



Personal Systems Reference Lenovo® ThinkCentre Desktops

March 2013 - Version 434

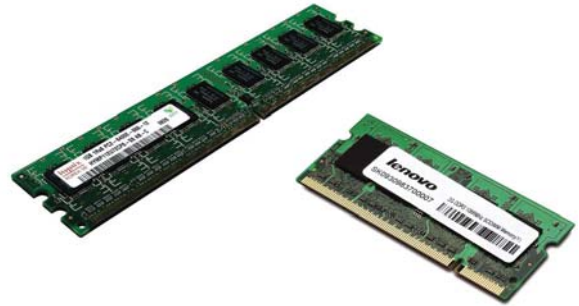


Lenovo ThinkCentre M92/M92p
(Tiny, Small, and Tower Form Factors with Lenovo ThinkVision Monitor)

Visit www.lenovo.com/psref for the latest version



Kensington® MicroSaver® Cable Lock
73P2582
Kensington Twin Head Cable Lock
45K1620



2GB PC3-10600 DDR3 Low-Halogen UDIMM 57Y4390
4GB PC3-10600 DDR3 UDIMM 0A36527
2GB PC3-10600 DDR3 Low-Halogen SODIMM 55Y3710
4GB PC3-10600 DDR3 Low-Halogen SODIMM 55Y3711
(UDIMM for SFF, Tower only;
SODIMM for Eco USFF, All-In-One only)



NVIDIA® GeForce® 310 DMS59 (2-DVI, 2-VGA)
57Y4167



Lenovo® USB 3.0 to DVI/VGA Monitor Adapter
0B47072



Ultraslim Plus Wireless Keyboard and Mouse
0A34032



Lenovo Laser Mouse (USB)
41U3074

Lenovo ThinkCentre M72e Tiny, Small, Tower



Lenovo ThinkCentre M72e Tiny with Optional Serial Port

Lenovo ThinkCentre M72e Tiny, Small, and Tower with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M72e Small

Lenovo ThinkCentre M72e Tiny with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M72e Tower

Lenovo ThinkCentre M72e Tiny with External Optical Box

ThinkCentre® M72e Tiny (4004) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	Display-Port dongle	PCIe Mini Card WLAN / BT	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
4004-A1U	i3-2120T	4GBx1	320G 5400	DVD±RW	HD 2000	None	None	None	None	Mount	ES52	None	Pro 64 06/05/12
4004-A2U	G630T	4GBx1	320G 5400	DVD±RW	Intel HD	None	None	None	None	Mount	ES52	None	Pro 64 06/05/12
4004-A7U	G630T	2GBx1	320G 5400	None	Intel HD	None	None	None	Stand	Mount	ES52	None	Pro 64 06/05/12
4004-A9U	i3-2120T	4GBx1	500G 5400	None	HD 2000	None	None	None	Stand	Mount	ES52	None	Pro 64 06/05/12
4004-B2U	i3-2120T	4GBx1	320G 5400	None	HD 2000	None	None	None	Stand	Mount	ES52	None	Pro 64 06/05/12
4004-C3U	i3-2120T	4GBx1	500G 7200	DVD±RW	HD 2000	None	Intel 2230 + BT	None	None	Mount	ES52	None	Pro 64 06/19/12
4004-C4U	i3-2120T	4GBx1	500G 7200	None	HD 2000	None	Intel 2230 + BT	None	Stand	Mount	ES52	None	Pro 64 06/19/12
4004-B8U	i3-2120T	4GBx1	500G 7200	None	HD 2000	None	None	None	Stand	Mount	ES52	None	Pro 64 07/10/12
4004-B5U	i3-2120T	4GBx1	500G 7200	None	HD 2000	None	None	None	Stand	Mount	ES52	None	Pro 32 07/10/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Essential business features, exceptional value</i>										Preloaded operating system		
Processor	Intel® Pentium® G630T Processor (2 cores / 2 threads, 2.3GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller										Some: Genuine Windows® 7 Professional 32		
Implementation	Intel Core™ i3-2120T Processor (2 cores / 4 threads, 2.6GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller										Some: Genuine Windows 7 Professional 64		
Memory	Processor in LGA1155 socket										Ready to install applications (only some listed)		
Graphics	16GB max, PC3-12800 1600MHz DDR3, two 204-pin SODIMM sockets (notebook), System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller										<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager 		
DP dongle	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution vary by processor (i5 CPU supports max: 2560x2048)										Preloaded applications (only some listed)		
Disk	None										<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo Simple Tap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 		
External optical SATA controller	SATA 3.0Gb/s, 2.5" Wide												
Onboard SATA eSATA port	Some: Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in Serial ATA, SATA 3.0Gb/s, integrated in chipset												
Chipset	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar												
Front ports	None												
Rear ports	Intel H61 Express Chipset												
PCIe Mini Card	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
PCIe WLAN	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)												
Bluetooth	One PCI Express® Mini Card slot												
Audio	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2												
Speaker	Some: Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter												
Ethernet	High Definition (HD) Audio, Realtek® ALC662 codec												
Intel AMT	Internal speaker for business audio												
Modem	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®												
Security chip	None												
Keyboard	None												
Mouse	None												
Floor Stand	None												
VESA mount	None												
Power supply	None												
Machine	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										Security		
	Enhanced Optical USB Mouse, black, Lenovo logo										<ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement 		
	Some: System floor stand for vertical orientation										EPEAT™ Gold rating		
	Supports VESA 75mm and 100mm mount standard										ENERGY STAR® 5.2-compliant		
	65 watts AC/DC adapter, autosensing, 87% PSU										Cisco EnergyWise compatible		
	<ul style="list-style-type: none"> • Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box) 										GREENGUARD® certified		
											RoHS-compliant		
											Supports ThinkVantage Technologies		
											For compatible accessories, please go to O-M72E sheet;		
											For Lenovo service upgrade options, please go to S-TC sheet		
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												

See footnotes for important warranty information
US models announced June 5, June 19, or July 10, 2012

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(MOSI1-1) July 2012

ThinkCentre® M72e Tiny (4004) - TopSeller - II

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	SATA disk GB rpm	External optical	Graphics	Display-Port dongle	PCIe Mini Card WLAN / BT	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
4004-A8U	i5-3470T	4GBx1	750G 5400	None	HD 2500	None	None	None	Stand	Mount	ES52	None	Pro 64	06/05/12
4004-B1U	i5-3470T	4GBx1	500G 5400	None	HD 2500	None	None	None	Stand	Mount	ES52	None	Pro 64	06/05/12
4004-B4U	i5-3470T	4GBx2	750G 5400	None	HD 2500	None	None	None	Stand	None	ES52	None	Pro 64	06/05/12
4004-C1U	i5-3470T	4GBx1	500G 7200	None	HD 2500	None	Intel 2230 + BT	None	Stand	Mount	ES52	None	Pro 64	06/19/12
4004-C2U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	Intel 2230 + BT	None	None	Mount	ES52	None	Pro 64	06/19/12
4004-B7U	i5-3470T	2GBx1	320G 7200	None	HD 2500	None	None	None	Stand	Mount	ES52	None	Pro 64	07/10/12
4004-B6U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	None	None	None	Mount	ES52	None	Pro 64	07/10/12
4004-E7U	i3-3220T	4GBx1	500G 5400	None	HD 2500	None	None	None	Stand	Mount	ES52	None	Pro 64	09/04/12
4004-E8U	i3-3220T	4GBx1	500G 5400	DVD±RW	HD 2500	None	Intel 2230 + BT	None	None	Mount	ES52	None	Pro 64	09/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										Preloaded operating system			
Processor	Intel® Core™ i3-3220T Processor (2 cores / 4 threads, 2.8GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology										Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager 			
Implementation	Processor in LGA1155 socket										Preloaded applications (only some listed)			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)										<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate 			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution vary by processor (i5 CPU supports max: 2560x2048)</i>													
DP dongle	None													
Disk	SATA 3.0Gb/s, 2.5" Wide													
External optical	<i>Some:</i> Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in													
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset													
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar													
eSATA port	None													
Chipset	Intel H61 Express Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)													
PCIe Mini Card	One PCI Express® Mini Card slot													
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2													
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®													
Intel AMT	None													
Modem	None													
Security chip	None													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Floor Stand	<i>Some:</i> System floor stand for vertical orientation													
VESA mount	<i>Some:</i> Supports VESA 75mm and 100mm mount standard													
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU													
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box) 										Security <ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement 			
											EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant			
											Supports ThinkVantage Technologies			
											For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													

See footnotes for important warranty information
 US models announced June 5, June 19, July 10, or September 4, 2012

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 (MOSI1-2) September 2012

ThinkCentre® M72e Tiny (4004) - TopSeller (Thin Client)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	Display-Port dongle	PCIe Mini Card WLAN / BT	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
4004-D1U	G460	2GBx1	8G SSD	None	Intel HD	None	None	None	Stand	Mount	ES52	None	Emb 32	07/10/12
4004-E9U	G640T	2GBx1	8G SSD	None	Intel HD	None	None	None	Stand	Mount	ES52	None	Emb 32	08/14/12
4004-K4U	i5-3470T	2GBx1	8G SSD	None	HD 2500	None	Intel 105	None	Stand	None	ES52	None	Emb 32	03/05/13
4004-K3U	G640T	2GBx1	8G SSD	None	Intel HD	None	Intel 105	None	Stand	None	ES52	None	Emb 32	03/05/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	<i>Essential business features, exceptional value</i>											Preloaded operating system		
Processor	Intel® Celeron® G460 Processor (1 core / 2 threads, 1.8GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Pentium® G640T Processor (2 cores / 2 threads, 2.4GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Genuine Windows® 7 Embedded 32 Preloaded applications (only some listed) <ul style="list-style-type: none"> • Adobe Reader® • Adobe Flash® Player • Citrix® Receiver • IIS Web Server • Microsoft® Management Console • Microsoft Silverlight • Remote Desktop Protocol • ThinPrint .print Client • TightVNC Viewer • VMware® View Client • vWorkspace • Windows Media Player 		
Implementation	Processor in LGA1155 socket													
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), <i>System automatically clocks down for processors with 1066MHz DDR3 memory controller</i>													
Graphics	Intel HD Graphics or Intel HD Graphics 2500 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA) @60Hz</i>													
DP dongle	None													
Disk	Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" Wide													
External optical	None													
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset													
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar													
eSATA port	None													
Chipset	Intel H61 Express Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)													
PCIe Mini Card	One PCI Express® Mini Card slot													
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1													
Bluetooth	None													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®													
Intel AMT	None													
Modem	None													
Security chip	None													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Floor Stand	System floor stand for vertical orientation													
VESA mount	<i>Some:</i> Supports VESA 75mm and 100mm mount standard													
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU													
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box) 											Security <ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement 		
												EPEAT™ Gold rating ENERGY STAR® 5.2-compliant GREENGUARD® certified RoHS-compliant		
												Supports ThinkVantage Technologies		
												For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													

See footnotes for important warranty information
 US models announced July 10, 2012, August 14, 2012 or March 5, 2013

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 (MOSI1-22) March 2013

ThinkCentre® M72e Tiny (4004) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	SATA disk GB rpm	External optical	Graphics	Display-Port dongle	PCIe Mini Card WLAN / BT	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
4004-C6U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	Intel 2230 + BT	None	None	Mount	ES52	None	Win8 Pro64	10/23/12
4004-C7U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	None	None	None	Mount	ES52	None	Win8 Pro64	10/23/12
4004-C8U	i5-3470T	4GBx1	500G 7200	None	HD 2500	None	None	None	Stand	Mount	ES52	None	Win8 Pro64	10/23/12
4004-F2U	i3-3220T	4GBx1	500G 7200	None	HD 2500	None	None	None	Stand	Mount	ES52	None	Win8 Pro64	10/23/12
4004-F3U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	None	None	None	Mount	ES52	None	Win8 Pro64	10/23/12
4004-G6U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	None	None	None	Mount	ES52	None	Win7 Pro64	10/23/12
4004-G7U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	Intel 105	None	None	Mount	ES52	None	Win7 Pro64	10/23/12
4004-G8U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	Intel 2230 + BT	None	None	Mount	ES52	None	Win7 Pro64	10/23/12
4004-H1U	i3-3220T	4GBx1	500G 7200	None	HD 2500	None	Intel 105	None	None	Mount	ES52	None	Win8 Pro64	10/23/12
4004-H3U	i3-3220T	4GBx1	500G 5400	None	HD 2500	None	Intel 105	None	Stand	None	ES52	None	Win7 Pro64	11/20/12
4004-H4U	i3-3220T	4GBx1	180G SSD	None	HD 2500	None	Intel 105	None	Stand	None	ES52	None	Win7 Pro64	11/20/12
4004-J1U	i3-3220T	4GBx1	500G 7200	None	HD 2500	None	Intel 105	Serial	Stand	None	ES52	None	Win7 Pro64	12/25/12
4004-L2U	i5-3470T	4GBx2	180G SSD	DVD±RW	HD 2500	None	Intel 2230 + BT	None	None	Mount	ES52	None	Win7 Pro64	03/12/13

Positioning	<i>Essential business features, exceptional value</i>											Preloaded operating system		
Processor	Intel® Core™ i3-3220T Processor (2 cores / 4 threads, 2.8GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit		
Implementation	Processor in LGA1155 socket											Preloaded applications (only some listed)		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											- Windows 7 models		
Graphics	Intel HD Graphics 2500 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution vary by processor (i5 CPU supports max: 2560x2048)</i>											<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● Lenovo® Message Center Plus ● Lenovo SimpleTap ● Adobe® Reader® ● Windows Live™ Essentials ● Microsoft® Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 		
DP dongle	None											- Windows 8 models		
Disk	Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" Wide											<ul style="list-style-type: none"> ● Lenovo Support ● Lenovo Companion ● Lenovo Cloud Storage ● Norton™ Studio ● AccuWeather ● Evernote® ● Microsoft Office 2013 preloaded; purchase product key to activate ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) 		
External optical	Some: Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in											- All models		
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset											<ul style="list-style-type: none"> ● ThinkVantage System Update ● Lenovo Solution Center ● View Management Utility ● Norton Internet Security (30 days of virus definitions) ● Skype™ 		
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar													
eSATA port	None													
Chipset	Intel H61 Express Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)													
PCIe Mini Card	One PCI Express® Mini Card slot													
PCIe WLAN	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2													
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®													
Intel AMT	None													
Modem	None													
Security chip	None													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											Security		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											<ul style="list-style-type: none"> ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement 		
Floor Stand	Some: System floor stand for vertical orientation											EPEAT™ Gold rating		
VESA mount	Some: Supports VESA 75mm and 100mm mount standard											ENERGY STAR® 5.2-compliant		
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU											Cisco EnergyWise compatible		
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box) 											GREENGUARD® certified		
												RoHS-compliant		
												Supports ThinkVantage Technologies		
												For compatible accessories, please go to O-M72E sheet;		
												For Lenovo service upgrade options, please go to S-TC sheet		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													

See footnotes for important warranty information

US models announced Oct 23, 2012, Nov 20, 2012, Dec 25, 2012, or Mar 12, 2013

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(MOSI1-33) March 2013

ThinkCentre® M72e Tiny (4004) - TopSeller (Win 8) - II

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	SATA disk GB rpm	External optical	Graphics	Display-Port dongle	PCIe Mini Card WLAN / BT	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2 Global	Preload	Ann date (mm/dd/yy)
4004-F1U	G640T	4GBx1	320G 7200	None	Intel HD	None	None	None	Stand	Mount	ES52	None	Win8 Pro64 10/23/12
4004-G3U	i3-2120T	4GBx1	500G 7200	None	HD 2000	None	None	None	Stand	None	ES52	None	Win7 Pro64 10/23/12
4004-G4U	i3-2120T	4GBx1	500G 7200	None	HD 2000	None	Intel 105	None	Stand	None	ES52	None	Win7 Pro64 10/23/12
4004-G5U	i3-2120T	4GBx1	500G 7200	None	HD 2000	None	Intel 2230 + BT	None	Stand	None	ES52	None	Win7 Pro64 10/23/12
4004-G9U	i3-2120T	4GBx1	500G 7200	None	HD 2000	None	None	None	None	Mount	ES52	None	Win7 Pro64 10/23/12
4004-H2U	i3-2120T	4GBx1	500G 7200	None	HD 2000	None	Intel 2230 + BT	None	None	Mount	ES52	None	Win7 Pro64 10/23/12
4004-H5U	G645T	4GBx1	500G 5400	None	Intel HD	None	Intel 105	None	Stand	None	ES52	None	Win7 Pro64 11/20/12
4004-J2U	G645T	4GBx1	500G 7200	None	Intel HD	None	Intel 105	Serial	Stand	None	ES52	None	Win7 Pro64 12/25/12
4004-H6U	G1610T	4GBx1	500G 5400	None	Intel HD	None	Intel 105	None	Stand	None	ES52	None	Win7 Pro64 01/22/13
4004-H7U	G2020T	4GBx1	500G 5400	None	Intel HD	None	Intel 105	None	Stand	None	ES52	None	Win7 Pro64 01/22/13

Positioning	<i>Essential business features, exceptional value</i>							Preloaded operating system					
Processor	<p>Intel® Celeron® G1610T Processor (2 cores / 2 threads, 2.3GHz, 2MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Pentium® G640T Processor (2 cores / 2 threads, 2.4GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller</p> <p>Intel Pentium G645T Processor (2 cores / 2 threads, 2.5GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Pentium G2020T Processor (2 cores / 2 threads, 2.5GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core™ i3-2120T Processor (2 cores / 4 threads, 2.6GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology</p>							<p><i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</p> <p><i>Some:</i> Windows 8 Pro 64-bit</p> <p>Preloaded applications (only some listed)</p> <p>- Windows 7 models</p> <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Power Manager • ThinkVantage Communication Utility • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) <p>- Windows 8 models</p> <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) <p>- All models</p> <ul style="list-style-type: none"> • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™ 					
Implementation	Processor in LGA1155 socket												
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>												
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution vary by processor (i5 CPU supports max: 2560x2048)</i>												
DP dongle	None												
Disk	SATA 3.0Gb/s, 2.5" Wide												
External optical	None												
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset												
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar												
eSATA port	None												
Chipset	Intel H61 Express Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)												
PCIe Mini Card	One PCI Express® Mini Card slot												
PCIe WLAN	<p><i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1</p> <p><i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2</p>												
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®												
Intel AMT	None												
Modem	None												
Security chip	None							<p>Security</p> <ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement 					
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	<i>Some:</i> System floor stand for vertical orientation												
VESA mount	<i>Some:</i> Supports VESA 75mm and 100mm mount standard												
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU												
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box) 							<p>EPEAT™ Gold rating</p> <p>ENERGY STAR® 5.2-compliant</p> <p>Cisco EnergyWise compatible</p> <p>GREENGUARD® certified</p> <p>RoHS-compliant</p> <p>Supports ThinkVantage Technologies</p> <p>For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet</p>					
Limited Warranty	<p>3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available</p>												

See footnotes for important warranty information

US models announced Oct 23, 2012, Nov 20, 2012, Dec 25, 2012, or Jan 22, 2013

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(MOSI1-38) February 2013

ThinkCentre® M72e Tiny (3264)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	Display-Port dongle	PCIe Mini Card WLAN / BT	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
3264-D7U	G630T	4GBx1	320G 5400	DVD±RW	Intel HD	None	None	None	None	Mount	ES52	None	Pro 64 06/05/12
3264-A1U	i3-2120T	4GBx1	320G 5400	None	HD 2000	None	None	None	Stand	None	ES52	None	Pro 64 06/05/12
3264-A2U	G630T	2GBx1	320G 5400	None	Intel HD	None	None	None	Stand	None	ES52	None	Pro 64 06/05/12
3264-A3U	G530T	2GBx1	320G 5400	None	Intel HD	None	None	None	Stand	None	ES52	None	Pro 32 06/05/12
3264-A4U	G460	2GBx1	320G 5400	None	Intel HD	None	None	None	Stand	None	ES52	None	Pro 32 06/05/12
3264-A5U	i3-2120T	4GBx1	500G 5400	None	HD 2000	None	None	None	Stand	None	ES52	None	Pro 64 06/05/12
3264-P7U	i3-2120T	4GBx1	500G 7200	DVD±RW	HD 2000	None	Intel 105	None	None	Mount	ES52	None	Pro 64 06/19/12
3264-P8U	i3-2120T	4GBx1	500G 7200	DVD±RW	HD 2000	None	Intel 105	None	None	Mount	ES52	None	Prem 64 06/19/12
3264-N2U	i3-2120T	2GBx1	320G 7200	None	HD 2000	None	None	None	Stand	None	ES52	None	Pro 32 07/10/12
3264-N3U	i3-2120T	4GBx1	320G 7200	DVD±RW	HD 2000	None	None	None	None	Mount	ES52	None	Pro 32 07/10/12
3264-N4U	G630T	4GBx1	320G 7200	None	Intel HD	None	None	None	Stand	None	ES52	None	Pro 32 07/10/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										Preloaded operating system		
Processor	Intel® Celeron® G460 Processor (1 core / 2 threads, 1.8GHz, 1.5MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Celeron G530T Processor (2 cores / 2 threads, 2.0GHz, 2MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Pentium® G630T Processor (2 cores / 2 threads, 2.3GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Core™ i3-2120T Processor (2 cores / 4 threads, 2.6GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller										Some: Genuine Windows® 7 Professional 32 Some: Genuine Windows 7 Professional 64 Some: Genuine Windows 7 Home Premium 64		
Implementation	Processor in LGA1155 socket										Ready to install applications (only some listed)		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>										<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager 		
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution vary by processor (i5 CPU supports max: 2560x2048)</i>										Preloaded applications (only some listed) <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 		
DP dongle	None												
Disk	SATA 3.0Gb/s, 2.5" Wide												
External optical	<i>Some:</i> Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in												
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset												
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar												
eSATA port	None												
Chipset	Intel H61 Express Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)												
PCIe Mini Card	One PCI Express® Mini Card slot												
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1												
Bluetooth	None												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®												
Intel AMT	None												
Modem	None												
Security chip	None										Security <ul style="list-style-type: none"> ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement 		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	<i>Some:</i> System floor stand for vertical orientation												
VESA mount	<i>Some:</i> Supports VESA 75mm and 100mm mount standard												
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU												
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box) 										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet		

See footnotes for important warranty information
 US models announced June 5, June 19, or July 10, 2012

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 (MOSI-3) July 2012

ThinkCentre® M72e Tiny (3264) - II

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Display-Port dongle	PCIe Mini Card WLAN / BT	Optional port	Chassis Intrusion switch	Security Cable	Floor stand	VESA mount	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
3264-A7U	i5-3470T	4GBx1	500G 5400	DVD±RW	None	None	None	None	None	None	Mount	ES52	None	Pro 64 06/05/12
3264-B7U	i5-3470T	4GBx1	500G 5400	None	None	None	None	None	None	Stand	None	ES52	None	Pro 64 06/05/12
3264-P9U	i5-3470T	4GBx1	500G 7200	DVD±RW	None	Intel 105	None	None	None	None	Mount	ES52	None	Pro 64 06/19/12
3264-Q1U	i5-3470T	4GBx1	500G 7200	DVD±RW	None	Intel 2230 + BT	None	None	None	None	Mount	ES52	None	Pro 64 06/19/12
3264-Q2U	i5-3470T	4GBx1	500G 7200	None	None	Intel 2230 + BT	None	None	None	Stand	Mount	ES52	None	Pro 64 06/19/12
3264-N5U	i5-3470T	4GBx1	500G 7200	None	None	None	None	None	None	Stand	None	ES52	None	Pro 64 07/10/12
3264-V1U	i5-3470T	4GBx2	180G SSD	DVD±RW	None	Intel 2230 + BT	None	Switch	Cable	None	Mount	ES52	None	Pro 64 11/06/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system		
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology											Genuine Windows® 7 Professional 64		
Implementation	Processor in LGA1155 socket											Ready to install applications (only some listed)		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager 		
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution vary by processor (i5 CPU supports max: 2560x2048)</i>											Preloaded applications (only some listed)		
DP dongle	None											<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 		
Disk	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" Wide													
External optical	<i>Some:</i> Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in													
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset													
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar													
eSATA port	None													
Chipset	Intel H61 Express Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)													
PCIe Mini Card	One PCI Express® Mini Card slot													
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2													
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®													
Intel AMT	None													
Modem	None													
Security chip	None													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Floor Stand	<i>Some:</i> System floor stand for vertical orientation													
VESA mount	<i>Some:</i> Supports VESA 75mm and 100mm mount standard													
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU													
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box) 											Security		
												<ul style="list-style-type: none"> ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 		
												EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant		
												Supports ThinkVantage Technologies		
												For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													

See footnotes for important warranty information
US models announced June 5, June 19, July 10, or Nov 6, 2012
⚡ US model withdrawn effective February 2013

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(MOSI1-4) November 2012

ThinkCentre® M72e Tiny (3264) - Thin Client

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	Display-Port dongle	PCIe Mini Card WLAN / BT	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
3264-R3U	G460	2GBx1	8G SSD	None	Intel HD	None	None	None	Stand	Mount	ES52	None	Emb 32 07/10/12
3264-R6U	G640T	4GBx1	8G SSD	None	Intel HD	None	None	None	None	Mount	ES52	None	Emb 32 09/04/12
3264-AMU	G640T	2GBx1	8G SSD	None	Intel HD	None	Intel 2230 + BT	None	Stand	None	ES52	None	Emb 32 03/05/13

●3-year limited warranty

Positioning Processor	<i>Ultimate security, stability, and manageability for the enterprise</i> Intel® Celeron® G460 Processor (1 core / 2 threads, 1.8GHz, 1.5MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Pentium® G640T Processor (2 cores / 2 threads, 2.4GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller	Preloaded operating system Genuine Windows® 7 Embedded 32 Preloaded applications (only some listed) <ul style="list-style-type: none"> ● Adobe® Reader® ● Adobe Flash® Player ● Citrix® Receiver ● IIS Web Server ● Microsoft® Management Console ● Microsoft Silverlight ● Remote Desktop Protocol ● ThinPrint .print Client ● TightVNC Viewer ● VMware® View Client ● vWorkspace ● Windows Media Player
Implementation	Processor in LGA1155 socket	
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), <i>System automatically clocks down for processors with 1066MHz DDR3 memory controller</i>	
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz</i>	
DP dongle	None	
Disk	Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" Wide	
External optical	None	
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset	
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar	
eSATA port	None	
Chipset	Intel H61 Express Chipset	
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®	
Intel AMT	None	
Modem	None	
Security chip	None	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Floor Stand	<i>Some:</i> System floor stand for vertical orientation	
VESA mount	<i>Some:</i> Supports VESA 75mm and 100mm mount standard	
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU	
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box) 	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	Security <ul style="list-style-type: none"> ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement EPEAT™ Gold rating ENERGY STAR® 5.2-compliant GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information

US models announced July 10, 2012, September 4, 2012, or March 5, 2013

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(MOSI1-21) March 2013

ThinkCentre® M72e Tiny (3264) - Windows 8

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	Display- Port dongle	PCIe Mini Card WLAN / BT	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2 Global	Preload	Ann date (mm/dd/yy)
3264-Q5U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	None	None	None	Mount	ES52	None	Win8 Pro64 10/23/12
3264-R1U	i5-3470T	4GBx1	500G 7200	None	HD 2500	None	Intel 2230 + BT	None	Stand	Mount	ES52	None	Win8 Pro64 10/23/12
3264-R2U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	Intel 2230 + BT	None	None	Mount	ES52	None	Win8 Pro64 10/23/12
3264-R8U	i3-3220T	4GBx1	320G 7200	None	HD 2500	None	None	None	None	Mount	ES52	None	Win8 Pro64 10/23/12
3264-R9U	i3-3220T	4GBx1	500G 7200	DVD±RW	HD 2500	None	Intel 2230 + BT	None	None	Mount	ES52	None	Win8 Pro64 10/23/12
3264-S1U	i5-3470T	4GBx1	320G 7200	DVD±RW	HD 2500	None	Intel 2230 + BT	None	None	Mount	ES52	None	Win8 Pro64 10/23/12
3264-S2U	i5-3470T	4GBx1	320G 7200	None	HD 2500	None	Intel 2230 + BT	None	None	Mount	ES52	None	Win8 Pro64 10/23/12
3264-T2U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	None	None	None	Mount	ES52	None	Win7 Pro64 10/23/12
3264-T3U	i3-3220T	4GBx1	500G 7200	None	HD 2500	None	None	None	None	None	ES52	None	Win8 Pro64 10/23/12
3264-T4U	i3-3220T	4GBx1	500G 7200	None	HD 2500	None	Intel 105	None	None	Mount	ES52	None	Win7 Pro64 10/23/12
3264-T5U	i5-3470T	4GBx1	500G 7200	None	HD 2500	None	None	None	None	Mount	ES52	None	Win7 Pro64 10/23/12
3264-T7U	i5-3470T	4GBx1	500G 5400	None	HD 2500	None	None	None	Stand	None	ES52	None	Win7 Pro64 10/23/12
3264-R9U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	Intel 105	None	None	Mount	ES52	None	Win7 Pro64 10/23/12
3264-U1U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	Intel 2230 + BT	None	None	Mount	ES52	None	Win7 Pro64 10/23/12
3264-U2U	i5-3470T	4GBx1	500G 7200	None	HD 2500	None	Intel 2230 + BT	None	Stand	None	ES52	None	Win7 Pro64 10/23/12
3264-U3U	i5-3470T	4GBx1	500G 7200	None	HD 2500	None	Intel 2230 + BT	None	None	Mount	ES52	None	Win7 Pro64 10/23/12

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										Preloaded operating system		
Processor	Intel® Core™ i3-3220T Processor (2 cores / 4 threads, 2.8GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology										<i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit		
Implementation	Processor in LGA1155 socket										Preloaded applications (only some listed)		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)										- Windows 7 models		
Graphics	Intel HD Graphics 2500 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution vary by processor (i5 CPU supports max: 2560x2048)</i>										<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Power Manager • ThinkVantage Communication Utility • Lenovo® SimpleTap • Adobe® Reader® • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 		
DP dongle	None										- Windows 8 models		
Disk	SATA 3.0Gb/s, 2.5" Wide										<ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) 		
External optical	<i>Some:</i> Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in										- All models		
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset										<ul style="list-style-type: none"> • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™ 		
Onboard SATA eSATA port	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar										Security		
Chipset	Intel H61 Express Chipset										<ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement 		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										EPEAT™ Gold rating		
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)										ENERGY STAR® 5.2-compliant		
PCIe Mini Card	One PCI Express® Mini Card slot										Cisco EnergyWise compatible		
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2										GREENGUARD® certified		
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter										RoHS-compliant		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										Supports ThinkVantage Technologies		
Speaker	Internal speaker for business audio										For compatible accessories, please go to O-M72E sheet;		
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®										For Lenovo service upgrade options, please go to S-TC sheet		
Intel AMT	None												
Modem	None												
Security chip	None												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	<i>Some:</i> System floor stand for vertical orientation												
VESA mount	<i>Some:</i> Supports VESA 75mm and 100mm mount standard												
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU												
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box) 												
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												

See footnotes for important warranty information
US models announced October 23, 2012

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ThinkCentre® M72e Tiny (3264) - Windows 8 - II

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	Display-Port dongle	PCIe Mini Card WLAN / BT	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2 Global	Preload	Ann date (mm/dd/yy)
3264-R7U	G640T	4GBx1	320G 7200	None	Intel HD	None	None	None	None	Mount	ES52	None	Win8 Pro64 10/23/12
3264-T1U	G645T	4GBx1	500G 5400	DVD±RW	Intel HD	None	None	None	Stand	Mount	ES52	None	Win7 Pro64 10/23/12
3264-T8U	G645T	2GBx1	500G 5400	None	Intel HD	None	None	None	Stand	None	ES52	None	Win7 Pro64 10/23/12
3264-AEU	G645T	4GBx1	500G 7200	None	Intel HD	None	Intel 105	Serial	None	Mount	ES52	None	Win7 Pro64 12/25/12
3264-V2U	G2020T	4GBx1	500G 5400	None	Intel HD	None	Intel 105	None	Stand	None	ES52	None	Win7 Pro64 01/22/13
3264-V3U	G1610T	4GBx1	500G 5400	None	Intel HD	None	Intel 105	None	Stand	None	ES52	None	Win7 Pro64 01/22/13

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										
Processor	<p>Intel® Celeron® G1610T Processor (2 cores / 2 threads, 2.3GHz, 2MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Pentium® G640T Processor (2 cores / 2 threads, 2.4GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller</p> <p>Intel Pentium G645T Processor (2 cores / 2 threads, 2.5GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Pentium G2020T Processor (2 cores / 2 threads, 2.5GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology</p>										
Implementation	Processor in LGA1155 socket										
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), <i>System automatically clocks down for processors with 1066MHz DDR3 memory controller</i>										
Graphics	Intel HD Graphics in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution vary by processor (i5 CPU supports max: 2560x2048)</i>										
DP dongle	None										
Disk	SATA 3.0Gb/s, 2.5" Wide										
External optical	<i>Some:</i> Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in										
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset										
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar										
eSATA port	None										
Chipset	Intel H61 Express Chipset										
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)										
PCIe Mini Card	One PCI Express® Mini Card slot										
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1										
Bluetooth	None										
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										
Speaker	Internal speaker for business audio										
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®										
Intel AMT	None										
Modem	None										
Security chip	None										
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Floor Stand	<i>Some:</i> System floor stand for vertical orientation										
VESA mount	<i>Some:</i> Supports VESA 75mm and 100mm mount standard										
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU										
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box) 										
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										
	<p>Preloaded operating system</p> <p><i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</p> <p><i>Some:</i> Windows 8 Pro 64-bit</p> <p>Preloaded applications (only some listed)</p> <p>- Windows 7 models</p> <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Power Manager • ThinkVantage Communication Utility • Lenovo® SimpleTap • Adobe® Reader® • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) <p>- Windows 8 models</p> <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) <p>- All models</p> <ul style="list-style-type: none"> • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™ <p>Security</p> <ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement <p>EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant</p> <p>Supports ThinkVantage Technologies</p> <p>For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet</p>										

See footnotes for important warranty information
US models announced October 23, 2012, December 25, 2012, or January 22, 2013

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(MOSI1-37) February 2013

ThinkCentre® M72e Tiny (3267) - GMP

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	SATA disk GB rpm	External optical	Graphics	Display- Port dongle	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
3267-A1U	i5-3470T	4GBx1 1600MHz	320G 5400	DVD±RW	HD 2500	None	None	None	Mount	ES52	G P	Pro 64	06/05/12

- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology											
Implementation	Processor in LGA1155 socket											
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution vary by processor (i5 CPU supports max: 2560x2048)</i>											
DP dongle	None											
Disk	SATA 3.0Gb/s, 2.5" Wide, 5400 rpm											
External optical	Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in											
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset											
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar											
eSATA port	None											
Chipset	Intel H61 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)											
PCIe Mini Card	One PCI Express® Mini Card slot											
PCIe WLAN ⁴	None											
Bluetooth	None											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
Speaker	Internal speaker for business audio											
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Floor Stand	None											
VESA mount	Supports VESA 75mm and 100mm mount standard											
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU											
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box) 											
	Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 											
	Security <ul style="list-style-type: none"> ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies											
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet											

See footnotes for important warranty information
US model announced June 5, 2012

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(MOS11-5) June 2012

ThinkCentre® M72e Tiny (3267) - GMP (Thin Client)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	SATA disk GB rpm	External optical	Graphics	Display-Port dongle	PCIe Mini Card WLAN / BT	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
3267-A2U	G460	2GBx1	8G SSD	None	Intel HD	None	None	Serial	None	None	ES52	G P	Emb 32	07/10/12
3267-A5U	G465	2GBx1	8G SSD	None	Intel HD	None	None	Serial	None	None	ES52	G P	Emb 32	01/08/13
3267-A6U	G465	2GBx1	8G SSD	None	Intel HD	None	Intel 105	Serial	None	None	ES52	G P	Emb 32	03/12/13

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system		
Processor	Intel® Celeron® G460 Processor (1 core / 2 threads, 1.8GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Celeron G465 Processor (1 core / 2 threads, 1.9GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Processor in LGA1155 socket											Genuine Windows® 7 Embedded 32 Preloaded applications (only some listed) <ul style="list-style-type: none"> ● Adobe® Reader® ● Adobe Flash® Player ● Citrix® Receiver ● IIS Web Server ● Microsoft® Management Console ● Microsoft Silverlight ● Remote Desktop Protocol ● ThinPrint .print Client ● TightVNC Viewer ● VMware® View Client ● vWorkspace ● Windows Media Player 		
Implementation	Processor in LGA1155 socket													
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), <i>System automatically clocks down for processors with 1066MHz DDR3 memory controller</i>													
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz</i>													
DP dongle	None													
Disk	Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" Wide													
External optical	None													
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset													
Onboard SATA	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar													
eSATA port	None													
Chipset	Intel H61 Express Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)													
PCIe Mini Card	One PCI Express® Mini Card slot													
PCIe WLAN ⁴	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1													
Bluetooth	None													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®													
Intel AMT	None													
Modem	None													
Security chip	None													
Keyboard	None													
Mouse	None													
Floor Stand	None													
VESA mount	None													
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU													
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box) 											Security <ul style="list-style-type: none"> ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement 		
												EPEAT™ Gold rating ENERGY STAR® 5.2-compliant GREENGUARD® certified RoHS-compliant		
												Supports ThinkVantage Technologies		
												For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													

See footnotes for important warranty information

US models announced July 10, 2012, January 8, 2013, or March 12, 2013

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ThinkCentre® M72e Tiny (3267) - GMP (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	Display- Port dongle	Optional port	Floor stand	VESA mount	ENERGY STAR 5.2	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
3267-A3U	i5-3470T	4GBx1 1600MHz	320G 5400	DVD±RW	HD 2500	None	None	None	Mount	ES52	G P	Win8 Pro64	10/23/12
3267-A4U	i5-3470T	4GBx1 1600MHz	320G 5400	DVD±RW	HD 2500	None	None	None	Mount	ES52	G P	Win7 Pro64	10/23/12

•Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										
Implementation											
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)										
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution vary by processor (i5 CPU supports max: 2560x2048)</i>										
DP dongle	None										
Disk	SATA 3.0Gb/s, 2.5" Wide, 5400 rpm										
External optical	Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in										
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset										
Onboard SATA eSATA port	One SATA cable (1-drop to device), one SATA 3.0Gb/s connector on planar										
Chipset	Intel H61 Express Chipset										
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
Rear ports	Three USB 2.0 (external ODD occupies dedicated USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)										
PCIe Mini Card	One PCI Express® Mini Card slot										
PCIe WLAN ⁴	None										
Bluetooth	None										
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										
Speaker	Internal speaker for business audio										
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®										
Intel AMT	None										
Modem	None										
Security chip	None										
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Floor Stand	None										
VESA mount	Supports VESA 75mm and 100mm mount standard										
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU										
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 4.6 lb (2.1 kg) in maximum configuration (not including External Optical Box) 										
	Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Power Manager • ThinkVantage Communication Utility • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models <ul style="list-style-type: none"> • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™ 										
	Security <ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement 										
	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant										
	Supports ThinkVantage Technologies										
	For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet										
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										

See footnotes for important warranty information
US models announced October 23, 2012

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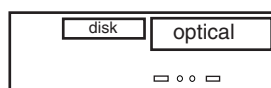
ThinkCentre® M72e Small (0967) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
0967-A1U	3x2	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	None	None	Pro 64	06/05/12
0967-A7U	3x2	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	None	None	Pro 64	09/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Essential business features, exceptional value</i>								Preloaded operating system			
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket								Genuine Windows® 7 Professional 64 Ready to install applications (only some listed)			
Implementation	Processor in LGA1155 socket								<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager 			
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets								Preloaded applications (only some listed)			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>								<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo Simple Tap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 			
Disk	SATA 3.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset											
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel H61 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
PCIe WLAN [†]	None											
Bluetooth	None											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Floor Stand	System floor stand for vertical orientation											
Power supply	240 watts, autosensing, active Power Factor Correction											
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.2" W X 15.0" D X 3.9" H ● 335mm W X 382mm D X 101mm H ● 14.6 lb (6.6 kg) in maximum configuration ● Highlighted optical drive button for easy access 								Security			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk								<ul style="list-style-type: none"> ● One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 			
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1								<ul style="list-style-type: none"> ● Cisco EnergyWise compatible ● RoHS-compliant 			
									Supports ThinkVantage Technologies			
									For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											



See footnotes for important warranty information
 US models announced June 5, or September 4, 2012

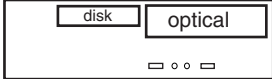
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 (MOSI1-6) September 2012

ThinkCentre® M72e Small (0967) - TopSeller - II

Personal Systems Reference (PSREF)

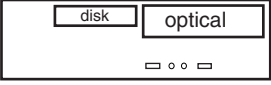
Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
0967-A2U	3x2	G860	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Pro 64	06/19/12
0967-A3U	3x2	i3-2120	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2000	None	Stand	None	None	Pro 64	06/19/12
0967-B2U	3x2	G640	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Pro 64	09/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Essential business features, exceptional value</i>										
Processor	<p>Intel® Pentium® G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Pentium G860 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Processor in LGA1155 socket</p>										
Implementation											
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets; <i>System automatically clocks down for processors with 1066 or 1333MHz DDR3 memory controller</i>										
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>										
Disk	SATA 3.0Gb/s 7200 rpm										
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset										
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar										
eSATA port	None										
Media reader	None										
Chipset	Intel H61 Express Chipset										
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D										
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)										
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										
PCIe WLAN ⁴	None										
Bluetooth	None										
Speaker	Internal speaker for business audio										
IEEE 1394	None										
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®										
Intel AMT	None										
Modem	None										
Security chip	None										
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Floor Stand	System floor stand for vertical orientation										
Power supply	240 watts, autosensing, active Power Factor Correction										
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.2" W X 15.0" D X 3.9" H ● 335mm W X 382mm D X 101mm H ● 14.6 lb (6.6 kg) in maximum configuration ● Highlighted optical drive button for easy access 										
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk										
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1										
											
Preloaded operating system											
Genuine Windows® 7 Professional 64											
Ready to install applications (only some listed)											
<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager 											
Preloaded applications (only some listed)											
<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 											
Security											
<ul style="list-style-type: none"> ● One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 											
Cisco EnergyWise compatible RoHS-compliant											
Supports ThinkVantage Technologies											
For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet											
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										

See footnotes for important warranty information
US models announced June 19 or September 4, 2012

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(MOS11-19) September 2012

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
0967-A8U	3x2	G870	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win8 Pro64	10/23/12
0967-A9U	3x2	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	None	None	Win8 Pro64	10/23/12
0967-B1U	3x2	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	None	None	Win8 Pro64	10/23/12
0967-B6U	3x2	G645	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win7 Pro64	10/23/12
0967-B3U	3x2	G860	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win7 Pro64	10/23/12
0967-B4U	3x2	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	None	None	Win7 Pro64	10/23/12
0967-B5U	3x2	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	None	None	Win7 Pro64	10/23/12
0967-B8U	3x2	G2120	4GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win7 Pro64	12/04/12
0967-C1U	3x2	G2020	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win7 Pro64	02/19/13
0967-B9U	3x2	G2120	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win7 Pro64	02/19/13
Positioning Processor	<i>Essential business features, exceptional value</i> Intel® Pentium® G645 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1066MHz) Intel Pentium G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz) Intel Pentium G860 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz) Intel Pentium G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz) Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1600MHz) Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket								Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage Power Manager ThinkVantage Communication Utility Lenovo® Message Center Plus Lenovo SimpleTap Adobe® Reader® Windows Live™ Essentials Microsoft Office 2010 preloaded; purchase product key to activate Corel® Burn.Now™ (DVD±RW) Corel DVD MovieFactory® (DVD±RW) - Windows 8 models <ul style="list-style-type: none"> Lenovo Support Lenovo Companion Lenovo Cloud Storage Norton™ Studio AccuWeather Evernote® Microsoft Office 2013 preloaded; purchase product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) - All models <ul style="list-style-type: none"> ThinkVantage System Update Lenovo Solution Center View Management Utility Norton Internet Security (30 days of virus definitions) Skype™ 			
Implementation	Processor in LGA1155 socket											
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets; <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>											
Graphics	Intel HD Graphics or Intel HD Graphics 2500 in processor, uses main memory, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>											
Disk	SATA 3.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset											
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel H61 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
PCIe WLAN [†]	None											
Bluetooth	None											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Floor Stand	System floor stand for vertical orientation											
Power supply	240 watts, autosensing, active Power Factor Correction											
Machine	<ul style="list-style-type: none"> Business black color; metal case 13.2" W X 15.0" D X 3.9" H 335mm W X 382mm D X 101mm H 14.6 lb (6.6 kg) in maximum configuration Highlighted optical drive button for easy access 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk											
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1											
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available								Security <ul style="list-style-type: none"> One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Serial port I/O control Individual USB port disablement Chassis intrusion switch on selected model(s) 			
									Cisco EnergyWise compatible RoHS-compliant Supports ThinkVantage Technologies			
									For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet			

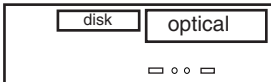
See footnotes for important warranty information
 US models announced October 23, 2012, December 4, 2012, or February 19, 2013

ThinkCentre® M72e Small (3598)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
3598-D4U	3x2	G630	4GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Pro 64	06/05/12
3598-C4U	3x2	G850	4GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Pro 64	06/05/12
3598-A7U	3x2	i3-2120	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2000	None	Stand	None	None	Pro 64	06/05/12
3598-F3U	3x2	G630	2GBx1 1600MHz	250G 7200	DVD±RW	Intel HD	None	Stand	None	None	Pro 64	07/10/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Essential business features, exceptional value</i>								Preloaded operating system			
Processor	Intel® Pentium® G630 Processor (2 cores / 2 threads, 2.7GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G850 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket								Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo Simple Tap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 			
Implementation	Processor in LGA1155 socket											
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets; <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>											
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>											
Disk	SATA 3.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset											
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel H61 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
PCIe WLAN [†]	None											
Bluetooth	None											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo								Security			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo								<ul style="list-style-type: none"> ● One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 			
Floor Stand	System floor stand for vertical orientation											
Power supply	240 watts, autosensing, active Power Factor Correction											
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.2" W X 15.0" D X 3.9" H ● 335mm W X 382mm D X 101mm H ● 14.6 lb (6.6 kg) in maximum configuration ● Highlighted optical drive button for easy access 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk											
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1											
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available								Cisco EnergyWise compatible RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information
 US models announced June 5 or July 10, 2012

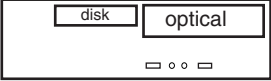
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ThinkCentre® M72e Small (3598) - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
3598-A5U	3x2	i5-3550	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	None	None	Pro 64	06/05/12
3598-E3U	3x2	i5-3570	4GBx1 1600MHz	250G 7200	DVD±RW	HD 2500	None	Stand	None	None	Pro 32	06/05/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Essential business features, exceptional value</i>										
Processor	Intel® Core™ i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology										
Implementation	Processor in LGA1155 socket										
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets										
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>										
Disk	SATA 3.0Gb/s 7200 rpm										
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset										
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar										
eSATA port	None										
Media reader	None										
Chipset	Intel H61 Express Chipset										
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D										
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)										
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										
PCIe WLAN [†]	None										
Bluetooth	None										
Speaker	Internal speaker for business audio										
IEEE 1394	None										
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®										
Intel AMT	None										
Modem	None										
Security chip	None										
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Floor Stand	System floor stand for vertical orientation										
Power supply	240 watts, autosensing, active Power Factor Correction										
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.2" W X 15.0" D X 3.9" H • 335mm W X 382mm D X 101mm H • 14.6 lb (6.6 kg) in maximum configuration • Highlighted optical drive button for easy access 										
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk										
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1										
											
	Preloaded operating system <i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> Genuine Windows 7 Professional 64										
	Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager 										
	Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo Simple Tap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 										
	Security <ul style="list-style-type: none"> • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) 										
	Cisco EnergyWise compatible RoHS-compliant										
	Supports ThinkVantage Technologies										
	For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet										
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										

See footnotes for important warranty information
US models announced June 5, 2012

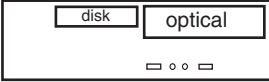
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ThinkCentre® M72e Small (3598) - Windows 8

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2 Global	Preload	Ann date (mm/dd/yy)
3598-F9U	3x2	G870	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win8 Pro64 10/23/12
3598-G9U	3x2	G640	4GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win7 Pro64 10/23/12
3598-H1U	3x2	G870	4GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win7 Pro64 10/23/12
3598-H2U	3x2	G640	2GBx1 1600MHz	250G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win7 Pro64 10/23/12
3598-H3U	3x2	i5-3570	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	None	None	Win7 Pro64 10/23/12
3598-K2U	3x2	G2120	4GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	None	Win7 Pro64 12/04/12

•3-year limited warranty

Positioning	<i>Essential business features, exceptional value</i>										
Processor	<p>Intel® Pentium® G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Pentium G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core™ i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Processor in LGA1155 socket</p>										
Implementation											
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets; <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>										
Graphics	Intel HD Graphics or Intel HD Graphics 2500 in processor, uses main memory, HDCP, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>										
Disk	SATA 3.0Gb/s 7200 rpm										
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset										
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar										
eSATA port	None										
Media reader	None										
Chipset	Intel H61 Express Chipset										
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D										
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)										
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										
PCIe WLAN ⁴	None										
Bluetooth	None										
Speaker	Internal speaker for business audio										
IEEE 1394	None										
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®										
Intel AMT	None										
Modem	None										
Security chip	None										
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Floor Stand	System floor stand for vertical orientation										
Power supply	240 watts, autosensing, active Power Factor Correction										
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.2" W X 15.0" D X 3.9" H • 335mm W X 382mm D X 101mm H • 14.6 lb (6.6 kg) in maximum configuration • Highlighted optical drive button for easy access 										
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk										
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1										
											
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										
<p>Preloaded operating system</p> <p><i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</p> <p><i>Some:</i> Windows 8 Pro 64-bit</p> <p>Preloaded applications (only some listed)</p> <p>- Windows 7 models</p> <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Power Manager • ThinkVantage Communication Utility • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) <p>- Windows 8 models</p> <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) <p>- All models</p> <ul style="list-style-type: none"> • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™ 											
<p>Security</p> <ul style="list-style-type: none"> • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) 											
Cisco EnergyWise compatible RoHS-compliant											
Supports ThinkVantage Technologies											
For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet											

See footnotes for important warranty information
US models announced October 23 or December 4, 2012

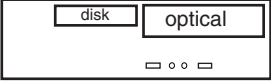
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(MOS11-25) December 2012

ThinkCentre® M72e Small (3660) - ES 5.2

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
3660-B6U	3x2	i3-2120	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2000	None	Stand	ES52	None	Pro 64	06/05/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Essential business features, exceptional value</i>											
Processor	Intel® Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											
Implementation	Processor in LGA1155 socket											
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets; <i>System automatically clocks down for processors with 1333MHz DDR3 memory controller</i>											
Graphics	Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>											
Disk	SATA 3.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset											
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel H61 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
PCIe WLAN ⁴	None											
Bluetooth	None											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Floor Stand	System floor stand for vertical orientation											
Power supply	240 watts, autosensing, 85% PSU											
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.2" W X 15.0" D X 3.9" H ● 335mm W X 382mm D X 101mm H ● 14.6 lb (6.6 kg) in maximum configuration ● Highlighted optical drive button for easy access 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk											
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1											
												
	Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 											
	Security <ul style="list-style-type: none"> ● One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 											
	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant											
	Supports ThinkVantage Technologies											
	For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet											
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											

See footnotes for important warranty information
 US model announced June 5, 2012

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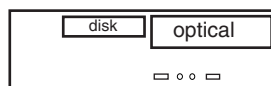
ThinkCentre® M72e Small (3660) - ES 5.2 - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
3660-C1U	3x2	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	ES52	None	Pro 32	06/05/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Essential business features, exceptional value</i>							Preloaded operating system				
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology							Genuine Windows® 7 Professional 32				
Implementation	Processor in LGA1155 socket							Ready to install applications (only some listed)				
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets							<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager 				
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>							Preloaded applications (only some listed)				
Disk	SATA 3.0Gb/s 7200 rpm							<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 				
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset											
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel H61 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
PCIe WLAN [†]	None											
Bluetooth	None											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Floor Stand	System floor stand for vertical orientation											
Power supply	240 watts, autosensing, 85% PSU											
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.2" W X 15.0" D X 3.9" H ● 335mm W X 382mm D X 101mm H ● 14.6 lb (6.6 kg) in maximum configuration ● Highlighted optical drive button for easy access 							Security				
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk							<ul style="list-style-type: none"> ● One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 				
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1							EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant				
								Supports ThinkVantage Technologies				
								For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											



See footnotes for important warranty information
US model announced June 5, 2012

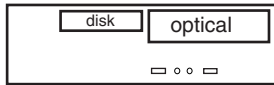
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ThinkCentre® M72e Small (3660) - ES 5.2 (Win 8)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
3660-D3U	3x2	G645	2GBx1 1600MHz	250G 7200	DVD±RW	Intel HD	None	Stand	ES52	None	Win8 Pro64	10/23/12
3660-D4U	3x2	G870	4GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	ES52	None	Win8 Pro64	10/23/12
3660-E2U	3x2	i3-2130	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2000	None	Stand	ES52	None	Win7 Pro64	10/23/12
3660-E3U	3x2	G2020	4GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	Stand	ES52	None	Win7 Pro64	01/22/13

•3-year limited warranty

Positioning	<i>Essential business features, exceptional value</i>								Preloaded operating system			
Processor	Intel® Pentium® G645 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket								Some: Windows® 7 Professional 64 reinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit			
Implementation	Processor in LGA1155 socket								Preloaded applications (only some listed) - Windows 7 models			
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets; System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller								<ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage Power Manager ThinkVantage Communication Utility Lenovo® Message Center Plus Lenovo SimpleTap Adobe® Reader® Windows Live™ Essentials Microsoft® Office 2010 preloaded; purchase product key to activate Corel® Burn.Now™ (DVD±RW) Corel DVD MovieFactory® (DVD±RW) 			
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>								- Windows 8 models <ul style="list-style-type: none"> Lenovo Support Lenovo Companion Lenovo Cloud Storage Norton™ Studio AccuWeather Evernote® Microsoft Office 2013 preloaded; purchase product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) 			
Disk	SATA 3.0Gb/s 7200 rpm								<ul style="list-style-type: none"> Lenovo Support Lenovo Companion Lenovo Cloud Storage Norton™ Studio AccuWeather Evernote® Microsoft Office 2013 preloaded; purchase product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) 			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive								- All models <ul style="list-style-type: none"> ThinkVantage System Update Lenovo Solution Center View Management Utility Norton Internet Security (30 days of virus definitions) Skype™ 			
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset								Security			
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar								<ul style="list-style-type: none"> One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Serial port I/O control Individual USB port disablement Chassis intrusion switch on selected model(s) 			
eSATA port	None								EPEAT™ Gold rating			
Media reader	None								ENERGY STAR® 5.2-compliant			
Chipset	Intel H61 Express Chipset								Cisco EnergyWise compatible			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)								GREENGUARD® certified			
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D								RoHS-compliant			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)								Supports ThinkVantage Technologies			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)								For compatible accessories, please go to O-M72E sheet;			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec								For Lenovo service upgrade options, please go to S-TC sheet			
PCIe WLAN [†]	None											
Bluetooth	None											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Floor Stand	System floor stand for vertical orientation											
Power supply	240 watts, autosensing, 85% PSU											
Machine	<ul style="list-style-type: none"> Business black color; metal case 13.2" W X 15.0" D X 3.9" H 335mm W X 382mm D X 101mm H 14.6 lb (6.6 kg) in maximum configuration Highlighted optical drive button for easy access 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk											
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1											
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											

See footnotes for important warranty information
US models announced October 23, 2012 or January 22, 2013

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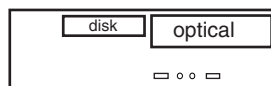
ThinkCentre® M72e Small (3660) - ES 5.2 (Win 8) - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
3660-D5U	3x2	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	ES52	None	Win8 Pro64	10/23/12
3660-D6U	3x2	i3-3240	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	ES52	None	Win8 Pro64	10/23/12
3660-D7U	3x2	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	ES52	None	Win8 Pro64	10/23/12
3660-D8U	3x2	i5-3570	4GBx1 1600MHz	1TB 7200	DVD±RW	HD 2500	None	Stand	ES52	None	Win8 Pro64	10/23/12
3660-D9U	3x2	i7-3770	4GBx1 1600MHz	1TB 7200	DVD±RW	HD 7450	None	Stand	ES52	None	Win8 Pro64	10/23/12

●3-year limited warranty

Positioning	<i>Essential business features, exceptional value</i>										
Processor	<p>Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller</p> <p>Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller</p> <p>Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Processor in LGA1155 socket</p>										
Implementation	Processor in LGA1155 socket										
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets										
Graphics	<p><i>Some:</i> Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11 one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</p> <p><i>Some:</i> AMD Radeon™ HD 7450, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort™, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I)@60Hz; works along with Intel HD Graphics to support up to four independent monitors</p>										
Disk	SATA 3.0Gb/s 7200 rpm										
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset										
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar										
eSATA port	None										
Media reader	None										
Chipset	Intel H61 Express Chipset										
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D										
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)										
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										
PCIe WLAN [†]	None										
Bluetooth	None										
Speaker	Internal speaker for business audio										
IEEE 1394	None										
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®										
Intel AMT	None										
Modem	None										
Security chip	None										
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Floor Stand	System floor stand for vertical orientation										
Power supply	240 watts, autosensing, 85% PSU										
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.2" W X 15.0" D X 3.9" H ● 335mm W X 382mm D X 101mm H ● 14.6 lb (6.6 kg) in maximum configuration ● Highlighted optical drive button for easy access 										
Bay	<p>Bay 1: 5.25", 1.6" high, access, std optical</p> <p>Bay 2: 3.5", 1" high, no access, no disk</p>										
Slot	<p>Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max)</p> <p>Slot 2: Low Profile, PCIe 2.0 x1</p> <p>Slot 3: Low Profile, PCIe 2.0 x1</p>										
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										
	<p>Preloaded operating system Windows® 8 Pro 64-bit</p> <p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> ● ThinkVantage® System Update ● View Management Utility ● Lenovo® Support ● Lenovo Companion ● Lenovo Cloud Storage ● Lenovo QuickLaunch ● Lenovo Solution Center ● Microsoft Office 2013 preloaded; purchase product key to activate ● Norton™ Internet Security (30 days of virus definitions) ● Norton Studio ● Intel AppUp® ● AccuWeather ● PC Device Stage ● Evernote™ ● Skype™ ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) 										
	<p>Security</p> <ul style="list-style-type: none"> ● One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 										
	<p>EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant</p>										
	Supports ThinkVantage Technologies										
	For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet										



See footnotes for important warranty information
US models announced October 23, 2012

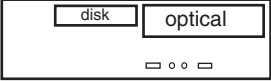
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ThinkCentre® M72e Small (3664) - ES 5.2 (GMP)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
3664-A1U	3x2	i5-3550	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	Switch	Stand	ES52	G P	Pro 64	06/05/12
3664-A2U	3x2	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	ES52	G P	Pro 64	06/19/12
3664-A4U	3x2	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	Switch	Stand	ES52	G P	Pro 64	08/21/12

- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Essential business features, exceptional value</i>										
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										
Implementation											
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets										
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>										
Disk	SATA 3.0Gb/s 7200 rpm										
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset										
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar										
eSATA port	None										
Media reader	None										
Chipset	Intel H61 Express Chipset										
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D										
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)										
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										
PCIe WLAN [†]	None										
Bluetooth	None										
Speaker	Internal speaker for business audio										
IEEE 1394	None										
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®										
Intel AMT	None										
Modem	None										
Security chip	None										
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Floor Stand	System floor stand for vertical orientation										
Power supply	240 watts, autosensing, 85% PSU										
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.2" W X 15.0" D X 3.9" H ● 335mm W X 382mm D X 101mm H ● 14.6 lb (6.6 kg) in maximum configuration ● Highlighted optical drive button for easy access 										
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk										
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1										
											
	Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 										
	Security <ul style="list-style-type: none"> ● One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 										
	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant										
	Supports ThinkVantage Technologies										
	For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet										
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										

See footnotes for important warranty information
 US models announced June 5, June 19, or August 21, 2012


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 (MOS11-11) August 2012

ThinkCentre® M72e Small (3664) - ES 5.2 (GMP) - Win 8

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
3664-A3U	3x2	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	Switch	Stand	ES52	G P	Win8 Pro64	10/23/12
3664-A5U	3x2	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	Stand	ES52	G P	Win7 Pro64	10/23/12

● Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	<i>Essential business features, exceptional value</i>											
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology											
Implementation	Processor in LGA1155 socket											
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets											
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>											
Disk	SATA 3.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset											
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel H61 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
PCIe WLAN ⁴	None											
Bluetooth	None											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Floor Stand	System floor stand for vertical orientation											
Power supply	240 watts, autosensing, 85% PSU											
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.2" W X 15.0" D X 3.9" H ● 335mm W X 382mm D X 101mm H ● 14.6 lb (6.6 kg) in maximum configuration ● Highlighted optical drive button for easy access 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk											
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1											
												
	Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit											
	Preloaded applications (only some listed) - Windows 7 models <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● Lenovo® Message Center Plus ● Lenovo SimpleTap ● Adobe® Reader® ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) - Windows 8 models <ul style="list-style-type: none"> ● Lenovo Support ● Lenovo Companion ● Lenovo Cloud Storage ● Norton™ Studio ● AccuWeather ● Evernote® ● Microsoft Office 2013 preloaded; purchase product key to activate ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) - All models <ul style="list-style-type: none"> ● ThinkVantage System Update ● Lenovo Solution Center ● View Management Utility ● Norton Internet Security (30 days of virus definitions) ● Skype™ 											
	Security <ul style="list-style-type: none"> ● One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 											
	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant											
	Supports ThinkVantage Technologies											
	For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet											
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											

See footnotes for important warranty information
US models announced October 23, 2012

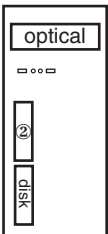
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(MOSI1-28) October 2012

ThinkCentre® M72e Tower (0958) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
0958-A1U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Pro 64	06/05/12
0958-A4U	3x3	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Pro 64	09/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Essential business features, exceptional value</i>										
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										
Implementation											
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets										
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>										
Disk	SATA 3.0Gb/s 7200 rpm										
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset										
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar										
eSATA port	None										
Media reader	None										
Chipset	Intel H61 Express Chipset										
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D										
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)										
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										
PCIe WLAN ⁴	None										
Bluetooth	None										
Speaker	Internal speaker for business audio										
IEEE 1394	None										
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®										
Intel AMT	None										
Modem	None										
Security chip	None										
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Power supply	280 watts with variable speed fan, manual switch										
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.3" W X 16.6" D X 15.3" H (with handle) • 160mm W X 422mm D X 388mm H • 20.7 lb (9.4 kg) in maximum configuration • Handle on top front • Highlighted optical drive button for easy access 										
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk										
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1										
											
	Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo Simple Tap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 										
	Security <ul style="list-style-type: none"> • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) 										
	Cisco EnergyWise compatible RoHS-compliant										
	Supports ThinkVantage Technologies										
	For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet										
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										

See footnotes for important warranty information
US models announced June 5, or September 4, 2012

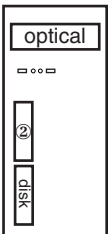
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ThinkCentre® M72e Tower (0958) - TopSeller - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
0958-A2U	3x3	G860	2GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	None	Pro 64	06/19/12
0958-A3U	3x3	i3-2120	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2000	None	None	None	Pro 64	06/19/12
0958-A8U	3x3	G640	2GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	None	Pro 64	09/04/12

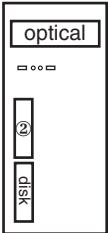
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Essential business features, exceptional value</i>							Preloaded operating system				
Processor	Intel® Pentium® G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G860 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket							Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo Simple Tap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)				
Implementation												
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets; <i>System automatically clocks down for processors with 1066 or 1333MHz DDR3 memory controller</i>											
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>											
Disk	SATA 3.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset											
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel H61 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
PCIe WLAN ⁴	None											
Bluetooth	None											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	280 watts with variable speed fan, manual switch											
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.3" W X 16.6" D X 15.3" H (with handle) • 160mm W X 422mm D X 388mm H • 20.7 lb (9.4 kg) in maximum configuration • Handle on top front • Highlighted optical drive button for easy access 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk											
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1											
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available							Security • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s)				
								Cisco EnergyWise compatible RoHS-compliant				
								Supports ThinkVantage Technologies				
								For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information
US models announced June 19 or September 4, 2012

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Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
0958-A5U	3x3	G870	2GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	None	Win8 Pro64	10/23/12
0958-A6U	3x3	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Win8 Pro64	10/23/12
0958-A7U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Win8 Pro64	10/23/12
0958-A9U	3x3	G860	2GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	None	Win7 Pro64	10/23/12
0958-B1U	3x3	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Win7 Pro64	10/23/12
0958-B2U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Win7 Pro64	10/23/12
0958-B3U	3x3	G645	2GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	None	Win7 Pro64	10/23/12
0958-B4U	3x3	G2120	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	None	Win7 Pro64	12/04/12
0958-B5U	3x3	G2120	2GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	None	Win7 Pro64	02/19/13
0958-B6U	3x3	G2020	2GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	None	Win7 Pro64	02/19/13

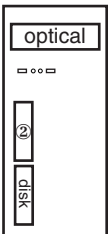
Positioning Processor	<p><i>Essential business features, exceptional value</i></p> <p>Intel® Pentium® G645 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1066MHz) Intel Pentium G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz) Intel Pentium G860 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz) Intel Pentium G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz) Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1600MHz) Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket</p>	<p>Preloaded operating system</p> <p>Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit</p> <p>Preloaded applications (only some listed)</p> <p>- Windows 7 models</p> <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Power Manager • ThinkVantage Communication Utility • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) <p>- Windows 8 models</p> <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) <p>- All models</p> <ul style="list-style-type: none"> • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™
Implementation Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets; <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>	
Graphics	Intel HD Graphics or Intel HD Graphics 2500 in processor, uses main memory, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>	
Disk	SATA 3.0Gb/s 7200 rpm	
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive	
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset	
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar	
eSATA port	None	
Media reader	None	
Chipset	Intel H61 Express Chipset	
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D	
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)	
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
PCIe WLAN ⁴	None	
Bluetooth	None	
Speaker	Internal speaker for business audio	
IEEE 1394	None	
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®	
Intel AMT	None	
Modem	None	
Security chip	None	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	280 watts with variable speed fan, manual switch	
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.3" W X 16.6" D X 15.3" H (with handle) • 160mm W X 422mm D X 388mm H • 20.7 lb (9.4 kg) in maximum configuration • Handle on top front • Highlighted optical drive button for easy access 	
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk	
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	

ThinkCentre® M72e Tower (3675) - ES 5.2 (TopSeller)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
3675-A1U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	ES52	None	Pro 64	06/05/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

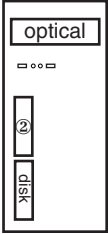
Positioning	<i>Essential business features, exceptional value</i>							Preloaded operating system				
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket							Genuine Windows® 7 Professional 64				
Implementation	Processor in LGA1155 socket							Ready to install applications (only some listed)				
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets							<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager 				
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>							Preloaded applications (only some listed)				
Disk	SATA 3.0Gb/s 7200 rpm							<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo Simple Tap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset											
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel H61 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
PCIe WLAN [†]	None											
Bluetooth	None											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	280 watts with variable speed fan, autosensing, 85% PSU											
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.3" W X 16.6" D X 15.3" H (with handle) • 160mm W X 422mm D X 388mm H • 20.7 lb (9.4 kg) in maximum configuration • Handle on top front • Highlighted optical drive button for easy access 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk											
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1											
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available							Security <ul style="list-style-type: none"> • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) 				
								EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant				
								Supports ThinkVantage Technologies				
								For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet				

ThinkCentre® M72e Tower (3597)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
3597-A2U	3x3	G630	2GBx1 1600MHz	250G 7200	Bay	DVD±RW	Intel HD	None	None	None	Pro 32	06/05/12
3597-C4U	3x3	i3-2120	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2000	None	None	None	Pro 64	06/05/12
3597-C5U	3x3	G850	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	None	Pro 64	06/05/12
3597-E4U	3x3	G630	2GBx1 1600MHz	250G 7200	Bay	DVD±RW	Intel HD	None	None	None	Pro 64	07/10/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

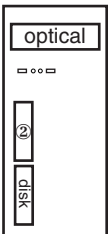
Positioning Processor	<i>Essential business features, exceptional value</i>						Preloaded operating system					
Implementation	<p>Intel® Pentium® G630 Processor (2 cores / 2 threads, 2.7GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Pentium G850 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket</p>						<p><i>Some:</i> Genuine Windows® 7 Professional 32</p> <p><i>Some:</i> Genuine Windows 7 Professional 64</p> <p>Ready to install applications (only some listed)</p> <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager 					
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets; <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>						Preloaded applications (only some listed)					
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>						<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 					
Disk	SATA 3.0Gb/s 7200 rpm						<p>Security</p> <ul style="list-style-type: none"> ● One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 					
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset											
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel H61 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
PCIe WLAN ⁴	None											
Bluetooth	None											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	280 watts with variable speed fan, manual switch											
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 6.3" W X 16.6" D X 15.3" H (with handle) ● 160mm W X 422mm D X 388mm H ● 20.7 lb (9.4 kg) in maximum configuration ● Handle on top front ● Highlighted optical drive button for easy access 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk											
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1											
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											
Cisco EnergyWise compatible RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet												

ThinkCentre® M72e Tower (3597) - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
3597-D4U	3x3	i5-3570	4GBx1 1600MHz	250G 7200	Bay	DVD±RW	HD 2500	None	None	None	Pro 32	06/05/12
3597-C3U	3x3	i5-3550	4GBx2 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Pro 64	06/05/12
3597-E3U	3x3	i5-3470	2GBx2 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Pro 64	07/10/12
3597-E2U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Pro 64	07/10/12
3597-E9U	3x3	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Pro 64	09/04/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	<i>Essential business features, exceptional value</i> Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system <i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> Genuine Windows 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
Implementation		
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets	
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>	
Disk	SATA 3.0Gb/s 7200 rpm	
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive	
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset	
Onboard SATA eSATA port	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar eSATA port	
Media reader	None	
Chipset	Intel H61 Express Chipset	
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D	
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)	
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
PCIe WLAN [†]	None	
Bluetooth	None	
Speaker	Internal speaker for business audio	
IEEE 1394	None	
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®	
Intel AMT	None	
Modem	None	
Security chip	None	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	280 watts with variable speed fan, manual switch	
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.3" W X 16.6" D X 15.3" H (with handle) • 160mm W X 422mm D X 388mm H • 20.7 lb (9.4 kg) in maximum configuration • Handle on top front • Highlighted optical drive button for easy access 	
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk	
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1	
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	Security <ul style="list-style-type: none"> • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) Cisco EnergyWise compatible RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet

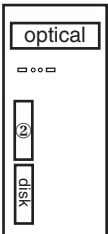
See footnotes for important warranty information
 US models announced June 5, July 10, or September 4, 2012

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 (MOSI1-15) September 2012

ThinkCentre® M72e Tower (3597) - Windows 8

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
3597-F4U	3x3	i3-2130	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2000	None	None	None	Win7 Pro64	10/23/12
3597-F5U	3x3	i5-3570	4GBx2 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Win7 Pro64	10/23/12
3597-F6U	3x3	G870	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	None	Win7 Pro64	10/23/12
3597-F7U	3x3	i5-3470	2GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Win7 Pro64	10/23/12
3597-F8U	3x3	G640	2GBx1 1600MHz	250G 7200	Bay	DVD±RW	Intel HD	None	None	None	Win7 Pro64	10/23/12
3597-F9U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Win7 Pro64	10/23/12
3597-G1U	3x3	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	None	Win7 Pro64	10/23/12
3597-G2U	3x3	G2120	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	None	Win7 Pro64	12/04/12

Positioning Processor	<i>Essential business features, exceptional value</i> Intel® Pentium® G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache) , Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo® Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
Implementation Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets; <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>	
Graphics	Intel HD Graphics, Intel HD Graphics 2000, or Intel HD Graphics 2500 in processor, uses main memory, HDCP, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>	
Disk	SATA 3.0Gb/s 7200 rpm	
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive	
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset	
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar	
eSATA port	None	
Media reader	None	
Chipset	Intel H61 Express Chipset	
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D	
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)	
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
PCIe WLAN [†]	None	
Bluetooth	None	
Speaker	Internal speaker for business audio	
IEEE 1394	None	
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®	
Intel AMT	None	
Modem	None	
Security chip	None	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	280 watts with variable speed fan, manual switch	
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.3" W X 16.6" D X 15.3" H (with handle) • 160mm W X 422mm D X 388mm H • 20.7 lb (9.4 kg) in maximum configuration • Handle on top front • Highlighted optical drive button for easy access 	
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk	
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1	
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	Security <ul style="list-style-type: none"> • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) Cisco EnergyWise compatible RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet

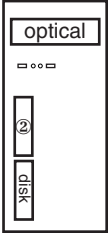
See footnotes for important warranty information
US models announced October 23 or December 4, 2012

ThinkCentre® M72e Tower (3655) - ES 5.2

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
3655-B6U	3x3	i3-2120	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2000	None	ES52	None	Pro 64	06/05/12
3655-D3U	3x3	G860	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	ES52	None	Pro 64	07/10/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	<i>Essential business features, exceptional value</i> Intel® Pentium® G860 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket							Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager				
Implementation Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets; <i>System automatically clocks down for processors with 1333MHz DDR3 memory controller</i>							Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo Simple Tap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)				
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>											
Disk	SATA 3.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset											
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel H61 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
PCIe WLAN ⁴	None											
Bluetooth	None											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	280 watts with variable speed fan, autosensing, 85% PSU											
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 6.3" W X 16.6" D X 15.3" H (with handle) ● 160mm W X 422mm D X 388mm H ● 20.7 lb (9.4 kg) in maximum configuration ● Handle on top front ● Highlighted optical drive button for easy access 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk											
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1											
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available							Security <ul style="list-style-type: none"> ● One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 				
								EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies				
								For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information
US models announced June 5 or July 10, 2012

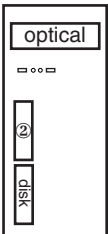
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ThinkCentre® M72e Tower (3655) - ES 5.2 (Win 8)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
3655-D8U	3x3	G645	2GBx1 1600MHz	250G 7200	Bay	DVD±RW	Intel HD	None	ES52	None	Win8 Pro64	10/23/12
3655-D9U	3x3	G870	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	ES52	None	Win8 Pro64	10/23/12
3655-E8U	3x3	i3-2130	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2000	None	ES52	None	Win7 Pro64	10/23/12
3655-F1U	3x3	G870	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	ES52	None	Win7 Pro64	10/23/12
3655-F3U	3x3	G2020	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	Intel HD	None	ES52	None	Win7 Pro64	01/22/13

•3-year limited warranty

Positioning Processor	<i>Essential business features, exceptional value</i> Intel® Pentium® G645 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Power Manager • ThinkVantage Communication Utility • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™
Implementation		
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets; <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>	
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>	
Disk	SATA 3.0Gb/s 7200 rpm	
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive	
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset	
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar	
eSATA port	None	
Media reader	None	
Chipset	Intel H61 Express Chipset	
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D	
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)	
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
PCIe WLAN ⁴	None	
Bluetooth	None	
Speaker	Internal speaker for business audio	
IEEE 1394	None	
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®	
Intel AMT	None	
Modem	None	
Security chip	None	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	280 watts with variable speed fan, autosensing, 85% PSU	
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.3" W X 16.6" D X 15.3" H (with handle) • 160mm W X 422mm D X 388mm H • 20.7 lb (9.4 kg) in maximum configuration • Handle on top front • Highlighted optical drive button for easy access 	
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk	
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1	
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	Security <ul style="list-style-type: none"> • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
US models announced October 23, 2012 or January 22, 2013

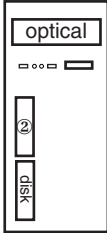
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(MOSI1-30) February 2013

ThinkCentre® M72e Tower (3655) - ES 5.2 - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Media reader	Chassis intr switch	ENERGY STAR 5.2	Global	Win7 preload	Ann date (mm/dd/yy)
3655-C1U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	ES52	None	Pro 32	06/05/12
3655-D2U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	None	ES52	None	Pro 64	07/10/12
✗ 3655-F2U	3x4	i7-3770	4GBx2 1600MHz	1TB 7200	Bay	DVD±RW	HD 4000	Media	Switch	ES52	None	Pro 64	11/06/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Essential business features, exceptional value</i>		<p>Preloaded operating system</p> <p><i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> Genuine Windows 7 Professional 64</p> <p>Ready to install applications (only some listed)</p> <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager <p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Communication Utility ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	<p>Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Processor in LGA1155 socket</p>		
Implementation	Processor in LGA1155 socket		
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets		
Graphics	<p>Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display;</p> <p><i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i></p>		
Disk	SATA 3.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset		
Onboard SATA eSATA port	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar		
Media reader	None		
Chipset	Intel H61 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
PCIe WLAN [†]	None		
Bluetooth	None		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	280 watts with variable speed fan, autosensing, 85% PSU		
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 6.3" W X 16.6" D X 15.3" H (with handle) ● 160mm W X 422mm D X 388mm H ● 20.7 lb (9.4 kg) in maximum configuration ● Handle on top front ● Highlighted optical drive button for easy access 		
Bay	<p>Bay 1: 5.25", 1.6" high, access, std optical</p> <p>Bay 2: 3.5", 1" high, no access, std disk</p> <p>Bay 3: 3.5", 1" high, no access, std disk</p> <p>Bay 4: 1.5", .35" high, access, opt reader*</p> <p>*bay only available on models with media reader installed</p>		
Slot	<p>Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max)</p> <p>Slot 2: half-length, full-height, PCIe 2.0 x1</p> <p>Slot 3: half-length, full-height, PCIe 2.0 x1</p>		
			
Limited Warranty	<p>3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available</p>		
	<p>Security</p> <ul style="list-style-type: none"> ● One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) <p>EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant</p> <p>Supports ThinkVantage Technologies</p> <p>For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet</p>		

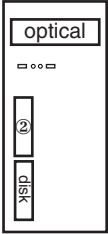
See footnotes for important warranty information
US models announced June 5, July 10, or November 6, 2012
✗ US model withdrawn effective February 2013

ThinkCentre® M72e Tower (3655) - ES 5.2 (Win 8) - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
3655-E5U	3x3	i7-3770	4GBx1 1600MHz	1TB 7200	Bay	DVD±RW	HD 7450	None	ES52	None	Win8 Pro64	10/23/12
3655-E1U	3x3	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	ES52	None	Win8 Pro64	10/23/12
3655-E2U	3x3	i3-3240	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	ES52	None	Win8 Pro64	10/23/12
3655-E3U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	ES52	None	Win8 Pro64	10/23/12
3655-E4U	3x3	i5-3570	4GBx1 1600MHz	1TB 7200	Bay	DVD±RW	HD 2500	None	ES52	None	Win8 Pro64	10/23/12
3655-E9U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	ES52	None	Win7 Pro64	10/23/12

•3-year limited warranty

Positioning	<i>Essential business features, exceptional value</i>							Preloaded operating system				
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache) , Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket							Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit				
Implementation	Processor in LGA1155 socket							Preloaded applications (only some listed) - Windows 7 models				
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets							<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Power Manager • ThinkVantage Communication Utility • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader™ • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
Graphics	Some: Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11 one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i> Some: AMD Radeon™ HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort™, 25 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz;</i> works along with Intel HD Graphics to support up to four independent monitors							- Windows 8 models <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) 				
Disk	SATA 3.0Gb/s 7200 rpm							- All models				
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive							<ul style="list-style-type: none"> • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™ 				
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset							Security <ul style="list-style-type: none"> • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) 				
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel H61 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
PCIe WLAN [†]	None											
Bluetooth	None											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	280 watts with variable speed fan, autosensing, 85% PSU											
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.3" W X 16.6" D X 15.3" H (with handle) • 160mm W X 422mm D X 388mm H • 20.7 lb (9.4 kg) in maximum configuration • Handle on top front • Highlighted optical drive button for easy access 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk											
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1											
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available							EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information
 US models announced October 23, 2012

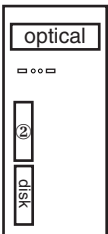
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 (MOS11-31) October 2012

ThinkCentre® M72e Tower (3662) - ES 5.2 (GMP)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY Global (G) STAR 5.2	GMP (P)	Win7 preload	Ann date (mm/dd/yy)
3662-A1U	3x3	i5-3550	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	Switch	ES52	G P	Pro 64	06/05/12
3662-A2U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	ES52	G P	Pro 64	06/19/12
3662-A4U	3x3	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	Switch	ES52	G P	Pro 64	08/21/12

- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	<p><i>Essential business features, exceptional value</i></p> <p>Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller</p> <p>Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Processor in LGA1155 socket</p>							<p>Preloaded operating system</p> <p>Genuine Windows® 7 Professional 64</p> <p>Ready to install applications (only some listed)</p> <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager <p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo Simple Tap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
Implementation	Processor in LGA1155 socket											
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets											
Graphics	<p>Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display;</p> <p><i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i></p>											
Disk	SATA 3.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset											
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel H61 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
PCIe WLAN [†]	None											
Bluetooth	None											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	280 watts with variable speed fan, autosensing, 85% PSU											
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.3" W X 16.6" D X 15.3" H (with handle) • 160mm W X 422mm D X 388mm H • 20.7 lb (9.4 kg) in maximum configuration • Handle on top front • Highlighted optical drive button for easy access 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk											
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1											
												
								<p>Security</p> <ul style="list-style-type: none"> • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) 				
								<p>EPEAT™ Gold rating</p> <p>ENERGY STAR® 5.2-compliant</p> <p>Cisco EnergyWise compatible</p> <p>GREENGUARD® certified</p> <p>RoHS-compliant</p>				
								<p>Supports ThinkVantage Technologies</p>				
								<p>For compatible accessories, please go to O-M72E sheet;</p> <p>For Lenovo service upgrade options, please go to S-TC sheet</p>				
Limited Warranty	<p>3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available</p>											

See footnotes for important warranty information
 US models announced June 5, June 19, or August 21, 2012

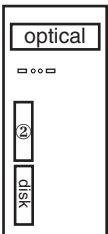
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 (MOS11-18) August 2012

ThinkCentre® M72e Tower (3662) - ES 5.2 (GMP) - Win 8

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.2	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
3662-A3U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	Switch	ES52	G P	Win8 Pro64	10/23/12
3662-A5U	3x3	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	HD 2500	None	ES52	G P	Win7 Pro64	10/23/12

•Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	<i>Essential business features, exceptional value</i>									
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology									
Implementation	Processor in LGA1155 socket									
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets									
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>									
Disk	SATA 3.0Gb/s 7200 rpm									
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive									
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset									
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar									
eSATA port	None									
Media reader	None									
Chipset	Intel H61 Express Chipset									
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)									
Rear ports	Four USB 2.0, serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DVI-D									
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)									
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices)									
Audio	High Definition (HD) Audio, Realtek® ALC662 codec									
PCIe WLAN ⁴	None									
Bluetooth	None									
Speaker	Internal speaker for business audio									
IEEE 1394	None									
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®									
Intel AMT	None									
Modem	None									
Security chip	None									
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo									
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo									
Power supply	280 watts with variable speed fan, autosenesing, 85% PSU									
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.3" W X 16.6" D X 15.3" H (with handle) • 160mm W X 422mm D X 388mm H • 20.7 lb (9.4 kg) in maximum configuration • Handle on top front • Highlighted optical drive button for easy access 									
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk Bay 3: 3.5", 1" high, no access, std disk									
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1									
										
	Preloaded operating system Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit									
	Preloaded applications (only some listed) - Windows 7 models <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Power Manager • ThinkVantage Communication Utility • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models <ul style="list-style-type: none"> • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™ 									
	Security <ul style="list-style-type: none"> • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) 									
	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant									
	Supports ThinkVantage Technologies									
	For compatible accessories, please go to O-M72E sheet; For Lenovo service upgrade options, please go to S-TC sheet									
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available									

Memory

Tiny 4004/3264/3267 use notebook memory:

2GB PC3-12800 DDR3 SODIMM	0A65722	ann	06/05/12
4GB PC3-12800 DDR3 SODIMM	0A65723	ann	06/05/12
8GB PC3-12800 DDR3 SODIMM	0A65724	ann	06/05/12

Small 0967/3598/3660/3664, and

Tower 0958/3675/3597/3655/3662 use desktop memory:

2GB PC3-12800 DDR3 UDIMM	0A65728	ann	06/05/12
4GB PC3-12800 DDR3 UDIMM	0A65729	ann	06/05/12
8GB PC3-12800 DDR3 UDIMM	0A65730	ann	06/05/12

More information at

www.lenovo.com/support/desktopmemorycompatibility

Optical

Small and Tower support:

DVD-ROM DL SATA 1.5Gb/s 16X-48X Max ⁴	41N5618	ann	09/26/06
Lenovo® Super Multi-Burner SATA Drive	0A65618	ann	08/23/11

Storage and removable storage

Tiny support:

320GB 7200rpm SATA 3.0Gb/s 7mm 4K HDD	0A65635	ann	06/05/12
500GB 7200rpm SATA 3.0Gb/s 7mm 4K HDD	0A65632	ann	06/05/12

Small and Tower support:

250GB SATA 3.0Gb/s Disk (7200 rpm)	41N3015	ann	01/24/06
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	ann	11/06/07
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918	ann	08/19/08
300GB SATA 3.0Gb/s Disk (10000 rpm) 2.5"	43R2031	ann	03/31/09
180GB Solid State Drive	0B47308	ann	01/29/13

All:

USB 2.0 Portable 320GB Hard Disk	45K1689	ann	03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
USB 3.0 Secure 500GB Hard Drive	0A65619	ann	11/29/11
USB 3.0 Secure 750GB Hard Drive	0A65616	ann	11/29/11
USB 3.0 Secure 1TB Hard Drive	0A65621	ann	08/28/12
Slim USB Portable DVD Burner	0A33988	ann	06/14/11

Graphics

Small 0967/3598/3660/3664 support Low Profile:

NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann	01/29/13
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Tower 0958/3675/3597/3655/3662 support 60 watts max:

NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann	01/29/13
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⁶⁷ Simultaneously use the graphic card monitor ports along with the systems integrated monitor ports when Multi-Monitor Support is enabled in BIOS Setup.

More information at www.lenovo.com/support/graphiccards

Keyboard

Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
Ultraslim Plus Wireless Keyboard and Mouse ⁵²	0A34032	ann	04/05/11
ThinkPad® USB Keyboard with TrackPoint	55Y9003	ann	08/18/09
Lenovo USB Fingerprint Keyboard	73P4730	ann	02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann	03/24/09

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo ScrollPoint® Mouse(USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
Lenovo Wireless Laser Mouse ⁵²	0A36188	ann	12/20/11
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09

More information at www.lenovo.com/support/mice

Modem

USB 2.0 Lenovo Modem	43R1814	ann	02/26/08
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Multimedia

ThinkPad In-Ear Headphones with mic ⁶⁰	57Y4488	ann	01/07/10
Lenovo Mini Speakers M220	55Y2033	ann	01/07/10
Lenovo Speakers M0520 (black)	57Y6360	ann	02/08/11
Lenovo Speakers M0520 (red)	57Y6361	ann	02/08/11
Lenovo Headset P550	55Y2065		
Lenovo Headset P950 (black)	57Y6605	ann	02/08/11

⁶⁰ Has a 1.2 meter (3.9-foot) cable. Best when systems are in close proximity. Example: SFF placed on a desk.

Security

Kensington® MicroSaver® Cable Lock ⁵⁶	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann	09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann	08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Under Desk Mount

Tiny support:

ThinkCentre Tiny Under Desk Mount Bracket	0B47097	ann	08/07/12
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Monitors

ThinkVision® L1711p 17" (VGA, DVI-D)	5047HB2	ann	10/20/09
ThinkVision LT1952p Wide 19" (VGA, DP, DVI-D) ⁶⁹	2448MB6	ann	09/13/11
ThinkVision L2250p Wide 22" (VGA, DVI-D)	2572HB6	ann	10/20/09
ThinkVision L2251x Wide 22" (VGA, DP)	2578HB6	ann	10/20/09
ThinkVision LT2252p Wide 22" (VGA, DP, DVI-D) ⁶⁹	2572MB6	ann	09/13/11
ThinkVision L2321x Wide 23" (VGA, DP)	4014HB6	ann	06/10/10
ThinkVision LT2323p Wide 23" (VGA, DP, DVI-D) ⁶⁹	3024HC1	ann	05/01/12
ThinkVision LT2452p Wide 24" (VGA, DP, DVI-D) ⁶⁹	4420MB2	ann	09/13/11

⁶⁹ DisplayPort cable is not included; use optional DisplayPort to DisplayPort Monitor Cable (0A36537).

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

Tiny support:

DisplayPort™ to Single-link DVI-D Cable	45J7915	ann	08/05/08
DisplayPort to VGA Monitor Cable	57Y4393	ann	08/04/09
DisplayPort to DisplayPort Monitor Cable	0A36537	ann	09/13/11

Small and Tower support:

Lenovo DVI to DVI Monitor Cable	0B47071		
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All:

Lenovo USB 3.0 to DVI/VGA Monitor Adapter	0B47072	ann	08/14/12
Lenovo USB Soundbar	0A36190	ann	05/01/12
Kensington MicroSaver Cable Lock ⁵⁶	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann	09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann	08/24/10
ThinkCentre Extend Arm	57Y4352	ann	07/06/10

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems



Lenovo ThinkCentre M72z with Frame Stand



Lenovo ThinkCentre M72z with Frame Stand



Lenovo ThinkCentre M72z with Monitor Stand



Lenovo ThinkCentre M72z with Monitor Stand



Dual Independent Display with Optional Lenovo ThinkVision Monitor

ThinkCentre® M72z (3543) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key-board/ Mouse Global	Preload	Ann date (mm/dd/yy)
3543-B6U	i3-3220	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	Intel 105	Media	None	None	None	Frame	USB	None	Win7 Pro64 03/12/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	<i>Mainstream All-In-One PC for the enterprise</i>											Preloaded operating system²⁰		
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology											Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit		
Implementation	Processor in LGA1155 socket											Ready to install applications (only some listed)		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager • Business-in-a-Box 		
Graphics	Intel HD Graphics 2500 in processor, uses main memory, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>											Preloaded applications (only some listed)		
DP dongle	None											<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Automatic Lock Utility • ThinkVantage Power Manager • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • RapidBoot HDD Accelerator • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) • InterVideo WinDVD® (DVD, DVD±RW) 		
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio													
Multi-touch	None													
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off													
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off													
Disk	Hard Disk Drive / SATA 3.0Gb/s, 3.5" Wide, 7200 rpm													
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable													
Media reader	7-in-1 Single Slot SD media reader													
Chipset	Intel H61 Express Chipset													
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)													
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
PCIe Mini Card	One PCI Express® Mini Card slot													
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1													
Bluetooth	None													
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB													
Audio	High Definition (HD) Audio, Realtek ALC269Q													
Speaker	Two internal stereo speakers (2watt x 2)													
Intel AMT	None													
Security chip	Trusted Platform Module (TPM 1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Power supply	150 watts, autosensing, 85% PSU													
Machine	<i>Model(s) with Non multi-touch, Frame stand:</i> <ul style="list-style-type: none"> • Business black color • 20.0" W X 4.0" D X 16.2" H • 507mm W X 101mm D X 411mm H (including stand) • 14.6 lb (6.6 kg) in maximum configuration • Handle in rear, removable feet • Support VESA mount (100mm) 											Security <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s) 		
												EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant		
												Supports ThinkVantage Technologies		
												For compatible accessories, please go to O-M72Z sheet; For Lenovo service upgrade options, please go to S-TC sheet		
Limited Warranty	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													

See footnotes for important warranty information
US model announced Mar 12, 2013

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(MTGI1-12) March 2013

ThinkCentre® M72z (3548) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key-board/Mouse	Global	Win7 preload	Ann date (mm/dd/yy)
3548-A9U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	2.4G	None	Pro 64	06/05/12
3548-B1U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	Pro 64	06/05/12
3548-B2U	i7-3770S	4GBx2 1600MHz	2.0M	500G 7200	HD 4000	11b/g/n	Media	None	None	None	Monitor	USB	None	Pro 64	06/05/12
3548-B3U	i7-3770S	4GBx2 1600MHz	2.0M	500G 7200	HD 4000	11b/g/n	Media	None	None	None	Monitor	2.4G	None	Pro 64	06/05/12
3548-C1U	i3-3220	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	Serial	None	Monitor	USB	None	Pro 64	09/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream All-In-One PC for the enterprise</i>	<p>Preloaded operating system²⁰ Genuine Windows® 7 Professional 64</p> <p>Ready to install applications (only some listed)</p> <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box <p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) ● InterVideo WinDVD® (DVD, DVD±RW)
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller	
Implementation	Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology	
Memory	Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	
Graphics	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
DP dongle	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>	
Display	None	
Multi-touch	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio	
Camera	None	
Controls	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off	
Disk	Front facing buttons for brightness up/auto, brightness down, and power on/off	
Optical	SATA 3.0Gb/s, 3.5" Wide, 7200 rpm	
Media reader	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Chipset	Some: 7-in-1 Single Slot SD media reader	
Rear ports	Intel H61 Express Chipset	
Side ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
PCIe Mini Card	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
PCIe WLAN	One PCI Express® Mini Card slot	
Bluetooth	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Ethernet	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Audio	One gigabit ethernet port, Realtek® RTL8111E-VB	
Speaker	High Definition (HD) Audio, Realtek ALC269Q	
Intel AMT	Two internal stereo speakers (2watt x 2)	
Modem	None	
IEEE 1394	None	
Security chip	None	
Keyboard	Trusted Platform Module (TPM 1.2-compliant)	
Mouse	Some: Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Power supply	Some: Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black	
Machine	Some: Enhanced Optical USB Mouse, black, Lenovo logo	
	Some: Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black	
	150 watts, autosensing, 85% PSU	
	<i>Model(s) with Non multi-touch, Monitor stand:</i>	
	<ul style="list-style-type: none"> ● Business black color ● 20.0" W X 8.9" D X 17.0" H ● 507mm W X 227mm D X 431mm H (including stand) ● 18.5 lb (8.4 kg) in maximum configuration ● Tilt: 25° back, -5° forward; Lift: 110mm; Swivel: +/-45° ● Support VESA mount (100mm) 	
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	
		<p>Security</p> <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) <p>EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant</p> <p>Supports ThinkVantage Technologies</p> <p>For compatible accessories, please go to O-M72Z sheet; For Lenovo service upgrade options, please go to S-TC sheet</p>

ThinkCentre® M72z (3548) - TopSeller - II

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key-board/Mouse Global	Win7 preload	Ann date (mm/dd/yy)
3548-B4U	G640	2GBx1 1600MHz	2.0M	500G 7200	Intel HD	11b/g/n	None	None	None	None	Monitor	USB	None	Pro 64 07/24/12
3548-B9U	G640	2GBx1 1600MHz	2.0M	500G 7200	Intel HD	11b/g/n	None	None	Serial	None	Monitor	USB	None	Pro 64 08/14/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream All-In-One PC for the enterprise</i>											Preloaded operating system²⁰
Processor	Intel® Pentium® G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Genuine Windows® 7 Professional 64
Implementation	Processor in LGA1155 socket											Ready to install applications (only some listed)
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook); <i>System automatically clocks down for processors with 1066MHz DDR3 memory controller</i>											<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box
Graphics	Intel HD Graphics in processor, uses main memory, DirectX® 10.1, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>											Preloaded applications (only some listed)
DP dongle	None											<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) ● InterVideo WinDVD® (DVD, DVD±RW)
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio											
Multi-touch	None											
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off											
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off											
Disk	SATA 3.0Gb/s, 3.5" Wide, 7200 rpm											
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable											
Media reader	None											
Chipset	Intel H61 Express Chipset											
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)											
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
PCIe Mini Card	One PCI Express® Mini Card slot											
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2											
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter											
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB											
Audio	High Definition (HD) Audio, Realtek ALC269Q											
Speaker	Two internal stereo speakers (2watt x 2)											
Intel AMT	None											
Modem	None											
IEEE 1394	None											
Security chip	Trusted Platform Module (TPM 1.2-compliant)											Security
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											<ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s)
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	150 watts, autosensing, 85% PSU											
Machine	<i>Model(s) with Non multi-touch, Monitor stand:</i> <ul style="list-style-type: none"> ● Business black color ● 20.0" W X 8.9" D X 17.0" H ● 507mm W X 227mm D X 431mm H (including stand) ● 18.5 lb (8.4 kg) in maximum configuration ● Tilt: 25° back, -5° forward; Lift: 110mm; Swivel: +/-45° ● Support VESA mount (100mm) 											EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Supports ThinkVantage Technologies
												For compatible accessories, please go to O-M72Z sheet;
												For Lenovo service upgrade options, please go to S-TC sheet

ThinkCentre® M72z (3548) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key-board/ Mouse Global	Preload	Ann date (mm/dd/yy)
3548-C6U	i5-3470T	4GBx1 1600MHz	2.0M	1TB 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	Win8 Pro64 10/23/12
3548-C7U	i7-3770S	4GBx2 1600MHz	2.0M	1TB 7200	HD 4000	11b/g/n	Media	None	None	None	Monitor	USB	None	Win8 Pro64 10/23/12
3548-C8U	i3-3220	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	Win7 Pro64 10/23/12
3548-C9U	i3-3240	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	Win7 Pro64 10/23/12
3548-D1U	G640	2GBx1 1600MHz	2.0M	500G 7200	Intel HD	11b/g/n	Media	None	None	None	Monitor	USB	None	Win7 Pro64 10/23/12
3548-D2U	i3-3220	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	Win7 Pro64 10/23/12
3548-D3U	G860	2GBx1 1600MHz	2.0M	500G 7200	Intel HD	11b/g/n	None	None	None	None	Monitor	USB	None	Win7 Pro64 10/23/12
3548-F2U	i3-3220	4GBx1 1600MHz	2.0M	180G SSD	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	Win7 Pro64 11/20/12
3548-F4U	G2020	2GBx1 1600MHz	2.0M	500G 7200	Intel HD	11b/g/n	Media	None	None	None	Monitor	USB	None	Win7 Pro64 01/22/13
3548-F7U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	Win7 Pro64 03/05/13
3548-F9U	i7-3770S	8GBx1 1600MHz	2.0M	1TB 7200	HD 4000	11b/g/n	Media	None	None	None	Monitor	USB	None	Win7 Pro64 03/05/13
3548-G1U	i5-3470S	4GBx1 1600MHz	2.0M	1TB 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	Win7 Pro64 03/12/13

Positioning	<i>Mainstream All-In-One PC for the enterprise</i>										Preloaded operating system²⁰			
Processor	Intel® Pentium® G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1066MHz) Intel Pentium G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz) Intel Pentium G860 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz) Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated DDR3 memory controller (up to 1600MHz) Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated DDR3 memory controller (up to 1600MHz) Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology										Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit			
Implementation	Processor in LGA1155 socket										Preloaded applications (only some listed) - Windows 7 models			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook) <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>										<ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage Communication Utility ThinkVantage Power Manager Lenovo® Message Center Plus RapidBoot HDD Accelerator Lenovo SimpleTap Adobe® Reader® Microsoft® Office 2010 preloaded; purchase product key to activate Corel® Burn.Now™ (DVD±RW) Corel DVD MovieFactory® (DVD±RW) InterVideo WinDVD® (DVD, DVD±RW) 			
Graphics	Intel HD Graphics / 2500 / 4000 in processor, uses main memory, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>										- Windows 8 models <ul style="list-style-type: none"> Lenovo Support Lenovo Settings Lenovo Companion Lenovo Cloud Storage Norton™ Studio AccuWeather Evernote® Microsoft Office 2013 preloaded; purchase product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) 			
DP dongle	None										- All models <ul style="list-style-type: none"> ThinkVantage System Update ThinkVantage Automatic lock Utility Lenovo Solution Center View Management Utility Norton Internet Security (30 days of virus definitions) Skype™ 			
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio										Security <ul style="list-style-type: none"> Security chip (see information on left) Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse USB port disablement Chassis intrusion switch on selected model(s) 			
Multi-touch	None													
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off													
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off													
Disk	Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide Some: Hard Disk Drive / SATA 3.0Gb/s, 3.5" Wide, 7200 rpm													
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable													
Media reader	Some: 7-in-1 Single Slot SD media reader													
Chipset	Intel H61 Express Chipset													
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)													
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
PCIe Mini Card	One PCI Express® Mini Card slot													
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2													
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter													
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB													
Audio	High Definition (HD) Audio, Realtek ALC269Q													
Speaker	Two internal stereo speakers (2watt x 2)													
Intel AMT	None													
Security chip	Trusted Platform Module (TPM 1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Power supply	150 watts, autosensing, 85% PSU													
Machine	<i>Model(s) with Non multi-touch, Monitor stand:</i> <ul style="list-style-type: none"> Business black color 20.0" W X 8.9" D X 17.0" H 507mm W X 227mm D X 431mm H (including stand) 18.5 lb (8.4 kg) in maximum configuration Tilt: 25° back, -5° forward; Lift: 110mm; Swivel: +/-45° Support VESA mount (100mm) 										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										Supports ThinkVantage Technologies For compatible accessories, please go to O-M72Z sheet; For Lenovo service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information

US models announced Oct 23, 2012, Nov 20, 2012, Jan 22, 2013, Mar 5, 2013, or Mar 12, 2013

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(MTG11-6) March 2013

ThinkCentre® M72z (3548) - TopSeller (Win 8) - II

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key-board/Mouse Global	Preload	Ann date (mm/dd/yy)
3548-E9U	i3-3220	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Frame	USB	None	Win7 Pro64 11/20/12
3548-F1U	G645	2GBx1 1600MHz	2.0M	500G 7200	Intel HD	11b/g/n	Media	None	None	None	Frame	USB	None	Win7 Pro64 11/20/12
3548-F3U	G645	2GBx1 1600MHz	2.0M	500G 7200	Intel HD	11b/g/n	Media	None	Serial	None	Frame	USB	None	Win7 Pro64 11/20/12
3548-F6U	G2120	2GBx1 1600MHz	2.0M	500G 7200	Intel HD	11b/g/n	Media	None	None	None	Frame	USB	None	Win7 Pro64 12/04/12
3548-F5U	G2020	2GBx1 1600MHz	2.0M	500G 7200	Intel HD	11b/g/n	Media	None	None	None	Frame	USB	None	Win7 Pro64 01/22/13
3548-F8U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Frame	USB	None	Win7 Pro64 03/05/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	<p><i>Mainstream All-In-One PC for the enterprise</i></p> <p>Intel® Pentium® G645 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Pentium G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p>	<p>Preloaded operating system²⁰</p> <p>Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</p> <p>Ready to install applications (only some listed)</p> <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager • Business-in-a-Box <p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Automatic Lock Utility • ThinkVantage Power Manager • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • RapidBoot HDD Accelerator • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) • InterVideo WinDVD® (DVD, DVD±RW)
Implementation Processor in LGA1155 socket		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook) <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>	
Graphics	Intel HD Graphics or Intel HD Graphics 2500 in processor, uses main memory, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>	
DP dongle	None	
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off	
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off	
Disk	Hard Disk Drive / SATA 3.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Media reader	7-in-1 Single Slot SD media reader	
Chipset	Intel H61 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB	
Audio	High Definition (HD) Audio, Realtek ALC269Q	
Speaker	Two internal stereo speakers (2watt x 2)	
Intel AMT	None	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<p><i>Model(s) with Non multi-touch, Frame stand:</i></p> <ul style="list-style-type: none"> • Business black color • 20.0" W X 4.0" D X 16.2" H • 507mm W X 101mm D X 411mm H (including stand) • 14.6 lb (6.6 kg) in maximum configuration • Handle in rear, removable feet • Support VESA mount (100mm) 	<p>Security</p> <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s)
		<p>EPEAT™ Gold rating</p> <p>ENERGY STAR® 5.2-compliant</p> <p>TCO Certified Edge</p> <p>Cisco EnergyWise compatible</p> <p>GREENGUARD® certified</p> <p>RoHS-compliant</p> <p>Supports ThinkVantage Technologies</p>
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	<p>For compatible accessories, please go to O-M72Z sheet;</p> <p>For Lenovo service upgrade options, please go to S-TC sheet</p>

See footnotes for important warranty information
US models announced Nov 20, 2012, Dec 4, 2012, Jan 22, 2013, or Mar 5, 2013

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ThinkCentre® M72z (3554)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key-board/Mouse Global	Win7 preload	Ann date (mm/dd/yy)
3554-E2U	i7-3770S	4GBx2 1600MHz	2.0M	500G 7200	HD 4000	11b/g/n	Media	None	None	None	Monitor	USB	None	Pro 64 06/05/12
3554-E3U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	Pro 64 06/05/12
3554-E4U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	Prem 64 06/05/12
3554-E5U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	None	Pro 64 06/05/12
3554-E6U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	Prem 32 06/05/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	<i>Mainstream All-In-One PC for the enterprise</i> Intel® Core™ i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ <i>Some:</i> Genuine Windows® 7 Home Premium 32 <i>Some:</i> Genuine Windows® 7 Home Premium 64 <i>Some:</i> Genuine Windows 7 Professional 64
Implementation	Processor in LGA1155 socket	Ready to install applications (only some listed)
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>	Preloaded applications (only some listed)
DP dongle	None	<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) ● InterVideo WinDVD® (DVD, DVD±RW)
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off	
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off	
Disk	SATA 3.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Media reader	<i>Some:</i> 7-in-1 Single Slot SD media reader	
Chipset	Intel H61 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB	
Audio	High Definition (HD) Audio, Realtek ALC269Q	
Speaker	Two internal stereo speakers (2watt x 2)	
Intel AMT	None	
Modem	None	
IEEE 1394	None	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s)
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>Model(s) with Non multi-touch, Frame stand:</i> <ul style="list-style-type: none"> ● Business black color ● 20.0" W X 4.0" D X 16.2" H ● 507mm W X 101mm D X 411mm H (including stand) ● 14.6 lb (6.6 kg) in maximum configuration ● Handle in rear, removable feet ● Support VESA mount (100mm) <i>Model(s) with Non multi-touch, Monitor stand:</i> <ul style="list-style-type: none"> ● Business black color ● 20.0" W X 8.9" D X 17.0" H ● 507mm W X 227mm D X 431mm H (including stand) ● 18.5 lb (8.4 kg) in maximum configuration ● Tilt: 25° back, -5° forward; Lift: 110mm; Swivel: +/-45° ● Support VESA mount (100mm) 	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	For compatible accessories, please go to O-M72Z sheet; For Lenovo service upgrade options, please go to S-TC sheet

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key-board/Mouse Global	Preload	Ann date (mm/dd/yy)
3554-H2U	i3-3220	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	Win8 Pro64 10/23/12
3554-H3U	i3-3240	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	Win8 Pro64 10/23/12
3554-H4U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	Win8 Pro64 10/23/12
3554-H7U	i5-3570S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	Win8 Pro64 10/23/12
3554-H8U	i7-3770S	4GBx1 1600MHz	2.0M	1TB 7200	HD 4000	11b/g/n	Media	None	None	None	Monitor	USB	None	Win8 Pro64 10/23/12
3554-M9U	i5-3470S	4GBx1 1600MHz	2.0M	180G SSD	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	None	Win7 Pro64 11/20/12

Positioning Processor	<i>Mainstream All-In-One PC for the enterprise</i> Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated DDR3 memory controller (up to 1600MHz) Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated DDR3 memory controller (up to 1600MHz) Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache) , Turbo Boost 2.0 (3.8GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage Communication Utility ThinkVantage Power Manager Lenovo® Message Center Plus RapidBoot HDD Accelerator Lenovo SimpleTap Adobe® Reader® Microsoft® Office 2010 preloaded; purchase product key to activate Corel® Burn.Now™ (DVD±RW) Corel DVD MovieFactory® (DVD±RW) InterVideo WinDVD® (DVD, DVD±RW) - Windows 8 models <ul style="list-style-type: none"> Lenovo Support Lenovo Settings Lenovo Companion Lenovo Cloud Storage Norton™ Studio AccuWeather Evernote® Microsoft Office 2013 preloaded; purchase product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) - All models <ul style="list-style-type: none"> ThinkVantage System Update ThinkVantage Automatic lock Utility Lenovo Solution Center View Management Utility Norton Internet Security (30 days of virus definitions) Skype™ Security <ul style="list-style-type: none"> Security chip (see information on left) Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse USB port disablement Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies
Implementation	Processor in LGA1155 socket	
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>	
DP dongle	None	
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off	
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off	
Disk	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 3.5" Wide, 7200 rpm DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Optical Media reader	<i>Some:</i> 7-in-1 Single Slot SD media reader	
Chipset	Intel H61 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB	
Audio	High Definition (HD) Audio, Realtek ALC269Q	
Speaker	Two internal stereo speakers (2watt x 2)	
Intel AMT	None	
Modem	None	
IEEE 1394	None	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>Model(s) with Non multi-touch, Monitor stand:</i> <ul style="list-style-type: none"> Business black color 20.0" W X 8.9" D X 17.0" H 507mm W X 227mm D X 431mm H (including stand) 18.5 lb (8.4 kg) in maximum configuration Tilt: 25° back, -5° forward; Lift: 110mm; Swivel: +/-45° Support VESA mount (100mm) 	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	<i>For compatible accessories, please go to O-M72Z sheet; For Lenovo service upgrade options, please go to S-TC sheet</i>

See footnotes for important warranty information
 US models announced October 23 or November 20, 2012

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key-board/Mouse Global	Preload	Ann date (mm/dd/yy)
3554-H1U	i3-3220	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	None	Win8 Pro64 10/23/12
3554-H5U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	None	Win8 Pro64 10/23/12
3554-H6U	i5-3570S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	None	Win8 Pro64 10/23/12
3554-H9U	i7-3770S	4GBx1 1600MHz	2.0M	1TB 7200	HD 4000	11b/g/n	Media	None	None	None	Frame	USB	None	Win8 Pro64 10/23/12
3554-M7U	i3-3220	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Frame	USB	None	Win7 Pro64 11/20/12
3554-N1U	G2020	2GBx1 1600MHz	2.0M	500G 7200	Intel HD	11b/g/n	Media	None	None	None	Frame	USB	None	Win7 Pro64 01/22/13

Positioning Processor	<i>Mainstream All-In-One PC for the enterprise</i> Intel® Pentium® G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® Message Center Plus • RapidBoot HDD Accelerator • Lenovo SimpleTap • Adobe® Reader® • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) • InterVideo WinDVD® (DVD, DVD±RW) - Windows 8 models <ul style="list-style-type: none"> • Lenovo Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models <ul style="list-style-type: none"> • ThinkVantage System Update • ThinkVantage Automatic lock Utility • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™
Implementation		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook) <i>System automatically clocks down for processors with 1333MHz DDR3 memory controller</i>	
Graphics	Intel HD Graphics / 2500 / 4000 in processor, uses main memory, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>	
DP dongle	None	
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off	
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off	
Disk	Hard Disk Drive / SATA 3.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Media reader	<i>Some:</i> 7-in-1 Single Slot SD media reader	
Chipset	Intel H61 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB	
Audio	High Definition (HD) Audio, Realtek ALC269Q	
Speaker	Two internal stereo speakers (2watt x 2)	
Intel AMT	None	
Modem	None	
IEEE 1394	None	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>Model(s) with Non multi-touch, Frame stand:</i> <ul style="list-style-type: none"> • Business black color • 20.0" W X 4.0" D X 16.2" H • 507mm W X 101mm D X 411mm H (including stand) • 14.6 lb (6.6 kg) in maximum configuration • Handle in rear, removable feet • Support VESA mount (100mm) 	Security <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s)
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72Z sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
US models announced October 23, 2012, November 20, 2012, or January 22, 2013

ThinkCentre® M72z (3558) - GMP

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key-board/ Mouse	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
3558-A2U	i5-3550S	4GBx1 1600MHz	2.0M	250G 7200	HD 2500	11b/g/n	Media	Switch	None	None	Frame	USB	G P	Pro 64	06/05/12
3558-A4U	i5-3570S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	Switch	None	None	Frame	USB	G P	Pro 64	08/14/12

- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	<i>Mainstream All-In-One PC for the enterprise</i> Intel® Core™ i5-3550S Processor (4 cores / 4 threads, 3.0GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box				
Implementation	Processor in LGA1155 socket										Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) ● InterVideo WinDVD® (DVD, DVD±RW)				
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)														
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>														
DP dongle	None														
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio														
Multi-touch	None														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off														
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off														
Disk	SATA 3.0Gb/s, 3.5" Wide, 7200 rpm														
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable														
Media reader	7-in-1 Single Slot SD media reader														
Chipset	Intel H61 Express Chipset										Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s)				
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)														
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2														
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter														
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB														
Audio	High Definition (HD) Audio, Realtek ALC269Q														
Speaker	Two internal stereo speakers (2watt x 2)														
Intel AMT	None														
Modem	None														
IEEE 1394	None														
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	150 watts, autosensing, 85% PSU														
Machine	<i>Model(s) with Non multi-touch, Frame stand:</i> ● Business black color ● 20.0" W X 4.0" D X 16.2" H ● 507mm W X 101mm D X 411mm H (including stand) ● 14.6 lb (6.6 kg) in maximum configuration ● Handle in rear, removable feet ● Support VESA mount (100mm)														
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M72Z sheet; For Lenovo service upgrade options, please go to S-TC sheet				

ThinkCentre® M72z (3558) - GMP (Thin Client)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	SATA optical	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key-board/Mouse	Global (G) GMP (P)	Win7 preload (mm/dd/yy)	Ann date
3558-A5U	G460	2GBx1 1600MHz	None	8G SSD None	None	Intel HD	11b/g/n	None	Switch	Serial	None	Frame	USB	G P	Emb 32	11/20/12
3558-A7U	G465	2GBx1 1600MHz	None	8G SSD None	None	Intel HD	11b/g/n	None	Switch	Serial	None	Frame	USB	G P	Emb 32	01/08/13

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	<i>Mainstream All-In-One PC for the enterprise</i> Intel® Celeron® G460 Processor (1 core / 2 threads, 1.8GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Celeron G465 Processor (1 core / 2 threads, 1.9GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller											Preloaded operating system²⁰ Genuine Windows® 7 Embedded 32 Preloaded applications (only some listed) <ul style="list-style-type: none"> ● Adobe® Reader® ● Adobe Flash® Player ● Citrix® Receiver ● IIS Web Server ● Microsoft® Management Console ● Microsoft Silverlight ● Remote Desktop Protocol ● ThinPrint .print Client ● TightVNC Viewer ● VMware® View Client ● vWorkspace ● Windows Media Player 				
Implementation	Processor in LGA1155 socket															
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook) <i>System automatically clocks down for processors with 1066MHz DDR3 memory controller</i>															
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>															
DP dongle Display	None 20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio															
Multi-touch Camera	None None															
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off															
Disk Optical Media reader	Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" Wide None None															
Chipset	Intel H61 Express Chipset															
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)															
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)															
PCIe Mini Card	One PCI Express® Mini Card slot															
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2															
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter															
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB															
Audio	High Definition (HD) Audio, Realtek ALC269Q															
Speaker	Two internal stereo speakers (2watt x 2)															
Intel AMT	None															
Modem	None															
IEEE 1394	None															
Security chip	Trusted Platform Module (TPM 1.2-compliant)											Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) 				
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo															
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo															
Power supply	150 watts, autosensing, 85% PSU															
Machine	<i>Model(s) with Non multi-touch, Frame stand:</i> <ul style="list-style-type: none"> ● Business black color ● 20.0" W X 4.0" D X 16.2" H ● 507mm W X 101mm D X 411mm H (including stand) ● 14.6 lb (6.6 kg) in maximum configuration ● Handle in rear, removable feet ● Support VESA mount (100mm) 											EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Supports ThinkVantage Technologies For compatible accessories, please go to O-M72Z sheet; For Lenovo service upgrade options, please go to S-TC sheet				

ThinkCentre® M72z (3558) - GMP (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^s	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card	Media reader	Chassis intrusion switch	Serial port	PS/2 port	Stand type	Key-board/ mouse	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
3558-A3U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	Switch	None	None	Frame	USB	G P	Win8 Pro64	10/23/12
3558-A6U	i5-3470S	4GBx1 1600MHz	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Frame	USB	G P	Win7 Pro64	10/23/12

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	<i>Mainstream All-In-One PC for the enterprise</i>											Preloaded operating system²⁰			
Implementation	Intel® Core™ i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											Preloaded applications (only some listed)			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>											- Windows 7 models			
DP dongle	None											<ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage Communication Utility ThinkVantage Power Manager Lenovo® Message Center Plus RapidBoot HDD Accelerator Lenovo Simple Tap Adobe® Reader® Microsoft Office 2010 preloaded; purchase product key to activate Corel® Burn.Now™ (DVD±RW) Corel DVD MovieFactory® (DVD±RW) InterVideo WinDVD® (DVD, DVD±RW) 			
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio											- Windows 8 models			
Multi-touch	None											<ul style="list-style-type: none"> Lenovo Support Lenovo Settings Lenovo Companion Lenovo Cloud Storage Norton™ Studio AccuWeather Evernote® Microsoft Office 2013 preloaded; purchase product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) 			
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off											- All models			
Controls	Front facing buttons for brightness up/auto, brightness down, and power on/off											<ul style="list-style-type: none"> ThinkVantage System Update ThinkVantage Automatic lock Utility Lenovo Solution Center View Management Utility Norton Internet Security (30 days of virus definitions) Skype™ 			
Disk	SATA 3.0Gb/s, 3.5" Wide, 7200 rpm														
Optical Media reader	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable														
Chipset	Intel H61 Express Chipset														
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort connector, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)														
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2														
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter														
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB														
Audio	High Definition (HD) Audio, Realtek ALC269Q														
Speaker	Two internal stereo speakers (2watt x 2)														
Intel AMT	None														
Modem	None														
IEEE 1394	None														
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	150 watts, autosensing, 85% PSU														
Machine	<i>Model(s) with Non multi-touch, Frame stand:</i> <ul style="list-style-type: none"> Business black color 20.0" W X 4.0" D X 16.2" H 507mm W X 101mm D X 411mm H (including stand) 14.6 lb (6.6 kg) in maximum configuration Handle in rear, removable feet Support VESA mount (100mm) 											Security <ul style="list-style-type: none"> Security chip (see information on left) Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse USB port disablement Chassis intrusion switch on selected model(s) 			
												EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant			
												Supports ThinkVantage Technologies			
												For compatible accessories, please go to O-M72Z sheet; For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

See footnotes for important warranty information
US models announced October 23, 2012

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(MTGI1-8) March 2013

Memory

2GB PC3-12800 DDR3 SODIMM	0A65722	ann 06/05/12
4GB PC3-12800 DDR3 SODIMM	0A65723	ann 06/05/12
8GB PC3-12800 DDR3 SODIMM	0A65724	ann 06/05/12

More information at

www.lenovo.com/support/desktopmemorycompatibility

Storage and removable storage

250GB SATA 3.0Gb/s Disk (7200 rpm)	41N3015	ann 01/24/06
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	ann 11/06/07
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918	ann 08/19/08
300GB SATA 3.0Gb/s Disk (10000 rpm) 2.5"	43R2031	ann 03/31/09

USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
USB 3.0 Secure 500GB Hard Drive	0A65619	ann 11/29/11
USB 3.0 Secure 750GB Hard Drive	0A65616	ann 11/29/11
USB 3.0 Secure 1TB Hard Drive	0A65621	ann 08/28/12
Slim USB Portable DVD Burner	0A33988	ann 06/14/11

Keyboard

Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
UltraSlim Plus Wireless Keyboard and Mouse ⁵²	0A34032	ann 04/05/11
ThinkPad® USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
Lenovo Wireless Laser Mouse ⁵²	0A36188	ann 12/20/11
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09

More information at www.lenovo.com/support/mice

Modem

USB 2.0 Lenovo Modem	43R1814	ann 02/26/08
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Multimedia

ThinkPad In-Ear Headphones with mic	57Y4488	ann 01/07/10
Lenovo Mini Speakers M220	55Y2033	ann 01/07/10
Lenovo Speakers M0520 (black)	57Y6360	ann 02/08/11
Lenovo Speakers M0520 (red)	57Y6361	ann 02/08/11
Lenovo Headset P550	55Y2065	
Lenovo Headset P950 (black)	57Y6605	ann 02/08/11

Security

Kensington® MicroSaver® Cable Lock ⁵⁶	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann 09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann 08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Monitors

ThinkVision® L1711p 17" (VGA, DVI-D) ⁶⁸	5047HB2	ann 10/20/09
ThinkVision LT1952p Wide 19" (VGA, DP, DVI-D) ⁶⁹	2448MB6	ann 09/13/11
ThinkVision L2250p Wide 22" (VGA, DVI-D) ⁶⁸	2572HB6	ann 10/20/09
ThinkVision L2251x Wide 22" (VGA, DP)	2578HB6	ann 10/20/09
ThinkVision LT2252p Wide 22" (VGA, DP, DVI-D) ⁶⁹	2572MB6	ann 09/13/11
ThinkVision L2321x Wide 23" (VGA, DP)	4014HB6	ann 06/10/10
ThinkVision LT2323p Wide 23" (VGA, DP, DVI-D) ⁶⁹	3024HC1	ann 05/01/12
ThinkVision LT2452p Wide 24" (VGA, DP, DVI-D) ⁶⁹	4420MB2	ann 09/13/11

⁶⁸ Requires a DisplayPort Monitor Cable (DisplayPort to Single-Link DVI-D or DisplayPort to VGA Analog).

⁶⁹ DisplayPort cable is not included; use optional DisplayPort to DisplayPort Monitor Cable (0A36537).

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

Lenovo USB 3.0 to DVI/VGA Monitor Adapter	0B47072	ann 08/14/12
DisplayPort™ to Single-link DVI-D Cable	45J7915	ann 08/05/08
DisplayPort to VGA Monitor Cable	57Y4393	ann 08/04/09
DisplayPort to DisplayPort Monitor Cable	0A36537	ann 09/13/11
Kensington MicroSaver Cable Lock ⁵⁶	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann 09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann 08/24/10
ThinkCentre Extend Arm ⁷⁰	57Y4352	ann 07/06/10

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

⁷⁰ Desk Mount only.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems

Lenovo ThinkCentre M77 Small and Tower

ThinkCentre®



Lenovo ThinkCentre M77
Small and Tower



Lenovo ThinkCentre M77 Tower
with Lenovo ThinkVision monitor



Lenovo ThinkCentre M77 Small



Lenovo ThinkCentre M77 Small
with Lenovo ThinkVision monitor



Lenovo ThinkCentre M77 Tower



Lenovo ThinkCentre M77 Tower

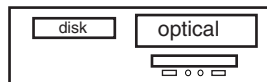
ThinkCentre® M77 Small (2227) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	GHz	Memory ⁸	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	PS/2 port	Floor stand	ENERGY STAR 5.2	Global Educ	Win7 preload
2227-A1U	4x3	Athlon II X4 645	3.1	4GBx1	500G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	None	N N	Pro 64
2227-A2U	4x3	Athlon II X2 B24	3.0	2GBx1	320G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	None	N N	Pro 64
2227-A3U	4x3	Phenom II X2 B53	2.8	4GBx1	320G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	None	N N	Pro 64
2227-A4U	4x3	FX 4100	3.6	4GBx1	500G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	None	N N	Pro 64
2227-A5U	4x3	Athlon II X2 B26	3.2	2GBx1	250G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	None	N N	Pro 64
2227-A6U	4x3	Phenom II X2 B53	2.8	4GBx1	250G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	None	N N	Pro 64
2227-B1U	4x3	Phenom II X2 B57	3.2	4GBx1	500G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	None	N N	Pro 64
2227-C1U	4x3	Phenom II X2 B57	3.2	2GBx1	250G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	None	N N	Pro 64

- Small and medium business (SMB) model(s), part of the US TopSeller Program
- 3-year limited warranty
- Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>	Preloaded operating system Genuine Windows® 7 Professional 64 Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
Processor	AMD Athlon™ II X2 Processor B24 with dual-core , integrated 1066MHz DDR3 memory controller, and 2MB L2 cache (1MB per core) AMD Athlon II X2 Processor B26 with dual-core , integrated 1066MHz DDR3 memory controller, and 2MB L2 cache (1MB per core) AMD Phenom™ II X2 Processor B53 with dual-core , integrated 1066MHz DDR3 memory controller, 1MB L2 cache (512KB per core), and 6MB shared L3 cache AMD Phenom II X2 Processor B57 with dual-core , integrated 1066MHz DDR3 memory controller, 1MB L2 cache (512KB per core), and 6MB shared L3 cache AMD Athlon II X4 Processor 645 with quad-core , integrated 1333MHz DDR3 memory controller, and 2MB L2 cache (512KB per core) AMD FX™ Processor 4100 with quad-core , Turbo Core 2.0 (3.8GHz max) integrated 1866MHz DDR3 memory controller, 4MB L2 cache (1MB per core), and 8MB shared L3 cache	
Implementation	Processor in Socket AM3+	
Memory	16GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets	
Graphics	ATI™ Radeon™ HD 4250 , integrated in chipset, uses main memory, one analog VGA DB-15 connector, one DisplayPort™ connector, HDCP, DirectX® 10.1, ATI Avivo™, SurroundView™, supports dual independent display; supports up to 4 monitors with opt dual-head ATI Radeon discrete graphics adapter; <i>Maximum resolution: 2560x1440 (VGA) @75Hz; 2560x1600 (DisplayPort) @60Hz</i> None	
DP dongle	None	
Disk	SATA 6.0Gb/s 7200 rpm	
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive	
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1	
SATA cables	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar	
eSATA port	None	
Media reader	None	
Chipset	AMD 980G Chipset	
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Six USB 2.0, serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort	
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)	
Internal connector	Three USB 2.0 planar conn (1 used; two open for additional USB devices)	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
IEEE 1394	None	
Ethernet	One gigabit ethernet port, Broadcom® BCM5761, DASH 1.1	
Modem	None	
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo	
Floor Stand	System floor stand for vertical orientation	
Power supply	240 watts, autosensing, active Power Factor Correction	
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.3" W X 14.5" D X 3.9" H • 337mm W X 369mm D X 99mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention 	
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader	
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1 Slot 4: Low Profile, 32-bit PCI 2.3	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	



See footnotes for important warranty information

US model announced Mar 6, 2012; previous models on Sep 20, Nov 8, Dec 13, 2011, or Feb 21, 2012

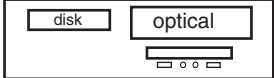
US models withdrawn effective November 2012

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(ABNY1-1) March 2012

Type-model	Slot x bay	Processor	GHz	Memory ⁸	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	PS/2 port	Floor stand	ENERGY STAR 5.2	Global Educ	Win7 preload
2209-A4U	4x3	Athlon II X2 B24	3.0	2GBx1	320G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	None	N N	Pro 64
2209-B3U	4x3	Athlon II X4 645	3.1	4GBx1	500G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	None	N N	Pro 64
2209-D5U	4x3	Sempron 150	2.9	2GBx1	320G 7200	DVD±RW	None	HD 4250	None	Switch	None	Stand	None	N N	Pro 64
2209-E1U	4x3	Athlon II X2 B26	3.2	4GBx1	250G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	None	N N	Pro 64
2209-G1U	4x3	Athlon II X2 220	2.8	2GBx1	250G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	None	N N	Pro 64

- 3-year limited warranty
- Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>										Preloaded operating system				
Processor	<p>AMD Sempron™ Processor 150 with single-core, integrated 1066MHz DDR3 memory controller, and 1MB L2 cache</p> <p>AMD Athlon™ II X2 processor 220 with dual-core, integrated 1066MHz DDR3 memory controller, and 1MB L2 cache (512KB per core)</p> <p>AMD Athlon II X2 Processor B24 with dual-core, integrated 1066MHz DDR3 memory controller, and 2MB L2 cache (1MB per core)</p> <p>AMD Athlon II X2 Processor B26 with dual-core, integrated 1066MHz DDR3 memory controller, and 2MB L2 cache (1MB per core)</p> <p>AMD Athlon II X4 Processor 645 with quad-core, integrated 1333MHz DDR3 memory controller, and 2MB L2 cache (512KB per core)</p>										Genuine Windows® 7 Professional 64				
Implementation	Processor in Socket AM3+										Preloaded applications (only some listed)				
Memory	16GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
Graphics	<p>ATI™ Radeon™ HD 4250, integrated in chipset, uses main memory, one analog VGA DB-15 connector, one DisplayPort™ connector, HDCP, DirectX® 10.1, ATI Avivo™, SurroundView™, supports dual independent display; supports up to 4 monitors with opt dual-head ATI Radeon discrete graphics adapter; <i>Maximum resolution: 2560x1440 (VGA) @75Hz; 2560x1600 (DisplayPort) @60Hz</i></p>														
DP dongle	None														
Disk	SATA 6.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1														
SATA cables	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar														
eSATA port	None														
Media reader	None														
Chipset	AMD 980G Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Six USB 2.0, serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)														
Internal connector	Three USB 2.0 planar conn (1 used; two open for additional USB devices)														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Broadcom® BCM5761, DASH 1.1														
Modem	None														
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo														
Floor Stand	System floor stand for vertical orientation														
Power supply	240 watts, autosensing, active Power Factor Correction														
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.3" W X 14.5" D X 3.9" H • 337mm W X 369mm D X 99mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention 														
Bay	<p>Bay 1: 5.25", 1.6" high, access, std optical</p> <p>Bay 2: 3.5", 1" high, no access, std disk</p> <p>Bay 3: 3.5", .5" high, access, opt reader</p>														
Slot	<p>Slot 1: Low Profile, PCI Express 2.0 x16 (45w max)</p> <p>Slot 2: Low Profile, PCIe 2.0 x1</p> <p>Slot 3: Low Profile, PCIe 2.0 x1</p> <p>Slot 4: Low Profile, 32-bit PCI 2.3</p>														
Limited Warranty	<p>3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available</p>										<p>Security</p> <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • <i>Some:</i> Chassis intrusion switch <p>RoHS-compliant</p> <p>Supports ThinkVantage Technologies</p> <p>For compatible accessories, please go to O-M77 sheet; For Lenovo service upgrade options, please go to S-TC sheet</p>				

See footnotes for important warranty information

US model announced June 5, 2012; previous models on Sep 20, 2011, Nov 8, 2011, or Jan 24, 2012

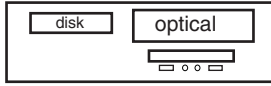
US model withdrawn effective November 2012

ThinkCentre® M77 Small (1996) - ENERGY STAR® 5.2

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	GHz	Memory ⁸	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	PS/2 port	Floor stand	ENERGY STAR 5.2	Global Educ	Win7 preload
ⓧ 1996-A2U	4x3	Athlon II X2 B24	3.0	2GBx1	320G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	ES5.2	N N	Pro 64
ⓧ 1996-A3U	4x3	Phenom II X2 B53	2.8	4GBx1	500G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	ES5.2	N N	Pro 64
1996-D7U	4x3	FX 4100	3.6	4GBx1	500G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	ES5.2	N N	Pro 64
1996-E1U	4x3	Athlon II X2 B26	3.2	4GBx1	250G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	ES5.2	N N	Pro 64
1996-E2U	4x3	Athlon II X2 B26	3.2	4GBx1	500G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	ES5.2	N N	Pro 64
ⓧ 1996-G1U	4x3	Phenom II X2 B57	3.2	4GBx1	500G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	ES5.2	N N	Pro 64

- 3-year limited warranty
- Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>		Preloaded operating system Genuine Windows® 7 Professional 64 Preloaded applications (only some listed) <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Toolbox ● Norton™ Internet Security 2011 (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	AMD Athlon™ II X2 Processor B24 with dual-core , integrated 1066MHz DDR3 memory controller, and 2MB L2 cache (1MB per core) AMD Athlon II X2 Processor B26 with dual-core , integrated 1066MHz DDR3 memory controller, and 2MB L2 cache (1MB per core) AMD Phenom™ II X2 Processor B53 with dual-core , integrated 1066MHz DDR3 memory controller, 1MB L2 cache (512KB per core), and 6MB shared L3 cache AMD Phenom II X2 Processor B57 with dual-core , integrated 1066MHz DDR3 memory controller, 1MB L2 cache (512KB per core), and 6MB shared L3 cache AMD FX™ Processor 4100 with quad-core , Turbo Core 2.0 (3.8GHz max) integrated 1866MHz DDR3 memory controller, 4MB L2 cache (1MB per core), and 8MB shared L3 cache Processor in Socket AM3+		
Memory	16GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets		
Graphics	ATI™ Radeon™ HD 4250 , integrated in chipset, uses main memory, one analog VGA DB-15 connector, one DisplayPort™ connector, HDCP, DirectX® 10.1, ATI Avivo™, SurroundView™, supports dual independent display; supports up to 4 monitors with opt dual-head ATI Radeon discrete graphics adapter; <i>Maximum resolution: 2560x1440 (VGA) @75Hz; 2560x1600 (DisplayPort)@60Hz</i> None		
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1		
SATA cables	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar		
eSATA port	None		
Media reader	None		
Chipset	AMD 980G Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Six USB 2.0, serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)		
Internal connector	Three USB 2.0 planar conn (1 used; two open for additional USB devices)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Broadcom® BCM5761, DASH 1.1		
Modem	None		
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
Power supply	240 watts, autosensing, 85% PSU		
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 14.5" D X 3.9" H ● 337mm W X 369mm D X 99mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader		
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1 Slot 4: Low Profile, 32-bit PCI 2.3		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		
			
Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement 			
EPEAT™ Gold rating ENERGY STAR 5.2-compliant GREENGUARD® certified RoHS-compliant			
Supports ThinkVantage Technologies			
For compatible accessories, please go to O-M77 sheet; For Lenovo service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information

ⓧ US model announced June 5, 2012; previous models on Sep 20, 2011, Nov 8, 2011, or Jan 24, 2012

ⓧ US models withdrawn effective November 2012

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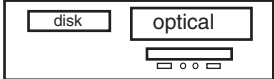
(ABNY1-3) June 2012

ThinkCentre® M77 Small (1997) - ES 5.2 (GMP)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	GHz	Memory ⁸	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	PS/2 port	Floor stand	ENERGY STAR 5.2	Global (G) GMP (P)	Win7 preload
✕ 1997-A1U	4x3	Athlon II X2 B24	3.0	4GBx1	320G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	ES5.2	G P	Pro 32
☞ 1997-B1U	4x3	Phenom II X2 B57	3.2	4GBx1	500G 7200	DVD±RW	None	HD 4250	None	None	None	Stand	ES5.2	G P	Pro 64

- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- Microsoft Office 2010 Product Key Ready (O10PKR)

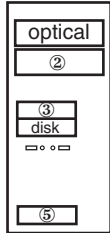
Positioning	<i>Mainstream enterprise stability and manageability</i>										Preloaded operating system				
Processor	AMD Athlon™ II X2 Processor B24 with dual-core, integrated 1066MHz DDR3 memory controller, and 2MB L2 cache (1MB per core) AMD Phenom™ II X2 Processor B57 with dual-core, integrated 1066MHz DDR3 memory controller, 1MB L2 cache (512KB per core), and 6MB shared L3 cache										Some: Genuine Windows® 7 Professional 32 Some: Genuine Windows 7 Professional 64				
Implementation	Processor in Socket AM3+										Preloaded applications (only some listed)				
Memory	16GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Toolbox ● Norton™ Internet Security 2011 (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 				
Graphics	ATI™ Radeon™ HD 4250 , integrated in chipset, uses main memory, one analog VGA DB-15 connector, one DisplayPort™ connector, HDCP, DirectX® 10.1, ATI Avivo™, SurroundView™, supports dual independent display; supports up to 4 monitors with opt dual-head ATI Radeon discrete graphics adapter; <i>Maximum resolution: 2560x1440 (VGA)@75Hz; 2560x1600 (DisplayPort)@60Hz</i>														
DP dongle	None														
Disk	SATA 6.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1														
SATA cables	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar														
eSATA port	None														
Media reader	None														
Chipset	AMD 980G Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Six USB 2.0, serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)														
Internal connector	Three USB 2.0 planar conn (1 used; two open for additional USB devices)														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Broadcom® BCM5761, DASH 1.1														
Modem	None														
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo														
Floor Stand	System floor stand for vertical orientation														
Power supply	240 watts, autosensing, 85% PSU														
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 14.5" D X 3.9" H ● 337mm W X 369mm D X 99mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader										Security				
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1 Slot 4: Low Profile, 32-bit PCI 2.3										<ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement 				
											EPEAT™ Gold rating ENERGY STAR® 5.2-compliant GREENGUARD® certified RoHS-compliant				
											Supports ThinkVantage Technologies				
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														
	See footnotes for important warranty information										©Lenovo				
	☞ US model announced February 28, 2012; previous model on September 20, 2011										(ABNY1-4) March 2012				
	✕ US model withdrawn effective November 2012														

ThinkCentre® M77 Tower (1995) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	GHz	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	PS/2 port	ENERGY STAR 5.2	Global Educ	Win7 preload
1995-A1U	4x5	Athlon II X4 645	3.1	4GBx1	500G 7200	Bay	DVD±RW	None	HD 4250	None	None	None	None	N N	Pro 64
1995-A2U	4x5	Athlon II X2 B24	3.0	2GBx1	320G 7200	Bay	DVD±RW	None	HD 4250	None	None	None	None	N N	Pro 64
1995-A3U	4x5	Phenom II X2 B53	2.8	4GBx1	320G 7200	Bay	DVD±RW	None	HD 4250	None	None	None	None	N N	Pro 64
1995-A4U	4x5	FX 4100	3.6	4GBx1	500G 7200	Bay	DVD±RW	None	HD 4250	None	None	None	None	N N	Pro 64
1995-A5U	4x5	FX 4100	3.6	4GBx1	500G 7200	Bay	DVD±RW	None	HD 4250	None	Switch	None	None	N N	Pro 64
1995-A6U	4x5	Phenom II X2 B53	2.8	4GBx1	500G 7200	Bay	DVD±RW	None	HD 5450	None	Switch	None	None	N N	Pro 64

- Small and medium business (SMB) model(s), part of the US TopSeller Program
- 3-year limited warranty
- Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>										Preloaded operating system				
Processor	AMD Athlon™ II X2 Processor B24 with dual-core , integrated 1066MHz DDR3 memory controller, and 2MB L2 cache (1MB per core) AMD Phenom™ II X2 Processor B53 with dual-core , integrated 1066MHz DDR3 memory controller, and 1MB L2 cache (512KB per core)s, and 6MB shared L3 cache AMD Athlon II X4 Processor 645 with quad-core , integrated 1333MHz DDR3 memory controller, and 2MB L2 cache (512KB per core) AMD FX™ Processor 4100 with quad-core , Turbo Core 2.0 (3.8GHz max) integrated 1866MHz DDR3 memory controller, 4MB L2 cache (1MB per core), and 8MB shared L3 cache										Genuine Windows® 7 Professional 64				
Implementation	Processor in Socket AM3+										Preloaded applications (only some listed)				
Memory	16GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
Graphics	<i>Some:</i> ATI™ Radeon™ HD 4250 , integrated in chipset, uses main memory, one VGA, one DisplayPort™, HDCP, DirectX® 10.1, ATI Avivo™, SurroundView™, supports dual independent display; supports up to 4 monitors with optional dual-head ATI Radeon discrete graphics adapter; <i>Maximum resolution:</i> 2560x1440 (VGA)@75Hz; 2560x1600 (DP)@60Hz <i>Some:</i> AMD Radeon HD 5450 , PCI Express® 2.0 x16 adapter, HDCP, DirectX 11, 512MB, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I)@60Hz														
DP dongle	None														
Disk	SATA 6.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1														
SATA cables	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar														
eSATA port	None														
Media reader	None														
Chipset	AMD 980G Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Six USB 2.0, serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)														
Internal connector	Three USB 2.0 planar conn (1 used; two open for additional USB devices)														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Broadcom® BCM5761, DASH 1.1														
Modem	None														
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo														
Power supply	280 watts with variable speed fan, manual switch														
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Handle on top front • Power button on top handle • Toolless cover removal • Tilted front I/O for easy access • Toolless disk, optical drive removal • Toolless adapter retention 														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk (some models)														
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1 Slot 4: half-length, full-height, 32-bit PCI 2.3														
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										Security <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • <i>Some:</i> Chassis intrusion switch 				
											RoHS-compliant				
											Supports ThinkVantage Technologies				
											For compatible accessories, please go to O-M77 sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information

US models announced November 8, 2011; previous models on September 20, 2011

US models withdrawn effective November 2012

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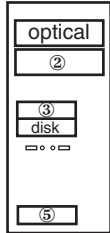
(ABNY1-5) November 2011

ThinkCentre® M77 Tower (1995) - TopSeller - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	GHz	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	PS/2 port	ENERGY STAR	Global 5.2 Educ	Win7 preload(mm/dd/yy)	Ann date
1995-A7U	4x5	Athlon II X2 B26	3.2	2GBx1	250G 7200	Bay	DVD±RW	None	HD 4250	None	None	None	None	N N	Pro 64	12/13/11
1995-A9U	4x5	Phenom II X2 B53	2.8	4GBx1	250G 7200	Bay	DVD±RW	None	HD 4250	None	None	None	None	N N	Pro 64	12/13/11
1995-B1U	4x5	Phenom II X2 B57	3.2	4GBx1	500G 7200	Bay	DVD±RW	None	HD 4250	None	None	None	None	N N	Pro 64	02/21/12
1995-C1U	4x5	Athlon II X2 B24	3.0	2GBx1	250G 7200	Bay	DVD±RW	None	HD 4250	None	None	None	None	N N	Pro 64	03/06/12

- Small and medium business (SMB) model(s), part of the US TopSeller Program
- 3-year limited warranty
- Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>										Preloaded operating system					
Processor	AMD Athlon™ II X2 Processor B24 with dual-core , integrated 1066MHz DDR3 memory controller, and 2MB L2 cache (1MB per core) AMD Athlon II X2 Processor B26 with dual-core , integrated 1066MHz DDR3 memory controller, and 2MB L2 cache (1MB per core) AMD Phenom™ II X2 Processor B53 with dual-core , integrated 1066MHz DDR3 memory controller, and 1MB L2 cache (512KB per core), and 6MB shared L3 cache AMD Phenom II X2 Processor B57 with dual-core , integrated 1066MHz DDR3 memory controller, 1MB L2 cache (512KB per core), and 6MB shared L3 cache										Genuine Windows® 7 Professional 64					
Implementation	Processor in Socket AM3+										Preloaded applications (only some listed)					
Memory	16GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 					
Graphics	ATI™ Radeon™ HD 4250 , integrated in chipset, uses main memory, one analog VGA DB-15 connector, one DisplayPort™ connector, HDCP, DirectX® 10.1, ATI Avivo™, SurroundView™, supports dual independent display; supports up to 4 monitors with opt dual-head ATI Radeon discrete graphics adapter; <i>Maximum resolution: 2560x1440 (VGA) @75Hz; 2560x1600 (DisplayPort) @60Hz</i>															
DP dongle	None															
Disk	SATA 6.0Gb/s 7200 rpm															
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive															
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1															
SATA cables	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar															
eSATA port	None															
Media reader	None															
Chipset	AMD 980G Chipset															
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)															
Rear ports	Six USB 2.0, serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort															
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)															
Internal connector	Three USB 2.0 planar conn (1 used; two open for additional USB devices)															
Audio	High Definition (HD) Audio, Realtek® ALC662 codec															
Speaker	Internal speaker for business audio															
IEEE 1394	None															
Ethernet	One gigabit ethernet port, Broadcom® BCM5761, DASH 1.1															
Modem	None															
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant															
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo															
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo															
Power supply	280 watts with variable speed fan, manual switch															
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Handle on top front • Power button on top handle • Toolless cover removal • Tilted front I/O for easy access • Toolless disk, optical drive removal • Toolless adapter retention 															
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk (some models)															
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1 Slot 4: half-length, full-height, 32-bit PCI 2.3															
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										Security <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement 					
											RoHS-compliant					
											Supports ThinkVantage Technologies					
											For compatible accessories, please go to O-M77 sheet; For Lenovo service upgrade options, please go to S-TC sheet					

See footnotes for important warranty information
 US models announced December 13, 2011, February 21, 2012, or March 6, 2012
 < US models withdrawn effective November 2012

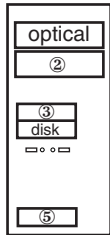
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 (ABNY1-9) March 2012

ThinkCentre® M77 Tower (1990)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	GHz	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	PS/2 port	ENERGY STAR 5.2	Global Educ	Win7 preload
⌘ 1990-A6U	4x4	Athlon II X2 B24	3.0	2GBx1	320G 7200	None	DVD±RW	None	HD 4250	None	None	None	None	N N	Pro 64
1990-B6U	4x5	Athlon II X4 645	3.1	4GBx1	500G 7200	Bay	DVD±RW	None	HD 4250	None	None	None	None	N N	Pro 64
1990-E1U	4x5	Sempron 150	2.9	2GBx1	320G 7200	Bay	DVD±RW	None	HD 4250	None	Switch	None	None	N N	Pro 64
1990-F1U	4x4	Athlon II X2 B26	3.2	4GBx1	250G 7200	None	DVD±RW	None	HD 4250	None	None	None	None	N N	Pro 64
⌘ 1990-G1U	4x4	Athlon II X2 220	2.8	2GBx1	250G 7200	None	DVD±RW	None	HD 4250	None	None	None	None	N N	Pro 64

- 3-year limited warranty
- Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>										Preloaded operating system				
Processor	AMD Sempron™ Processor 150 with single-core, integrated 1066MHz DDR3 memory controller, and 1MB L2 cache AMD Athlon™ II X2 processor 220 with dual-core , integrated 1066MHz DDR3 memory controller, and 1MB L2 cache (512KB per core) AMD Athlon II X2 Processor B24 with dual-core , integrated 1066MHz DDR3 memory controller, and 2MB L2 cache (1MB per core) AMD Athlon II X2 Processor B26 with dual-core , integrated 1066MHz DDR3 memory controller, and 2MB L2 cache (1MB per core) AMD Athlon II X4 Processor 645 with quad-core , integrated 1333MHz DDR3 memory controller, and 2MB L2 cache (512KB per core)										Genuine Windows® 7 Professional 64				
Implementation	Processor in Socket AM3+										Preloaded applications (only some listed)				
Memory	16GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
Graphics	ATI™ Radeon™ HD 4250 , integrated in chipset, uses main memory, one analog VGA DB-15 connector, one DisplayPort™ connector, HDCP, DirectX® 10.1, ATI Avivo™, SurroundView™, supports dual independent display; supports up to 4 monitors with opt dual-head ATI Radeon discrete graphics adapter; <i>Maximum resolution: 2560x1440 (VGA) @75Hz; 2560x1600 (DisplayPort) @60Hz</i>														
DP dongle	None														
Disk	SATA 6.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1														
SATA cables	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar														
eSATA port	None														
Media reader	None														
Chipset	AMD 980G Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Six USB 2.0, serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)														
Internal connector	Three USB 2.0 planar conn (1 used; two open for additional USB devices)														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Broadcom® BCM5761, DASH 1.1														
Modem	None														
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo														
Power supply	280 watts with variable speed fan, manual switch														
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Handle on top front • Power button on top handle • Toolless cover removal • Tilted front I/O for easy access • Toolless disk, optical drive removal • Toolless adapter retention 														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk (some models)														
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1 Slot 4: half-length, full-height, 32-bit PCI 2.3										Security <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • <i>Some:</i> Chassis intrusion switch 				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M77 sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information

⌘ US model announced June 5, 2012; previous models on Sep 20, 2011, Nov 8, 2011, or Jan 24, 2012

⌘ US model withdrawn effective November 2012

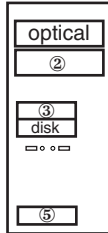
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(ABNY1-6) JuneS 2012

ThinkCentre® M77 Tower (1982) - ENERGY STAR® 5.2

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	GHz	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	PS/2 port	ENERGY STAR 5.2	Global Educ	Win7 preload
⌘ 1982-A4U	4x4	Athlon II X2 B24	3.0	2GBx1	320G 7200	None	DVD±RW	None	HD 4250	None	None	None	ES5.2	N N	Pro 64
⌘ 1982-A5U	4x4	Phenom II X2 B53	2.8	4GBx1	500G 7200	None	DVD±RW	None	HD 4250	None	None	None	ES5.2	N N	Pro 64
1982-E3U	4x5	FX 4100	3.6	4GBx1	500G 7200	Bay	DVD±RW	None	HD 4250	None	None	None	ES5.2	N N	Pro 64
1982-F1U	4x4	Athlon II X2 B26	3.2	4GBx1	250G 7200	None	DVD±RW	None	HD 4250	None	None	None	ES5.2	N N	Pro 64
⌘ 1982-G1U	4x4	Phenom II X2 B57	3.2	4GBx1	500G 7200	None	DVD±RW	None	HD 4250	None	None	None	ES5.2	N N	Pro 64

- 3-year limited warranty
- Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>		Preloaded operating system Genuine Windows® 7 Professional 64 Preloaded applications (only some listed) <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Power Manager ● ThinkVantage Toolbox ● Norton™ Internet Security 2011 (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft® Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	AMD Athlon™ II X2 Processor B24 with dual-core , integrated 1066MHz DDR3 memory controller, and 2MB L2 cache (1MB per core) AMD Athlon II X2 Processor B26 with dual-core , integrated 1066MHz DDR3 memory controller, and 2MB L2 cache (1MB per core) AMD Phenom™ II X2 Processor B53 with dual-core , integrated 1066MHz DDR3 memory controller, and 1MB L2 cache (512KB per core), and 6MB shared L3 cache AMD Phenom II X2 Processor B57 with dual-core , integrated 1066MHz DDR3 memory controller, 1MB L2 cache (512KB per core), and 6MB shared L3 cache AMD FX™ Processor 4100 with quad-core , Turbo Core 2.0 (3.8GHz max) integrated 1866MHz DDR3 memory controller, 4MB L2 cache (1MB per core), and 8MB shared L3 cache		
Implementation	Processor in Socket AM3+		
Memory	16GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets		
Graphics	ATI™ Radeon™ HD 4250 , integrated in chipset, uses main memory, one analog VGA DB-15 connector, one DisplayPort™ connector, HDCP, DirectX® 10.1, ATI Avivo™, SurroundView™, supports dual independent display; supports up to 4 monitors with opt dual-head ATI Radeon discrete graphics adapter; <i>Maximum resolution: 2560x1440 (VGA)@75Hz; 2560x1600 (DisplayPort)@60Hz</i> None		
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1		
SATA cables	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar		
eSATA port	None		
Media reader	None		
Chipset	AMD 980G Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Six USB 2.0, serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)		
Internal connector	Three USB 2.0 planar conn (1 used; two open for additional USB devices)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Broadcom® BCM5761, DASH 1.1		
Modem	None		
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo		
Power supply	280 watts with variable speed fan, autosensing, 85% PSU		
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 24.2 lb (11.0 kg) in maximum configuration ● Handle on top front ● Power button on top handle ● Toolless cover removal ● Tilted front I/O for easy access ● Toolless disk, optical drive removal ● Toolless adapter retention 		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk (some models)		
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1 Slot 4: half-length, full-height, 32-bit PCI 2.3		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		
			Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement
			EPEAT™ Gold rating ENERGY STAR 5.2-compliant GREENGUARD® certified RoHS-compliant
			Supports ThinkVantage Technologies
			For compatible accessories, please go to O-M77 sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information

⌘ US model announced June 5, 2012; previous models on Sep 20, 2011, Nov 8, 2011, or Jan 24, 2012

⌘ US models withdrawn effective November 2012

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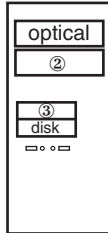
(ABNY1-7) June 2012

ThinkCentre® M77 Tower (1983) - ES 5.2 (GMP)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	GHz	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	PS/2 port	ENERGY STAR 5.2	Global (G) GMP (P)	Win7 preload
1983-A1U	4x4	Athlon II X2 B24	3.0	4GBx1	320G 7200	None	DVD±RW	None	HD 4250	None	None	None	ES5.2	G P	Pro 32
1983-B1U	4x4	Phenom II X2 B57	3.2	4GBx1	500G 7200	None	DVD±RW	None	HD 4250	None	None	None	ES5.2	G P	Pro 64

- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>										Preloaded operating system				
Processor	AMD Athlon™ II X2 Processor B24 with dual-core , integrated 1066MHz DDR3 memory controller, and 2MB L2 cache (1MB per core) AMD Phenom™ II X2 Processor B57 with dual-core , integrated 1066MHz DDR3 memory controller, 1MB L2 cache (512KB per core), and 6MB shared L3 cache Processor in Socket AM3+										Some: Genuine Windows® 7 Professional 32 Some: Genuine Windows 7 Professional 64				
Implementation	Processor in Socket AM3+										Preloaded applications (only some listed)				
Memory	16GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
Graphics	ATI™ Radeon™ HD 4250 , integrated in chipset, uses main memory, one analog VGA DB-15 connector, one DisplayPort™ connector, HDCP, DirectX® 10.1, ATI Avivo™, SurroundView™, supports dual independent display; supports up to 4 monitors with opt dual-head ATI Radeon discrete graphics adapter; <i>Maximum resolution: 2560x1440 (VGA) @75Hz; 2560x1600 (DisplayPort) @60Hz</i> None														
DP dongle	None														
Disk	SATA 6.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1														
SATA cables	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar														
eSATA port	None														
Media reader	None														
Chipset	AMD 980G Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Six USB 2.0, serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)														
Internal connector	Three USB 2.0 planar conn (1 used; two open for additional USB devices)														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Broadcom® BCM5761, DASH 1.1														
Modem	None														
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo														
Power supply	280 watts with variable speed fan, autosensing, 85% PSU														
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Handle on top front • Power button on top handle • Toolless cover removal • Tilted front I/O for easy access • Toolless disk, optical drive removal • Toolless adapter retention 														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk														
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1 Slot 4: half-length, full-height, 32-bit PCI 2.3										Security <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement 				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M77 sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information

US model announced February 28, 2012; previous model on September 20, 2011

US model withdrawn effective November 2012

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(ABNY1-8) March 2012

Memory

2GB PC3-10600 DDR3 Low-Halogen UDIMM	57Y4390	ann 01/12/10
2GB PC3-10600 DDR3 L-H UDIMM (25-Pack)	57Y4420	ann 01/12/10
4GB PC3-10600 DDR3 UDIMM	0A36527	ann 04/12/11

More information at

www.lenovo.com/support/desktopmemorycompatibility

Optical

DVD-ROM DL SATA 1.5Gb/s 16X-48X Max ⁴	41N5618	ann 09/26/06
Lenovo® Super Multi-Burner SATA Drive	0A65618	ann 08/23/11

Storage and removable storage

250GB SATA 3.0Gb/s Disk (7200 rpm)	41N3015	ann 01/24/06
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	ann 11/06/07
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918	ann 08/19/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
USB 3.0 Secure 500GB Hard Drive	0A65619	ann 11/29/11
USB 3.0 Secure 750GB Hard Drive	0A65616	ann 11/29/11
USB 3.0 Secure 1TB Hard Drive	0A65621	ann 08/28/12
Slim USB Portable DVD Burner	0A33988	ann 06/14/11

Graphics

Small 2227/2209/1996/1997 support Low Profile:

NVIDIA® Quadro® 256MB NVS 295 (2-DP)	45K1669	ann 04/21/09
NVIDIA Quadro 512MB NVS 300 DMS59 (2-DVI or 2-VGA via DMS59 dongles)	0A36528	ann 04/26/11
NVIDIA Quadro 512MB 400 (DP, DVI-I with a DVI to VGA converter)	0A36535	ann 06/28/11
NVIDIA GeForce® 310 512MB DMS59 (2-DVI or 2-VGA via DMS59 dongles)	57Y4167	ann 03/02/10
AMD 7450 1GB (DP, DVI-I with a DVI to VGA converter)	0A36538	ann 05/29/12
NVIDIA NVS 510 2GB Graphics Card by Lenovo	0B47077	ann 01/29/13

Tower 1995/1990/1982/1983 support:

NVIDIA Quadro 256MB NVS 295 (2-DP)	45K1669	ann 04/21/09
NVIDIA Quadro 512MB NVS 300 DMS59	0A36528	ann 04/26/11
NVIDIA Quadro 512MB NVS 450 (4-DP or 4-DVI-D via DP to DVI-D cable)	57Y4398	ann 01/19/10
NVIDIA Quadro 512MB 400 (DP, DVI-I)	0A36535	ann 06/28/11
NVIDIA GeForce 310 512MB DMS59	57Y4167	ann 03/02/10
AMD 7450 1GB (DP, DVI-I)	0A36538	ann 05/29/12
NVIDIA NVS 510 2GB Graphics Card by Lenovo	0B47077	ann 01/29/13

Keyboard

Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
USB Numeric Keypad	33L3225	ann 05/10/00
Ultraslim Plus Wireless Keyboard and Mouse ⁵²	0A34032	ann 04/05/11
Lenovo Mini Wireless Keyboard N5901 ⁵²	57Y6336	ann 12/08/09
ThinkPad® USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09
Lenovo Cherry Smartcard Keyboard	0A36328	ann 05/10/11

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo ScrollPoint® Mouse(USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
Lenovo Mini Optical Mouse - Black	55Y9308	ann 05/19/09
Lenovo Mini Optical Mouse - White	55Y9309	ann 05/19/09
Lenovo Wireless Laser Mouse ⁵²	0A36188	ann 12/20/11
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09

More information at www.lenovo.com/support/mice

Multimedia

ThinkPad In-Ear Headphones with mic ⁶⁰	57Y4488	ann 01/07/10
Lenovo Mini Speakers M220	55Y2033	ann 01/07/10
Lenovo Speaker M0520 (black)	57Y6360	ann 02/08/11
Lenovo Speaker M0520 (red)	57Y6361	ann 01/07/10
Lenovo Headphone P550	55Y2065	

⁶⁰ Has a 1.2 meter (3.9-foot) cable. Best when systems are in close proximity. Example: SFF placed on a desk.

Modem

USB 2.0 Lenovo Modem	43R1814	ann 02/26/08
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Security

Kensington® MicroSaver® Cable Lock ⁵⁶	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann 09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann 08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Monitors

ThinkVision® L1711p 17" (VGA, DVI-D)	5047HB2	ann 10/20/09
ThinkVision LT1952p Wide 19" (VGA, DP, DVI-D) ⁶⁹	2448MB6	ann 09/13/11
ThinkVision L2250p Wide 22" (VGA, DVI-D)	2572HB6	ann 10/20/09
ThinkVision L2251x Wide 22" (VGA, DP)	2578HB6	ann 10/20/09
ThinkVision LT2252p Wide 22" (VGA, DP, DVI-D) ⁶⁹	2572MB6	ann 09/13/11
ThinkVision LT2452p Wide 24" (VGA, DP, DVI-D) ⁶⁹	4420MB2	ann 09/13/11

⁶⁹ DisplayPort cable is not included; use optional DisplayPort to DisplayPort Monitor Cable (0A36537).

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
DisplayPort™ to Single-link DVI-D Cable	45J7915	ann 08/05/08
DisplayPort to VGA Monitor Cable	57Y4393	ann 08/04/09
DisplayPort to DisplayPort Monitor Cable	0A36537	ann 09/13/11
Lenovo USB Soundbar	0A36190	ann 05/01/12
Kensington MicroSaver Cable Lock ⁵⁶	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann 09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann 08/24/10
ThinkCentre Extend Arm	57Y4352	ann 07/06/10

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems



Lenovo ThinkCentre M78
Small and Tower



Lenovo ThinkCentre M78 Tower
with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M78 Small



Lenovo ThinkCentre M78 Small
with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M78 Tower



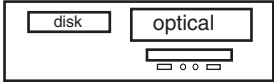
Lenovo ThinkCentre M78 Tower

ThinkCentre® M78 Small (5100) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Chassis intrusion switch	PS/2 port	Floor stand	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
5100-A1U	4x3	A8-5500B	4GBx1	1TB 7200	DVD±RW	None	Radeon HD 7560D	None	None	Stand	None	None	Pro 64 08/28/12
5100-A2U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	None	None	Pro 64 08/28/12
5100-A3U	4x3	A4-5300	4GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	None	None	Pro 64 08/28/12
5100-A4U	4x3	A4-5300	2GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	None	None	Pro 64 08/28/12

- Small and medium business (SMB) model(s), part of the US TopSeller Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>										
Processor	<p>AMD Accelerated Processor A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz)</p> <p>AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz)</p> <p>AMD Accelerated Processor A8-5500B (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core technology (up to 3.7GHz), integrated AMD Radeon HD 7560D Graphics, integrated DDR3 memory controller (up to 1866MHz)</p>										
Implementation	Processor in Socket FM2										
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										
Graphics	<p>AMD Radeon HD Graphics, integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution: 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz</i></p>										
DP dongle	None										
Disk	SATA 6.0Gb/s 7200 rpm										
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1										
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar										
eSATA port	None										
Media reader	None										
Chipset	AMD A75 Chipset										
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)										
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)										
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)										
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										
Speaker	Internal speaker for business audio										
IEEE 1394	None										
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®										
Modem	None										
Security chip	Trusted Platform Module (TPM 1.2-compliant)										
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Floor Stand	System floor stand for vertical orientation										
Power supply	240 watts, autosensing, active Power Factor Correction										
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.3" W X 15.0" D X 3.9" H • 339mm W X 381mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention 										
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader										
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3										
											
	<p>Preloaded operating system</p> <p>Genuine Windows® 7 Professional 64</p> <p>Ready to install applications (only some listed)</p> <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager • Business-in-a-Box <p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Google Chrome • Google Toolbar • Skype™ for Windows • Evernote® • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 										
	<p>Security</p> <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) 										
	RoHS-compliant										
	Supports ThinkVantage Technologies										
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										

See footnotes for important warranty information
US model(s) announced August 28, 2012

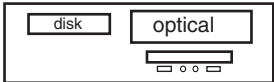
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(ANDE1-1) August 2012

ThinkCentre® M78 Small (5100) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	SATA optical	Media reader	Graphics	Chassis intrusion switch	PS/2 port	Floor stand	ENERGY STAR 5.2 Global	Preload	Ann date (mm/dd/yy)
5100-B1U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	None	None	Win8 Pro64 10/23/12
5100-B2U	4x3	A4-5300	2GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	None	None	Win8 Pro64 10/23/12
5100-C1U	4x3	A4-5300	2GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	None	None	Win7 Pro64 10/30/12
5100-C2U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	None	None	Win7 Pro64 10/30/12

- Small and medium business (SMB) model(s), part of the US TopSeller Program
- 3-year limited warranty

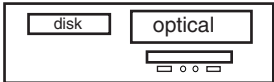
Positioning	<i>Mainstream enterprise stability and manageability</i>										
Processor	<p>AMD Accelerated Processor A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz)</p> <p>AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz)</p>										
Implementation	Processor in Socket FM2										
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										
Graphics	<p>AMD Radeon HD Graphics, integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution: 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz</i></p>										
DP dongle	None										
Disk	SATA 6.0Gb/s 7200 rpm										
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1										
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar										
eSATA port	None										
Media reader	None										
Chipset	AMD A75 Chipset										
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)										
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)										
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)										
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										
Speaker	Internal speaker for business audio										
IEEE 1394	None										
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®										
Modem	None										
Security chip	Trusted Platform Module (TPM 1.2-compliant)										
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Floor Stand	System floor stand for vertical orientation										
Power supply	240 watts, autosensing, active Power Factor Correction										
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.3" W X 15.0" D X 3.9" H • 339mm W X 381mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention 										
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader										
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3										
											
	<p>Preloaded operating system</p> <p><i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</p> <p><i>Some:</i> Windows 8 Pro 64-bit</p> <p>Preloaded applications (only some listed)</p> <p>- Windows 7 models</p> <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Google Chrome • Google Toolbar • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) <p>- Windows 8 models</p> <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Norton™ Studio • Intel AppUp® • AccuWeather • PC Device Stage • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) <p>- All models</p> <ul style="list-style-type: none"> • ThinkVantage® System Update • View Management Utility • Lenovo Solution Center • Norton Internet Security (30 days of virus definitions) • Evernote® • Skype™ <p>Security</p> <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) 										
	RoHS-compliant										
	Supports ThinkVantage Technologies										
	For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet										
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										

See footnotes for important warranty information
US model(s) announced October 23 or 30, 2012

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Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Chassis intrusion switch	PS/2 port	Floor stand	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
4865-A7U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	None	None	Pro 32 08/28/12
4865-C1U	4x3	A8-5500B	4GBx1	1TB 7200	DVD±RW	None	Radeon HD 7560D	None	None	Stand	None	None	Pro 64 08/28/12
4865-C2U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	None	None	Pro 64 08/28/12
4865-C3U	4x3	A4-5300	4GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	None	None	Pro 64 08/28/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

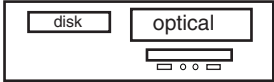
Positioning	<i>Mainstream enterprise stability and manageability</i>		<p>Preloaded operating system</p> <p><i>Some:</i> Genuine Windows® 7 Professional 32</p> <p><i>Some:</i> Genuine Windows 7 Professional 64</p> <p>Ready to install applications (only some listed)</p> <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box <p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo Simple Tap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Google Chrome ● Google Toolbar ● Skype™ for Windows ● Evernote® ● RapidBoot HDD Accelerator ● Symantec™ VIP ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	<p>AMD Accelerated Processor A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz)</p> <p>AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz)</p> <p>AMD Accelerated Processor A8-5500B (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core technology (up to 3.7GHz), integrated AMD Radeon HD 7560D Graphics, integrated DDR3 memory controller (up to 1866MHz)</p>		
Implementation	Processor in Socket FM2		<p>Security</p> <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		
Graphics	<p>AMD Radeon HD Graphics, integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz</p>		<p>RoHS-compliant</p> <p>Supports ThinkVantage Technologies</p> <p>For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet</p>
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1		
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar		
eSATA port	None		
Media reader	None		
Chipset	AMD A75 Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Modem	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
Power supply	240 watts, autosensing, active Power Factor Correction		
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 15.0" D X 3.9" H ● 339mm W X 381mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 		
Bay	<p>Bay 1: 5.25", 1.6" high, access, std optical</p> <p>Bay 2: 3.5", 1" high, no access, std disk</p> <p>Bay 3: 3.5", .5" high, access, opt reader</p>		
Slot	<p>Slot 1: Low Profile, PCI Express 2.0 x16 (40w max)</p> <p>Slot 2: Low Profile, PCIe 2.0 x1</p> <p>Slot 3: Low Profile, 32-bit PCI 2.3</p> <p>Slot 4: Low Profile, 32-bit PCI 2.3</p>		
			
Limited Warranty	<p>3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available</p>		

ThinkCentre® M78 Small (4865) - Windows 8

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Chassis Intrusion switch	PS/2 port	Floor stand	ENERGY STAR 5.2 Global	Preload	Ann date (mm/dd/yy)
4865-E1U	4x3	A4-5300	2GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	None	Win8 Pro64	10/23/12

●3-year limited warranty

Positioning	<i>Mainstream enterprise stability and manageability</i>											Preloaded operating system Windows® 8 Pro 64-bit Preloaded applications (only some listed) <ul style="list-style-type: none"> ● ThinkVantage® System Update ● View Management Utility ● Lenovo® Support ● Lenovo Companion ● Lenovo Cloud Storage ● Lenovo QuickLaunch ● Lenovo Solution Center ● Microsoft Office 2013 preloaded; purchase product key to activate ● Norton™ Internet Security (30 days of virus definitions) ● Norton Studio ● Intel AppUp® ● AccuWeather ● PC Device Stage ● Evernote™ ● Skype™ ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) 	
Processor	AMD Accelerated Processor A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz)												
Implementation	Processor in Socket FM2												
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets												
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution: 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz</i>												
DP dongle	None												
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1												
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar												
eSATA port	None												
Media reader	None												
Chipset	AMD A75 Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®												
Modem	None												
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	System floor stand for vertical orientation												
Power supply	240 watts, autosensing, active Power Factor Correction												
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 15.0" D X 3.9" H ● 339mm W X 381mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader												
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3												
													
	Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 												
	RoHS-compliant												
	Supports ThinkVantage Technologies												
	For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet												
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												

See footnotes for important warranty information
US model(s) announced October 23, 2012

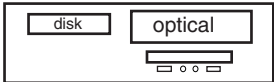
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(ANDE1-10) October 2012

ThinkCentre® M78 Small (2113) - ENERGY STAR® 5.2

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Chassis intrusion switch	PS/2 port	Floor stand	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
2113-A1U	4x3	A4-5300	2GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	ES52	None	Pro 32 08/28/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>												
Processor	AMD Accelerated Processor A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz)												
Implementation	Processor in Socket FM2												
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets												
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution: 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz</i>												
DP dongle	None												
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1												
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar												
eSATA port	None												
Media reader	None												
Chipset	AMD A75 Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®												
Modem	None												
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	System floor stand for vertical orientation												
Power supply	240 watts, autosensing, 85% PSU												
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 15.0" D X 3.9" H ● 339mm W X 381mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader												
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3												
													
	Preloaded operating system Genuine Windows® 7 Professional 32 Ready to install applications (only some listed) <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo Simple Tap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Google Chrome ● Google Toolbar ● Skype™ for Windows ● Evernote® ● RapidBoot HDD Accelerator ● Symantec™ VIP ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 												
	Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 												
	EPEAT™ Gold rating ENERGY STAR 5.2-compliant ULE Gold RoHS-compliant												
	Supports ThinkVantage Technologies												
	For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet												
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												

See footnotes for important warranty information
US model(s) announced August 28, 2012

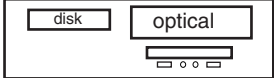
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ThinkCentre® M78 Small (2113) - ES 5.2 (Win 8)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Chassis intrusion switch	PS/2 port	Floor stand	ENERGY STAR 5.2 Global	Preload	Ann date (mm/dd/yy)
2113-D1U	4x3	A4-5300	2GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	ES52	None	Win8 Pro64 10/23/12
2113-D2U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	ES52	None	Win8 Pro64 10/23/12
2113-D3U	4x3	A8-5500B	4GBx1	1TB 7200	DVD±RW	None	Radeon HD 7560D	None	None	Stand	ES52	None	Win8 Pro64 10/23/12
2113-D4U	4x3	A8-5500B	4GBx1	1TB 7200	DVD±RW	None	Radeon HD 7450	None	None	Stand	ES52	None	Win8 Pro64 10/23/12
2113-E1U	4x3	A4-5300	2GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	ES52	None	Win7 Pro64 10/30/12

●3-year limited warranty

Positioning	<i>Mainstream enterprise stability and manageability</i>										Preloaded operating system		
Processor	AMD Accelerated Processor A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz) AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz) AMD Accelerated Processor A8-5500B (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core technology (up to 3.7GHz), integrated AMD Radeon HD 7560D Graphics, integrated DDR3 memory controller (up to 1866MHz)										<i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit		
Implementation	Processor in Socket FM2										Preloaded applications (only some listed)		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										- Windows 7 models <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage Communication Utility ThinkVantage Power Manager Lenovo® Message Center Plus Lenovo SimpleTap Adobe® Reader® Google Chrome Google Toolbar RapidBoot HDD Accelerator Symantec™ VIP Windows Live™ Essentials Microsoft Office 2010 preloaded; purchase product key to activate Corel® Burn.Now™ (DVD±RW) Corel DVD MovieFactory® (DVD±RW) 		
Graphics	<i>Some:</i> AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA)@60Hz; 2560x2048 (DP)@60Hz <i>Some:</i> AMD Radeon HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I)@60Hz; works along with Intel HD Graphics to support up to four independent monitors										- Windows 8 models <ul style="list-style-type: none"> Lenovo Support Lenovo Companion Lenovo Cloud Storage Lenovo QuickLaunch Norton™ Studio Intel AppUp® AccuWeather PC Device Stage Microsoft Office 2013 preloaded; purchase product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) 		
DP dongle	None										- All models <ul style="list-style-type: none"> ThinkVantage® System Update View Management Utility Lenovo Solution Center Norton Internet Security (30 days of virus definitions) Evernote® Skype™ 		
Disk	SATA 6.0Gb/s 7200 rpm										Security		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										<ul style="list-style-type: none"> Security chip (see information on left) Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) Cable lock Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Individual USB port disablement Chassis intrusion switch on selected model(s) 		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1										EPEAT™ Gold rating		
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar										ENERGY STAR 5.2-compliant		
eSATA port	None										ULE Gold		
Media reader	None										RoHS-compliant		
Chipset	AMD A75 Chipset										Supports ThinkVantage Technologies		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										For compatible accessories, please go to O-M78 sheet;		
Rear ports	Four USB 2.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)										For ThinkPlus™ service upgrade options, please go to S-TC sheet		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®												
Modem	None												
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	System floor stand for vertical orientation												
Power supply	240 watts, autosenesing, 85% PSU												
Machine	<ul style="list-style-type: none"> Business black color; metal case 13.3" W X 15.0" D X 3.9" H 339mm W X 381mm D X 100mm H 16.5 lb (7.5 kg) in maximum configuration Toolless cover flips up and tilts backward on rear hinges Toolless disk and optical drive removal Toolless adapter retention 												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader												
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3												
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												

See footnotes for important warranty information
US model(s) announced October 23 or 30, 2012

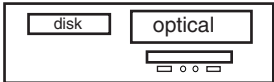
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ThinkCentre® M78 Small (2114) - ES 5.2 (GMP)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Chassis intrusion switch	PS/2 port	Floor stand	ENERGY STAR 5.2	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
2114-A1U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	ES52	G P	Pro 64	08/28/12

- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>											Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo Simple Tap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Google Chrome ● Google Toolbar ● Skype™ for Windows ● Evernote® ● RapidBoot HDD Accelerator ● Symantec™ VIP ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)		
Processor	AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz)													
Implementation	Processor in Socket FM2													
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets													
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution: 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz</i>													
DP dongle	None													
Disk	SATA 6.0Gb/s 7200 rpm													
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1													
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar													
eSATA port	None													
Media reader	None													
Chipset	AMD A75 Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)													
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®													
Modem	None													
Security chip	Trusted Platform Module (TPM 1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Floor Stand	System floor stand for vertical orientation													
Power supply	240 watts, autosensing, 85% PSU													
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 15.0" D X 3.9" H ● 339mm W X 381mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader													
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3													
														
	Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)													
	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold RoHS-compliant													
	Supports ThinkVantage Technologies													
	For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet													
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													

See footnotes for important warranty information
 US model(s) announced August 28, 2012

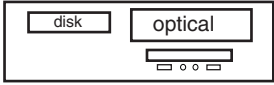
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ThinkCentre® M78 Small (2114) - ES 5.2 (GMP) - Win 8

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	SATA optical	Media reader	Graphics	Chassis intrusion switch	PS/2 port	Floor stand	ENERGY STAR 5.2	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
2114-B1U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	ES52	G P	Win8 Pro64	10/23/12
2114-C1U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	ES52	G P	Win7 Pro64	10/30/12

● Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	<i>Mainstream enterprise stability and manageability</i>											Preloaded operating system		
Processor	AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz)											Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit		
Implementation	Processor in Socket FM2											Some: Windows 8 Pro 64-bit		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets											Preloaded applications (only some listed) - Windows 7 models <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage Communication Utility ThinkVantage Power Manager Lenovo® Message Center Plus Lenovo SimpleTap Adobe® Reader® Google Chrome Google Toolbar RapidBoot HDD Accelerator Symantec™ VIP Windows Live™ Essentials Microsoft Office 2010 preloaded; purchase product key to activate Corel® Burn.Now™ (DVD±RW) Corel DVD MovieFactory® (DVD±RW) - Windows 8 models <ul style="list-style-type: none"> Lenovo Support Lenovo Companion Lenovo Cloud Storage Lenovo QuickLaunch Norton™ Studio Intel AppUp® AccuWeather PC Device Stage Microsoft Office 2013 preloaded; purchase product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) - All models <ul style="list-style-type: none"> ThinkVantage® System Update View Management Utility Lenovo Solution Center Norton Internet Security (30 days of virus definitions) Evernote® Skype™ 		
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution: 1920x1200 (VGA)@60Hz; 2560x2048 (DisplayPort)@60Hz</i>													
DP dongle	None													
Disk	SATA 6.0Gb/s 7200 rpm													
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1													
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar													
eSATA port	None													
Media reader	None													
Chipset	AMD A75 Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)													
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®													
Modem	None													
Security chip	Trusted Platform Module (TPM 1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Floor Stand	System floor stand for vertical orientation													
Power supply	240 watts, autosensing, 85% PSU													
Machine	<ul style="list-style-type: none"> Business black color; metal case 13.3" W X 15.0" D X 3.9" H 339mm W X 381mm D X 100mm H 16.5 lb (7.5 kg) in maximum configuration Toolless cover flips up and tilts backward on rear hinges Toolless disk and optical drive removal Toolless adapter retention 													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader													
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3													
														
EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold RoHS-compliant														
Supports ThinkVantage Technologies														
For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet														
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													

See footnotes for important warranty information
US model(s) announced October 23 or 30, 2012

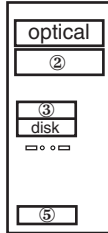
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(ANDE1-12) November 2012

ThinkCentre® M78 Tower (2111) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Chassis intr switch	PS/2 port	ENERGY STAR 5.2	Win7 Global preload	Ann date (mm/dd/yy)
2111-A1U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	None	None	Pro 64 08/28/12
2111-A2U	4x5	A6-5400B	4GBx1	500G 7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	None	None	Pro 64 08/28/12
2111-A3U	4x5	A8-5500B	4GBx1	1TB 7200	Bay	DVD±RW	None	Radeon HD 7560D	None	None	None	None	Pro 64 08/28/12
2111-A4U	4x5	A8-5500B	4GBx1	1TB 7200	Bay	DVD±RW	None	GeForce 605	None	None	None	None	Pro 64 08/28/12

- Small and medium business (SMB) model(s), part of the US TopSeller Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>										Preloaded operating system		
Processor	<p>AMD Accelerated Processor A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz)</p> <p>AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz)</p> <p>AMD Accelerated Processor A8-5500B (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core technology (up to 3.7GHz), integrated AMD Radeon HD 7560D Graphics, integrated DDR3 memory controller (up to 1866MHz)</p>										Genuine Windows® 7 Professional 64		
Implementation	Processor in Socket FM2										Ready to install applications (only some listed)		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager • Business-in-a-Box 		
Graphics	<p><i>Some:</i> AMD Radeon HD Graphics, integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA)@60Hz; 2560x2048 (DP)@60Hz</p> <p><i>Some:</i> NVIDIA® GeForce® 605, PCI Express® 2.0 x16 adapter, DirectX 11, 512MB, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I)@60Hz</p>										Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Google Chrome • Google Toolbar • Skype™ for Windows • Evernote® • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 		
DP dongle	None												
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1												
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar												
eSATA port	None												
Media reader	None												
Chipset	AMD A75 Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®												
Modem	None												
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Power supply	280 watts with variable speed fan, manual switch												
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 27.5 lb (12.5 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk												
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3										Security <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) 		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										RoHS-compliant		
											Supports ThinkVantage Technologies		
											For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet		

See footnotes for important warranty information
US model(s) announced August 28, 2012

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(ANDE1-5) August 2012

ThinkCentre® M78 Tower (2111) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB	2nd Disk rpm	Bay	SATA optical	Media reader	Graphics	Chassis intr switch	PS/2 port	ENERGY STAR 5.2 Global	Ann date (mm/dd/yy)
2111-B2U	4x5	A4-5300	2GBx1	250G	7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	None	Win8 Pro64 10/23/12
2111-B3U	4x5	A6-5400B	4GBx1	500G	7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	None	Win8 Pro64 10/23/12
2111-C2U	4x5	A4-5300	2GBx1	250G	7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	None	Win7 Pro64 10/30/12
2111-C3U	4x5	A6-5400B	4GBx1	500G	7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	None	Win7 Pro64 10/30/12

- Small and medium business (SMB) model(s), part of the US TopSeller Program
- 3-year limited warranty

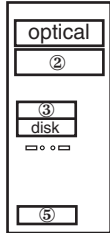
Positioning	<i>Mainstream enterprise stability and manageability</i>										Preloaded operating system		
Processor	AMD Accelerated Processor A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz) AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz) Processor in Socket FM2										Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit		
Implementation	Processor in Socket FM2										Preloaded applications (only some listed)		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										- Windows 7 models		
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution: 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz</i>										<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Google Chrome • Google Toolbar • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 		
DP dongle	None										- Windows 8 models		
Disk	SATA 6.0Gb/s 7200 rpm										<ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Norton™ Studio • Intel AppUp® • AccuWeather • PC Device Stage • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) 		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										- All models		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1										<ul style="list-style-type: none"> • ThinkVantage® System Update • View Management Utility • Lenovo Solution Center • Norton Internet Security (30 days of virus definitions) • Evernote® • Skype™ 		
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar										Security		
eSATA port	None										<ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) 		
Media reader	None										RoHS-compliant		
Chipset	AMD A75 Chipset										Supports ThinkVantage Technologies		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®												
Modem	None												
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Power supply	280 watts with variable speed fan, manual switch												
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 27.5 lb (12.5 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk												
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3												
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												

See footnotes for important warranty information
US model(s) announced October 23 or 30, 2012

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(ANDE1-13) November 2012

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Chassis intr switch	PS/2 port	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
1766-A7U	4x5	A6-5400B	4GBx1	500G 7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	None	Pro 32	08/28/12
1766-B1U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	None	Pro 64	08/28/12
1766-B2U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	None	Prem 32	08/28/12
1766-B3U	4x5	A8-5500B	4GBx1	1TB 7200	Bay	DVD±RW	None	Radeon HD 7560D	None	None	None	Pro 64	08/28/12
1766-B4U	4x5	A6-5400B	4GBx1	500G 7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	None	Pro 64	08/28/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

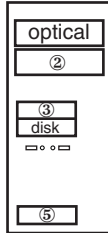
Positioning	<i>Mainstream enterprise stability and manageability</i>										Preloaded operating system		
Processor	<p>AMD Accelerated Processor A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz)</p> <p>AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz)</p> <p>AMD Accelerated Processor A8-5500B (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core technology (up to 3.7GHz), integrated AMD Radeon HD 7560D Graphics, integrated DDR3 memory controller (up to 1866MHz)</p>										<p><i>Some:</i> Genuine Windows® 7 Professional 32</p> <p><i>Some:</i> Genuine Windows 7 Professional 64</p> <p><i>Some:</i> Genuine Windows 7 Home Premium 32</p>		
Implementation	Processor in Socket FM2										Ready to install applications (only some listed)		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager • Business-in-a-Box 		
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz										Preloaded applications (only some listed)		
DP dongle	None										<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo Simple Tap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Google Chrome • Google Toolbar • Skype™ for Windows • Evernote® • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 		
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1												
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar												
eSATA port	None												
Media reader	None												
Chipset	AMD A75 Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®												
Modem	None												
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Power supply	280 watts with variable speed fan, manual switch												
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 27.5 lb (12.5 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 												
Bay	<p>Bay 1: 5.25", 1.6" high, access, std optical</p> <p>Bay 2: 5.25", 1.6" high, access, open</p> <p>Bay 3: 3.5", 1" high, access, opt reader</p> <p>Bay 4: 3.5", 1" high, no access, std disk</p> <p>Bay 5: 3.5", 1" high, no access, opt disk</p>												
Slot	<p>Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max)</p> <p>Slot 2: half-length, full-height, PCIe 2.0 x1</p> <p>Slot 3: half-length, full-height, 32-bit PCI 2.3</p> <p>Slot 4: half-length, full-height, 32-bit PCI 2.3</p>												
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										<p>Security</p> <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) 		
											RoHS-compliant		
											Supports ThinkVantage Technologies		
											For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet		

ThinkCentre® M78 Tower (1562) - ENERGY STAR® 5.2

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Chassis intr switch	PS/2 port	ENERGY STAR 5.2	Win7 Global preload	Ann date (mm/dd/yy)
1562-A1U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	ES52	None	Pro 32 08/28/12
1562-C1U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	ES52	None	Prem 32 08/28/12
1562-C2U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	ES52	None	Pro 64 08/28/12
1562-C3U	4x5	A6-5400B	4GBx1	500G 7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	ES52	None	Pro 64 08/28/12
1562-C4U	4x5	A8-5500B	4GBx1	1TB 7200	Bay	DVD±RW	None	Radeon HD 7560D	None	None	ES52	None	Pro 64 08/28/12
1562-C5U	4x5	A8-5500B	4GBx1	1TB 7200	Bay	DVD±RW	None	GeForce 605	None	None	ES52	None	Pro 64 08/28/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>										Preloaded operating system		
Processor	AMD Accelerated Processor A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz) AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz) AMD Accelerated Processor A8-5500B (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core technology (up to 3.7GHz), integrated AMD Radeon HD 7560D Graphics, integrated DDR3 memory controller (up to 1866MHz)										<i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> Genuine Windows 7 Professional 64 <i>Some:</i> Genuine Windows 7 Home Premium 32		
Implementation	Processor in Socket FM2										Ready to install applications (only some listed)		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box 		
Graphics	<i>Some:</i> AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA)@60Hz; 2560x2048 (DP)@60Hz <i>Some:</i> NVIDIA® GeForce® 605 , PCI Express® 2.0 x16 adapter, DirectX 11, 512MB, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I)@60Hz										Preloaded applications (only some listed)		
DP dongle	None										<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo Simple Tap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Google Chrome ● Google Toolbar ● Skype™ for Windows ● Evernote® ● RapidBoot HDD Accelerator ● Symantec™ VIP ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) ● InterVideo WinDVD® (DVD, DVD±RW) 		
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1												
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar												
eSATA port	None												
Media reader	None												
Chipset	AMD A75 Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®												
Modem	None												
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Power supply	280 watts, autosensing, 85% PSU												
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 27.5 lb (12.5 kg) in maximum configuration ● Toolless cover removal, toolless adapter retention ● Toolless disk, optical drive removal 												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk												
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3												
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 		
											EPEAT™ Gold rating ENERGY STAR 5.2-compliant ULE Gold RoHS-compliant		
											Supports ThinkVantage Technologies		
											For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet		

See footnotes for important warranty information
US model(s) announced August 28, 2012

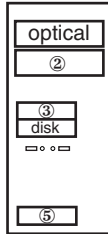
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(ANDE1-7) August 2012

ThinkCentre® M78 Tower (1562) - ES 5.2 (Win 8)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Chassis intr switch	PS/2 port	ENERGY STAR 5.2 Global	Preload	Ann date (mm/dd/yy)
1562-E1U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	ES52	None	Win8 Pro64 10/23/12
1562-E2U	4x5	A6-5400B	4GBx1	500G 7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	ES52	None	Win8 Pro64 10/23/12
1562-E3U	4x5	A8-5500B	4GBx1	1TB 7200	Bay	DVD±RW	None	Radeon HD 7560D	None	None	ES52	None	Win8 Pro64 10/23/12
1562-E4U	4x5	A8-5500B	4GBx1	1TB 7200	Bay	DVD±RW	None	Radeon HD 7450	None	None	ES52	None	Win8 Pro64 10/23/12
1562-F1U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	ES52	None	Win7 Pro64 10/30/12

•3-year limited warranty

Positioning	<i>Mainstream enterprise stability and manageability</i>										
Processor	<p>AMD Accelerated Processor A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz)</p> <p>AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz)</p> <p>AMD Accelerated Processor A8-5500B (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core technology (up to 3.7GHz), integrated AMD Radeon HD 7560D Graphics, integrated DDR3 memory controller (up to 1866MHz)</p>										
Implementation	Processor in Socket FM2										
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										
Graphics	<p><i>Some:</i> AMD Radeon HD Graphics, integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA)@60Hz; 2560x2048 (DP)@60Hz</p> <p><i>Some:</i> AMD Radeon HD 7450, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I)@60Hz; works along with Intel HD Graphics to support up to four independent monitors</p>										
DP dongle	None										
Disk	SATA 6.0Gb/s 7200 rpm										
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1										
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar										
eSATA port	None										
Media reader	None										
Chipset	AMD A75 Chipset										
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)										
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)										
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)										
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										
Speaker	Internal speaker for business audio										
IEEE 1394	None										
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®										
Modem	None										
Security chip	Trusted Platform Module (TPM 1.2-compliant)										
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Power supply	280 watts, autosensing, 85% PSU										
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 27.5 lb (12.5 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 										
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk										
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3										
											
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										
	Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Google Chrome • Google Toolbar • RapidBoot HDD Accelerator • Symantec™ VIP • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Norton™ Studio • Intel AppUp® • AccuWeather • PC Device Stage • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models <ul style="list-style-type: none"> • ThinkVantage® System Update • View Management Utility • Lenovo Solution Center • Norton Internet Security (30 days of virus definitions) • Evernote® • Skype™ 										
	Security <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) 										
	EPEAT™ Gold rating ENERGY STAR 5.2-compliant ULE Gold RoHS-compliant										
	Supports ThinkVantage Technologies										
	For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet										

See footnotes for important warranty information
US model(s) announced October 23 or 30, 2012

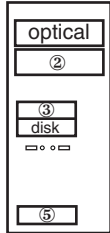
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(ANDE1-14) November 2012

ThinkCentre® M78 Tower (1565) - ES 5.2 (GMP)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Chassis intr switch	PS/2 port	ENERGY STAR 5.2	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
1565-A1U	4x5	A6-5400B	4GBx1	500G 7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	ES52	G P	Pro 64	08/28/12

- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>										Preloaded operating system			
Processor	AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz)										Genuine Windows® 7 Professional 64			
Implementation	Processor in Socket FM2										Ready to install applications (only some listed)			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box 			
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution: 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz</i>										Preloaded applications (only some listed)			
DP dongle	None										<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Google Chrome ● Google Toolbar ● Skype™ for Windows ● Evernote® ● RapidBoot HDD Accelerator ● Symantec™ VIP ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 			
Disk	SATA 6.0Gb/s 7200 rpm													
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1													
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar													
eSATA port	None													
Media reader	None													
Chipset	AMD A75 Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)													
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®													
Modem	None													
Security chip	Trusted Platform Module (TPM 1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Power supply	280 watts, autosensing, 85% PSU													
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 27.5 lb (12.5 kg) in maximum configuration ● Toolless cover removal, toolless adapter retention ● Toolless disk, optical drive removal 													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk													
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3													
														
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 			
											EPEAT™ Gold rating ENERGY STAR 5.2-compliant ULE Gold RoHS-compliant			
											Supports ThinkVantage Technologies			
											For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information
US model(s) announced August 28, 2012

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(ANDE1-8) August 2012

ThinkCentre® M78 Tower (1565) - ES 5.2 (GMP) - Win 8

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB	2nd Disk rpm	Disk Bay	SATA optical	Media reader	Graphics	Chassis intr switch	PS/2 port	ENERGY STAR 5.2	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
1565-B1U	4x5	A6-5400B	4GBx1	500G	7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	ES52	G P	Win8 Pro64	10/23/12
1565-C1U	4x5	A6-5400B	4GBx1	500G	7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	ES52	G P	Win7 Pro64	10/30/12

●Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	<i>Mainstream enterprise stability and manageability</i>											Preloaded operating system			
Processor	AMD Accelerated Processor A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz)											Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit			
Implementation	Processor in Socket FM2											Some: Windows 8 Pro 64-bit			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets											Preloaded applications (only some listed)			
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution: 1920x1200 (VGA)@60Hz; 2560x2048 (DisplayPort)@60Hz</i>											- Windows 7 models			
DP dongle	None											<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● Lenovo® Message Center Plus ● Lenovo SimpleTap ● Adobe® Reader® ● Google Chrome ● Google Toolbar ● RapidBoot HDD Accelerator ● Symantec™ VIP ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 			
Disk	SATA 6.0Gb/s 7200 rpm											- Windows 8 models			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											<ul style="list-style-type: none"> ● Lenovo Support ● Lenovo Companion ● Lenovo Cloud Storage ● Lenovo QuickLaunch ● Norton™ Studio ● Intel AppUp® ● AccuWeather ● PC Device Stage ● Microsoft Office 2013 preloaded; purchase product key to activate ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) 			
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1											- All models			
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar											<ul style="list-style-type: none"> ● ThinkVantage® System Update ● View Management Utility ● Lenovo Solution Center ● Norton Internet Security (30 days of virus definitions) ● Evernote® ● Skype™ 			
eSATA port	None											Security			
Media reader	None											<ul style="list-style-type: none"> ● Security chip (see information on left) ● One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 			
Chipset	AMD A75 Chipset											EPEAT™ Gold rating			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											ENERGY STAR 5.2-compliant			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)											ULE Gold			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)											RoHS-compliant			
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)											Supports ThinkVantage Technologies			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											For compatible accessories, please go to O-M78 sheet;			
Speaker	Internal speaker for business audio											For ThinkPlus™ service upgrade options, please go to S-TC sheet			
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®														
Modem	None														
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	280 watts, autosensing, 85% PSU														
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 27.5 lb (12.5 kg) in maximum configuration ● Toolless cover removal, toolless adapter retention ● Toolless disk, optical drive removal 														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk														
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3														
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

See footnotes for important warranty information
US model(s) announced October 23 or 30, 2012

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(ANDE1-15) November 2012

Memory

2GB PC3-12800 DDR3 UDIMM	0A65728	ann	06/05/12
4GB PC3-12800 DDR3 UDIMM	0A65729	ann	06/05/12
8GB PC3-12800 DDR3 UDIMM	0A65730	ann	06/05/12

More information at

www.lenovo.com/support/desktopmemorycompatibility

Optical

Lenovo® Super Multi-Burner SATA Drive	0A65618	ann	08/23/11
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Storage and removable storage

250GB SATA 3.0Gb/s Disk (7200 rpm)	41N3015	ann	01/24/06
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	ann	11/06/07
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918	ann	08/19/08
300GB SATA 3.0Gb/s Disk (10000 rpm) 2.5"	43R2031	ann	03/31/09

USB 2.0 Portable 320GB Hard Disk	45K1689	ann	03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
USB 3.0 Secure 500GB Hard Drive	0A65619	ann	11/29/11
USB 3.0 Secure 750GB Hard Drive	0A65616	ann	11/29/11
USB 3.0 Secure 1TB Hard Drive	0A65621	ann	08/28/12
Slim USB Portable DVD Burner	0A33988	ann	06/14/11

Graphics

Small 2111/1766/1562/1565 support Low Profile:

NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann	01/29/13
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Tower 5100/4865/2113/2114 support 75 watts max:

NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann	01/29/13
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⁶⁷ Simultaneously use the graphic card monitor ports along with the systems integrated monitor ports when Multi-Monitor Support is enabled in BIOS Setup.

More information at www.lenovo.com/support/graphiccards

Keyboard

Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
Ultraslim Plus Wireless Keyboard and Mouse ⁵²	0A34032	ann	04/05/11
ThinkPad® USB Keyboard with TrackPoint	55Y9003	ann	08/18/09
Lenovo USB Fingerprint Keyboard	73P4730	ann	02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann	03/24/09

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo ScrollPoint® Mouse(USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
Lenovo Wireless Laser Mouse ⁵²	0A36188	ann	12/20/11
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09

More information at www.lenovo.com/support/mice

Modem

USB 2.0 Lenovo Modem	43R1814	ann	02/26/08
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Multimedia

ThinkPad In-Ear Headphones with mic ⁶⁰	57Y4488	ann	01/07/10
Lenovo Mini Speakers M220	55Y2033	ann	01/07/10
Lenovo Speakers M0520 (black)	57Y6360	ann	02/08/11
Lenovo Speakers M0520 (red)	57Y6361	ann	02/08/11
Lenovo Headset P550	55Y2065		
Lenovo Headset P950 (black)	57Y6605	ann	02/08/11

⁶⁰ Has a 1.2 meter (3.9-foot) cable. Best when systems are in close proximity. Example: SFF placed on a desk.

Security

Kensington® MicroSaver® Cable Lock ⁵⁶	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann	09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann	08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Monitors

ThinkVision® L1711p 17" (VGA, DVI-D)	5047HB2	ann	10/20/09
ThinkVision LT1952p Wide 19" (VGA, DP, DVI-D) ⁶⁹	2448MB6	ann	09/13/11
ThinkVision L2250p Wide 22" (VGA, DVI-D)	2572HB6	ann	10/20/09
ThinkVision LT2251x Wide 22" (VGA, DP)	2578HB6	ann	10/20/09
ThinkVision LT2252p Wide 22" (VGA, DP, DVI-D) ⁶⁹	2572MB6	ann	09/13/11
ThinkVision L2321x Wide 23" (VGA, DP)	4014HB6	ann	06/10/10
ThinkVision LT2323p Wide 23" (VGA, DP, DVI-D) ⁶⁹	3024HC1	ann	05/01/12
ThinkVision LT2452p Wide 24" (VGA, DP, DVI-D) ⁶⁹	4420MB2	ann	09/13/11

⁶⁹ DisplayPort cable is not included; use optional DisplayPort to DisplayPort Monitor Cable (0A36537).

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

DisplayPort™ to Single-link DVI-D Cable	45J7915	ann	08/05/08
DisplayPort to VGA Monitor Cable	57Y4393	ann	08/04/09
DisplayPort to DisplayPort Monitor Cable	0A36537	ann	09/13/11
Lenovo USB Soundbar	0A36190	ann	05/01/12
Kensington MicroSaver Cable Lock ⁵⁶	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann	09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann	08/24/10
ThinkCentre Extend Arm	57Y4352	ann	07/06/10

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems

Lenovo ThinkCentre M81 Small and Tower

ThinkCentre®



Lenovo ThinkCentre M81
Small and Tower



Lenovo ThinkCentre M81 Tower
with Lenovo ThinkVision monitor



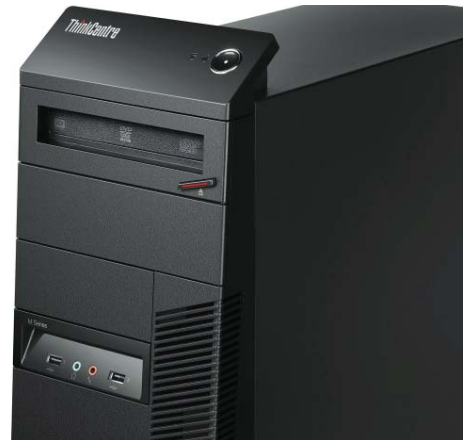
Lenovo ThinkCentre M81 Small



Lenovo ThinkCentre M81 Small
with Lenovo ThinkVision monitor



Lenovo ThinkCentre M81 Tower



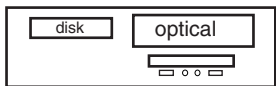
Lenovo ThinkCentre M81 Tower

ThinkCentre® M81 Small (7518) - TopSeller - IV

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.0	Global Educ	Win7 preload	Ann date (mm/dd/yy)
✗ 7518-D6U	4x3	Core i5-2400	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	Switch	Stand	None	N N	Pro 32	11/08/11
✗ 7518-D4U	4x3	Core i3-2130	4GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	Switch	Stand	None	N N	Pro 64	11/08/11
✗ 7518-D5U	4x3	Core i5-2500	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	Switch	Stand	None	N N	Pro 64	11/08/11
✗ 7518-D7U	4x3	Core i3-2120	4GBx1 1333MHz	250G 7200	DVD±RW	Intel HD	None	Stand	None	N N	Pro 64	12/13/11
✗ 7518-D8U	4x3	Core i3-2130	4GBx1 1333MHz	250G 7200	DVD±RW	Intel HD	None	Stand	None	N N	Pro 64	12/13/11
✗ 7518-D9U	4x3	Core i5-2400	4GBx1 1333MHz	250G 7200	DVD±RW	Intel HD	None	Stand	None	N N	Pro 64	12/13/11
☞ 7518-E1U	4x3	Core i5-2400	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	None	Stand	None	N N	Pro 64	02/21/12

- These small and medium business (SMB) models are part of the US TopSeller Program
- These models have a 3-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>		<p>Preloaded operating system</p> <p>Some: Genuine Windows® 7 Professional 32</p> <p>Some: Genuine Windows 7 Professional 64</p> <p>Preloaded applications²⁰ (only some listed)</p> <ul style="list-style-type: none"> • Rescue and Recovery™ • ThinkVantage® System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe Reader® • Skype™ for Windows • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
Processor	<p>Intel® Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), Virtualization Technology, integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller</p> <p>Intel Core i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Virtualization Technology, integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller</p> <p>Intel Core i5-2400 Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Virtualization Technology, Turbo Boost 2.0 (3.4GHz), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller</p> <p>Intel Core i5-2500 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Virtualization Technology, Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller</p>		
Implementation	Processor in LGA1155 socket		
Memory	16GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets		
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>		
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset		
SATA cables	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector on planar		
eSATA port	None		
Media reader	None		
Chipset	Intel Q65 Express Chipset Platform Controller Hub [PCH] (PCI Express® 2.0 x1, ethernet MAC, PCI, and USB), SMSC® 5627P Super I/O		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Six USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Intel AMT	None		
Modem	None		
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
Power supply	240 watts, autosensing, active Power Factor Correction		
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.3" W X 14.5" D X 3.9" H • 337mm W X 369mm D X 99mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention 		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader		
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3		
Limited Warranty ¹	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		
			
		<p>Security</p> <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Some: Chassis intrusion switch <p>GREENGUARD® certified RoHS-compliant</p> <p>Supports ThinkVantage Technologies</p> <p>For compatible accessories, please go to O-M81 sheet; For Lenovo service upgrade options, please go to S-TC sheet</p>	

See footnotes for important warranty information
 US models announced November 8, 2011, December 13, 2011, or February 21, 2012
 ✗ US models withdrawn effective November 2012

Memory

2GB PC3-10600 DDR3 Low-Halogen UDIMM	57Y4390	ann 01/12/10
2GB PC3-10600 DDR3 L-H UDIMM (25-Pack)	57Y4420	ann 01/12/10
4GB PC3-10600 DDR3 UDIMM	0A36527	ann 04/12/11

More information at

www.lenovo.com/support/desktopmemorycompatibility

Optical

All:

DVD-ROM DL SATA 1.5Gb/s 16X-48X Max ⁴	41N5618	ann 09/26/06
Lenovo® Super Multi-Burner SATA Drive	0A65618	ann 08/23/11

Tower 5030/5048/7517/1730 support:

Blu-ray™ Burner SATA 1.5Gb/s Drive	45K1675	ann 03/31/09
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Storage and removable storage

250GB SATA 3.0Gb/s Disk (7200 rpm)	41N3015	ann 01/24/06
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	ann 11/06/07
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918	ann 08/19/08
300GB SATA 3.0Gb/s Disk (10000 rpm) 2.5"	43R2031	ann 03/31/09
USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
USB 3.0 Secure 500GB Hard Drive	0A65619	ann 11/29/11
USB 3.0 Secure 750GB Hard Drive	0A65616	ann 11/29/11
USB 3.0 Secure 1TB Hard Drive	0A65621	ann 08/28/12
Slim USB Portable DVD Burner	0A33988	ann 06/14/11

Graphics

Small 7518/5032/5049/0385 support Low Profile:

NVIDIA® Quadro® 256MB NVS 295 (2-DP) ⁶⁷	45K1669	ann 04/21/09
NVIDIA Quadro 512MB NVS 300 DMS59 (2-DVI or 2-VGA via DMS59 dongles) ⁶⁷	0A36528	ann 04/26/11
NVIDIA Quadro 512MB 400 (DP, DVI-I with a DVI to VGA converter) ⁶⁷	0A36535	ann 06/28/11
NVIDIA Quadro 1GB 600 (DP, DVI-I with a DVI to VGA converter) ⁶⁷	0A36183	ann 10/26/10
NVIDIA GeForce® 310 512MB DMS59 (2-DVI or 2-VGA via DMS59 dongles) ⁶⁷	57Y4167	ann 03/02/10
AMD 7450 1GB (DP, DVI-I with a DVI to VGA converter) ⁶⁷	0A36538	ann 05/29/12
NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann 01/29/13

Tower 7517/5030/5048/1730 support 75 watts max:

NVIDIA Quadro 256MB NVS 295 (2-DP) ⁶⁷	45K1669	ann 04/21/09
NVIDIA Quadro 512MB NVS 300 DMS59 ⁶⁷	0A36528	ann 04/26/11
NVIDIA Quadro 512MB 400 (DP, DVI-I) ⁶⁷	0A36535	ann 06/28/11
NVIDIA Quadro 512MB NVS 450 (4-DP or 4-DVI-D via DP to DVI-D cable)	57Y4398	ann 01/19/10
NVIDIA Quadro 1GB 600 (DP, DVI-I) ⁶⁷	0A36183	ann 10/26/10
NVIDIA Quadro 1GB 2000 (2-DP, DVI-I) ⁶⁷	57Y4479	ann 10/26/10
NVIDIA GeForce 310 512MB DMS59 ⁶⁷	57Y4167	ann 03/02/10
AMD 7450 1GB (DP, DVI-I) ⁶⁷	0A36538	ann 05/29/12
NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann 01/29/13

⁶⁷ Simultaneously use the graphic card monitor ports along with the systems integrated monitor ports when Multi-Monitor Support is enabled in BIOS Setup.

More information at www.lenovo.com/support/graphiccards

Keyboard

Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Preferred Pro Full Size PS/2 Keyboard	31P7415	ann 06/04/02
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Ultraslim Plus Wireless Keyboard and Mouse ⁵²	0A34032	ann 04/05/11
ThinkPad® USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo USB Fingerprint Keyboard	73P4730	ann 02/22/05

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo ScrollPoint® Mouse(USB, Optical)	31P7405	ann 08/27/02
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
Lenovo Wireless Laser Mouse ⁵²	0A36188	ann 12/20/11
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09
Lenovo Optical Mouse A6010	57Y6255	
Lenovo Mini Optical Mouse M20B	55Y2091	
Lenovo Wireless Mouse N30B	55Y9360	

More information at www.lenovo.com/support/mice

Multimedia

ThinkPad In-Ear Headphones with mic ⁶⁰	57Y4488	ann 01/07/10
Lenovo Mini Speakers M220	55Y2033	ann 01/07/10
Lenovo Headphone P550	55Y2065	

⁶⁰ Has a 1.2 meter (3.9-foot) cable. Best when systems are in close proximity. Example: SFF placed on a desk.

Security

Kensington® MicroSaver® Cable Lock ⁵⁶	73P2582	ann 12/29/03
ensington Twin Head Cable Lock ⁵⁶	45K1620	ann 09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann 08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Monitors

ThinkVision® L1711p 17" (VGA, DVI-D)	5047HB2	ann 10/20/09
ThinkVision LT1952p Wide 19" (VGA, DP, DVI-D) ⁶⁹	2448MB6	ann 09/13/11
ThinkVision L2250p Wide 22" (VGA, DVI-D)	2572HB6	ann 10/20/09
ThinkVision L2251x Wide 22" (VGA, DP)	2578HB6	ann 10/20/09
ThinkVision LT2252p Wide 22" (VGA, DP, DVI-D) ⁶⁹	2572MB6	ann 09/13/11
ThinkVision LT2452p Wide 24" (VGA, DP, DVI-D) ⁶⁹	4420MB2	ann 09/13/11

⁶⁹ DisplayPort cable is not included; use optional DisplayPort to DisplayPort Monitor Cable (0A36537).

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
DisplayPort™ to Single-link DVI-D Cable	45J7915	ann 08/05/08
DisplayPort to VGA Monitor Cable	57Y4393	ann 08/04/09
DisplayPort to DisplayPort Monitor Cable	0A36537	ann 09/13/11
Lenovo USB Soundbar	0A36190	ann 05/01/12
Kensington MicroSaver Cable Lock ⁵⁶	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann 09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann 08/24/10
ThinkCentre Extend Arm	57Y4352	ann 07/06/10

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems

Lenovo ThinkCentre M82 Small and Tower

ThinkCentre®



Lenovo ThinkCentre M82
Small and Tower



Lenovo ThinkCentre M82 Tower
with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M82 Small



Lenovo ThinkCentre M82 Small
with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M82 Tower



Lenovo ThinkCentre M82 Tower

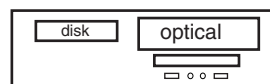
ThinkCentre® M82 Small (3306) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
3306-A1U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Pro 64 06/19/12
3306-A2U	4x3	i5-3470	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Pro 64 06/19/12
3306-A3U	4x3	i5-3470	4GBx2 1600MHz	1TB 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Pro 64 06/19/12
3306-A4U	4x3	i5-3470	4GBx2 1600MHz	1TB 7200	DVD±RW	None	HD 7450	None	None	Stand	None	None	Pro 64 06/19/12
3306-A5U	4x3	i5-3470	4GBx2 1600MHz	1TB 7200	DVD±RW	None	HD 7350	None	None	Stand	None	None	Pro 64 06/19/12
3306-A6U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 7350	None	None	Stand	None	None	Pro 64 06/19/12
3306-D1U	4x3	i5-3570	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Pro 64 07/10/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>										
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology										
Implementation	Processor in LGA1155 socket										
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										
Graphics	<i>Some: Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz;</i> <i>Some: AMD Radeon™ HD 7350, DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; Maximum resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors</i> <i>Some: AMD Radeon HD 7450, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; Maximum resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors</i>										
DP dongle	None										
Disk	SATA 6.0Gb/s 7200 rpm										
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset										
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector										
eSATA port	None										
Media reader	None										
Chipset	Intel Q75 Express Chipset										
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort										
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector										
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										
Speaker	Internal speaker for business audio										
IEEE 1394	None										
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®										
Intel AMT	Intel Standard Manageability										
Modem	None										
Security chip	Trusted Platform Module (TPM 1.2-compliant)										
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Floor Stand	System floor stand for vertical orientation										
Power supply	240 watts, autosensing, active Power Factor Correction										
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.3" W X 15.2" D X 3.9" H • 338mm W X 385mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention 										
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader										
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3										
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										
	Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 										
	Security <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) 										
	GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies										
	For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet										



See footnotes for important warranty information
 US models announced June 19 or July 10, 2012

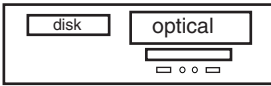
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ThinkCentre® M82 Small (3306) - TopSeller - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
3306-B1U	4x3	i3-2120	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2000	None	None	Stand	None	None	Pro 64 07/10/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>												
Processor	Intel® Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology												
Implementation	Processor in LGA1155 socket												
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets												
Graphics	Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>												
DP dongle	None												
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset												
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector												
eSATA port	None												
Media reader	None												
Chipset	Intel Q75 Express Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®												
Intel AMT	Intel Standard Manageability												
Modem	None												
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	System floor stand for vertical orientation												
Power supply	240 watts, autosensing, active Power Factor Correction												
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader												
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3												
													
	Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 												
	Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 												
	GREENGUARD® certified RoHS-compliant												
	Supports ThinkVantage Technologies												
	For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet												
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												

See footnotes for important warranty information
US model announced July 10, 2012

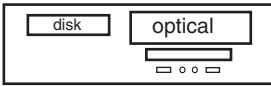
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ThinkCentre® M82 Small (3306) - TopSeller - III

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
3306-B2U	4x3	i5-3570	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Pro 64 07/10/12
3306-B3U	4x3	i7-3770	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 4000	None	None	Stand	None	None	Pro 64 07/10/12
3306-F1U	4x3	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Pro 64 09/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

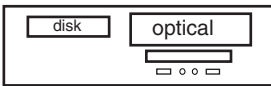
Positioning	<i>Mainstream enterprise stability and manageability</i>										
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										
Implementation	Processor in LGA1155 socket										
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>										
DP dongle	None										
Disk	SATA 6.0Gb/s 7200 rpm										
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset										
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector										
eSATA port	None										
Media reader	None										
Chipset	Intel Q75 Express Chipset										
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort										
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector										
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										
Speaker	Internal speaker for business audio										
IEEE 1394	None										
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®										
Intel AMT	Intel Standard Manageability										
Modem	None										
Security chip	Trusted Platform Module (TPM 1.2-compliant)										
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Floor Stand	System floor stand for vertical orientation										
Power supply	240 watts, autosensing, active Power Factor Correction										
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 										
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader										
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3										
											
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										
	Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 										
	Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 										
	GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies										
	For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet										

See footnotes for important warranty information
 US models announced July 10 or September 4, 2012

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ThinkCentre® M82 Small (3306) - TopSeller (Win 8)

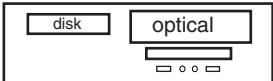
Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2 Global	Preload	Ann date (mm/dd/yy)
3306-C1U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Win8 Pro64 10/23/12
3306-F2U	4x3	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Win8 Pro64 10/23/12
3306-F3U	4x3	i7-3770	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 4000	None	None	Stand	None	None	Win8 Pro64 10/23/12
3306-F4U	4x3	i5-3570	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Win8 Pro64 10/23/12
3306-G1U	4x3	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Win7 Pro64 10/23/12
3306-G2U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Win7 Pro64 10/23/12
3306-G3U	4x3	i5-3570	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 2500	None	None	Stand	None	None	Win7 Pro64 10/23/12
3306-H1U	4x3	i7-3770	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 4000	None	None	Stand	None	None	Win7 Pro64 03/05/13
3306-J1U	4x3	i7-3770	4GBx2 1600MHz	1TB 7200	DVD±RW	None	HD 7450	None	None	Stand	None	None	Win7 Pro64 03/12/13
3306-J2U	4x3	i5-3475S	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 4000	None	None	Stand	None	None	Win7 Pro64 03/12/13
3306-J3U	4x3	i5-3475S	4GBx2 1600MHz	1TB 7200	DVD±RW	None	HD 7450	None	None	Stand	None	None	Win7 Pro64 03/12/13
Positioning	<i>Mainstream enterprise stability and manageability</i>												
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated DDR3 memory controller (up to 1600MHz) Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3475S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology												
Implementation	Processor in LGA1155 socket												
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets												
Graphics	<i>Some:</i> Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz <i>Some:</i> AMD Radeon™ HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors												
DP dongle	None												
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset												
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector												
eSATA port	None												
Media reader	None												
Chipset	Intel Q75 Express Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®												
Intel AMT	Intel Standard Manageability												
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	System floor stand for vertical orientation												
Power supply	240 watts, autosensing, active Power Factor Correction												
Machine	<ul style="list-style-type: none"> Business black color; metal case 13.3" W X 15.2" D X 3.9" H 338mm W X 385mm D X 100mm H 16.5 lb (7.5 kg) in maximum configuration Toolless cover flips up and tilts backward on rear hinges Toolless disk and optical drive removal Toolless adapter retention 												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader												
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3												
													
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												
Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage Communication Utility ThinkVantage Power Manager Lenovo® AppShop Lenovo Message Center Plus Lenovo SimpleTap Adobe® Reader® Windows Live™ Essentials Microsoft Office 2010 preloaded; purchase product key to activate Corel® Burn.Now™ (DVD±RW) Corel DVD MovieFactory® (DVD±RW) - Windows 8 models <ul style="list-style-type: none"> Lenovo Support Lenovo Companion Lenovo Cloud Storage Norton™ Studio AccuWeather Evernote® Microsoft Office 2013 preloaded; purchase product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) - All models <ul style="list-style-type: none"> ThinkVantage System Update Lenovo Solution Center View Management Utility Norton Internet Security (30 days of virus definitions) Skype™ 													
Security <ul style="list-style-type: none"> Security chip (see information on left) Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) Cable lock Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Individual USB port disablement Chassis intrusion switch on selected model(s) 													
GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies													
For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet													

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
3395-A2U	4x3	i3-2130	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2000	None	Stand	None	Pro 64	06/19/12
3395-C6U	4x3	i3-2120	2GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2000	None	Stand	None	Pro 64	06/19/12
3395-C7U	4x3	G850	2GBx1 1600MHz	250G 7200	DVD±RW	None	Intel HD	None	Stand	None	Pro 32	06/19/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>										Preloaded operating system	
Processor	<p>Intel® Pentium® G850 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Processor in LGA1155 socket</p>										<p><i>Some:</i> Genuine Windows® 7 Professional 32</p> <p><i>Some:</i> Genuine Windows 7 Professional 64</p>	
Implementation											Ready to install applications (only some listed)	
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager 	
Graphics	<p>Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</p>										<p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo Simple Tap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 	
DP dongle	None											
Disk	SATA 6.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset											
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector											
eSATA port	None											
Media reader	None											
Chipset	Intel Q75 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®											
Intel AMT	Intel Standard Manageability											
Modem	None											
Security chip	Trusted Platform Module (TPM 1.2-compliant)											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Floor Stand	System floor stand for vertical orientation											
Power supply	240 watts, autosensing, active Power Factor Correction											
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 										<p>Security</p> <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 	
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader											
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3										<p>GREENGUARD® certified RoHS-compliant</p> <p>Supports ThinkVantage Technologies</p>	
Limited Warranty	<p>3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available</p>										<p>For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet</p>	



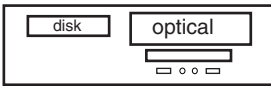
See footnotes for important warranty information
 US models announced June 19, 2012

ThinkCentre® M82 Small (3395) - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
3395-C4U	4x3	i5-3550	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	Pro 64	06/19/12
3395-C5U	4x3	i5-3550	2GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	Pro 64	06/19/12
3395-D5U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	Pro 32	06/19/12
3395-D6U	4x3	i5-3570	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	Pro 32	06/19/12
3395-G1U	4x3	i5-3570	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 2500	None	None	Stand	None	Pro 64	07/10/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>										
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										
Implementation	Processor in LGA1155 socket										
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>										
DP dongle	None										
Disk	SATA 6.0Gb/s 7200 rpm										
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset										
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector										
eSATA port	None										
Media reader	None										
Chipset	Intel Q75 Express Chipset										
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort										
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector										
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										
Speaker	Internal speaker for business audio										
IEEE 1394	None										
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®										
Intel AMT	Intel Standard Manageability										
Modem	None										
Security chip	Trusted Platform Module (TPM 1.2-compliant)										
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Floor Stand	System floor stand for vertical orientation										
Power supply	240 watts, autosensing, active Power Factor Correction										
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 										
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader										
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3										
											
	Preloaded operating system <i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> Genuine Windows 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo Simple Tap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 										
	Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 										
	GREENGUARD® certified RoHS-compliant										
	Supports ThinkVantage Technologies										
	For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet										
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										

See footnotes for important warranty information
US models announced June 19 or July 10, 2012

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(MDTN1-8) July 2012

ThinkCentre® M82 Small (3395) - Windows 8

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2 Global	Preload	Ann date (mm/dd/yy)
3395-H7U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	None	None	Win8 Pro64	10/23/12
3395-N1U	4x3	i3-2130	2GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2000	None	None	Stand	None	Win7 Pro64	10/23/12
3395-N2U	4x3	i3-2120	2GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2000	None	None	Stand	None	Win7 Pro64	10/23/12
3395-N3U	4x3	i5-3570	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 2500	None	None	Stand	None	Win7 Pro64	10/23/12
3395-AAU	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	Win7 Pro64	11/27/12
3395-R1U	4x3	G2120	4GBx1 1600MHz	500G 7200	DVD±RW	None	Intel HD	None	None	Stand	None	Win7 Pro64	12/04/12
3395-R2U	4x3	G2020	4GBx1 1600MHz	500G 7200	DVD±RW	None	Intel HD	None	None	Stand	None	Win7 Pro64	01/22/13
3395-CAU	4x3	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	None	Win7 Pro64	03/05/13
3395-DAU	4x3	i5-3475S	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 4000	None	None	Stand	None	Win7 Pro64	03/12/13
Positioning	Mainstream enterprise stability and manageability												
Processor	<p>Intel® Pentium® G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz)</p> <p>Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1600MHz)</p> <p>Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated DDR3 memory controller (up to 1333MHz)</p> <p>Intel Core i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated DDR3 memory controller (up to 1333MHz)</p> <p>Intel Core i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated DDR3 memory controller (up to 1600MHz)</p> <p>Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i5-3475S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p>												
Implementation	Processor in LGA1155 socket												
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets												
Graphics	Intel HD Graphics / 2000 / 2500 / 4000 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>												
DP dongle	None												
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset												
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector												
eSATA port	None												
Media reader	None												
Chipset	Intel Q75 Express Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®												
Intel AMT	Intel Standard Manageability												
Modem	None												
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	<i>Some:</i> System floor stand for vertical orientation												
Power supply	240 watts, autosensing, active Power Factor Correction												
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.3" W X 15.2" D X 3.9" H • 338mm W X 385mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention 												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader												
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3												
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												

Preloaded operating system

Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit

Some: Windows 8 Pro 64-bit

Preloaded applications (only some listed)

- Windows 7 models

- ThinkVantage® Product Recovery
- ThinkVantage Communication Utility
- ThinkVantage Power Manager
- Lenovo® AppShop
- Lenovo Message Center Plus
- Lenovo SimpleTap
- Adobe® Reader®
- Windows Live™ Essentials
- Microsoft® Office 2010 preloaded; purchase product key to activate
- Corel® Burn.Now™ (DVD±RW)
- Corel DVD MovieFactory® (DVD±RW)

- Windows 8 models

- Lenovo Support
- Lenovo Companion
- Lenovo Cloud Storage
- Norton™ Studio
- AccuWeather
- Evernote®
- Microsoft Office 2013 preloaded; purchase product key to activate
- Cyberlink Power2Go (DVD±RW)
- Cyberlink PowerProducer (DVD±RW)

- All models

- ThinkVantage System Update
- Lenovo Solution Center
- View Management Utility
- Norton Internet Security (30 days of virus definitions)
- Skype™

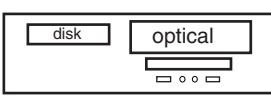
Security

- Security chip (see information on left)
- Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)
- Cable lock
- Power-on password
- Administrator password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Chassis intrusion switch on selected model(s)

GREENGUARD® certified
RoHS-compliant

Supports ThinkVantage Technologies

For compatible accessories, please go to O-M82 sheet;
For Lenovo service upgrade options, please go to S-TC sheet



See footnotes for important warranty information

US models announced Oct 23, 2012, Nov 27, 2012, Dec 4, 2012, Jan 22, 2013, Mar 5, 2013, or Mar 12 2013

⌘ US model withdrawn effective January 2013

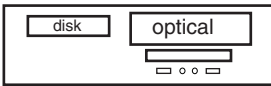
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ThinkCentre® M82 Small (2756) - ENERGY STAR® 5.2

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
2756-D3U	4x3	i3-2120	2GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2000	None	Stand	ES52	None	Pro 64 06/05/12
2756-D4U	4x3	G850	2GBx1 1600MHz	250G 7200	DVD±RW	None	Intel HD	None	Stand	ES52	None	Pro 64 06/05/12
2756-D5U	4x3	G630	2GBx1 1600MHz	250G 7200	DVD±RW	None	Intel HD	None	Stand	ES52	None	Pro 64 06/05/12
2756-D6U	4x3	i3-2120	4GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2000	None	Stand	ES52	None	Pro 64 06/05/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>										Preloaded operating system	
Processor	Intel® Pentium® G630 Processor (2 cores / 2 threads, 2.7GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G850 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 	
Implementation	Processor in LGA1155 socket											
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets											
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz											
DP dongle	None											
Disk	SATA 6.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset											
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector											
eSATA port	None											
Media reader	None											
Chipset	Intel Q75 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®											
Intel AMT	Intel Standard Manageability											
Modem	None											
Security chip	Trusted Platform Module (TPM 1.2-compliant)										Security <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) 	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Floor Stand	System floor stand for vertical orientation											
Power supply	240 watts, autosensing, 85% PSU											
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.3" W X 15.2" D X 3.9" H • 338mm W X 385mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader											
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3											
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										Supports ThinkVantage Technologies For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet	

See footnotes for important warranty information
US models announced June 5, 2012

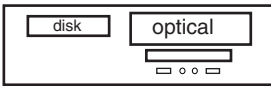
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ThinkCentre® M82 Small (2756) - ENERGY STAR® 5.2 - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
2756-B1U	4x3	i5-3550	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	Pro 64 06/05/12
2756-B3U	4x3	i5-3550	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	Pro 64 06/05/12
2756-D1U	4x3	i5-3550	2GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	Pro 64 06/05/12
2756-D2U	4x3	i7-3770	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	None	Pro 64 06/05/12
2756-D7U	4x3	i5-3550	4GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	Pro 64 06/05/12
2756-F1U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	Pro 32 06/05/12
2756-F2U	4x3	i5-3570	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	Pro 32 06/05/12
2756-F3U	4x3	i7-3770	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	None	Pro 32 06/05/12
2756-F4U	4x3	i5-3470	2GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	Pro 64 06/05/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>										Preloaded operating system		
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache) , Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache) , Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Some: Genuine Windows® 7 Professional 32 Some: Genuine Windows 7 Professional 64		
Implementation	Processor in LGA1155 socket										Ready to install applications (only some listed)		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager 		
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>										Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo Simple Tap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 		
DP dongle	None												
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset												
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector												
eSATA port	None												
Media reader	None												
Chipset	Intel Q75 Express Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®												
Intel AMT	Intel Standard Manageability												
Modem	None												
Security chip	Trusted Platform Module (TPM 1.2-compliant)										Security <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) 		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	System floor stand for vertical orientation												
Power supply	240 watts, autosensing, 85% PSU												
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.3" W X 15.2" D X 3.9" H • 338mm W X 385mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention 												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader												
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold GREENGUARD® certified RoHS-compliant		
											Supports ThinkVantage Technologies		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet		

See footnotes for important warranty information
 US models announced June 5, 2012

⚡ US model withdrawn effective November 2012

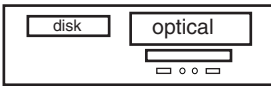
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ThinkCentre® M82 Small (2756) - ES 5.2 (Win 8)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2 Global	Preload	Ann date (mm/dd/yy)
2756-J2U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	Win8 Pro64 10/23/12
2756-L4U	4x3	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	Win8 Pro64 10/23/12
2756-L5U	4x3	i3-3240	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	Win8 Pro64 10/23/12
2756-L6U	4x3	i5-3570	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	Win8 Pro64 10/23/12
2756-L7U	4x3	i7-3770	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 7450	None	None	Stand	ES52	None	Win8 Pro64 10/23/12

●3-year limited warranty

Positioning Processor	<p><i>Mainstream enterprise stability and manageability</i></p> <p>Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller</p> <p>Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller</p> <p>Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Processor in LGA1155 socket</p>										<p>Preloaded operating system</p> <p>Windows® 8 Pro 64-bit</p> <p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> ● ThinkVantage® System Update ● View Management Utility ● Lenovo® Support ● Lenovo Companion ● Lenovo Cloud Storage ● Lenovo QuickLaunch ● Lenovo Solution Center ● Microsoft Office 2013 preloaded; purchase product key to activate ● Norton™ Internet Security (30 days of virus definitions) ● Norton Studio ● Intel AppUp® ● AccuWeather ● PC Device Stage ● Evernote® ● Skype™ ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) 		
Implementation	Processor in LGA1155 socket												
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets												
Graphics	<p><i>Some:</i> Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display;</p> <p><i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz</p> <p><i>Some:</i> AMD Radeon™ HD 7450, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts;</p> <p><i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz;</p> <p>works along with Intel HD Graphics to support up to four independent monitors</p>												
DP dongle	None												
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset												
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector												
eSATA port	None												
Media reader	None												
Chipset	Intel Q75 Express Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®												
Intel AMT	Intel Standard Manageability												
Modem	None												
Security chip	Trusted Platform Module (TPM 1.2-compliant)										<p>Security</p> <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	System floor stand for vertical orientation												
Power supply	240 watts, autosensing, 85% PSU												
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader												
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3												
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet		

See footnotes for important warranty information
US models announced October 23, 2012

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ThinkCentre® M82 Small (2756) - ES 5.2 (Win 8) - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2 Global	Preload	Ann date (mm/dd/yy)
2756-N3U	4x3	i5-3570	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	Win7 Pro64 10/23/12
2756-N4U	4x3	i3-2130	4GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2000	None	None	Stand	ES52	None	Win7 Pro64 10/23/12
2756-N5U	4x3	i3-2130	2GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2000	None	None	Stand	ES52	None	Win7 Pro64 10/23/12
2756-N6U	4x3	G870	2GBx1 1600MHz	250G 7200	DVD±RW	None	Intel HD	None	None	Stand	ES52	None	Win7 Pro64 10/23/12
2756-N7U	4x3	G640	2GBx1 1600MHz	250G 7200	DVD±RW	None	Intel HD	None	None	Stand	ES52	None	Win7 Pro64 10/23/12
2756-N8U	4x3	i7-3770	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	None	Win7 Pro64 10/23/12
2756-N9U	4x3	i5-3470	2GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	None	Win7 Pro64 10/23/12

●3-year limited warranty
 ●Microsoft® Office 2010 Product Key Ready (O10PKR)

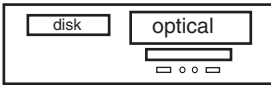
Positioning Processor	Mainstream enterprise stability and manageability Intel® Pentium® G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache) , Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo® AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Implementation	Processor in LGA1155 socket	
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets	
Graphics	Intel HD Graphics / 2000 / 2500 / 4000 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA)@60Hz</i> None	
DP dongle	None	
Disk	SATA 6.0Gb/s 7200 rpm	
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive	
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector	
eSATA port	None	
Media reader	None	
Chipset	Intel Q75 Express Chipset	
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort	
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)	
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
IEEE 1394	None	
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®	
Intel AMT	Intel Standard Manageability	
Modem	None	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Floor Stand	System floor stand for vertical orientation	
Power supply	240 watts, autosensing, 85% PSU	
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 	
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader	
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	

ThinkCentre® M82 Small (2929) - ES 5.2 (GMP)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
2929-A1U	4x3	i5-3550	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	G P	Pro 64	06/05/12
2929-B1U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	G P	Pro 64	06/19/12
2929-D1U	4x3	i5-3570	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	G P	Pro 64	08/14/12

- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>											Preloaded operating system
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Implementation	Processor in LGA1155 socket											
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets											
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>											
DP dongle	None											
Disk	SATA 6.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset											
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector											
eSATA port	None											
Media reader	None											
Chipset	Intel Q75 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®											
Intel AMT	Intel Standard Manageability											
Modem	None											
Security chip	Trusted Platform Module (TPM 1.2-compliant)											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Floor Stand	System floor stand for vertical orientation											
Power supply	240 watts, autosensing, 85% PSU											
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader											
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3											
												Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
 US models announced June 5, June 19, or August 14, 2012

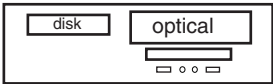
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ThinkCentre® M82 Small (2929) - ES 5.2 (GMP) - Win 8

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
2929-C1U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	G P	Win8 Pro64	10/23/12
2929-E1U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	G P	Win7 Pro64	10/23/12

•Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	<i>Mainstream enterprise stability and manageability</i>											Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit		
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology													
Implementation	Processor in LGA1155 socket											Preloaded applications (only some listed) - Windows 7 models <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® AppShop • Lenovo Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models <ul style="list-style-type: none"> • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™ 		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets													
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>													
DP dongle	None													
Disk	SATA 6.0Gb/s 7200 rpm													
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset													
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector													
eSATA port	None													
Media reader	None													
Chipset	Intel Q75 Express Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)													
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®													
Intel AMT	Intel Standard Manageability													
Modem	None													
Security chip	Trusted Platform Module (TPM 1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Floor Stand	System floor stand for vertical orientation													
Power supply	240 watts, autosensing, 85% PSU													
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.3" W X 15.2" D X 3.9" H • 338mm W X 385mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention 													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader													
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3													
														
	Security <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • <i>Chassis intrusion switch on selected model(s)</i> 													
	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold GREENGUARD® certified RoHS-compliant													
	Supports ThinkVantage Technologies													
	For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet													
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													

See footnotes for important warranty information
US models announced October 23, 2012

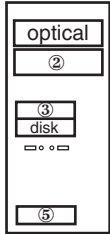
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ThinkCentre® M82 Tower (3302) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
3302-A1U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	Pro 64	06/19/12
3302-A2U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	Pro 32	06/19/12
3302-A3U	4x5	i5-3470	4GBx2 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 2500	None	None	None	Pro 64	06/19/12
3302-A4U	4x5	i5-3470	4GBx2 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 7350	None	None	None	Pro 64	06/19/12
3302-A5U	4x5	i5-3470	4GBx2 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 7450	None	None	None	Pro 64	06/19/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>										Preloaded operating system
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Some: Genuine Windows® 7 Professional 32 Some: Genuine Windows 7 Professional 64
Implementation	Processor in LGA1155 socket										Ready to install applications (only some listed)
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										
Graphics	<p>Some: Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i></p> <p>Some: AMD Radeon™ HD 7350, DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz</i>; works along with Intel HD Graphics to support up to four independent monitors</p> <p>Some: AMD Radeon HD 7450, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz</i>; works along with Intel HD Graphics to support up to four independent monitors</p>										Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo Simple Tap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
DP dongle	None										
Disk	SATA 6.0Gb/s 7200 rpm										Security <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s)
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset										
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector										
eSATA port	None										
Media reader	None										
Chipset	Intel Q75 Express Chipset										
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort										
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector										
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										
Speaker	Internal speaker for business audio										
IEEE 1394	None										
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®										
Intel AMT	Intel Standard Manageability										
Modem	None										
Security chip	Trusted Platform Module (TPM 1.2-compliant)										
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Power supply	280 watts with variable speed fan, manual switch										
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 										
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk										
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3										
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										
GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet											

See footnotes for important warranty information
US models announced June 19, 2012

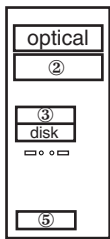
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ThinkCentre® M82 Tower (3302) - TopSeller - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
3302-B1U	4x5	i3-2120	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2000	None	None	None	Pro 64	07/10/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>										Preloaded operating system		
Processor	Intel® Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Genuine Windows® 7 Professional 64		
Implementation	Processor in LGA1155 socket										Ready to install applications (only some listed)		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager 		
Graphics	Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>										Preloaded applications (only some listed)		
DP dongle	None										<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 		
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset												
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector												
eSATA port	None												
Media reader	None												
Chipset	Intel Q75 Express Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®												
Intel AMT	Intel Standard Manageability												
Modem	None												
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Power supply	280 watts with variable speed fan, manual switch												
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 24.2 lb (11.0 kg) in maximum configuration ● Toolless cover removal, toolless adapter retention ● Toolless disk, optical drive removal 												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk												
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3												
													
											Security		
											<ul style="list-style-type: none"> ● Security chip (see information on left) ● One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 		
											GREENGUARD® certified		
											RoHS-compliant		
											Supports ThinkVantage Technologies		
											For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet		
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												

See footnotes for important warranty information
US model announced July 10, 2012

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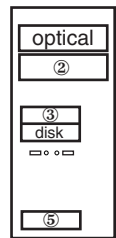
ThinkCentre® M82 Tower (3302) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2Global	Preload	Ann date (mm/dd/yy)
3302-C1U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Win8 Pro64 10/23/12
3302-E2U	4x5	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Win8 Pro64 10/23/12
3302-E3U	4x5	i5-3570	4GBx1 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Win8 Pro64 10/23/12
3302-F1U	4x5	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Win7 Pro64 10/23/12
3302-F2U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Win7 Pro64 10/23/12
3302-F3U	4x5	i5-3570	4GBx1 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Win7 Pro64 10/23/12
3302-H1U	4x5	i5-3475S	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	None	None	Win7 Pro64 03/12/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	<i>Mainstream enterprise stability and manageability</i>		Preloaded operating system Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3475S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		
Implementation	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		Preloaded applications (only some listed) - Windows 7 models <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® AppShop • Lenovo Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models <ul style="list-style-type: none"> • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>		
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset		
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector		
eSATA port	None		
Media reader	None		
Chipset	Intel Q75 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Intel AMT	Intel Standard Manageability		
Modem	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	280 watts with variable speed fan, manual switch		
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk		
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		



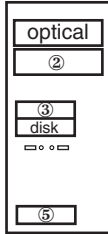
Security
 • Security chip (see information on left)
 • One lock to secure both cover and entire system to fixed object:
 -Padlock loop (in rear for opt padlock)
 -Security slot (in rear for optional Kensington® MicroSaver® cable)
 • Cable lock
 • Power-on password
 • Hard disk password
 • Boot sequence control
 • Boot without keyboard and mouse
 • Serial port I/O control
 • Individual USB port disablement
 • Chassis intrusion switch on selected model(s)

GREENGUARD® certified
 RoHS-compliant
 Supports ThinkVantage Technologies

For compatible accessories, please go to O-M82 sheet;
 For Lenovo service upgrade options, please go to S-TC sheet

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
3392-B6U	4x5	i3-2130	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2000	None	None	None	Pro 64	06/19/12
3392-C1U	4x5	i3-2120	4GBx1 1600MHz	250G 7200	Bay	DVD±RW	None	HD 2000	None	None	None	Pro 64	06/19/12
3392-C3U	4x5	i3-2120	2GBx1 1600MHz	250G 7200	Bay	DVD±RW	None	HD 2000	None	None	None	Pro 64	06/19/12
3392-C7U	4x5	G630	2GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	Intel HD	None	None	None	Pro 64	06/19/12
3392-C8U	4x5	G850	2GBx1 1600MHz	250G 7200	Bay	DVD±RW	None	Intel HD	None	None	None	Pro 64	06/19/12
3392-F3U	4x5	G630	2GBx1 1600MHz	250G 7200	Bay	DVD±RW	None	Intel HD	None	None	None	Pro 64	07/10/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>									Preloaded operating system			
Processor	Intel® Pentium® G630 Processor (2 cores / 2 threads, 2.7GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G850 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket									Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 			
Implementation													
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets												
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA)@60Hz</i>												
DP dongle	None												
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset												
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector												
eSATA port	None												
Media reader	None												
Chipset	Intel Q75 Express Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®												
Intel AMT	Intel Standard Manageability												
Modem	None												
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Power supply	280 watts with variable speed fan, manual switch												
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 24.2 lb (11.0 kg) in maximum configuration ● Toolless cover removal, toolless adapter retention ● Toolless disk, optical drive removal 												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk												
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3												
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available									Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet			

ThinkCentre® M82 Tower (3392) - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
3392-D2U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	Pro 32	06/19/12
3392-C2U	4x5	i5-3550	4GBx1 1600MHz	250G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	Pro 64	06/19/12
3392-C4U	4x5	i7-3770	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	None	Pro 64	06/19/12
3392-C5U	4x5	i5-3550	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	Pro 64	06/19/12
3392-D7U	4x5	i5-3570	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	Pro 32	06/19/12
3392-D8U	4x5	i7-3770	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	None	Pro 32	06/19/12
3392-D9U	4x5	i5-3470	2GBx1 1600MHz	250G 7200	Bay	DVD±RW	None	HD 2500	None	None	None	Pro 64	06/19/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	<i>Mainstream enterprise stability and manageability</i>		Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology		Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology		Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology		Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology		Processor in LGA1155 socket	
Implementation	Processor in LGA1155 socket											
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets											
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>											
DP dongle	None											
Disk	SATA 6.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset											
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector											
eSATA port	None											
Media reader	None											
Chipset	Intel Q75 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®											
Intel AMT	Intel Standard Manageability											
Modem	None											
Security chip	Trusted Platform Module (TPM 1.2-compliant)											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	280 watts with variable speed fan, manual switch											
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk											
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3											
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											
	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">optical</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">②</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">③</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">disk</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">⋯ ⋯</div> <div style="border: 1px solid black; padding: 2px;">⑤</div> </div>											
	Preloaded operating system <i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> Genuine Windows 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo Simple Tap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 											
	Security <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) 											
	GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies											
	For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet											

See footnotes for important warranty information
 US models announced June 19, 2012

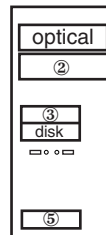
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 (MDTN1-11) June 2012

ThinkCentre® M82 Tower (3392) - Windows 8

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB	2nd Disk rpm	Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
3392-G3U	4x5	i5-3470	4GBx1 1600MHz	500G	7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Win8 Pro64	10/23/12
3392-K8U	4x5	i7-3770	4GBx1 1600MHz	500G	7200	Bay	DVD±RW	None	HD 4000	None	None	None	None	Win7 Pro64	10/23/12
3392-K9U	4x5	i5-3570	4GBx1 1600MHz	500G	7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Win7 Pro64	10/23/12
3392-L1U	4x5	i5-3470	2GBx1 1600MHz	250G	7200	Bay	DVD±RW	None	HD 2500	None	None	None	None	Win7 Pro64	10/23/12
3392-R1U	4x5	i5-3475S	4GBx1 1600MHz	500G	7200	Bay	DVD±RW	None	HD 4000	None	None	None	None	Win7 Pro64	03/12/13

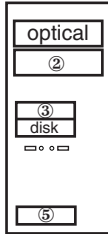
Positioning	Mainstream enterprise stability and manageability										Preloaded operating system				
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3475S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology										Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit				
Implementation	Processor in LGA1155 socket										Preloaded applications (only some listed) - Windows 7 models				
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® AppShop • Lenovo Message Center Plus • Lenovo Simple Tap • Adobe® Reader® • Windows Live™ Essentials • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>										- Windows 8 models				
DP dongle	None										<ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) 				
Disk	SATA 6.0Gb/s 7200 rpm										- All models				
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										<ul style="list-style-type: none"> • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton™ Internet Security (30 days of virus definitions) • Skype™ 				
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset														
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector														
eSATA port	None														
Media reader	None														
Chipset	Intel Q75 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Standard Manageability														
Modem	None														
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	280 watts with variable speed fan, manual switch														
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 										Security				
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk										<ul style="list-style-type: none"> • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • <i>Chassis intrusion switch on selected model(s)</i> 				
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3										GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies				
Limited Warranty 3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet				



See footnotes for important warranty information
 US models announced October 23, 2012 or March 12, 2013

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 (MDTN1-21) March 2013

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB	2nd Disk rpm	Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
3392-K3U	4x5	i3-2130	4GBx1 1600MHz	500G	7200	Bay	DVD±RW	None	HD 2000	None	None	None	None	Win7 Pro64	10/23/12
3392-K4U	4x5	G870	4GBx1 1600MHz	500G	7200	Bay	DVD±RW	None	Intel HD	None	None	None	None	Win7 Pro64	10/23/12
3392-K5U	4x5	G640	2GBx1 1600MHz	250G	7200	Bay	DVD±RW	None	Intel HD	None	None	None	None	Win7 Pro64	10/23/12
3392-K6U	4x5	i3-2130	4GBx1 1600MHz	250G	7200	Bay	DVD±RW	None	HD 2000	None	None	None	None	Win7 Pro64	10/23/12
3392-K7U	4x5	i3-2120	2GBx1 1600MHz	250G	7200	Bay	DVD±RW	None	HD 2000	None	None	None	None	Win7 Pro64	10/23/12
3392-N1U	4x5	G2120	4GBx1 1600MHz	500G	7200	Bay	DVD±RW	None	Intel HD	None	None	None	None	Win7 Pro64	12/04/12
3392-N2U	4x5	G2020	4GBx1 1600MHz	500G	7200	Bay	DVD±RW	None	Intel HD	None	None	None	None	Win7 Pro64	01/22/13

Positioning Processor	<p><i>Mainstream enterprise stability and manageability</i></p> <p>Intel® Pentium® G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1066MHz) Intel Pentium G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz) Intel Pentium G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1333MHz) Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated DDR3 memory controller (up to 1600MHz) Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated DDR3 memory controller (up to 1333MHz) Intel Core i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated DDR3 memory controller (up to 1333MHz)</p>	<p>Preloaded operating system</p> <p>Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</p> <p>Ready to install applications (only some listed)</p> <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager <p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo® AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office 2010 preloaded; purchase product key to activate • Core!® Burn.Now™ (DVD±RW) • Core! DVD MovieFactory® (DVD±RW)
Implementation	Processor in LGA1155 socket	
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets <i>System automatically clocks down for processors with 1066MHz or 1333MHz DDR3 memory controller</i>	
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>	
DP dongle	None	
Disk	SATA 6.0Gb/s 7200 rpm	
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive	
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector	
eSATA port	None	
Media reader	None	
Chipset	Intel Q75 Express Chipset	
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort	
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)	
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
IEEE 1394	None	
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®	
Intel AMT	Intel Standard Manageability	
Modem	None	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	280 watts with variable speed fan, manual switch	
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 	
Bay	<p>Bay 1: 5.25", 1.6" high, access, std optical</p> <p>Bay 2: 5.25", 1.6" high, access, open</p> <p>Bay 3: 3.5", 1" high, access, opt reader</p> <p>Bay 4: 3.5", 1" high, no access, std disk</p> <p>Bay 5: 3.5", 1" high, no access, opt disk</p>	
Slot	<p>Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max)</p> <p>Slot 2: half-length, full-height, PCIe 2.0 x1</p> <p>Slot 3: half-length, full-height, 32-bit PCI 2.3</p> <p>Slot 4: half-length, full-height, 32-bit PCI 2.3</p>	
Limited Warranty	<p>3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available</p>	
		<p>Security</p> <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) <p>GREENGUARD® certified RoHS-compliant</p> <p>Supports ThinkVantage Technologies</p> <p>For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet</p>

See footnotes for important warranty information

US models announced October 23, 2012, December 4, 2012, or January 22, 2013

ThinkCentre® M82 Tower (2697) - ENERGY STAR® 5.2

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
2697-E5U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	None	Pro 32 06/05/12
2697-M1U	4x5	i7-3770	4GBx2 1600MHz	1TB 7200	Bay	DVD±RW	Media	HD 4000	None	Switch	ES52	None	Pro 64 11/06/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>										Preloaded operating system		
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Some: Genuine Windows® 7 Professional 32 Some: Genuine Windows 7 Professional 64		
Implementation	Processor in LGA1155 socket										Ready to install applications (only some listed)		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager 		
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i> None										Preloaded applications (only some listed)		
DP dongle	None										<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo Simple Tap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 		
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset												
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector												
eSATA port	None												
Media reader	Some: 29-in-1 media reader, internal USB 2.0												
Chipset	Intel Q75 Express Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®												
Intel AMT	Intel Standard Manageability												
Modem	None												
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Power supply	280 watts, autosensing, 85% PSU												
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 										Security <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) 		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk												
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies		
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet		

See footnotes for important warranty information
 US models announced June 5 or November 6, 2012
 < US model withdrawn effective February 2013

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 (MDTN1-4) November 2012

ThinkCentre® M82 Tower (2697) - ES 5.2 (Win 8)

Personal Systems Reference (PSREF)

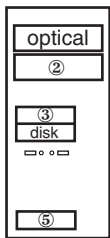
Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Global	Preload	Ann date (mm/dd/yy)
2697-H1U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	None	Win8 Pro64	10/23/12
2697-J3U	4x5	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	None	Win8 Pro64	10/23/12
2697-J4U	4x5	i3-3240	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	None	Win8 Pro64	10/23/12
2697-J5U	4x5	i7-3770	4GBx1 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	None	Win8 Pro64	10/23/12
2697-J6U	4x5	i7-3770	4GBx1 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 7450	None	None	ES52	None	Win8 Pro64	10/23/12
2697-L2U	4x5	i3-3220	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	None	Win7 Pro64	10/23/12
2697-L3U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	None	Win7 Pro64	10/23/12
2697-L4U	4x5	i5-3570	4GBx1 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	None	Win7 Pro64	10/23/12
2697-L6U	4x5	i3-2130	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2000	None	None	ES52	None	Win7 Pro64	10/23/12
Positioning	<i>Mainstream enterprise stability and manageability</i>										Preloaded operating system			
Processor	<p>Intel® Core™ i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated DDR3 memory controller (up to 1333MHz)</p> <p>Intel Core i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated DDR3 memory controller (up to 1600MHz)</p> <p>Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated DDR3 memory controller (up to 1600MHz)</p> <p>Intel Core i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p>										<p><i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</p> <p><i>Some:</i> Windows 8 Pro 64-bit</p> <p>Preloaded applications (only some listed)</p> <p>- Windows 7 models</p> <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® AppShop • Lenovo Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) <p>- Windows 8 models</p> <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) <p>- All models</p> <ul style="list-style-type: none"> • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™ 			
Implementation	Processor in LGA1155 socket													
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets													
Graphics	<p><i>Some:</i> Intel HD Graphics 2000 / 2500 / 4000 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA)@60Hz</p> <p><i>Some:</i> AMD Radeon™ HD 7450, DirectX 11, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I)@60Hz; works along with Intel HD Graphics to support up to four independent monitors</p>													
DP dongle	None													
Disk	SATA 6.0Gb/s 7200 rpm													
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset													
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector													
eSATA port	None													
Media reader	None													
Chipset	Intel Q75 Express Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)													
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®													
Intel AMT	Intel Standard Manageability													
Modem	None													
Security chip	Trusted Platform Module (TPM 1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Power supply	280 watts, autosensing, 85% PSU													
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 													
Bay	<p>Bay 1: 5.25", 1.6" high, access, std optical</p> <p>Bay 2: 5.25", 1.6" high, access, open</p> <p>Bay 3: 3.5", 1" high, access, opt reader</p> <p>Bay 4: 3.5", 1" high, no access, std disk</p> <p>Bay 5: 3.5", 1" high, no access, opt disk</p>													
Slot	<p>Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max)</p> <p>Slot 2: half-length, full-height, PCIe 2.0 x1</p> <p>Slot 3: half-length, full-height, 32-bit PCI 2.3</p> <p>Slot 4: half-length, full-height, 32-bit PCI 2.3</p>													
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										For compatible accessories, please go to O-M82 sheet; For Lenovo service upgrade options, please go to S-TC sheet			

ThinkCentre® M82 Tower (2742) - ES 5.2 (GMP)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
2742-A1U	4x5	i5-3550	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	G P	Pro 64	06/05/12
2742-B1U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	G P	Pro 64	06/19/12
2742-D1U	4x5	i5-3570	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	G P	Pro 64	08/14/12

- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

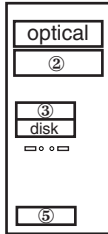
Positioning Processor	<i>Mainstream enterprise stability and manageability</i> Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)			
Implementation	Processor in LGA1155 socket										Security • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s)			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets													
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i> None													
DP dongle	None													
Disk	SATA 6.0Gb/s 7200 rpm													
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset													
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector													
eSATA port	None													
Media reader	None													
Chipset	Intel Q75 Express Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)													
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®													
Intel AMT	Intel Standard Manageability													
Modem	None													
Security chip	Trusted Platform Module (TPM 1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Power supply	280 watts, autosensing, 85% PSU													
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk													
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3													
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													
See footnotes for important warranty information US models announced June 5, June 19, or August 14, 2012											©Lenovo (MDTN1-5) August 2012			

ThinkCentre® M82 Tower (2742) - ES 5.2 (GMP) - Win 8

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
2742-C1U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	G P	Win8 Pro64	10/23/12
2742-E1U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	G P	Win7 Pro64	10/23/12

● Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	<i>Mainstream enterprise stability and manageability</i>										Preloaded operating system			
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology										Some: Windows® 7 Professional 64 preinstalled through downgrade rights in WWindows 8 Pro 64-bit			
Implementation	Processor in LGA1155 socket										Some: Windows 8 Pro 64-bit			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										Preloaded applications (only some listed)			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA)@60Hz</i>										- Windows 7 models			
DP dongle	None										<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● Lenovo® AppShop ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Adobe® Reader® ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 			
Disk	SATA 6.0Gb/s 7200 rpm										- Windows 8 models			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										<ul style="list-style-type: none"> ● Lenovo Support ● Lenovo Companion ● Lenovo Cloud Storage ● Norton™ Studio ● AccuWeather ● Evernote® ● Microsoft Office 2013 preloaded; purchase product key to activate ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) 			
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset										- All models			
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, two SATA 3.0Gb/s connectors, and one eSATA connector										<ul style="list-style-type: none"> ● ThinkVantage System Update ● Lenovo Solution Center ● View Management Utility ● Norton Internet Security (30 days of virus definitions) ● Skype™ 			
eSATA port	None										Security			
Media reader	None										<ul style="list-style-type: none"> ● Security chip (see information on left) ● One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 			
Chipset	Intel Q75 Express Chipset										EPEAT™ Gold rating			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										ENERGY STAR® 5.2-compliant			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort										ULE Gold			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										GREENGUARD® certified			
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector										RoHS-compliant			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										Supports ThinkVantage Technologies			
Speaker	Internal speaker for business audio										For compatible accessories, please go to O-M82 sheet;			
IEEE 1394	None										For Lenovo service upgrade options, please go to S-TC sheet			
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®													
Intel AMT	Intel Standard Manageability													
Modem	None													
Security chip	Trusted Platform Module (TPM 1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Power supply	280 watts, autosensing, 85% PSU													
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 24.2 lb (11.0 kg) in maximum configuration ● Toolless cover removal, toolless adapter retention ● Toolless disk, optical drive removal 													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk													
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3													
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													

See footnotes for important warranty information
US models announced October 23, 2012

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Memory

2GB PC3-12800 DDR3 UDIMM	0A65728	ann	06/05/12
4GB PC3-12800 DDR3 UDIMM	0A65729	ann	06/05/12
8GB PC3-12800 DDR3 UDIMM	0A65730	ann	06/05/12

More information at

www.lenovo.com/support/desktopmemorycompatibility

Optical

DVD-ROM DL SATA 1.5Gb/s 16X-48X Max ⁴	41N5618	ann	09/26/06
Lenovo® Super Multi-Burner SATA Drive	0A65618	ann	08/23/11

Storage and removable storage

250GB SATA 3.0Gb/s Disk (7200 rpm)	41N3015	ann	01/24/06
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	ann	11/06/07
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918	ann	08/19/08
300GB SATA 3.0Gb/s Disk (10000 rpm) 2.5"	43R2031	ann	03/31/09
180GB Solid State Drive	0B47308	ann	01/29/13
USB 2.0 Portable 320GB Hard Disk	45K1689	ann	03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
USB 3.0 Secure 500GB Hard Drive	0A65619	ann	11/29/11
USB 3.0 Secure 750GB Hard Drive	0A65616	ann	11/29/11
USB 3.0 Secure 1TB Hard Drive	0A65621	ann	08/28/12
Slim USB Portable DVD Burner	0A33988	ann	06/14/11

Graphics

Small 2756/2929 support Low Profile:

Lenovo AMD 7450 1GB (DP, DVI-I with a DVI to VGA converter) ⁶⁷	0A36538	ann	05/29/12
NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann	01/29/13

Tower 2697/2742 support 75 watts max:

Lenovo AMD 7450 1GB (DP, DVI-I) ⁶⁷	0A36538	ann	05/29/12
NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann	01/29/13

⁶⁷ Simultaneously use the graphic card monitor ports along with the systems integrated monitor ports when Multi-Monitor Support is enabled in BIOS Setup.

More information at www.lenovo.com/support/graphiccards

Keyboard

Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
Ultraslim Plus Wireless Keyboard and Mouse ⁵²	0A34032	ann	04/05/11
ThinkPad® USB Keyboard with TrackPoint	55Y9003	ann	08/18/09
Lenovo USB Fingerprint Keyboard	73P4730	ann	02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann	03/24/09

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo ScrollPoint® Mouse(USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
Lenovo Wireless Laser Mouse ⁵²	0A36188	ann	12/20/11
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09

More information at www.lenovo.com/support/mice

Modem

USB 2.0 Lenovo Modem	43R1814	ann	02/26/08
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Multimedia

ThinkPad In-Ear Headphones with mic ⁶⁰	57Y4488	ann	01/07/10
Lenovo Mini Speakers M220	55Y2033	ann	01/07/10
Lenovo Speakers M0520 (black)	57Y6360	ann	02/08/11
Lenovo Speakers M0520 (red)	57Y6361	ann	02/08/11
Lenovo Headset P550	55Y2065		
Lenovo Headset P950 (black)	57Y6605	ann	02/08/11

⁶⁰ Has a 1.2 meter (3.9-foot) cable. Best when systems are in close proximity. Example: SFF placed on a desk.

Security

Kensington® MicroSaver® Cable Lock ⁵⁶	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann	09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann	08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Monitors

ThinkVision® L1711p 17" (VGA, DVI-D)	5047HB2	ann	10/20/09
ThinkVision LT1952p Wide 19" (VGA, DP, DVI-D) ⁶⁹	2448MB6	ann	09/13/11
ThinkVision L2250p Wide 22" (VGA, DVI-D)	2572HB6	ann	10/20/09
ThinkVision L2251x Wide 22" (VGA, DP)	2578HB6	ann	10/20/09
ThinkVision LT2252p Wide 22" (VGA, DP, DVI-D) ⁶⁹	2572MB6	ann	09/13/11
ThinkVision L2321x Wide 23" (VGA, DP)	4014HB6	ann	06/10/10
ThinkVision LT2323p Wide 23" (VGA, DP, DVI-D) ⁶⁹	3024HC1	ann	05/01/12
ThinkVision LT2452p Wide 24" (VGA, DP, DVI-D) ⁶⁹	4420MB2	ann	09/13/11

⁶⁹ DisplayPort cable is not included; use optional DisplayPort to DisplayPort Monitor Cable (0A36537).

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

Lenovo USB 3.0 to DVI/VGA Monitor Adapter	0B47072	ann	08/14/12
DisplayPort™ to Single-link DVI-D Cable	45J7915	ann	08/05/08
DisplayPort to VGA Monitor Cable	57Y4393	ann	08/04/09
DisplayPort to DisplayPort Monitor Cable	0A36537	ann	09/13/11
Lenovo USB Soundbar	0A36190	ann	05/01/12
Kensington MicroSaver Cable Lock ⁵⁶	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann	09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann	08/24/10
ThinkCentre Extend Arm	57Y4352	ann	07/06/10

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems



Lenovo ThinkCentre M90z with Frame Stand



Lenovo ThinkCentre M90z with Height Adjustable Stand Option 57Y4351
(57Y4351 is not compatible to Multi-touch models)



Tool-Less Back Cover Removal



Handle



Dual Independent Display with Optional Lenovo ThinkVision Monitor

Type-model	Processor	GHz	Memory	Widescreen display	Camera (mega-pixel)	SATA disk	Chassis intr switch	Blue-tooth	Media reader	Light sensor	PCIe Mini Card 802.11	Stand type	Intel vPro	Global Educ	Win7 preload
3429-A1U	G6950	2.80	2GBx1	23.0" Full HD		320GB ²					Intel 1000	Frame		None	Pro 32
3429-A2U	i3-530	2.93	2+1GB	23.0" Full HD	2.0M	500GB					Intel 1000	Frame		None	Pro 32
3429-D6U	G6960	2.93	2GBx1	23.0" Full HD	2.0M	320GB					Intel 1000	Frame		None	Pro 64
3429-D3U	i3-550	3.20	2+1GB	23.0" Full HD	2.0M	320GB					Intel 1000	Frame		None	Pro 64
3429-A3U	i5-650	3.20	2GBx2	23.0" Full HD	2.0M	500GB					Intel 1000	Frame	vPro	None	Pro 64
3429-E4U	i3-550	3.20	4GBx1	23.0" Full HD	2.0M	320GB	Switch	Blue		Sensor	Intel 1000	Lift		None	Pro 64
3429-E5U	i5-660	3.33	4GBx1	23.0" Full HD	2.0M	500GB			Media	Sensor	Intel 1000	Lift	vPro	None	Pro 64
3429-E6U	G6950	2.80	2GBx1	23.0" Full HD	2.0M	320GB				Sensor	Intel 1000	Lift		None	Pro 64
3429-E9U	i3-550	3.20	4GBx1	23.0" Full HD	2.0M	250GB					Intel 1000	Frame		None	Pro 64

- Best space saving solution & excellent cable management
- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 3-year limited warranty¹
- These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	All-In-One PC for the enterprise Intel® Pentium® Processor G6950 or G6960 with dual-core , Intel 64, Virtualization Technology, integrated 1066MHz dual-channel DDR3 memory controller, and 3MB cache or Intel Core™ i3 Processor i3-530 or i3-550 with dual-core , Intel 64, Hyper-Threading Technology, Virtualization Technology, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache or Intel Core i5 Processor i5-650 or i5-660 with dual-core , Intel 64, Hyper-Threading Technology, Turbo Boost Technology, Virtualization Technology, TXT, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache Processor in LGA1156 socket		All-In-One All: • Business black color • Handle in rear • Support VESA mount (100mm) • Tool-less back cover, disk, optical drive, memory removal <i>Model(s) with Frame stand:</i> • 22" W X 4.29" D X 17.4" H • 560mm W X 109mm D X 443mm H • 23.6 lb (10.7 kg) in maximum configuration <i>Model(s) with Lift stand:</i> • Height Adjustable • 22" W X 9.84" D X 17.4" H • 560mm W X 250mm D X 443mm H • 29.3 lb (13.3 kg) in maximum configuration • Tilt -5°-25°
Implementation			
Memory	2GB, 3GB, or 4GB std, 8GB max ³ , PC3-10600 1333MHz DDR3* , dual-channel capable, two 204-pin SODIMM sockets (notebook) * System automatically clocks down for processors with 1066MHz DDR3 memory controller		
Graphics	Intel HD Graphics in processor, uses main memory (up to 765MB [2GB models], 1277MB [3GB models], or 1759MB [4GB models]), HDCP, DirectX® 10, one DisplayPort™ connector, supports dual independent display		
DP dongle	None		
Widescreen	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , anti-glare, CCFL backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio, work as standalone monitor via VGA-in connector		
Light sensor	Some: Ambient Light Sensor		
Multi-touch	None		
Camera	Some: Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical on/off switch		
SATA disk	320GB or 500GB , SATA 3.0Gb/s, 3.5" wide, 7200 rpm		
SATA DVD±RW	DVD burner, SATA 1.5Gb/s, 12.7mm high		
eSATA port	None		
Diskette drive	None		
Media reader	Some: Single Slot SD Media Card Reader		
Chipset	Intel Q57 Express Chipset Platform Controller Hub (PCH) for SATA, ethernet, and USB		
Ports	<i>Rear:</i> four USB 2.0, ethernet (RJ-45), DisplayPort, VGA-in connector <i>Side:</i> two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) One PCI Express Mini Card slot 11b/g/n wireless ¹³ , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 Some: Bluetooth 2.1 wireless, Broadcom® BCM2070, LED indicator One gigabit ethernet port, Intel 82578DM High Definition (HD) Audio, Realtek® ALC269 codec Two internal speakers (2watt x 2)		
PCIe Mini Card	Intel 1000		
Bluetooth™	None		
Ethernet	None		
Audio	None		
Speaker	None		
IEEE 1394	None		
Intel AMT	vPro model(s): Intel Active Management Technology 6.0 (Intel AMT 6.0)		
Modem	None		
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo		
Power supply	150 watts, autosensing, 85% PSU, 80 PLUS® Bronze qualified		
Preloaded operating system²⁰	Accessories		
- Some: Genuine Windows® 7 Professional 32	2GB PC3-10600 DDR3 SODIMM 55Y3710		
- Some: Genuine Windows 7 Professional 64	ThinkCentre M90z Height Adjustable Stand 57Y4351		
	More accessories on O-M90Z sheet		
Preloaded applications⁵ (all OSes; only some listed)	Acc Guide in pdf lenovo.com/accessoriesguide		
• Rescue and Recovery™	Other accessories at lenovo.com/accessories		
• ThinkVantage System Update			
• Corel® Burn.Now™ (DVD±RW)			
• Corel DVD MovieFactory® (DVD±RW)			
			Security • Security chip (see information left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Boot sequence control • Boot without keyboard, mouse • Individual USB port disablement • Some: Chassis intrusion switch
			Supports ThinkVantage® technologies
			• EPEAT™ Gold rating • ENERGY STAR® 5.0-compliant • TCO Certified Edge • GREENGUARD® certified • RoHS-compliant
			Limited Warranty¹ ↔ 3-year parts and labor ↔ International Warranty Service⁹ ↔ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time) ↔ Onsite service upgrade options (in eligible locations):⁷ • 3-year LOR 9x5, 4 hour response (Lenovo part number 41C9192) • 3-year LOR 24x7, 4 hour response (Lenovo part number 41C9193) • 4-year LOR 9x5, Next Business Day (Lenovo part number 41C9194) • 4-year LOR 9x5, 4 hour response (Lenovo part number 41C9195) • 4-year LOR 24x7, 4 hour response (Lenovo part number 41C9196) ↔ Lenovo services at www.lenovo.com/services_warranty/us/en/index.html ↔ Post warranty maintenance services available ↔ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹

See footnotes for important warranty information
US models announced May 11, Nov 30, 2010 or Jan 4, Nov 8, Dec 13, 2011
↔ US models withdrawn effective April, November 2011 or March, November 2012

Type-model	Processor	GHz	Memory	Widescreen display	Camera (mega-pixel)	SATA disk	Chassis intr switch	Blue-tooth	Media reader	PCIe Mini Card 802.11	Stand type	Intel vPro	Win7 preload	Global Educ	Avail date
5205-A5U	i3-530	2.93	2GBx1	23.0" Full HD		320GB ²					Frame		Pro 32	None	Jun 10
5205-H3U	i3-550	3.20	2GBx1	23.0" Full HD	2.0M	320GB				Intel 1000	Frame		Pro 32	None	Mar 11
5205-B1U	i5-650	3.20	2GBx1	23.0" Full HD	2.0M	320GB	Switch	Blue	Media	Intel 1000	Lift	vPro	Pro 32	None	Jun 10
5205-B2U	i5-670	3.46	2GBx1	23.0" Full HD	2.0M	320GB	Switch	Blue	Media	Intel 1000	Lift	vPro	Pro 32	None	Jun 10
5205-A6U	i5-650	3.20	2GBx2	23.0" Full HD	2.0M	500GB				Intel 1000	Frame	vPro	Pro 64	None	Jun 10

• Best space saving solution & excellent cable management
• These models have a 3-year limited warranty¹
• These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	<i>All-In-One PC for the enterprise</i> Intel® Core™ i3 Processor i3-530 or i3-550 with dual-core, Intel 64, Hyper-Threading Technology, Virtualization Technology, integrated 1333MHz dual-channel DDR3 memory controller, 4MB cache or Intel Core i5 Processor i5-650 or i5-670 with dual-core, Intel 64, Hyper-Threading Technology, Turbo Boost Technology, Virtualization Technology, TXT, integrated 1333MHz dual-channel DDR3 memory controller, and 4MB cache Processor in LGA1156 socket	All-In-One <i>All:</i> • Business black color • Handle in rear • Support VESA mount (100mm) • Tool-less back cover, disk, optical drive, memory removal <i>Model(s) with Frame stand:</i> • 22" W X 4.29" D X 17.4" H • 560mm W X 109mm D X 443mm H • 23.6 lb (10.7 kg) in maximum configuration <i>Model(s) with Lift stand:</i> • Height Adjustable • 22" W X 9.84" D X 17.4" H • 560mm W X 250mm D X 443mm H • 29.3 lb (13.3 kg) in maximum configuration • Tilt -5°-25° <i>All:</i> Bay ① 3.5", 1" high, no access, std disk (desktop) Bay ② slim, .5" high, access, std optical (notebook)
Implementation		
Memory	2GB or 4GB std, 8GB max ⁸ , PC3-10600 1333MHz DDR3 , dual-channel capable, two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics in processor, HDCP, DirectX® 10, uses main memory (up to 765MB [<i>2GB models</i>], 1759MB [<i>4GB model</i>]), one DisplayPort™ connector, supports dual independent display	
DP dongle	None	
Widescreen	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , anti-glare, CCFL backlight, 250 nits, 16:9 aspect ratio, 1000:1 dynamic contrast ratio, work as standalone monitor via VGA-in connector	
Multi-touch	None	
Camera	None <i>Some:</i> Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical on/off switch	Security • Security chip (see information left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Boot sequence control • Boot without keyboard, mouse • Individual USB port disablement • <i>Some:</i> Chassis intrusion switch
SATA disk	320GB or 500GB , SATA 3.0Gb/s, 3.5" wide, 7200 rpm	
SATA DVD±RW	DVD burner, SATA 1.5Gb/s, 12.7mm high	
eSATA port	None	
Diskette drive	None	
Media reader	<i>Some:</i> Single Slot SD Media Card Reader	
Chipset	Intel Q57 Express Chipset Platform Controller Hub (PCH) for SATA, ethernet, and USB	
Ports	<i>Rear:</i> four USB 2.0, ethernet (RJ-45), DisplayPort, VGA-in connector <i>Side:</i> two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm) One PCI Express Mini Card slot <i>Some:</i> 11b/g/n wireless ¹³ , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 <i>Some:</i> Bluetooth 2.1 wireless, Broadcom® BCM2070, LED indicator	
PCIe Mini Card	Intel 1000	Supports ThinkVantage® technologies
Bluetooth™	None	
Ethernet	One gigabit ethernet port, Intel 82578DM	• EPEAT™ Gold rating • ENERGY STAR® 5.0-compliant • TCO Certified Edge • GREENGUARD® certified • RoHS-compliant
Audio	High Definition (HD) Audio, Realtek® ALC269 codec	
Speaker	Two internal speakers (2watt x 2)	
IEEE 1394	None	
Intel AMT	<i>vPro model(s):</i> Intel Active Management Technology 6.0 (Intel AMT 6.0) <i>Non-vPro model(s):</i> None	
Modem	None	
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant	Limited Warranty¹ ↪ 3-year parts and labor ↪ International Warranty Service⁹ ↪ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time) ↪ Onsite service upgrade options (in eligible locations):⁷ • 3-year LOR 9x5, 4 hour response (Lenovo part number 41C9192) • 3-year LOR 24x7, 4 hour response (Lenovo part number 41C9193) • 4-year LOR 9x5, Next Business Day (Lenovo part number 41C9194) • 4-year LOR 9x5, 4 hour response (Lenovo part number 41C9195) • 4-year LOR 24x7, 4 hour response (Lenovo part number 41C9196) ↪ Lenovo services at www.lenovo.com/services_warranty/us/en/index.html ↪ Post warranty maintenance services available ↪ 24 hour x 7 day¹⁴ toll-free support during the warranty period¹
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU, 80 PLUS® Bronze qualified	
Preloaded operating system²⁰	Accessories	
- <i>Some:</i> Genuine Windows® 7 Professional 32	2GB PC3-10600 DDR3 SODIMM 55Y3710	
- <i>Some:</i> Genuine Windows 7 Professional 64	ThinkCentre M90z Height Adjustable Stand 57Y4351	
	More accessories on O-M90Z sheet	
Preloaded applications⁵ (all OSes; only some listed)	Acc Guide in pdf lenovo.com/accessoriesguide Other accessories at lenovo.com/accessories	
• Rescue and Recovery™		
• ThinkVantage System Update		
• ThinkVantage Power Manager		
• ThinkVantage Toolbox		
• Lenovo Message Center Plus		
• Norton™ Internet Security 2011 (30 days of virus definitions)		
• Microsoft Office 2010 preloaded; purchase product key to activate		
• Corel® DVD MovieFactory® (DVD±RW)		

See footnotes for important warranty information
US models announced May 11, 2010 or February 8, 2011

↪ US models withdrawn effective April 2011, November 2011, or November 2012

Memory

2GB PC3-10600 DDR3 SODIMM	55Y3710	ann 03/02/10
2GB PC3-10600 DDR3 SODIMM (25Pack)	57Y4416	ann 03/02/10
4GB PC3-10600 DDR3 SODIMM	55Y3711	ann 03/02/10

More information at

www.lenovo.com/support/desktopmemorycompatibility

Storage and removable storage

250GB SATA 3.0Gb/s Disk (7200 rpm)	41N3015	ann 01/24/06
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	ann 11/06/07
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918	ann 08/19/08
300GB SATA 3.0Gb/s Disk (10000 rpm) 2.5"	43R2031	ann 03/31/09

USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
USB 3.0 Secure 500GB Hard Drive	0A65619	ann 11/29/11
USB 3.0 Secure 750GB Hard Drive	0A65616	ann 11/29/11
Slim USB Portable DVD Burner	0A33988	ann 06/14/11

Keyboard

Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Ultraslim Plus Wireless Keyboard and Mouse ⁵²	0A34032	ann 04/05/11
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
Lenovo Wireless Laser Mouse ⁵²	0A36188	ann 12/20/11

More information at www.lenovo.com/support/mice

Multimedia

ThinkPad® In-Ear Headphones with mic	57Y4488	ann 01/07/10
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Security

Kensington® MicroSaver® Cable Lock ⁵⁶	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann 09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann 08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Stand

ThinkCentre M90z Height Adjustable Stand ⁵⁹	57Y4351	ann 05/04/10
ThinkCentre Extend Arm ⁵⁷	57Y4352	ann 07/06/10

⁵⁷ Compatible when ThinkCentre Extend Arm is desk (clamp) mounted only, wall mount is not supported.

⁵⁹ Not compatible to Multi-touch models.

Monitors

ThinkVision® L1711p 17" (VGA, DVI-D) ⁶⁸	5047HB2	ann 10/20/09
ThinkVision LT1952p Wide 19" (VGA, DP, DVI-D) ⁶⁹	2448MB6	ann 09/13/11
ThinkVision L2250p Wide 22" (VGA, DVI-D) ⁶⁸	2572HB6	ann 10/20/09
ThinkVision L2251x Wide 22" (VGA, DP)	2578HB6	ann 10/20/09
ThinkVision LT2252p Wide 22" (VGA, DP, DVI-D) ⁶⁹	2572MB6	ann 09/13/11
ThinkVision LT2452p Wide 24" (VGA, DP, DVI-D) ⁶⁹	4420MB2	ann 09/13/11

⁶⁸ Requires a DisplayPort Monitor Cable (DisplayPort to Single-Link DVI-D or DisplayPort to VGA Analog).

⁶⁹ DisplayPort cable is not included; use optional DisplayPort to DisplayPort P Monitor Cable (0A36537).

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
DisplayPort™ to Single-link DVI-D Cable	45J7915	ann 08/05/08
DisplayPort to VGA Monitor Cable	57Y4393	ann 08/04/09
DisplayPort to DisplayPort Monitor Cable	0A36537	ann 09/13/11
Kensington MicroSaver Cable Lock ⁵⁶	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann 09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann 08/24/10
ThinkCentre Extend Arm	57Y4352	ann 07/06/10

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems

Lenovo ThinkCentre M91p Small and Tower

ThinkCentre®



Lenovo ThinkCentre M91p
Small and Tower



Lenovo ThinkCentre M91p Tower
with Lenovo ThinkVision monitor



Lenovo ThinkCentre M91p Small



Lenovo ThinkCentre M91p Small
with Lenovo ThinkVision monitor



Lenovo ThinkCentre M91p Tower



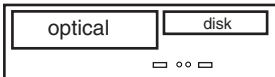
Lenovo ThinkCentre M91p Tower

ThinkCentre® M91 Eco Ultra Small (7519) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.0	Intel vPro	Global Educ	Win7 preload	Ann date (mm/dd/yy)
7519-B3U	1x2	Core i3-2130	4GBx1 1333MHz	250G 7200	DVD±RW	Intel HD	None	Stand	ES50	None	N N	Pro 64	12/13/11
7519-B4U	1x2	Core i3-2120	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	None	Stand	ES50	None	N N	Pro 64	02/21/12

- The most powerful, stable, and manageable desktop with next generation Intel platform
- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 1-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>								Preloaded operating system				
Processor	Intel® Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), Virtualization Technology, integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller Intel Core i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Virtualization Technology, integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller Processor in LGA1155 socket								Genuine Windows® 7 Professional 64 Preloaded applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • ThinkVantage® System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
Implementation	Processor in LGA1155 socket												
Memory	8GB max, PC3-10600 1333MHz DDR3 , two 204-pin SODIMM sockets (notebook)												
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i> None												
DP dongle	None												
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1												
SATA cables	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, one SATA 3.0Gb/s connector, and one eSATA connector on planar												
eSATA port	None												
Media reader	None												
Chipset	Intel Q67 Express Chipset Platform Controller Hub [PCH] (PCI Express® 2.0 x1, ethernet MAC, PCI, and USB), SMSC® 5627P Super I/O												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Six USB 2.0, ethernet (RJ-45), VGA DB-15, DisplayPort												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®												
Intel AMT	None												
Modem	None												
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo logo												
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo® logo												
Floor Stand	System floor stand for vertical orientation												
Power supply	150 watts AC/DC adapter, autosensing, 87% PSU												
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 10.8" W X 9.4" D X 3.1" H • 275mm W X 238mm D X 79mm H • 9.2 lb (4.2 kg) in maximum configuration • Hinged toolless cover for easy serviceability • Toolless disk and optical drive removal 												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk												
Slot	Slot 1: Low Profile, 32-bit PCI 2.3								Security <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement 				
									EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant				
									Supports ThinkVantage Technologies				
Limited Warranty	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available								For compatible accessories, please go to O-M91P sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information

US model announced February 21, 2012; previous model on December 13, 2011


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(MAST1-20) March 2012

ThinkCentre® M91 Eco Ultra Small (7516) - GMP

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.0	Intel vPro	Global (G) GMP (P)	Win7 preload
7516-C5U	1x2	Core i3-2100	4GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	None	Stand	ES50	None	G P	Pro 64
7516-E2U	1x2	Core i3-2120	4GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	None	Stand	ES50	None	G P	Pro 64

- The most powerful, stable, and manageable desktop with next generation Intel platform
- These models are part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										
Processor	Intel® Core™ i3-2100 Processor (2 cores / 4 threads, 3.1GHz, 3MB cache), Virtualization Technology, integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller Intel Core i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), Virtualization Technology, integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller										
Implementation	Processor in LGA1155 socket										
Memory	8GB max, PC3-10600 1333MHz DDR3 , two 204-pin SODIMM sockets (notebook)										
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>										
DP dongle	None										
Disk	SATA 6.0Gb/s 7200 rpm										
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1										
SATA cables	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, one SATA 3.0Gb/s connector, and one eSATA connector on planar										
eSATA port	None										
Media reader	None										
Chipset	Intel Q67 Express Chipset Platform Controller Hub [PCH] (PCI Express® 2.0 x1, ethernet MAC, PCI, and USB), SMSC® 5627P Super I/O										
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
Rear ports	Six USB 2.0, ethernet (RJ-45), VGA DB-15, DisplayPort										
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)										
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										
Speaker	Internal speaker for business audio										
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®										
Intel AMT	None										
Modem	None										
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant										
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo										
Floor Stand	System floor stand for vertical orientation										
Power supply	150 watts AC/DC adapter, autosensing, 87% PSU										
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 10.8" W X 9.4" D X 3.1" H • 275mm W X 238mm D X 79mm H • 9.2 lb (4.2 kg) in maximum configuration • Hinged toolless cover for easy serviceability • Toolless disk and optical drive removal 										
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk										
Slot	Slot 1: Low Profile, 32-bit PCI 2.3										
											
	Preloaded operating system Genuine Windows® 7 Professional 64 Preloaded applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • ThinkVantage® System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 										
	Security <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement 										
	EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant										
	Supports ThinkVantage Technologies										
	For compatible accessories, please go to O-M91P sheet; For Lenovo service upgrade options, please go to S-TC sheet										
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										

See footnotes for important warranty information

US model announced December 6, 2011; previous model on April 12, 2011

US model withdrawn effective November 2012

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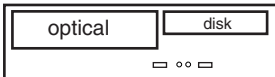
(MAST1-11) December 2011

ThinkCentre® M91p Eco Ultra Small (0266)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.0	Intel vPro	Global Educ	Win7 preload
0266-B7U	1x2	Core i5-2400S	4GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	None	None	ES50	vPro	N N	Pro 64
0266-B8U	1x2	Core i5-2500S	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	None	None	ES50	vPro	N N	Pro 64

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- These models have a 3-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>		Preloaded operating system Genuine Windows® 7 Professional 64 Preloaded applications (only some listed) <ul style="list-style-type: none"> ● Rescue and Recovery™ ● ThinkVantage® System Update ● ThinkVantage Power Manager ● ThinkVantage Toolbox ● Norton™ Internet Security 2011 (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Microsoft® Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Core™ i5-2400S Processor (4 cores / 4 threads, 2.5GHz, 6MB cache), Turbo Boost 2.0 (3.3GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-2500S Processor (4 cores / 4 threads, 2.7GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket		
Implementation	Processor in LGA1155 socket		
Memory	8GB max, PC3-10600 1333MHz DDR3 , two 204-pin SODIMM sockets (notebook)		
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i> None		
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1		
SATA cables	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, one SATA 3.0Gb/s connector, and one eSATA connector on planar		
eSATA port	None		
Media reader	None		
Chipset	Intel Q67 Express Chipset Platform Controller Hub [PCH] (PCI Express® 2.0 x1, ethernet MAC, PCI, and USB), SMSC® 5627P Super I/O		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Six USB 2.0, ethernet (RJ-45), VGA DB-15, DisplayPort		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Intel AMT	Intel Active Management Technology 7.1 (Intel AMT 7.1)		
Modem	None		
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo logo		
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo		
Floor Stand	None		
Power supply	150 watts AC/DC adapter, autosensing, 87% PSU		
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 10.8" W X 9.4" D X 3.1" H ● 275mm W X 238mm D X 79mm H ● 9.2 lb (4.2 kg) in maximum configuration ● Hinged toolless cover for easy serviceability ● Toolless disk and optical drive removal 		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk		
Slot	Slot 1: Low Profile, 32-bit PCI 2.3		
			
Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement 			
EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant			
Supports ThinkVantage Technologies			
For compatible accessories, please go to O-M91P sheet; For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		

See footnotes for important warranty information
 US models announced April 5, 2011


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 (MAST1-9) April 2011

ThinkCentre® M91p Eco Ultra Small (0266) - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.0	Intel vPro	Global Educ	Win7 preload
0266-D1U	1x2	Core i5-2400S	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	None	None	ES50	vPro	N N	Pro 64

- Next Generation Intel platform with latest Intel vPro Technology and Intel Active Management Technology
- This model has a 3-year limited warranty
- This system is Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>							Preloaded operating system				
Processor	Intel® Core™ i5-2400S Processor (4 cores / 4 threads, 2.5GHz, 6MB cache), Turbo Boost 2.0 (3.3GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology							Genuine Windows® 7 Professional 64				
Implementation	Processor in LGA1155 socket							Preloaded applications (only some listed)				
Memory	8GB max, PC3-10600 1333MHz DDR3 , two 204-pin SODIMM sockets (notebook)							<ul style="list-style-type: none"> • Rescue and Recovery™ • ThinkVantage® System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz;</i>											
DP dongle	None											
Disk	SATA 6.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1											
SATA cables	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, one SATA 3.0Gb/s connector, and one eSATA connector on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel Q67 Express Chipset Platform Controller Hub [PCH] (PCI Express® 2.0 x1, ethernet MAC, PCI, and USB), SMSC® 5627P Super I/O											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Six USB 2.0, ethernet (RJ-45), VGA DB-15, DisplayPort											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
Speaker	Internal speaker for business audio											
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®											
Intel AMT	Intel Active Management Technology 7.1 (Intel AMT 7.1)											
Modem	None											
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo											
Floor Stand	None											
Power supply	150 watts AC/DC adapter, autosensing, 87% PSU											
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 10.8" W X 9.4" D X 3.1" H • 275mm W X 238mm D X 79mm H • 9.2 lb (4.2 kg) in maximum configuration • Hinged toolless cover for easy serviceability • Toolless disk and optical drive removal 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk											
Slot	Slot 1: Low Profile, 32-bit PCI 2.3											
								Security <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement 				
												
								EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant				
								Supports ThinkVantage Technologies				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available							For compatible accessories, please go to O-M91P sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information
US model announced April 12, 2011


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ThinkCentre® M91p Eco Ultra Small (0266) - III

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.0	Intel vPro	Global Educ	Win7 preload
0266-D3U	1x2	Core i5-2500S	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	None	Stand	ES50	vPro	N N	Pro 64

- Next Generation Intel platform with latest Intel vPro Technology and Intel Active Management Technology
- This model has a 3-year limited warranty
- This system is Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>							Preloaded operating system				
Processor	Intel® Core™ i5-2500S Processor (4 cores / 4 threads) , 2.7GHz, 6MB cache), Virtualization Technology, Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller							Genuine Windows® 7 Professional 64				
Implementation	Processor in LGA1155 socket							Preloaded applications²⁰ (only some listed)				
Memory	8GB max, PC3-10600 1333MHz DDR3 , two 204-pin SODIMM sockets (notebook)							<ul style="list-style-type: none"> ● Rescue and Recovery™ ● ThinkVantage® System Update ● ThinkVantage Power Manager ● ThinkVantage Toolbox ● Norton™ Internet Security 2011 (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Microsoft® Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 				
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz;</i>											
DP dongle	None											
Disk	SATA 6.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1											
SATA cables	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, one SATA 3.0Gb/s connector, and one eSATA connector on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel Q67 Express Chipset Platform Controller Hub [PCH] (PCI Express® 2.0 x1, ethernet MAC, PCI, and USB), SMSC® 5627P Super I/O											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Six USB 2.0, ethernet (RJ-45), VGA DB-15, DisplayPort											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
Speaker	Internal speaker for business audio											
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®											
Intel AMT	Intel Active Management Technology 7.1 (Intel AMT 7.1)											
Modem	None											
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo											
Floor Stand	System floor stand for vertical orientation											
Power supply	150 watts AC/DC adapter, autosensing, 87% PSU											
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 10.8" W X 9.4" D X 3.1" H ● 275mm W X 238mm D X 79mm H ● 9.2 lb (4.2 kg) in maximum configuration ● Hinged toolless cover for easy serviceability ● Toolless disk and optical drive removal 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk											
Slot	Slot 1: Low Profile, 32-bit PCI 2.3											
								Security				
								<ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement 				
								EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant				
								Supports ThinkVantage Technologies				
Limited Warranty ¹	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available							For compatible accessories, please go to O-M91P sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information
US model announced May 24, 2011

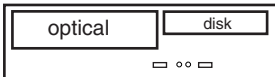
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(MAST1-16) June 2011

ThinkCentre® M91p Eco Ultra Small (5067) - GMP

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.0	Intel vPro	Global (G) GMP (P)	Win7 preload
5067-A1U	1x2	Core i5-2400S	2GBx1 1333MHz	250G 7200	DVD±RW	Intel HD	None	None	ES50	vPro	G P	Pro 32

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- This model is part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- This system is Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>							Preloaded operating system				
Processor	Intel® Core™ i5-2400S Processor (4 cores / 4 threads, 2.5GHz, 6MB cache), Turbo Boost 2.0 (3.3GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology							Genuine Windows® 7 Professional 32				
Implementation	Processor in LGA1155 socket							Preloaded applications (only some listed)				
Memory	8GB max, PC3-10600 1333MHz DDR3 , two 204-pin SODIMM sockets (notebook)							<ul style="list-style-type: none"> • Rescue and Recovery™ • ThinkVantage® System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>											
DP dongle	None											
Disk	SATA 6.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1											
SATA cables	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, one SATA 3.0Gb/s connector, and one eSATA connector on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel Q67 Express Chipset Platform Controller Hub [PCH] (PCI Express® 2.0 x1, ethernet MAC, PCI, and USB), SMSC® 5627P Super I/O											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Six USB 2.0, ethernet (RJ-45), VGA DB-15, DisplayPort											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
Speaker	Internal speaker for business audio											
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®											
Intel AMT	Intel Active Management Technology 7.1 (Intel AMT 7.1)											
Modem	None											
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo											
Floor Stand	None											
Power supply	150 watts AC/DC adapter, autosensing, 87% PSU											
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 10.8" W X 9.4" D X 3.1" H • 275mm W X 238mm D X 79mm H • 9.2 lb (4.2 kg) in maximum configuration • Hinged toolless cover for easy serviceability • Toolless disk and optical drive removal 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk											
Slot	Slot 1: Low Profile, 32-bit PCI 2.3											
								Security <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement 				
								EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant				
								Supports ThinkVantage Technologies				
								For compatible accessories, please go to O-M91P sheet; For Lenovo service upgrade options, please go to S-TC sheet				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											

See footnotes for important warranty information
US model announced April 5, 2011

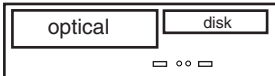
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ThinkCentre® M91p Eco Ultra Small (5067) - GMP - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.0	Intel vPro	Global (G) GMP (P)	Win7 preload
5067-A3U	1x2	Core i5-2400S	4GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	None	None	ES50	vPro	G P	Pro 64

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- This model is part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- This system is Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>							Preloaded operating system				
Processor	Intel® Core™ i5-2400S Processor (4 cores / 4 threads, 2.5GHz, 6MB cache), Turbo Boost 2.0 (3.3GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology							Genuine Windows® 7 Professional 64				
Implementation	Processor in LGA1155 socket							Preloaded applications (only some listed)				
Memory	8GB max, PC3-10600 1333MHz DDR3 , two 204-pin SODIMM sockets (notebook)							<ul style="list-style-type: none"> • Rescue and Recovery™ • ThinkVantage® System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>											
DP dongle	None											
Disk	SATA 6.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1											
SATA cables	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector, one SATA 3.0Gb/s connector, and one eSATA connector on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel Q67 Express Chipset Platform Controller Hub [PCH] (PCI Express® 2.0 x1, ethernet MAC, PCI, and USB), SMSC® 5627P Super I/O											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Six USB 2.0, ethernet (RJ-45), VGA DB-15, DisplayPort											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
Speaker	Internal speaker for business audio											
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®											
Intel AMT	Intel Active Management Technology 7.1 (Intel AMT 7.1)											
Modem	None											
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo											
Floor Stand	None											
Power supply	150 watts AC/DC adapter, autosensing, 87% PSU											
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 10.8" W X 9.4" D X 3.1" H • 275mm W X 238mm D X 79mm H • 9.2 lb (4.2 kg) in maximum configuration • Hinged toolless cover for easy serviceability • Toolless disk and optical drive removal 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk							Security				
Slot	Slot 1: Low Profile, 32-bit PCI 2.3							<ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement 				
								EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant				
								Supports ThinkVantage Technologies				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available							For compatible accessories, please go to O-M91P sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information
US model announced May 10, 2011

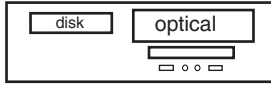
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ThinkCentre® M91p Small (4480) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.0	Intel vPro	Global Educ	Win7 preload
4480-A4U	4x3	Core i5-2400	2GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	None	Stand	ES50	vPro	N N	Pro 64
4480-A5U	4x3	Core i7-2600	4GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	None	Stand	ES50	vPro	N N	Pro 64
4480-B1U	4x3	Core i5-2400	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	None	Stand	ES50	vPro	N N	Pro 64
4480-B3U	4x3	Core i7-2600	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	None	Stand	ES50	vPro	N N	Pro 64
4480-B4U	4x3	Core i7-2600	4GBx1 1333MHz	500G 7200	DVD±RW	HD 6450	None	Stand	ES50	vPro	N N	Pro 64
4480-B5U	4x3	Core i5-2500	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	None	Stand	ES50	vPro	N N	Pro 64

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 3-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>		Preloaded operating system Genuine Windows® 7 Professional 64 Preloaded applications (only some listed) <ul style="list-style-type: none"> ● Rescue and Recovery™ ● ThinkVantage® System Update ● ThinkVantage Power Manager ● ThinkVantage Toolbox ● Norton™ Internet Security 2011 (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Microsoft® Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Core™ i5-2400 Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.4GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-2500 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-2600 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology		
Implementation	Processor in LGA1155 socket		
Memory	16GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets		
Graphics	<i>Some:</i> Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz;</i> <i>Some:</i> AMD Radeon™ HD 6450 , PCI Express® 2.0 x16 adapter, HDCP, DirectX 11, 1GB, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz;</i> works along with Intel HD Graphics to support four independent monitors		
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1		
SATA cables	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector on planar		
eSATA port	None		
Media reader	None		
Chipset	Intel Q67 Express Chipset Platform Controller Hub [PCH] (PCI Express® 2.0 x1, ethernet MAC, PCI, and USB), SMSC® 5627P Super I/O		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Six USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Intel AMT	Intel Active Management Technology 7.1 (Intel AMT 7.1)		
Modem	None		
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
Power supply	240 watts, autosensing, 85% PSU		
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 14.5" D X 3.9" H ● 337mm W X 369mm D X 99mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader		
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		
			
Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement 			
EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant			
Supports ThinkVantage Technologies			
For compatible accessories, please go to O-M91P sheet; For Lenovo service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information

US models announced September 6, 2011; previous models on March 1 or August 23, 2011

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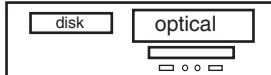
(MAST1-7) September 2011

ThinkCentre® M91p Small (4480) - TopSeller - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.0	Intel vPro	Global Educ	Win7 preload	Ann date (mm/dd/yy)
4480-B6U	4x3	Core i5-2500	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	None	Stand	ES50	vPro	N N	Pro 32	11/08/11
4480-B7U	4x3	Core i7-2600	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	None	Stand	ES50	vPro	N N	Pro 32	11/08/11
4480-B8U	4x3	Core i5-2400	4GBx1 1333MHz	500G 7200	DVD±RW	HD 5450	Switch	Stand	ES50	vPro	N N	Pro 64	11/08/11
4480-B9U	4x3	Core i5-2400	4GBx1 1333MHz	250G 7200	DVD±RW	Intel HD	None	Stand	ES50	vPro	N N	Pro 64	12/13/11
4480-C1U	4x3	Core i5-2500	4GBx1 1333MHz	250G 7200	DVD±RW	Intel HD	None	Stand	ES50	vPro	N N	Pro 64	12/13/11
4480-C2U	4x3	Core i7-2600	4GBx1 1333MHz	1TB 7200	DVD±RW	Intel HD	None	Stand	ES50	vPro	N N	Pro 64	02/21/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 3-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning Processor	<p><i>Ultimate security, stability, and manageability for the enterprise</i></p> <p>Intel® Core™ i5-2400 Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Virtualization Technology, Turbo Boost 2.0 (3.4GHz), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller</p> <p>Intel Core i5-2500 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Virtualization Technology, Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller</p> <p>Intel Core i7-2600 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Virtualization Technology, Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller</p> <p>Processor in LGA1155 socket</p>	<p>Preloaded operating system²⁰</p> <p>Some: Genuine Windows® 7 Professional 32</p> <p>Some: Genuine Windows 7 Professional 64</p> <p>Preloaded applications¹⁴ (only some listed)</p> <ul style="list-style-type: none"> • Rescue and Recovery™ • ThinkVantage® System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
Implementation	Processor in LGA1155 socket	
Memory	16GB max ⁷ , UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets	
Graphics	<p>Some: Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA)@60Hz;</i></p> <p>Some: AMD Radeon™ HD 5450, PCI Express® 2.0 x16 adapter, HDCP, DirectX 11, 512MB, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz; 2048x1536@85Hz (VGA via DIV-to-VGA dongle);</i> works along with Intel HD Graphics to support four independent monitors</p>	
DP dongle	None	
Disk	SATA 6.0Gb/s 7200 rpm	
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive	
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1	
SATA cables	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector on planar	
eSATA port	None	
Media reader	None	
Chipset	Intel Q67 Express Chipset Platform Controller Hub [PCH] (PCI Express 2.0 x1, ethernet MAC, PCI, and USB), SMSC® 5627P Super I/O	
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Six USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort	
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)	
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports)	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®	
Intel AMT	Intel Active Management Technology 7.1 (Intel AMT 7.1)	
Modem	None	
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo	
Floor Stand	System floor stand for vertical orientation	
Power supply	240 watts, autosensing, 85% PSU	
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.3" W X 14.5" D X 3.9" H • 337mm W X 369mm D X 99mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention 	
Bay	<p>Bay 1: 5.25", 1.6" high, access, std optical</p> <p>Bay 2: 3.5", 1" high, no access, std disk</p> <p>Bay 3: 3.5", .5" high, access, opt reader</p>	
Slot	<p>Slot 1: Low Profile, PCI Express 2.0 x16 (45w max)</p> <p>Slot 2: Low Profile, PCIe 2.0 x1</p> <p>Slot 3: Low Profile, 32-bit PCI 2.3</p> <p>Slot 4: Low Profile, 32-bit PCI 2.3</p>	
Limited Warranty ¹²	3-years, limited onsite service²⁴ , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available	<p>Security</p> <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Some: Chassis intrusion switch <p>EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant</p> <p>Supports ThinkVantage Technologies</p> <p>For compatible accessories, please go to O-M91P sheet; For Lenovo service upgrade options, please go to S-TC sheet</p>

See footnotes for important warranty information

US model announced February 21, 2012; previous models on November 8 or December 13, 2011

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(MAST1-18) March 2012

ThinkCentre® M91p Small (4518)

Personal Systems Reference (PSREF)

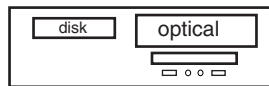
Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.0	Intel vPro	Global Educ	Win7 preload
4518-D6U	4x3	Core i5-2500	2GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	None	Stand	ES50	vPro	N N	Pro 64
4518-D7U	4x3	Core i7-2600	4GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	None	Stand	ES50	vPro	N N	Pro 64
4518-E4U	4x3	Core i5-2400	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	None	Stand	ES50	vPro	N N	Pro 64
4518-E5U	4x3	Core i7-2600	4GBx1 1333MHz	500G 7200	DVD±RW	HD 5450	None	Stand	ES50	vPro	N N	Pro 64

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- These models have a 3-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										
Processor	Intel® Core™ i5-2400 Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.4GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-2500 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-2600 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										
Implementation	Processor in LGA1155 socket										
Memory	16GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets										
Graphics	<i>Some: Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz;</i> <i>Some: AMD Radeon™ HD 5450, PCI Express® 2.0 x16 adapter, HDCP, DirectX 11, 512MB, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; Maximum resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz; 2048x1536 @85Hz (VGA via DVI-to-VGA dongle); works along with Intel HD Graphics 2000 to support four independent monitors</i>										
DP dongle	None										
Disk	SATA 6.0Gb/s 7200 rpm										
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1										
SATA cables	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector on planar										
eSATA port	None										
Media reader	None										
Chipset	Intel Q67 Express Chipset Platform Controller Hub [PCH] (PCI Express 2.0 x1, ethernet MAC, PCI, and USB), SMSC® 5627P Super I/O										
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
Rear ports	Six USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort										
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports)										
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										
Speaker	Internal speaker for business audio										
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®										
Intel AMT	Intel Active Management Technology 7.1 (Intel AMT 7.1)										
Modem	None										
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant										
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo										
Floor Stand	System floor stand for vertical orientation										
Power supply	240 watts, autosensing, 85% PSU										
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 14.5" D X 3.9" H ● 337mm W X 369mm D X 99mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 										
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader										
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3										
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										

- Preloaded operating system**
 Genuine Windows® 7 Professional 64
- Preloaded applications** (only some listed)
- Rescue and Recovery™
 - ThinkVantage® System Update
 - ThinkVantage Power Manager
 - ThinkVantage Toolbox
 - Norton™ Internet Security 2011 (30 days of virus definitions)
 - Adobe® Reader®
 - Skype™ for Windows
 - Microsoft® Office 2010 preloaded; purchase product key to activate
 - Corel® Burn.Now™ (DVD±RW)
 - Corel DVD MovieFactory® (DVD±RW)

- Security**
- Security chip (see information on left)
 - Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)
 - Power-on password
 - Hard disk password
 - Boot sequence control
 - Boot without keyboard and mouse
 - Serial port I/O control
 - Individual USB port disablement



EPEAT™ Gold rating
 ENERGY STAR® 5.0-compliant
 GREENGUARD® certified
 RoHS-compliant

Supports ThinkVantage Technologies

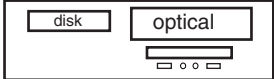
For compatible accessories, please go to O-M91P sheet; For Lenovo service upgrade options, please go to S-TC sheet

ThinkCentre® M91p Small (7033) - GMP

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.0	Intel vPro	Global (G) GMP (P)	Win7 preload
7033-A1U	4x3	Core i5-2400	2GBx1 1333MHz	250G 7200	DVD±RW	Intel HD	None	Stand	ES50	vPro	G P	Pro 32

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- This model is part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- This system is Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										
Processor	Intel® Core™ i5-2400 Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.4GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology										
Implementation	Processor in LGA1155 socket										
Memory	16GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets										
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>										
DP dongle	None										
Disk	SATA 6.0Gb/s 7200 rpm										
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1										
SATA cables	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector on planar										
eSATA port	None										
Media reader	None										
Chipset	Intel Q67 Express Chipset Platform Controller Hub [PCH] (PCI Express® 2.0 x1, ethernet MAC, PCI, and USB), SMSC® 5627P Super I/O										
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
Rear ports	Six USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort										
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports)										
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										
Speaker	Internal speaker for business audio										
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®										
Intel AMT	Intel Active Management Technology 7.1 (Intel AMT 7.1)										
Modem	None										
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant										
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo										
Floor Stand	System floor stand for vertical orientation										
Power supply	240 watts, autosensing, 85% PSU										
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 14.5" D X 3.9" H ● 337mm W X 369mm D X 99mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 										
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader										
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3										
											
Preloaded operating system											
Genuine Windows® 7 Professional 32											
Preloaded applications (only some listed)											
<ul style="list-style-type: none"> ● Rescue and Recovery™ ● ThinkVantage® System Update ● ThinkVantage Power Manager ● ThinkVantage Toolbox ● Norton™ Internet Security 2011 (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Microsoft® Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 											
Security											
<ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement 											
EPEAT™ Gold rating											
ENERGY STAR® 5.0-compliant											
GREENGUARD® certified											
RoHS-compliant											
Supports ThinkVantage Technologies											
For compatible accessories, please go to O-M91P sheet; For Lenovo service upgrade options, please go to S-TC sheet											
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										

See footnotes for important warranty information
US model announced March 1, 2011

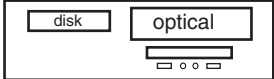
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(MAST1-8) April 2011

ThinkCentre® M91p Small (7033) - GMP - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Floor stand	ENERGY STAR 5.0	Intel vPro	Global (G) GMP (P)	Win7 preload
7033-A2U	4x3	Core i5-2400	4GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	None	Stand	ES50	vPro	G P	Pro 64

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- This model is part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- This system is Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											
Processor	Intel® Core™ i5-2400 Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.4GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology											
Implementation	Processor in LGA1155 socket											
Memory	16GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets											
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>											
DP dongle	None											
Disk	SATA 6.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1											
SATA cables	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel Q67 Express Chipset Platform Controller Hub [PCH] (PCI Express® 2.0 x1, ethernet MAC, PCI, and USB), SMSC® 5627P Super I/O											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Six USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
Speaker	Internal speaker for business audio											
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®											
Intel AMT	Intel Active Management Technology 7.1 (Intel AMT 7.1)											
Modem	None											
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo											
Floor Stand	System floor stand for vertical orientation											
Power supply	240 watts, autosensing, 85% PSU											
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.3" W X 14.5" D X 3.9" H • 337mm W X 369mm D X 99mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader											
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3											
												
	Preloaded operating system Genuine Windows® 7 Professional 64 Preloaded applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • ThinkVantage® System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 											
	Security <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement 											
	EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant											
	Supports ThinkVantage Technologies											
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available For compatible accessories, please go to O-M91P sheet; For Lenovo service upgrade options, please go to S-TC sheet											

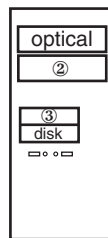
See footnotes for important warranty information
 US model announced May 10, 2011

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Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.0	Intel vPro	Global Educ	Win7 preload
7052-A7U	4x4	Core i5-2400	4GBx1 1333MHz	500G 7200	None	DVD±RW	Intel HD	None	ES50	vPro	N N	Pro 64
7052-A8U	4x4	Core i7-2600	4GBx1 1333MHz	500G 7200	None	DVD±RW	HD 5450	None	ES50	vPro	N N	Pro 64

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have a 3-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	Ultimate security, stability, and manageability for the enterprise										
Processor	Intel® Core™ i5-2400 Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.4GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-2600 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										
Implementation	Processor in LGA1155 socket										
Memory	16GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets										
Graphics	Some: Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz;</i> Some: AMD Radeon™ HD 5450 , PCI Express® 2.0 x16 adapter, HDCP, DirectX 11, 512MB, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz; 2048x1536@85Hz (VGA via DVI-to-VGA dongle);</i> works along with Intel HD Graphics 2000 to support four independent monitors										
DP dongle	None										
Disk	SATA 6.0Gb/s 7200 rpm										
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1										
SATA cables	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector on planar										
eSATA port	None										
Media reader	None										
Chipset	Intel Q67 Express Chipset Platform Controller Hub [PCH] (PCI Express 2.0 x1, ethernet MAC, PCI, and USB), SMSC® 5627P Super I/O										
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
Rear ports	Six USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort										
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports)										
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										
Speaker	Internal speaker for business audio										
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®										
Intel AMT	Intel Active Management Technology 7.1 (Intel AMT 7.1)										
Modem	None										
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant										
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo										
Power supply	280 watts with variable speed fan, autosensing, 85% PSU										
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 24.2 lb (11.0 kg) in maximum configuration ● Handle on top front ● Power button on top handle ● Toolless cover removal ● Tilted front I/O for easy access ● Toolless disk, optical drive removal ● Toolless adapter retention 										
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk										
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3										
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										
	Preloaded operating system Genuine Windows® 7 Professional 64 Preloaded applications (only some listed) <ul style="list-style-type: none"> ● Rescue and Recovery™ ● ThinkVantage® System Update ● ThinkVantage Power Manager ● ThinkVantage Toolbox ● Norton™ Internet Security 2011 (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Microsoft® Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 										
	Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M91P sheet; For Lenovo service upgrade options, please go to S-TC sheet										

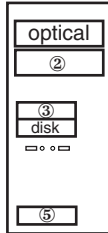


ThinkCentre® M91p Tower (7052) - TopSeller - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.0	Intel vPro	Global Educ	Win7 preload
7052-B2U	4x4	Core i7-2600	4GBx1 1333MHz	500G 7200	None	DVD±RW	Intel HD	None	ES50	vPro	N N	Pro 64
7052-B3U	4x5	Core i7-2600	4GBx1 1333MHz	500G 7200	Bay	DVD±RW	Intel HD	None	ES50	vPro	N N	Pro 64
7052-B4U	4x5	Core i5-2500	4GBx1 1333MHz	500G 7200	Bay	DVD±RW	Intel HD	None	ES50	vPro	N N	Pro 64

- Next Generation Intel platform with latest Intel vPro Technology and Intel Active Management Technology
- These small and medium business (SMB) models are part of the US TopSeller Program
- These models have a 3-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>							Preloaded operating system					
Processor	Intel® Core™ i5-2500 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-2600 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Virtualization Technology, Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller Processor in LGA1155 socket							Genuine Windows® 7 Professional 64 Preloaded applications (only some listed) <ul style="list-style-type: none"> ● Rescue and Recovery™ ● ThinkVantage® System Update ● ThinkVantage Power Manager ● ThinkVantage Toolbox ● Norton™ Internet Security 2011 (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Microsoft® Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 					
Implementation	Processor in LGA1155 socket												
Memory	16GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets												
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>												
DP dongle	None												
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1												
SATA cables	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector on planar												
eSATA port	None												
Media reader	None												
Chipset	Intel Q67 Express Chipset Platform Controller Hub [PCH] (PCI Express® 2.0 x1, ethernet MAC, PCI, and USB), SMSC® 5627P Super I/O												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Six USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports)												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®												
Intel AMT	Intel Active Management Technology 7.1 (Intel AMT 7.1)												
Modem	None												
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo												
Power supply	280 watts with variable speed fan, autosensing, 85% PSU												
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 24.2 lb (11.0 kg) in maximum configuration ● Handle on top front ● Power button on top handle ● Toolless cover removal ● Tilted front I/O for easy access ● Toolless disk, optical drive removal ● Toolless adapter retention 												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk (some models)												
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3							Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement 					
Limited Warranty ¹	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available							EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M91P sheet; For Lenovo service upgrade options, please go to S-TC sheet					

See footnotes for important warranty information

US model announced September 6, 2011; previous models on June 21 or August 23, 2011

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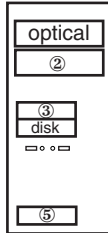
(MAST1-17) September 2011

ThinkCentre® M91p Tower (7052) - TopSeller - III

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	Media reader	ENERGY STAR 5.0	Intel vPro	Global Educ	Win7 preload	Ann date (mm/dd/yy)
7052-B5U	4x5	Core i5-2400	2GBx1 1333MHz	320G 7200	Bay	DVD±RW	Intel HD	None	None	ES50	vPro	N N	Pro 64	11/08/11
7052-B6U	4x5	Core i5-2500	4GBx1 1333MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	ES50	vPro	N N	Pro 32	11/08/11
7052-B7U	4x5	Core i7-2600	4GBx1 1333MHz	500G 7200	Bay	DVD±RW	Intel HD	None	None	ES50	vPro	N N	Pro 32	11/08/11
7052-B8U	4x5	Core i5-2500	4GBx1 1333MHz	500G 7200	Bay	DVD±RW	HD 5450	Switch	None	ES50	vPro	N N	Pro 64	11/08/11
7052-B9U	4x5	Core i7-2600	4GBx1 1333MHz	500G 7200	Bay	DVD±RW	HD 6450	None	Media	ES50	vPro	N N	Pro 64	11/08/11
7052-C2U	4x5	Core i5-2400	4GBx1 1333MHz	250G 7200	Bay	DVD±RW	Intel HD	None	None	ES50	vPro	N N	Pro 64	12/13/11
7052-C3U	4x5	Core i5-2500	4GBx1 1333MHz	250G 7200	Bay	DVD±RW	Intel HD	None	None	ES50	vPro	N N	Pro 64	12/13/11
7052-C4U	4x5	Core i7-2600	4GBx1 1333MHz	250G 7200	Bay	DVD±RW	Intel HD	None	None	ES50	vPro	N N	Pro 64	12/13/11

- Next Generation Intel platform with latest Intel vPro Technology and Intel Active Management Technology
- These small and medium business (SMB) models are part of the US TopSeller Program
- These models have a 3-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	Ultimate security, stability, and manageability for the enterprise										Preloaded operating system²⁰			
Processor	Intel® Core™ i5-2400 Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Virtualization Technology, Turbo Boost 2.0 (3.4GHz), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller Intel Core i5-2500 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Virtualization Technology, Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller Intel Core i7-2600 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Virtualization Technology, Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller										Some: Genuine Windows® 7 Professional 32 Some: Genuine Windows 7 Professional 64 Preloaded applications¹⁴ (only some listed)			
Implementation	Processor in LGA1155 socket										<ul style="list-style-type: none"> • Rescue and Recovery™ • ThinkVantage® System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 			
Memory	16GB max ⁷ , UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets													
Graphics	Some: Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA)@60Hz;</i> Some: AMD Radeon™ HD 5450 , PCI Express® 2.0 x16 adapter, HDCP, DirectX 11, 512MB, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; works along with Intel HD Graphics to support four independent monitors Some: AMD Radeon HD 6450 , PCI Express 2.0 x16 adapter, HDCP, DirectX 11, 1GB, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; works along with Intel HD Graphics to support four independent monitors													
Disk	SATA 6.0Gb/s 7200 rpm													
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1													
SATA cables	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector on planar													
eSATA port	None													
Media reader	Some: 25-in-1 media reader, internal USB 2.0													
Chipset	Intel Q67 Express Chipset Platform Controller Hub [PCH] (PCI Express 2.0 x1, ethernet MAC, PCI, and USB), SMSC® 5627P Super I/O													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Six USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)													
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports)													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®													
Intel AMT	Intel Active Management Technology 7.1 (Intel AMT 7.1)													
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo													
Power supply	280 watts with variable speed fan, autosensing, 85% PSU													
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Handle on top front • Power button on top handle • Toolless cover removal • Tilted front I/O for easy access • Toolless disk, optical drive removal • Toolless adapter retention 													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk													
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3													
Limited Warranty ¹²	3-years, limited onsite service²⁴ , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available													

- Security**
- Security chip (see information on left)
 - Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)
 - Power-on password
 - Hard disk password
 - Boot sequence control
 - Boot without keyboard and mouse
 - Serial port I/O control
 - Individual USB port disablement
 - Some: Chassis intrusion switch

EPEAT™ Gold rating
 ENERGY STAR® 5.0-compliant
 GREENGUARD® certified
 RoHS-compliant

Supports ThinkVantage Technologies

For compatible accessories, please go to O-M91P sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information

US models announced December 13, 2011; previous models on November 8, 2011

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(MAST1-19) December 2011

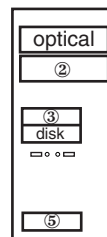
ThinkCentre® M91p Tower (7052) - TopSeller - IV

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	Media reader	ENERGY STAR 5.0	Intel vPro	Global Educ	Win7 preload	Ann date (mm/dd/yy)
7052-C9U	4x5	Core i7-2600	4GBx1 1333MHz	1TB 7200	Bay	DVD±RW	Intel HD	None	None	ES50	vPro	N N	Pro 64	02/21/12

- Next Generation Intel platform with latest Intel vPro Technology and Intel Active Management Technology
- This small and medium business (SMB) model is part of the US TopSeller Program
- This model has a 3-year limited warranty
- This system is Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										Preloaded operating system²⁰			
Processor	Intel® Core™ i7-2600 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Virtualization Technology, Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller										Genuine Windows® 7 Professional 64			
Implementation	Processor in LGA1155 socket										Preloaded applications¹⁴ (only some listed)			
Memory	16GB max ⁷ , UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> ● Rescue and Recovery™ ● ThinkVantage® System Update ● ThinkVantage Power Manager ● ThinkVantage Toolbox ● Norton™ Internet Security 2011 (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Microsoft® Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 			
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>													
DP dongle	None													
Disk	SATA 6.0Gb/s 7200 rpm													
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1													
SATA cables	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector on planar													
eSATA port	None													
Media reader	None													
Chipset	Intel Q67 Express Chipset Platform Controller Hub [PCH] (PCI Express 2.0 x1, ethernet MAC, PCI, and USB), SMSC® 5627P Super I/O													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Six USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)													
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports)													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®													
Intel AMT	Intel Active Management Technology 7.1 (Intel AMT 7.1)													
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo													
Power supply	280 watts with variable speed fan, autosensing, 85% PSU													
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 6.9" W X 17.4" D X 16.3" H ● 175mm W X 442mm D X 414mm H ● 24.2 lb (11.0 kg) in maximum configuration ● Handle on top front ● Power button on top handle ● Toolless cover removal ● Tilted front I/O for easy access ● Toolless disk, optical drive removal ● Toolless adapter retention 													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk										Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement 			
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3													
											EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant			
											Supports ThinkVantage Technologies			
											For compatible accessories, please go to O-M91P sheet; For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty ¹² 3-years, limited onsite service²⁴ , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available														



See footnotes for important warranty information
US model announced February 21, 2012

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(MAST1-21) March 2012

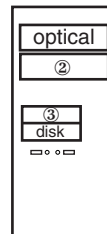
ThinkCentre® M91p Tower (4524)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.0	Intel vPro	Global Educ	Win7 preload
4524-A8U	4x4	Core i7-2600	4GBx1 1333MHz	500G 7200	None	DVD±RW	Intel HD	None	ES50	vPro	N N	Pro 64
4524-A2U	4x4	Core i5-2400	2GBx1 1333MHz	320G 7200	None	DVD±RW	Intel HD	None	ES50	vPro	N N	Pro 32
4524-C8U	4x4	Core i7-2600	4GBx1 1333MHz	500G 7200	None	DVD±RW	HD 5450	None	ES50	vPro	N N	Pro 64
4524-E1U	4x4	Core i5-2500	2GBx1 1333MHz	320G 7200	None	DVD±RW	Intel HD	None	ES50	vPro	N N	Pro 64
4524-E3U	4x4	Core i7-2600	4GBx1 1333MHz	320G 7200	None	DVD±RW	Intel HD	None	ES50	vPro	N N	Pro 64
4524-A7U	4x4	Core i5-2400	4GBx1 1333MHz	500G 7200	None	DVD±RW	Intel HD	None	ES50	vPro	N N	Pro 64

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- These models have a 3-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>		<p>Preloaded operating system</p> <p>Some: Genuine Windows® 7 Professional 32</p> <p>Some: Genuine Windows 7 Professional 64</p> <p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> • Rescue and Recovery™ • ThinkVantage® System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
Processor	<p>Intel® Core™ i5-2400 Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.4GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i5-2500 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i7-2600 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology</p>		
Implementation	Processor in LGA1155 socket		
Memory	16GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets		
Graphics	<p>Some: Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz;</i></p> <p>Some: AMD Radeon™ HD 5450, PCI Express® 2.0 x16 adapter, HDCP, DirectX 11, 512MB, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz; 2048x1536 @85Hz (VGA via DVI-to-VGA dongle);</i> works along with Intel HD Graphics 2000 to support four independent monitors</p>		
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1		
SATA cables	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector on planar		
eSATA port	None		
Media reader	None		
Chipset	Intel Q67 Express Chipset Platform Controller Hub [PCH] (PCI Express 2.0 x1, ethernet MAC, PCI, and USB), SMSC® 5627P Super I/O		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Six USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®		
Intel AMT	Intel Active Management Technology 7.1 (Intel AMT 7.1)		
Modem	None		
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo		
Power supply	280 watts with variable speed fan, autosensing, 85% PSU		
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Handle on top front • Power button on top handle • Toolless cover removal • Tilted front I/O for easy access • Toolless disk, optical drive removal • Toolless adapter retention 		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk		
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		



See footnotes for important warranty information

US model announced March 6, 2012; previous models on March 1, 2011

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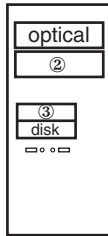
(MAST1-2) March 2012

ThinkCentre® M91p Tower (7034) - GMP

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.0	Intel vPro	Global (G) GMP (P)	Win7 preload
7034-A1U	4x4	Core i5-2400	2GBx1 1333MHz	250G 7200	None	DVD±RW	Intel HD	None	ES50	vPro	G P	Pro 32

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- This model is part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- This system is Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>							Preloaded operating system				
Processor	Intel® Core™ i5-2400 Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.4GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology							Genuine Windows® 7 Professional 32				
Implementation	Processor in LGA1155 socket							Preloaded applications (only some listed)				
Memory	16GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets							<ul style="list-style-type: none"> • Rescue and Recovery™ • ThinkVantage® System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>											
DP dongle	None											
Disk	SATA 6.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1											
SATA cables	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel Q67 Express Chipset Platform Controller Hub [PCH] (PCI Express® 2.0 x1, ethernet MAC, PCI, and USB), SMSC® 5627P Super I/O											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Six USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
Speaker	Internal speaker for business audio											
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®											
Intel AMT	Intel Active Management Technology 7.1 (Intel AMT 7.1)											
Modem	None											
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo											
Power supply	280 watts with variable speed fan, autosensing, 85% PSU											
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Handle on top front • Power button on top handle • Toolless cover removal • Tilted front I/O for easy access • Toolless disk, optical drive removal • Toolless adapter retention 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk											
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3							Security <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement 				
								EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant				
								Supports ThinkVantage Technologies				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available							For compatible accessories, please go to O-M91P sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information
 US model announced March 1, 2011

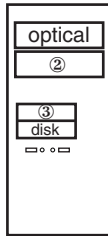
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 (MAST1-5) March 2011

ThinkCentre® M91p Tower (7034) - GMP - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Chassis intr switch	ENERGY STAR 5.0	Intel vPro	Global (G) GMP (P)	Win7 preloaded
7034-A2U	4x4	Core i5-2400	4GBx1 1333MHz	320G 7200	None	DVD±RW	Intel HD	None	ES50	vPro	G P	Pro 64

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- This model is part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- This system is Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>							Preloaded operating system				
Processor	Intel® Core™ i5-2400 Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.4GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology							Genuine Windows® 7 Professional 64				
Implementation	Processor in LGA1155 socket							Preloaded applications (only some listed)				
Memory	16GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets							<ul style="list-style-type: none"> • Rescue and Recovery™ • ThinkVantage® System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe Reader® • Skype™ for Windows • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>											
DP dongle	None											
Disk	SATA 6.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1											
SATA cables	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector on planar											
eSATA port	None											
Media reader	None											
Chipset	Intel Q67 Express Chipset Platform Controller Hub [PCH] (PCI Express® 2.0 x1, ethernet MAC, PCI, and USB), SMSC® 5627P Super I/O											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Six USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
Speaker	Internal speaker for business audio											
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®											
Intel AMT	Intel Active Management Technology 7.1 (Intel AMT 7.1)											
Modem	None											
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo logo											
Power supply	280 watts with variable speed fan, autosensing, 85% PSU											
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Handle on top front • Power button on top handle • Toolless cover removal • Tilted front I/O for easy access • Toolless disk, optical drive removal • Toolless adapter retention 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk											
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3							Security <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement 				
								EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant				
								Supports ThinkVantage Technologies				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available							For compatible accessories, please go to O-M91P sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information
US model announced May 10, 2011

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(MAST1-15) May 2011

Memory

Eco Ultra Small 0266/5067/7516 use notebook memory:

2GB PC3-10600 DDR3 L-H SODIMM	55Y3710	ann 03/02/10
2GB PC3-10600 DDR3 L-H SODIMM (25Pack)	57Y4416	ann 03/02/10
4GB PC3-10600 DDR3 L-H SODIMM	55Y3711	ann 03/02/10

Small 4518/4480/7033, and

Tower 4524/7052/7034 use desktop memory:

2GB PC3-10600 DDR3 Low-Halogen UDIMM	57Y4390	ann 01/12/10
2GB PC3-10600 DDR3 L-H UDIMM (25-Pack)	57Y4420	ann 01/12/10
4GB PC3-10600 DDR3 UDIMM	0A36527	ann 04/12/11

More information at

www.lenovo.com/support/desktopmemorycompatibility

Optical

All:

DVD-ROM DL SATA 1.5Gb/s 16X-48X Max ⁴	41N5618	ann 09/26/06
Lenovo® Super Multi-Burner SATA Drive	0A65618	ann 08/23/11

Tower 4524/7052/7034 support:

Blu-ray™ Burner SATA 1.5Gb/s Drive	45K1675	ann 03/31/09
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Storage and removable storage

250GB SATA 3.0Gb/s Disk (7200 rpm)	41N3015	ann 01/24/06
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	ann 11/06/07
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918	ann 08/19/08
300GB SATA 3.0Gb/s Disk (10000 rpm) 2.5"	43R2031	ann 03/31/09
USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
USB 3.0 Secure 500GB Hard Drive	0A65619	ann 11/29/11
USB 3.0 Secure 750GB Hard Drive	0A65616	ann 11/29/11
USB 3.0 Secure 1TB Hard Drive	0A65621	ann 08/28/12
Slim USB Portable DVD Burner	0A33988	ann 06/14/11

Graphics

Small 4518/4480/7033 support Low Profile:

NVIDIA® Quadro® 256MB NVS 295 (2-DP) ⁶⁷	45K1669	ann 04/21/09
NVIDIA Quadro 512MB NVS 300 DMS59 (2-DVI or 2-VGA via DMS59 dongles) ⁶⁷	0A36528	ann 04/26/11
NVIDIA Quadro 512MB 400 (DP, DVI-I with a DVI to VGA converter) ⁶⁷	0A36535	ann 06/28/11
NVIDIA Quadro 1GB 600 (DP, DVI-I with a DVI to VGA converter) ⁶⁷	0A36183	ann 10/26/10
NVIDIA GeForce® 310 512MB DMS59 (2-DVI or 2-VGA via DMS59 dongles) ⁶⁷	57Y4167	ann 03/02/10
AMD 7450 1GB (DP, DVI-I with a DVI to VGA converter) ⁶⁷	0A36538	ann 05/29/12
NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann 01/29/13

Tower 4524/7052/7034 support 75 watts max:

NVIDIA Quadro 256MB NVS 295 (2-DP) ⁶⁷	45K1669	ann 04/21/09
NVIDIA Quadro 512MB NVS 300 DMS59 ⁶⁷	0A36528	ann 04/26/11
NVIDIA Quadro 512MB NVS 450 (4-DP or 4-DVI-D via DP to DVI-D cable)	57Y4398	ann 01/19/10
NVIDIA Quadro 512MB 400 (DP, DVI-I) ⁶⁷	0A36535	ann 06/28/11
NVIDIA Quadro 1GB 600 (DP, DVI-I) ⁶⁷	0A36183	ann 10/26/10
NVIDIA GeForce 310 512MB DMS59 ⁶⁷	57Y4167	ann 03/02/10
AMD 7450 1GB (DP, DVI-I) ⁶⁷	0A36538	ann 05/29/12
NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann 01/29/13

⁶⁷ Simultaneously use the graphic card monitor ports along with the systems integrated monitor ports when Multi-Monitor Support is enabled in BIOS Setup.

More information at www.lenovo.com/support/graphiccards

Keyboard

Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Preferred Pro Full Size PS/2 Keyboard	31P7415	ann 06/04/02
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Ultraslim Plus Wireless Keyboard and Mouse ⁵²	0A34032	ann 04/05/11
ThinkPad® USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo USB Fingerprint Keyboard	73P4730	ann 02/22/05

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo ScrollPoint® Mouse(USB, Optical)	31P7405	ann 08/27/02
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
Lenovo Wireless Laser Mouse ⁵²	0A36188	ann 12/20/11
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09
Lenovo Optical Mouse A6010	55Y6255	
Lenovo Mini Optical Mouse M20B	55Y2091	
Lenovo Wireless Mouse N30B	55Y9360	

More information at www.lenovo.com/support/mice

Multimedia

ThinkPad In-Ear Headphones with mic ⁶⁰	57Y4488	ann 01/07/10
Lenovo Mini Speakers M220	55Y2033	ann 01/07/10
Lenovo Headphone P550	55Y2065	

⁶⁰ Has a 1.2 meter (3.9-foot) cable. Best when systems are in close proximity. Example: SFF placed on a desk.

Security

Kensington® MicroSaver® Cable Lock ⁵⁶	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann 09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann 08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Monitors

ThinkVision® L1711p 17" (VGA, DVI-D)	5047HB2	ann 10/20/09
ThinkVision LT1952p Wide 19" (VGA, DP, DVI-D) ⁶⁹	2448MB6	ann 09/13/11
ThinkVision L2250p Wide 22" (VGA, DVI-D)	2572HB6	ann 10/20/09
ThinkVision L2251x Wide 22" (VGA, DP)	2578HB6	ann 10/20/09
ThinkVision LT2252p Wide 22" (VGA, DP, DVI-D) ⁶⁹	2572MB6	ann 09/13/11
ThinkVision LT2452p Wide 24" (VGA, DP, DVI-D) ⁶⁹	4420MB2	ann 09/13/11

⁶⁹ DisplayPort cable is not included; use optional DisplayPort to DisplayPort Monitor Cable (0A36537).

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

Eco Ultra Small 0266/5067 support:

Lenovo Vertical PC and Monitor Stand II	41R4474	ann 01/27/09
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All:

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
DisplayPort™ to Single-link DVI-D Cable	45J7915	ann 08/05/08
DisplayPort to VGA Monitor Cable	57Y4393	ann 08/04/09
DisplayPort to DisplayPort Monitor Cable	0A36537	ann 09/13/11
Lenovo USB Soundbar	0A36190	ann 05/01/12
Kensington MicroSaver Cable Lock ⁵⁶	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann 09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann 08/24/10
ThinkCentre Extend Arm	57Y4352	ann 07/06/10

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems

Lenovo ThinkCentre M92/M92p Tiny, Small, Tower



Lenovo ThinkCentre M92/M92p Tiny with Optional Serial Port or DisplayPort



Lenovo ThinkCentre M92/M92p Tiny with Floor Stand



Lenovo ThinkCentre M92/M92p Small



Lenovo ThinkCentre M92/M92p Tiny with VESA Mount



Lenovo ThinkCentre M92/M92p Tower



Lenovo ThinkCentre M92/M92p Tiny with External Optical Box

ThinkCentre® M92 Tiny (3234) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	SATA disk GB rpm	External optical	Graphics	PCIe Mini Card WLAN / BT	Optional Chassis port intr switch	Floor stand	VESA mount	ENERGY STAR 5.2	Intel vPro	Win7 Global preload (mm/dd/yy)	Ann date (mm/dd/yy)
3234-A6U	i3-2120T	4GBx1	500G 5400	None	HD 2000	None	None	Stand	None	ES52	None	Pro 64	06/05/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											
Processor	Intel® Core™ i3-2120T Processor (2 cores / 4 threads, 2.6GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology											
Implementation	Processor in LGA1155 socket											
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											
Graphics	Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>											
DP dongle	None											
Disk	SATA 3.0Gb/s, 2.5" Wide, 5400 rpm											
External optical	None											
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset											
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar											
eSATA port	None											
Chipset	Intel Q77 Express Chipset											
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)											
PCIe Mini Card	One PCI Express® Mini Card slot											
PCIe WLAN	None											
Bluetooth	None											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®											
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)											
Modem	None											
Security chip	Trusted Platform Module (TPM1.2-compliant)											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Floor Stand	System floor stand for vertical orientation											
VESA mount	None											
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU											
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box) 											
	Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate 											
	Security <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) 											
	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies											
Limited Warranty	1-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet											

See footnotes for important warranty information
US model announced June 5, 2012

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(MHTN1-1) June 2012

ThinkCentre® M92 Tiny (3229) - GMP (Thin Client)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB	External rpm	optical Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intr switch	Floor stand	VESA mount	ENERGY STAR 5.2	Intel vPro	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
3229-A1U	G460	2GBx1	8G SSD	None	Intel HD	None	Serial	None	None	None	ES52	None	G P	Emb 32	07/10/12
3229-A2U	G465	2GBx1	8G SSD	None	Intel HD	None	Serial	None	None	None	ES52	None	G P	Emb 32	01/08/13

•Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system			
Processor	Intel® Celeron® G460 Processor (1 core / 2 threads, 1.8GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Celeron G465 Processor (1 core / 2 threads, 1.9GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Processor in LGA1155 socket											Genuine Windows® 7 Embedded 32 Preloaded applications (only some listed) <ul style="list-style-type: none"> • Adobe® Reader® • Adobe Flash® Player • Citrix® Receiver • IIS Web Server • Microsoft® Management Console • Microsoft Silverlight • Remote Desktop Protocol • ThinPrint .print Client • TightVNC Viewer • VMware® View Client • vWorkspace • Windows Media Player 			
Implementation	Processor in LGA1155 socket														
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), <i>System automatically clocks down for processors with 1066MHz DDR3 memory controller</i>														
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>														
DP dongle	None														
Disk	Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" Wide														
External optical	None														
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset														
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar														
eSATA port	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	None														
Bluetooth	None														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)														
Keyboard	None														
Mouse	None														
Floor Stand	None														
VESA mount	None														
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU														
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box) 											Security <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) 			
												EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold GREENGUARD® certified RoHS-compliant			
												Supports ThinkVantage Technologies			
												For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

See footnotes for important warranty information
US models announced July 10, 2012 or January 8, 2013

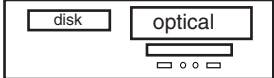
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(MHTN1-23) January 2013

ThinkCentre® M92 Small (3207)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Intel vPro Global	Win7 preload (mm/dd/yy)	Ann date (mm/dd/yy)
3207-A8U	4x3	i3-2120	2GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2000	None	None	Stand	ES52	None None	Pro 32	06/05/12
3207-A9U	4x3	i3-2120	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2000	None	None	Stand	ES52	None None	Pro 32	06/05/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

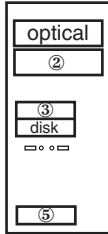
Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system		
Processor	Intel® Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology											Genuine Windows® 7 Professional 32		
Implementation	Processor in LGA1155 socket											Ready to install applications (only some listed)		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets											<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager 		
Graphics	Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>											Preloaded applications (only some listed)		
DP dongle	None											<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 		
Disk	SATA 6.0Gb/s 7200 rpm													
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support													
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector													
eSATA port	None													
Media reader	None													
Chipset	Intel Q77 Express Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)													
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®													
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)													
Modem	None													
Security chip	Trusted Platform Module (TPM1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Floor Stand	System floor stand for vertical orientation													
Power supply	240 watts, autosensing, 85% PSU													
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader													
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3													
														
												Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 		
												EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant		
												Supports ThinkVantage Technologies		
												For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													

See footnotes for important warranty information
US models announced June 5, 2012

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(MHTN1-5) June 2012

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	PCIe Mini Card WLAN / BT	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro Global	Win7 preload (mm/dd/yy)	Ann date (mm/dd/yy)
3208-A8U	4x5	i3-2130	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2000	None	None	ES52	None None	Pro 64	06/05/12
3208-A9U	4x5	i3-2120	2GBx1	250G 7200	Bay	DVD±RW	None	HD 2000	None	None	ES52	None None	Pro 32	06/05/12
3208-C5U	4x5	i3-3240	4GBx2	1TB 7200	Bay	DVD±RW	Media	HD 7450	Intel 2230 + BT	Switch	ES52	None None	Pro 64	11/06/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										Preloaded operating system			
Processor	<p>Intel® Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller</p>										<p><i>Some:</i> Genuine Windows® 7 Professional 32</p> <p><i>Some:</i> Genuine Windows 7 Professional 64</p>			
Implementation	Processor in LGA1155 socket										Ready to install applications (only some listed)			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager 			
Graphics	<p><i>Some:</i> Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz</p> <p><i>Some:</i> AMD Radeon™ HD 7450, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors</p>										Preloaded applications (only some listed)			
DP dongle	None										<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 			
Disk	SATA 6.0Gb/s 7200 rpm													
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support													
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector													
eSATA port	None													
Media reader	<i>Some:</i> 29-in-1 media reader, internal USB 2.0													
Chipset	Intel Q77 Express Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)													
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector													
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2													
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®										Security			
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)										<ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) 			
Modem	None													
Security chip	Trusted Platform Module (TPM1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Power supply	280 watts, autosensing, 85% PSU													
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 													
Bay	<p>Bay 1: 5.25", 1.6" high, access, std optical</p> <p>Bay 2: 5.25", 1.6" high, access, open</p> <p>Bay 3: 3.5", 1" high, access, opt reader</p> <p>Bay 4: 3.5", 1" high, no access, std disk</p> <p>Bay 5: 3.5", 1" high, no access, opt disk</p>										<p>EPEAT™ Gold rating</p> <p>ENERGY STAR® 5.2-compliant</p> <p>ULE Gold</p> <p>Cisco EnergyWise compatible</p> <p>GREENGUARD® certified</p> <p>RoHS-compliant</p>			
Slot	<p>Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max)</p> <p>Slot 2: half-length, full-height, PCIe 2.0 x1</p> <p>Slot 3: half-length, full-height, 32-bit PCI 2.3</p> <p>Slot 4: half-length, full-height, 32-bit PCI 2.3</p>										<p>Supports ThinkVantage Technologies</p> <p>For compatible accessories, please go to O-M92 sheet;</p> <p>For Lenovo service upgrade options, please go to S-TC sheet</p>			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													

See footnotes for important warranty information
 US models announced June 5 or November 6, 2012
 < US model withdrawn effective February 2013

ThinkCentre® M92p Tiny (2121) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	ENERGY STAR 5.2	Intel vPro Global	Win7 preload	Ann date (mm/dd/yy)
2121-A1U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	DP	None	None	Mount	ES52	vPro	Pro 64	07/10/12
2121-A2U	i5-3470T	4GBx1	500G 7200	None	HD 2500	None	DP	None	Stand	Mount	ES52	vPro	Pro 64	07/10/12
2121-A3U	i5-3470T	4GBx1	320G 7200	None	HD 2500	None	DP	None	Stand	Mount	ES52	vPro	Pro 64	07/10/12
2121-A4U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	Serial	None	None	Mount	ES52	vPro	Pro 64	07/10/12
2121-A5U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 2230 + BT	None	None	None	Mount	ES52	vPro	Pro 64	07/10/12
2121-A6U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 2230 + BT	None	None	None	Mount	ES52	vPro	Pro 64	07/10/12
2121-A7U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 2230 + BT	None	None	Stand	Mount	ES52	vPro	Pro 64	07/10/12
⚡ 2121-B1U	i5-3470T	4GBx1	500G 7200	None	HD 2500	None	DP	None	Stand	Mount	ES52	vPro	Pro 64	07/10/12
⚡ 2121-C8U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 2230 + BT	DP	None	None	Mount	ES52	vPro	Pro 64	08/14/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>	Preloaded operating system Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo Simple Tap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology	
Implementation	Processor in LGA1155 socket	
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>	
DP dongle	None	
Disk	SATA 3.0Gb/s, 2.5" Wide, 7200 rpm	
External optical	<i>Some:</i> Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in	
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset	
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar	
eSATA port	None	
Chipset	Intel Q77 Express Chipset	
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
IEEE 1394	None	
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Modem	None	
Security chip	Trusted Platform Module (TPM1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Floor Stand	<i>Some:</i> System floor stand for vertical orientation	
VESA mount	Supports VESA 75mm and 100mm mount standard	
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU	
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box) 	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
 US models announced July 10 or August 14, 2012

⚡ US models withdrawn effective September or November 2012

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 (MHTN1-19) August 2012

ThinkCentre® M92p Tiny (2121) - TopSeller (Thin Client)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	ENERGY STAR 5.2	Intel vPro Global	Win7 preload (mm/dd/yy)	Ann date (mm/dd/yy)
2121-B2U	i5-3470T	2GBx1	8G SSD	None	HD 2500	None	None	None	Stand	Mount	ES52	vPro	None	Emb 32 07/10/12
2121-B3U	i5-3470T	2GBx1	8G SSD	None	HD 2500	Intel 2230 + BT	None	None	Stand	Mount	ES52	vPro	None	Emb 32 07/10/12
2121-F3U	i5-3470T	2GBx1	8G SSD	None	HD 2500	Intel 105	DP	None	Stand	None	ES52	vPro	None	Emb 32 03/05/13

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										Preloaded operating system			
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology										Genuine Windows® 7 Embedded 32			
Implementation	Processor in LGA1155 socket										Preloaded applications (only some listed)			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)										<ul style="list-style-type: none"> • Adobe® Reader® • Adobe Flash® Player • Citrix® Receiver • IIS Web Server • Microsoft® Management Console • Microsoft Silverlight • Remote Desktop Protocol • ThinPrint .print Client • TightVNC Viewer • VMware® View Client • vWorkspace • Windows Media Player 			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>													
DP dongle	None													
Disk	Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" Wide													
External optical	None													
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset													
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar													
eSATA port	None													
Chipset	Intel Q77 Express Chipset													
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)													
PCIe Mini Card	One PCI Express® Mini Card slot													
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2													
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®													
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)													
Modem	None													
Security chip	Trusted Platform Module (TPM1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										Security			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										<ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) 			
Floor Stand	System floor stand for vertical orientation										EPEAT™ Gold rating			
VESA mount	<i>Some:</i> Supports VESA 75mm and 100mm mount standard										ENERGY STAR® 5.2-compliant			
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU										ULE Gold			
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box) 										GREENGUARD® certified			
											RoHS-compliant			
											Supports ThinkVantage Technologies			
											For compatible accessories, please go to O-M92 sheet;			
											For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													

See footnotes for important warranty information
 US models announced July 10, 2012 or March 5, 2013
 < US model withdrawn effective October 2012

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 (MHTN1-20) March 2013

ThinkCentre® M92p Tiny (2121) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	PCIe Mini Card WLAN / BT	Optional port	Intrusion switch	Floor stand	VESA mount	ENERGY STAR 5.2	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
2121-A9U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 2230 + BT	None	None	Stand	None	ES52	vPro	None	Win8 Pro64	10/23/12
2121-C4U	i5-3470T	4GBx1	500G 7200	None	HD 2500	None	None	None	Stand	None	ES52	vPro	None	Win8 Pro64	10/23/12
2121-C5U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 2230 + BT	None	None	None	Mount	ES52	vPro	None	Win8 Pro64	10/23/12
2121-C6U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	None	None	None	Mount	ES52	vPro	None	Win8 Pro64	10/23/12
2121-C9U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 105	DP	None	None	Mount	ES52	vPro	None	Win8 Pro64	10/23/12
2121-D3U	i5-3470T	4GBx1	500G 7200	None	HD 2500	None	DP	None	Stand	None	ES52	vPro	None	Win7 Pro64	10/23/12
2121-D4U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	None	DP	None	None	Mount	ES52	vPro	None	Win7 Pro64	10/23/12
2121-D5U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 105	DP	None	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
2121-D6U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 105	DP	None	None	Mount	ES52	vPro	None	Win7 Pro64	10/23/12
2121-D7U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 2230 + BT	DP	None	Stand	None	ES52	vPro	None	Win7 Pro64	10/23/12
2121-D8U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 2230 + BT	DP	None	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
2121-E1U	i5-3470T	4GBx1	180G SSD	None	HD 2500	Intel 105	DP	None	Stand	None	ES52	vPro	None	Win7 Pro64	11/20/12
2121-E2U	i5-3470T	4GBx1	180G SSD	DVD±RW	HD 2500	Intel 105	DP	None	None	Mount	ES52	vPro	None	Win8 Pro64	11/20/12
2121-E3U	i5-3470T	4GBx1	500G 5400	None	HD 2500	Intel 105	None	None	Stand	None	ES52	vPro	None	Win7 Pro64	11/20/12
2121-E4U	i5-3470T	4GBx1	500G 5400	None	HD 2500	Intel 105	DP	None	Stand	None	ES52	vPro	None	Win7 Pro64	11/20/12
2121-E5U	i5-3470T	4GBx1	500G 5400	DVD±RW	HD 2500	Intel 105	DP	None	None	Mount	ES52	vPro	None	Win7 Pro64	11/20/12
2121-E9U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 2230 + BT	None	None	Stand	None	ES52	vPro	None	Win7 Pro64	12/11/12
2121-F1U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 2230 + BT	None	None	None	Mount	ES52	vPro	None	Win7 Pro64	12/11/12
2121-F2U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 105	Serial	None	None	Mount	ES52	vPro	None	Win7 Pro64	12/25/12

⚠

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology
Implementation	Processor in LGA1155 socket
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>
DP dongle	None
Disk	<i>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide</i> <i>Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" Wide</i>
External optical	<i>Some: Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in</i>
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar
eSATA port	None
Chipset	Intel Q77 Express Chipset
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)
PCIe Mini Card	One PCI Express® Mini Card slot
PCIe WLAN	<i>Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1</i> <i>Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2</i>
Bluetooth	<i>Some: Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter</i>
Audio	High Definition (HD) Audio, Realtek® ALC662 codec
Speaker	Internal speaker for business audio
IEEE 1394	None
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)
Modem	None
Security chip	Trusted Platform Module (TPM1.2-compliant)

Preloaded operating system
<i>Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</i> <i>Some: Windows 8 Pro 64-bit</i>
Preloaded applications (only some listed)
- Windows 7 models
<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Adobe® Reader® • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
- Windows 8 models
<ul style="list-style-type: none"> • Lenovo® Support • Lenovo Companion • Norton™ Studio • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)
- All models
<ul style="list-style-type: none"> • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™
Security
<ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s)
EPEAT™ Gold rating
ENERGY STAR® 5.2-compliant
ULE Gold
Cisco EnergyWise compatible
GREENGUARD® certified
RoHS-compliant
Supports ThinkVantage Technologies
For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet

Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo
Floor Stand	<i>Some: System floor stand for vertical orientation</i>
VESA mount	<i>Some: Supports VESA 75mm and 100mm mount standard</i>
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box)
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available

See footnotes for important warranty information

US models announced October 23, November 20, December 11, or December 25, 2012

⚠ US models withdrawn effective November 2012

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(MHTN1-24) February 2013

ThinkCentre® M92p Tiny (3243)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	PCIe Mini Card WLAN / BT	Optional Chassis port intr switch	Floor stand	VESA mount	ENERGY STAR 5.2	Intel vPro Global	Win7 preload	Ann date (mm/dd/yy)
3243-A3U	i5-3470T	4GBx1	500G 5400	None	HD 2500	None	None	Stand	None	ES52	vPro	None	Pro 64 06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 1-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system	
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology											Genuine Windows® 7 Professional 64	
Implementation	Processor in LGA1155 socket											Ready to install applications (only some listed)	
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager 	
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>											Preloaded applications (only some listed)	
DP dongle	None											<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate 	
Disk	SATA 3.0Gb/s, 2.5" Wide, 5400 rpm												
External optical	None												
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset												
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar												
eSATA port	None												
Chipset	Intel Q77 Express Chipset												
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)												
PCIe Mini Card	One PCI Express® Mini Card slot												
PCIe WLAN	None												
Bluetooth	None												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®												
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)												
Modem	None												
Security chip	Trusted Platform Module (TPM1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	System floor stand for vertical orientation												
VESA mount	None												
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU												
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box) 											Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 	
												EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant	
												Supports ThinkVantage Technologies	
												For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet	
Limited Warranty	1-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												

See footnotes for important warranty information
US model announced June 5, 2012

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Type-model	Processor	Memory ⁸	SATA disk GB rpm	External optical	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intr switch	Floor stand	VESA mount	ENERGY STAR 5.2	Intel vPro Global	Win7 preload (mm/dd/yy)	Ann date (mm/dd/yy)
3238-A1U	i5-3470T	4GBx1	500G 5400	DVD±RW	HD 2500	None	None	None	None	Mount	ES52	vPro	Pro 64	06/05/12
3238-B5U	i5-3470T	4GBx1	500G 5400	None	HD 2500	None	None	None	None	None	ES52	vPro	Pro 64	06/05/12
3238-B6U	i5-3470T	4GBx1	320G 5400	None	HD 2500	None	None	None	Stand	None	ES52	vPro	Pro 64	06/05/12
3238-B7U	i5-3470T	4GBx1	500G 5400	None	HD 2500	None	None	None	Stand	None	ES52	vPro	Pro 32	06/05/12
3238-B8U	i5-3470T	2GBx1	320G 5400	None	HD 2500	None	None	None	Stand	Mount	ES52	vPro	Pro 32	06/05/12
3238-D9U	i5-3470T	4GBx1	500G 5400	None	HD 2500	None	USB	None	Stand	Mount	ES52	vPro	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										Preloaded operating system			
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology										Some: Genuine Windows® 7 Professional 32			
Implementation	Processor in LGA1155 socket										Some: Genuine Windows 7 Professional 64			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)										Ready to install applications (only some listed)			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>										<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager 			
DP dongle	None										Preloaded applications (only some listed)			
Disk	SATA 3.0Gb/s, 2.5" Wide, 5400 rpm										<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo Simple Tap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 			
External optical	Some: Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in													
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset													
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar													
eSATA port	None													
Chipset	Intel Q77 Express Chipset													
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)													
PCIe Mini Card	One PCI Express® Mini Card slot													
PCIe WLAN	None													
Bluetooth	None													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®													
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)													
Modem	None													
Security chip	Trusted Platform Module (TPM1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Floor Stand	Some: System floor stand for vertical orientation													
VESA mount	Some: Supports VESA 75mm and 100mm mount standard													
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU													
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box) 										Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 			
											EPEAT™ Gold rating			
											ENERGY STAR® 5.2-compliant			
											ULE Gold			
											Cisco EnergyWise compatible			
											GREENGUARD® certified			
											RoHS-compliant			
											Supports ThinkVantage Technologies			
											For compatible accessories, please go to O-M92 sheet;			
											For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													

ThinkCentre® M92p Tiny (3238) - II

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	PCIe Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Security Cable	Floor stand	VESA mount	ENERGY STAR 5.2	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
3238-F5U	i5-3470T	4GBx1	500G 7200	None	Intel 2230 + BT	None	None	None	None	Mount	ES52	vPro	None	Pro 64	06/19/12
3238-F6U	i5-3470T	4GBx1	500G 7200	None	Intel 105	None	None	None	None	Mount	ES52	vPro	None	Pro 64	06/19/12
3238-F7U	i5-3470T	4GBx1	500G 7200	None	Intel 105	None	None	None	Stand	Mount	ES52	vPro	None	Pro 64	06/19/12
3238-F8U	i5-3470T	4GBx1	500G 7200	DVD±RW	Intel 2230 + BT	None	None	None	None	Mount	ES52	vPro	None	Pro 64	06/19/12
3238-F9U	i5-3470T	4GBx1	500G 7200	None	Intel 2230 + BT	None	None	None	Stand	Mount	ES52	vPro	None	Pro 64	06/19/12
⊗ 3238-K3U	i5-3470T	4GBx1	500G 7200	None	None	DP	None	None	Stand	Mount	ES52	vPro	None	Pro 64	06/19/12
3238-E5U	i5-3470T	4GBx1	500G 7200	None	None	None	None	None	None	Mount	ES52	vPro	None	Pro 64	07/10/12
3238-E8U	i5-3470T	4GBx1	320G 7200	DVD±RW	None	None	None	None	None	Mount	ES52	vPro	None	Pro 64	07/10/12
3238-E9U	i5-3470T	4GBx1	320G 7200	None	None	None	None	None	None	Mount	ES52	vPro	None	Pro 64	07/10/12
3238-F1U	i5-3470T	4GBx1	320G 7200	None	None	None	None	None	Stand	None	ES52	vPro	None	Pro 64	07/10/12
3238-F2U	i5-3470T	2GBx1	320G 7200	None	None	None	None	None	Stand	None	ES52	vPro	None	Pro 64	07/10/12
⊗ 3238-P6U	i5-3470T	4GBx2	180G SSD	DVD±RW	Intel 2230 + BT	None	Switch	Cable	None	Mount	ES52	vPro	None	Pro 64	11/06/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>	Preloaded operating system Genuine Windows® 7 Professional 64
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology	
Implementation	Processor in LGA1155 socket	Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>	Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
DP dongle	None	
Disk	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" Wide	Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)
External optical	<i>Some:</i> Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in	
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset	
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar	
eSATA port	None	
Chipset	Intel Q77 Express Chipset	
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
IEEE 1394	None	
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Modem	None	
Security chip	Trusted Platform Module (TPM1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Floor Stand	<i>Some:</i> System floor stand for vertical orientation	
VESA mount	<i>Some:</i> Supports VESA 75mm and 100mm mount standard	
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU	
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box) 	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
US models announced June 19, July 10, or November 6, 2012
⊗ US models withdrawn effective October 2012 or February 2013

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(MHTN1-17) November 2012

ThinkCentre® M92p Tiny (3238) - Thin Client

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	SATA disk GB rpm	External optical	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intr switch	Floor stand	VESA mount	ENERGY STAR 5.2	Intel vPro	Global	Win7 preload (mm/dd/yy)	Ann date (mm/dd/yy)
3238-K4U	i5-3470T	2GBx1	8G SSD	None	HD 2500	None	None	None	Stand	Mount	ES52	vPro	None	Emb 32	07/10/12
3238-R6U	i5-3470T	2GBx1	8G SSD	None	HD 2500	Intel 105	DP	None	Stand	None	ES52	vPro	None	Emb 32	03/05/13
3238-R7U	i5-3470T	2GBx1	8G SSD	None	HD 2500	Intel 2230 + BT	None	None	Stand	None	ES52	vPro	None	Emb 32	03/05/13

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system			
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology											Genuine Windows® 7 Embedded 32			
Implementation	Processor in LGA1155 socket											Preloaded applications (only some listed)			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											<ul style="list-style-type: none"> ● Adobe® Reader® ● Adobe Flash® Player ● Citrix® Receiver ● IIS Web Server ● Microsoft® Management Console ● Microsoft Silverlight ● Remote Desktop Protocol ● ThinPrint .print Client ● TightVNC Viewer ● VMware® View Client ● vWorkspace ● Windows Media Player 			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>														
DP dongle	None														
Disk	Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" Wide														
External optical	None														
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset														
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar														
eSATA port	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	<i>Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1</i> <i>Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2</i>														
Bluetooth	<i>Some: Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter</i>														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Floor Stand	System floor stand for vertical orientation														
VESA mount	<i>Some: Supports VESA 75mm and 100mm mount standard</i>														
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU														
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box) 											Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 			
												EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold GREENGUARD® certified RoHS-compliant			
												Supports ThinkVantage Technologies			
												For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

See footnotes for important warranty information
US models announced July 10, 2012 or March 5, 2013

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(MHTN1-21) March 2013

ThinkCentre® M92p Tiny (3238) - Windows 8

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	SATA disk GB rpm	External optical	Graphics	PCle Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	ENERGY STAR 5.2	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3238-K1U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 2230 + BT	None	None	None	Mount	ES52	vPro	None	Win8 Pro64	10/23/12
3238-K2U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 2230 + BT	None	None	Stand	None	ES52	vPro	None	Win8 Pro64	10/23/12
3238-L1U	i5-3470T	4GBx1	320G 7200	DVD±RW	HD 2500	Intel 105	DP	None	None	Mount	ES52	vPro	None	Win8 Pro64	10/23/12
3238-L2U	i5-3470T	4GBx1	320G 7200	None	HD 2500	None	DP	None	None	Mount	ES52	vPro	None	Win8 Pro64	10/23/12
3238-L4U	i5-3470T	4GBx1	320G 5400	None	HD 2500	None	None	None	None	Mount	ES52	vPro	None	Win7 Pro64	10/23/12
3238-L5U	i5-3470T	4GBx1	320G 5400	DVD±RW	HD 2500	None	None	None	Stand	Mount	ES52	vPro	None	Win7 Pro64	10/23/12
3238-L6U	i5-3470T	2GBx1	500G 5400	None	HD 2500	None	None	None	Stand	None	ES52	vPro	None	Win7 Pro64	10/23/12
3238-L7U	i5-3470T	4GBx1	500G 7200	None	HD 2500	None	None	None	None	Mount	ES52	vPro	None	Win7 Pro64	10/23/12
3238-M3U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 2230 + BT	None	None	Stand	None	ES52	vPro	None	Win7 Pro64	10/23/12
3238-M4U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 105	None	None	Stand	None	ES52	vPro	None	Win7 Pro64	10/23/12
3238-M5U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 105	None	None	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3238-M6U	i5-3470T	4GBx1	500G 7200	DVD±RW	HD 2500	Intel 2230 + BT	None	None	Stand	Mount	ES52	vPro	None	Win7 Pro64	10/23/12
3238-M7U	i5-3470T	4GBx1	500G 7200	None	HD 2500	Intel 2230 + BT	None	None	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3238-M8U	i5-3470T	4GBx1	500G 7200	None	HD 2500	None	None	None	Stand	None	ES52	vPro	None	Win7 Pro64	10/23/12
3238-M9U	i5-3470T	4GBx1	500G 5400	None	HD 2500	None	None	None	Stand	None	ES52	vPro	None	Win7 Pro64	10/23/12
3238-Q2U	i5-3470T	4GBx1	180G SSD	None	HD 2500	Intel 105	DP	None	None	Mount	ES52	vPro	None	Win7 Pro64	11/20/12
3238-Q3U	i5-3470T	4GBx1	180G SSD	DVD±RW	HD 2500	Intel 105	DP	None	None	Mount	ES52	vPro	None	Win7 Pro64	11/20/12

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>	Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 reinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology	
Implementation	Processor in LGA1155 socket	Preloaded applications (only some listed) - Windows 7 models <ul style="list-style-type: none">ThinkVantage® Product RecoveryThinkVantage Communication UtilityAdobe® Reader®Microsoft Office 2010 preloaded; purchase product key to activateCorel® Burn.Now™ (DVD±RW)Corel DVD MovieFactory® (DVD±RW)
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>	- Windows 7 models <ul style="list-style-type: none">Lenovo® SupportLenovo CompanionLenovo Cloud StorageAccuWeatherEvernote®Microsoft Office 2013 preloaded; purchase product key to activateCyberlink Power2Go (DVD±RW)Cyberlink PowerProducer (DVD±RW)
DP dongle	None	
Disk	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" Wide	- All models <ul style="list-style-type: none">ThinkVantage System UpdateLenovo Solution CenterView Management UtilityNorton™ Internet Security (30 days of virus definitions)Skype™
External optical	<i>Some:</i> Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in	
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset	Security <ul style="list-style-type: none">Security chip (see information on left)Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)Power-on passwordAdministrator passwordHard disk passwordBoot sequence controlBoot without keyboard and mouseIndividual USB port disablementChassis intrusion switch on selected model(s)
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar	
eSATA port	None	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant
Chipset	Intel Q77 Express Chipset	
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	Supports ThinkVantage Technologies
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)	
PCle Mini Card	One PCI Express® Mini Card slot	For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet
PCle WLAN	<i>Some:</i> 11b/g/n wireless, PCle Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 <i>Some:</i> 11b/g/n wireless, PCle Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	Limited Warranty 3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
IEEE 1394	None	
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Modem	None	
Security chip	Trusted Platform Module (TPM1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Floor Stand	<i>Some:</i> System floor stand for vertical orientation	
VESA mount	<i>Some:</i> Supports VESA 75mm and 100mm mount standard	
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU	
Machine	<ul style="list-style-type: none">Business black color; metal case7.1" W X 7.2" D X 1.4" H179mm W X 182mm D X 34.5mm H9.1 lb (4.1 kg) in maximum configuration (including External Optical Box)	

See footnotes for important warranty information
US models announced October 23 or November 20, 2012

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(MHTN1-25) February 2013

ThinkCentre® M92p Tiny (3237) - GMP

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	SATA disk GB rpm	External optical	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intr switch	Floor stand	VESA mount	ENERGY STAR	Intel 5.2 vPro	Global (G) GMP (P)	Win7 preload(mm/dd/yy)	Ann date
3237-A1U	i5-3470T	4GBx1	320G 5400	DVD±RW	HD 2500	None	None	None	None	Mount	ES52	vPro	G P	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system			
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology											Genuine Windows® 7 Professional 64			
Implementation	Processor in LGA1155 socket											Ready to install applications (only some listed)			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager 			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>											Preloaded applications (only some listed)			
DP dongle	None											<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 			
Disk	SATA 3.0Gb/s, 2.5" Wide, 5400 rpm														
External optical	Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in														
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset														
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar														
eSATA port	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	None														
Bluetooth	None														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Floor Stand	None														
VESA mount	Supports VESA 75mm and 100mm mount standard														
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU														
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 7.1" W X 7.2" D X 1.4" H ● 179mm W X 182mm D X 34.5mm H ● 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box) 											Security			
												<ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 			
												EPEAT™ Gold rating			
												ENERGY STAR® 5.2-compliant			
												ULE Gold			
												Cisco EnergyWise compatible			
												GREENGUARD® certified			
												RoHS-compliant			
												Supports ThinkVantage Technologies			
												For compatible accessories, please go to O-M92 sheet;			
												For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

See footnotes for important warranty information
US model announced June 5, 2012

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(MHTN1-4) June 2012

ThinkCentre® M92p Tiny (3237) - GMP (Thin Client)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intr switch	Floor stand	VESA mount	ENERGY STAR	Intel vPro	Global (G) GMP (P)	Win7 preload(mm/dd/yy)	Ann date
3237-A3U	i5-3470T	2GBx1	8G SSD	None	HD 2500	None	Serial	None	None	None	ES52	vPro	G P	Emb 32	07/10/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system			
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology											Genuine Windows® 7 Embedded 32			
Implementation	Processor in LGA1155 socket											Preloaded applications (only some listed)			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											<ul style="list-style-type: none"> • Adobe® Reader® • Adobe Flash® Player • Citrix® Receiver • IIS Web Server • Microsoft® Management Console • Microsoft Silverlight • Remote Desktop Protocol • ThinPrint .print Client • TightVNC Viewer • VMware® View Client • vWorkspace • Windows Media Player 			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>														
DP dongle	None														
Disk	Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" Wide														
External optical	None														
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset														
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar														
eSATA port	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	None														
Bluetooth	None														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)														
Keyboard	None														
Mouse	None														
Floor Stand	None														
VESA mount	None														
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU														
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box) 											Security <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) 			
												EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold GREENGUARD® certified RoHS-compliant			
												Supports ThinkVantage Technologies			
												For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

See footnotes for important warranty information
US model announced July 10, 2012

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ThinkCentre® M92p Tiny (3237) - GMP (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	SATA disk GB rpm	External optical	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intr switch	Floor stand	VESA mount	ENERGY STAR 5.2	Intel vPro	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
3237-A4U	i5-3470T	4GBx1	320G 5400	DVD±RW	HD 2500	None	None	None	None	Mount	ES52	vPro	G P	Win8 Pro64	10/23/12
3237-A5U	i5-3470T	4GBx1	320G 5400	DVD±RW	HD 2500	None	None	None	None	Mount	ES52	vPro	G P	Win7 Pro64	10/23/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system			
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit			
Implementation												Preloaded applications (only some listed)			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											- Windows 7 models			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional DisplayPort, supports up to triple independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>											<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® AppShop • Lenovo Message Center Plus • Lenovo Simple Tap • Adobe® Reader® • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 			
DP dongle	None											- Windows 8 models			
Disk	SATA 3.0Gb/s, 2.5" Wide, 5400 rpm											<ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) 			
External optical	Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in											- All models			
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset											<ul style="list-style-type: none"> • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™ 			
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar														
eSATA port	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Two USB 3.0, one USB 2.0 (external ODD occupies USB 2.0 port on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / DisplayPort on selected models)														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	None														
Bluetooth	None														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Floor Stand	None														
VESA mount	Supports VESA 75mm and 100mm mount standard														
Power supply	65 watts AC/DC adapter, autosensing, 87% PSU														
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 7.1" W X 7.2" D X 1.4" H • 179mm W X 182mm D X 34.5mm H • 9.1 lb (4.1 kg) in maximum configuration (including External Optical Box) 											Security <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) 			
												EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant			
												Supports ThinkVantage Technologies			
												For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

See footnotes for important warranty information
US models announced October 23, 2012

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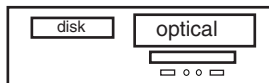
ThinkCentre® M92p Small (2988) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Intel vPro Global	Win7 preload (mm/dd/yy)	Ann date (mm/dd/yy)
2988-A1U	4x3	i5-3550	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	Pro 64	06/05/12
2988-A3U	4x3	i7-3770	4GBx2 1600MHz	1TB 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	vPro	Pro 64	06/05/12
2988-A6U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	Pro 64	06/05/12
2988-A9U	4x3	i7-3770	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	vPro	Pro 64	07/10/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system	
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo Simple Tap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 	
Implementation	Processor in LGA1155 socket												
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets												
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>												
DP dongle	None												
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support												
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector												
eSATA port	None												
Media reader	None												
Chipset	Intel Q77 Express Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®												
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)												
Modem	None												
Security chip	Trusted Platform Module (TPM1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	System floor stand for vertical orientation												
Power supply	240 watts, autosensing, 85% PSU												
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.3" W X 15.2" D X 3.9" H • 338mm W X 385mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention 											Security <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) 	
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader											EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant	
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3											Supports ThinkVantage Technologies	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet	



See footnotes for important warranty information
 US models announced June 5 or July 10, 2012

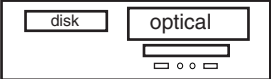
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 (MHTN1-6) July 2012

ThinkCentre® M92p Small (2988) - TopSeller - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Intel vPro Global	Win7 preload (mm/dd/yy)	Ann date (mm/dd/yy)
2988-A4U	4x3	i7-3770	4GBx2 1600MHz	1TB 7200	DVD±RW	None	HD 7350 None	None	Stand	ES52	vPro None	Pro 64	06/05/12
2988-A5U	4x3	i7-3770	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 7450 None	None	Stand	ES52	vPro None	Pro 64	06/05/12
2988-A7U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 7350 None	None	Stand	ES52	vPro None	Pro 64	06/05/12
2988-A8U	4x3	i7-3770	4GBx2 1600MHz	1TB 7200	DVD±RW	None	HD 7450 None	None	Stand	ES52	vPro None	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

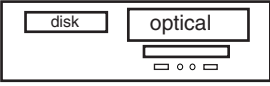
Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										Preloaded operating system		
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager 		
Implementation	Processor in LGA1155 socket										Preloaded applications (only some listed)		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 		
Graphics	<i>Some:</i> AMD Radeon™ HD 7350 , DirectX® 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort™, 30 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I)@60Hz; works along with Intel HD Graphics to support up to four independent monitors <i>Some:</i> AMD Radeon HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I)@60Hz; works along with Intel HD Graphics to support up to four independent monitors												
DP dongle	None												
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support												
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector												
eSATA port	None												
Media reader	None												
Chipset	Intel Q77 Express Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®												
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)												
Modem	None												
Security chip	Trusted Platform Module (TPM1.2-compliant)										Security		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										<ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	System floor stand for vertical orientation												
Power supply	240 watts, autosensing, 85% PSU												
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant		
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3												
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												

See footnotes for important warranty information
US models announced June 5, 2012

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(MHTN1-7) June 2012

ThinkCentre® M92p Small (2988) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

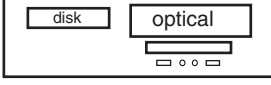
Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	PCIe Mini Card WLAN / BT	Chassis intr	Floor switchstand	ENERGY STAR 5.2	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
2988-B2U	4x3	i7-3770	4GBx1	500G 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	vPro	None	Win8 Pro64	10/23/12
2988-C6U	4x3	i5-3470	4GBx1	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win8 Pro64	10/23/12
2988-B4U	4x3	i5-3570	4GBx1	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win8 Pro64	10/23/12
2988-C8U	4x3	i7-3770	4GBx1	1TB 7200	DVD±RW	None	HD 7450	None	None	Stand	ES52	vPro	None	Win8 Pro64	10/23/12
2988-D9U	4x3	i5-3470	4GBx1	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
2988-E1U	4x3	i5-3570	4GBx1	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
2988-E2U	4x3	i7-3770	4GBx1	1TB 7200	DVD±RW	None	HD 7450	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
2988-F2U	4x3	i7-3770	4GBx2	1TB 7200	DVD±RW	None	HD 7450	Intel 6205	None	Stand	ES52	vPro	None	Win7 Pro64	03/12/13
2988-F3U	4x3	i5-3475S	4GBx2	1TB 7200	DVD±RW	None	HD 7450	None	None	Stand	ES52	vPro	None	Win7 Pro64	03/12/13
Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										Preloaded operating system				
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3475S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit				
Implementation	Processor in LGA1155 socket										Preloaded applications (only some listed)				
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										- Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® AppShop • Lenovo Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)				
Graphics	Some: Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i> Some: AMD Radeon™ HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz;</i> works along with Intel HD Graphics to support up to four independent monitors										- Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)				
DP dongle	None										- All models				
Disk	SATA 6.0Gb/s 7200 rpm										• ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™				
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support														
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector														
eSATA port	None														
Media reader	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector														
PCIe WLAN	Some: 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2														
Bluetooth	None														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)										Security				
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										• Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s)				
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Floor Stand	System floor stand for vertical orientation														
Power supply	240 watts, autosensing, 85% PSU														
Machine	• Business black color; metal case • 13.3" W X 15.2" D X 3.9" H • 338mm W X 385mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader														
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3														
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														
See footnotes for important warranty information											©Lenovo				
US models announced October 23, 2012 or March 3, 2013											(MHTN1-27) March 2013				

ThinkCentre® M92p Small (3209)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Intel vPro Global	Win7 preload (mm/dd/yy)	Ann date (mm/dd/yy)
3209-A2U	4x3	i5-3550	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro None	Pro 64	06/05/12
3209-A4U	4x3	i5-3550	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro None	Pro 64	06/05/12
3209-C5U	4x3	i7-3770	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	vPro None	Pro 32	06/05/12
3209-C8U	4x3	i5-3550	4GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro None	Pro 64	06/05/12
3209-E4U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro None	Pro 32	06/05/12
3209-E5U	4x3	i5-3550	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro None	Pro 32	06/05/12
3209-E6U	4x3	i5-3470	2GBx1 1600MHz	250G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro None	Pro 32	06/05/12
3209-E7U	4x3	i5-3470	2GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro None	Pro 64	06/05/12
3209-D7U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro None	Pro 64	07/10/12
3209-D9U	4x3	i5-3570	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro None	Pro 64	07/10/12
3209-F8U	4x3	i5-3570	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro None	Pro 64	07/10/12
3209-F9U	4x3	i7-3770	4GBx1 1600MHz	1TB 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	vPro None	Pro 64	07/10/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	<p><i>Ultimate security, stability, and manageability for the enterprise</i></p> <p>Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Processor in LGA1155 socket</p>	<p>Preloaded operating system</p> <p>Some: Genuine Windows® 7 Professional 32</p> <p>Some: Genuine Windows 7 Professional 64</p> <p>Ready to install applications (only some listed)</p> <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager <p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo Simple Tap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
Implementation		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets	
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>	
DP dongle	None	
Disk	SATA 6.0Gb/s 7200 rpm	
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive	
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support	
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector	
eSATA port	None	
Media reader	None	
Chipset	Intel Q77 Express Chipset	
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort	
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)	
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio	
IEEE 1394	None	
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Modem	None	
Security chip	Trusted Platform Module (TPM1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Floor Stand	System floor stand for vertical orientation	
Power supply	240 watts, autosensing, 85% PSU	
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.3" W X 15.2" D X 3.9" H • 338mm W X 385mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention 	
Bay	<p>Bay 1: 5.25", 1.6" high, access, std optical</p> <p>Bay 2: 3.5", 1" high, no access, std disk</p> <p>Bay 3: 3.5", .5" high, access, opt reader</p>	
Slot	<p>Slot 1: Low Profile, PCI Express 2.0 x16 (45w max)</p> <p>Slot 2: Low Profile, PCIe 2.0 x1</p> <p>Slot 3: Low Profile, 32-bit PCI 2.3</p> <p>Slot 4: Low Profile, 32-bit PCI 2.3</p>	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	<p>Security</p> <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) <p>EPEAT™ Gold rating</p> <p>ENERGY STAR® 5.2-compliant</p> <p>ULE Gold</p> <p>Cisco EnergyWise compatible</p> <p>GREENGUARD® certified</p> <p>RoHS-compliant</p> <p>Supports ThinkVantage Technologies</p> <p>For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet</p>

See footnotes for important warranty information
 US models announced June 5 or July 10, 2012
 < US model withdrawn effective September 2012

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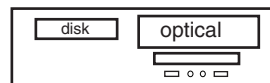
ThinkCentre® M92p Small (3209) - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Intel vPro Global	Win7 preload (mm/dd/yy)	Ann date (mm/dd/yy)
3209-D4U	4x3	i7-3770	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 7350	None	None	Stand	ES52	vPro	Pro 64	06/05/12
3209-D5U	4x3	i5-3550	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 7350	None	None	Stand	ES52	vPro	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system	
Processor	Intel® Core™ i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Genuine Windows® 7 Professional 64 Ready to install applications (only some listed)	
Implementation	Processor in LGA1155 socket											<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager 	
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets											Preloaded applications (only some listed)	
Graphics	AMD Radeon™ HD 7350 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA adapter), one DisplayPort™, 30 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz; works along with Intel HD Graphics to support up to four independent monitors</i> None											<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 	
DP dongle	None												
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support												
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector												
eSATA port	None												
Media reader	None												
Chipset	Intel Q77 Express Chipset												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®												
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)												
Modem	None												
Security chip	Trusted Platform Module (TPM1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	System floor stand for vertical orientation												
Power supply	240 watts, autosensing, 85% PSU												
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 											Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 	
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader											EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant	
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3											Supports ThinkVantage Technologies	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet	



See footnotes for important warranty information
US models announced June 5, 2012

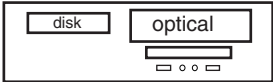
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(MHTN1-9) June 2012

ThinkCentre® M92p Small (3209) - Windows 8

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3209-K2U	4x3	i7-3770	4GBx1	500G 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	vPro	None	Win8 Pro64	10/23/12
3209-K9U	4x3	i5-3470	4GBx1	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win8 Pro64	10/23/12
3209-L1U	4x3	i5-3570	4GBx1	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win8 Pro64	10/23/12
3209-L2U	4x3	i7-3770	4GBx1	500G 7200	DVD±RW	None	HD 7450	None	None	Stand	ES52	vPro	None	Win8 Pro64	10/23/12

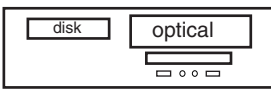
- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system			
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Windows® 8 Pro 64-bit Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® System Update • View Management Utility • Lenovo® Support • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Lenovo Solution Center • Microsoft® Office 2013 preloaded; purchase product key to activate • Norton™ Internet Security (30 days of virus definitions) • Norton Studio • Intel AppUp® • AccuWeather • PC Device Stage • Evernote™ • Skype™ • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) 			
Implementation	Processor in LGA1155 socket														
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets														
Graphics	<i>Some:</i> Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz <i>Some:</i> AMD Radeon™ HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors														
DP dongle	None														
Disk	SATA 6.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support														
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector														
eSATA port	None														
Media reader	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Floor Stand	System floor stand for vertical orientation														
Power supply	240 watts, autosensing, 85% PSU														
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.3" W X 15.2" D X 3.9" H • 338mm W X 385mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention 														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader														
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3														
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information
 US models announced October 23, 2012

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Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3209-L3U	4x3	i5-3470	4GBx1	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
3209-L4U	4x3	i5-3570	4GBx1	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
3209-L5U	4x3	i7-3770	4GBx1	1TB 7200	DVD±RW	None	HD 7450	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
3209-L7U	4x3	i5-3470	2GBx1	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
3209-L8U	4x3	i5-3570	4GBx1	250G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
3209-M1U	4x3	i7-3770	4GBx1	500G 7200	DVD±RW	None	HD 7450	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
3209-M2U	4x3	i7-3770	4GBx1	500G 7200	DVD±RW	None	HD 7350	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
3209-M3U	4x3	i7-3770	4GBx1	1TB 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
3209-M4U	4x3	i5-3570	4GBx1	1TB 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12
3209-M5U	4x3	i5-3570	4GBx1	500G 7200	DVD±RW	None	HD 7350	None	None	Stand	ES52	vPro	None	Win7 Pro64	10/23/12

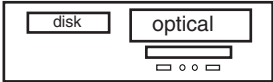
Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										Preloaded operating system				
Processor	<p>Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p>										Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit				
Implementation	Processor in LGA1155 socket										Ready to install applications (only some listed)				
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager 				
Graphics	<p><i>Some:</i> Intel HD Graphics 2500 / 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz</p> <p><i>Some:</i> AMD Radeon™ HD 7350, DirectX 11, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors</p> <p><i>Some:</i> AMD Radeon HD 7450, DirectX 11, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors</p>										Preloaded applications (only some listed) <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo® AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 				
DP dongle	None														
Disk	SATA 6.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support														
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector														
eSATA port	None														
Media reader	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)										Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 				
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Floor Stand	System floor stand for vertical orientation														
Power supply	240 watts, autosensing, 85% PSU														
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader														
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies				
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet				

ThinkCentre® M92p Small (3209) - Windows 8 - III

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Intel vPro Global	Preload	Ann date (mm/dd/yy)
3209-R5U	4x3	i5-3475S	4GBx2	1TB 7200	DVD±RW	None	HD 7450	None	None	Stand	ES52	vPro	None	Win7 Pro64 03/12/13

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system
Processor	Intel® Core™ i5-3475S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology											Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
Implementation	Processor in LGA1155 socket											Ready to install applications (only some listed)
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets											<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager
Graphics	AMD Radeon™ HD 7450 , DirectX 11, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz</i> ; works along with Intel HD Graphics to support up to four independent monitors											Preloaded applications (only some listed)
DP dongle	None											<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo® AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Disk	SATA 6.0Gb/s 7200 rpm											Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support											
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector											
eSATA port	None											
Media reader	None											
Chipset	Intel Q77 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®											
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)											
Modem	None											
Security chip	Trusted Platform Module (TPM1.2-compliant)											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Floor Stand	System floor stand for vertical orientation											
Power supply	240 watts, autosensing, 85% PSU											
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader											
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3											
												
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies
												For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
US model announced March 12, 2013

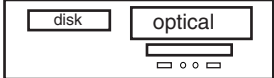
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(MHTN1-35) March 2103

ThinkCentre® M92p Small (3227) - GMP

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Intel vPro	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
3227-A1U	4x3	i7-3770	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 4000	None	None	Stand	ES52	vPro	G P	Pro 64	06/05/12
3227-A2U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	G P	Pro 64	06/19/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system			
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager 			
Implementation	Processor in LGA1155 socket											Preloaded applications (only some listed)			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets											<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo AppShop ● Lenovo Solution Center ● Lenovo Message Center Plus ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 			
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>														
DP dongle	None														
Disk	SATA 6.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support														
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector														
eSATA port	None														
Media reader	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Floor Stand	System floor stand for vertical orientation														
Power supply	240 watts, autosensing, 85% PSU														
Machine	<ul style="list-style-type: none"> ● Business black color; metal case ● 13.3" W X 15.2" D X 3.9" H ● 338mm W X 385mm D X 100mm H ● 16.5 lb (7.5 kg) in maximum configuration ● Toolless cover flips up and tilts backward on rear hinges ● Toolless disk and optical drive removal ● Toolless adapter retention 											Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Cable lock ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader														
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3														
															
												EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant			
												Supports ThinkVantage Technologies			
												For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

See footnotes for important warranty information
 US models announced June 5 or June 19, 2012

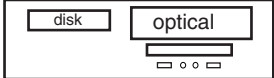
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 (MHTN1-10) June 2012

ThinkCentre® M92p Small (3227) - GMP (Win 8)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intr	Floor switch	ENERGY STAR	Intel vPro 5.2	Global (G) GMP (P)	Ann date (mm/dd/yy)
3227-A3U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	G P Win8 Pro64	10/23/12
3227-A4U	4x3	i5-3470	4GBx1 1600MHz	500G 7200	DVD±RW	None	HD 2500	None	None	Stand	ES52	vPro	G P Win7 Pro64	10/23/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

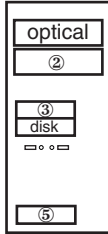
Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology											
Implementation	Processor in LGA1155 socket											
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets											
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>											
DP dongle	None											
Disk	SATA 6.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support											
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector											
eSATA port	None											
Media reader	None											
Chipset	Intel Q77 Express Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®											
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)											
Modem	None											
Security chip	Trusted Platform Module (TPM1.2-compliant)											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Floor Stand	System floor stand for vertical orientation											
Power supply	240 watts, autosenesing, 85% PSU											
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.3" W X 15.2" D X 3.9" H • 338mm W X 385mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader											
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3											
												
	Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit											
	Preloaded applications (only some listed) - Windows 7 models <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® AppShop • Lenovo Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models <ul style="list-style-type: none"> • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™ 											
	Security <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) 											
	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant											
	Supports ThinkVantage Technologies											
	For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet											
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											

ThinkCentre® M92p Tower (2992) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro	Global	Win7 preload (mm/dd/yy)	Ann date (mm/dd/yy)
2992-A2U	4x5	i5-3550	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Pro 64	06/05/12
2992-A3U	4x5	i7-3770	4GBx2 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Pro 64	06/05/12
2992-A4U	4x5	i7-3770	4GBx2 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 7350	None	None	ES52	vPro	None	Pro 64	06/05/12
2992-A5U	4x5	i7-3770	4GBx1 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 7450	None	None	ES52	vPro	None	Pro 64	06/05/12
2992-A6U	4x5	i5-3550	4GBx1 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 7350	None	None	ES52	vPro	None	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	Ultimate security, stability, and manageability for the enterprise										Preloaded operating system				
Processor	Intel® Core™ i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology										Genuine Windows® 7 Professional 64				
Implementation	Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology										Ready to install applications (only some listed)				
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager 				
Graphics	<p><i>Some:</i> Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz</p> <p><i>Some:</i> AMD Radeon™ HD 7350, DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors</p> <p><i>Some:</i> AMD Radeon HD 7450, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors</p>										<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
DP dongle	None														
Disk	SATA 6.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support														
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector														
eSATA port	None														
Media reader	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®										Security				
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)										<ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) 				
Modem	None														
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	280 watts, autosensing, 85% PSU														
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant				
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3										Supports ThinkVantage Technologies For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet				
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

See footnotes for important warranty information
 US models announced June 5, 2012

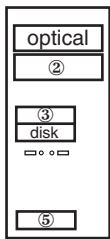
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ThinkCentre® M92p Tower (2992) - TopSeller - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
2992-A7U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Pro 64	06/05/12
2992-A8U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 7350	None	None	ES52	vPro	None	Pro 64	06/05/12
2992-A9U	4x5	i7-3770	4GBx2 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 7350	None	None	ES52	vPro	None	Pro 64	06/05/12
2992-B1U	4x5	i7-3770	4GBx2 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 7450	None	None	ES52	vPro	None	Pro 64	06/05/12
2992-B2U	4x5	i7-3770	4GBx1 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Pro 64	07/10/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										Preloaded operating system				
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Genuine Windows® 7 Professional 64				
Implementation	Processor in LGA1155 socket										Ready to install applications (only some listed)				
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager 				
Graphics	<i>Some: Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display;</i> <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz;</i> <i>Some: AMD Radeon™ HD 7350, DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; Maximum resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors</i> <i>Some: AMD Radeon HD 7450, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; Maximum resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors</i>										Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
DP dongle	None														
Disk	SATA 6.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support														
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector														
eSATA port	None														
Media reader	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)										Security <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) 				
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	280 watts, autosensing, 85% PSU														
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk														
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3														
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet				

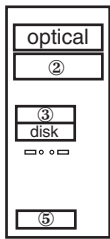
See footnotes for important warranty information
 US models announced June 5 or July 10, 2012

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 (MHTN1-13) July 2012

ThinkCentre® M92p Tower (2992) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
2992-B5U	4x5	i7-3770	4GBx1	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Win8 Pro64	10/23/12
2992-C9U	4x5	i5-3470	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win8 Pro64	10/23/12
2992-D1U	4x5	i5-3570	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win8 Pro64	10/23/12
2992-D2U	4x5	i7-3770	4GBx1	1TB 7200	Bay	DVD±RW	None	HD 7450	None	None	ES52	vPro	None	Win8 Pro64	10/23/12
2992-E3U	4x5	i5-3470	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
2992-E4U	4x5	i5-3570	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
2992-E5U	4x5	i7-3770	4GBx1	1TB 7200	Bay	DVD±RW	None	HD 7450	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
2992-F7U	4x5	i5-3475S	4GBx1	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Win7 Pro64	03/12/13
2992-F8U	4x5	i5-3475S	4GBx2	1TB 7200	Bay	DVD±RW	None	HD 7450	None	None	ES52	vPro	None	Win7 Pro64	03/12/13

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										Preloaded operating system				
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3475S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit				
Implementation	Processor in LGA1155 socket										Preloaded applications (only some listed)				
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										- Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)				
Graphics	Some: Intel HD Graphics 2500 / 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i> Some: AMD Radeon™ HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz;</i> works along with Intel HD Graphics to support up to four independent monitors										- Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)				
DP dongle	None										- All models				
Disk	SATA 6.0Gb/s 7200 rpm										• ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™				
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										Security				
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support										• Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable)				
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector										• Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s)				
eSATA port	None										EPEAT™ Gold rating				
Media reader	None										ENERGY STAR® 5.2-compliant				
Chipset	Intel Q77 Express Chipset										ULE Gold				
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										Cisco EnergyWise compatible				
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort										GREENGUARD® certified				
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										RoHS-compliant				
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector										Supports ThinkVantage Technologies				
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										For compatible accessories, please go to O-M92 sheet;				
Speaker	Internal speaker for business audio										For Lenovo service upgrade options, please go to S-TC sheet				
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	280 watts, autosensing, 85% PSU														
Machine	• Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk														
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3														
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

See footnotes for important warranty information

US models announced October 23, 2012 or March 12, 2013

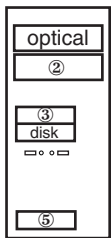
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(MHTN1-30) March 2013

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro Global	Win7 preload (mm/dd/yy)	Ann date (mm/dd/yy)
3212-A3U	4x5	i5-3550	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	Pro 64	06/05/12
3212-A9U	4x5	i5-3550	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	Pro 32	06/05/12
3212-C1U	4x5	i5-3550	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										Preloaded operating system			
Processor	Intel® Core™ i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Some: Genuine Windows® 7 Professional 32 Some: Genuine Windows 7 Professional 64			
Implementation											Ready to install applications (only some listed)			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager 			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>										Preloaded applications (only some listed)			
DP dongle	None										<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo Simple Tap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 			
Disk	SATA 6.0Gb/s 7200 rpm													
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support													
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector													
eSATA port	None													
Media reader	None													
Chipset	Intel Q77 Express Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)													
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®													
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)													
Modem	None													
Security chip	Trusted Platform Module (TPM1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Power supply	280 watts, autosensing, 85% PSU													
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 										Security			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk										<ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) 			
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant			
											Supports ThinkVantage Technologies			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet			



See footnotes for important warranty information
 US models announced June 5, 2012
 < US model withdrawn effective September 2012

ThinkCentre® M92p Tower (3212) - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro	Global	Win7 preload (mm/dd/yy)	Ann date (mm/dd/yy)
3212-C6U	4x5	i7-3770	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Pro 64	06/05/12
3212-C7U	4x5	i5-3550	4GBx1 1600MHz	250G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Pro 64	06/05/12
3212-C9U	4x5	i7-3770	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 7350	None	None	ES52	vPro	None	Pro 64	06/05/12
3212-D1U	4x5	i7-3770	4GBx1 1600MHz	250G 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Pro 64	06/05/12
3212-E4U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Pro 32	06/05/12
3212-E5U	4x5	i7-3770	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Pro 32	06/05/12
3212-E6U	4x5	i5-3470	2GBx1 1600MHz	250G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Pro 32	06/05/12
3212-E7U	4x5	i5-3470	2GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Pro 64	06/05/12
3212-K1U	4x5	i7-3770	4GBx1 1600MHz	1TB 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Pro 64	06/19/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	Ultimate security, stability, and manageability for the enterprise										Preloaded operating system				
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Some: Genuine Windows® 7 Professional 32 Some: Genuine Windows 7 Professional 64				
Implementation	Processor in LGA1155 socket										Ready to install applications (only some listed)				
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										Preloaded applications (only some listed)				
Graphics	Some: Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i> Some: AMD Radeon™ HD 7350 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz;</i> works along with Intel HD Graphics to support up to four independent monitors										<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo Simple Tap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
DP dongle	None										Security <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet				
Disk	SATA 6.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support														
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector														
eSATA port	None														
Media reader	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	280 watts, autosensing, 85% PSU														
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk														
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3														
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

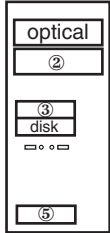
See footnotes for important warranty information
 US models announced June 5 or June 19, 2012

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ThinkCentre® M92p Tower (3212) - III

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	PCIe Mini Card WLAN / BT	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro	Global	Win7 preload (mm/dd/yy)	Ann date (mm/dd/yy)
3212-D8U	4x5	i5-3470	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Pro 64	07/10/12
3212-D9U	4x5	i7-3770	4GBx1	1TB 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Pro 64	07/10/12
3212-E2U	4x5	i5-3570	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Pro 64	07/10/12
3212-F7U	4x5	i5-3470	4GBx1	500G 7200	Bay	DVD±RW	None	HD 7350	None	None	ES52	vPro	None	Pro 64	07/10/12
3212-F8U	4x5	i5-3570	4GBx1	1TB 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Pro 64	07/10/12
3212-M2U	4x5	i7-3770	4GBx2	1TB 7200	Bay	DVD±RW	Media	HD 4000	Intel 2230 + BT	Switch	ES52	vPro	None	Pro 64	11/06/12

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										Preloaded operating system				
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Genuine Windows® 7 Professional 64				
Implementation	Processor in LGA1155 socket										Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager 				
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo Simple Tap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
Graphics	<i>Some:</i> Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz <i>Some:</i> AMD Radeon™ HD 7350 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors														
DP dongle	None														
Disk	SATA 6.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support														
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector														
eSATA port	None														
Media reader	<i>Some:</i> 29-in-1 media reader, internal USB 2.0														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector														
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2														
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)										Security <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) 				
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	280 watts, autosensing, 85% PSU														
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk														
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant				
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										Supports ThinkVantage Technologies For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information
 US models announced July 10 or November 6, 2012
 < US model withdrawn effective February 2013

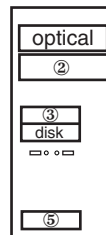
ThinkCentre® M92p Tower (3212) - Windows 8

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3212-H1U	4x5	i7-3770	4GBx1	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Win8 Pro64	10/23/12
3212-K3U	4x5	i5-3470	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win8 Pro64	10/23/12
3212-K4U	4x5	i5-3570	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win8 Pro64	10/23/12
3212-K5U	4x5	i7-3770	4GBx1	1TB 7200	Bay	DVD±RW	None	HD 7450	None	None	ES52	vPro	None	Win8 Pro64	10/23/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system			
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Windows® 8 Pro 64-bit Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® System Update • View Management Utility • Lenovo® Support • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Lenovo Solution Center • Microsoft® Office 2013 preloaded; purchase product key to activate • Norton™ Internet Security (30 days of virus definitions) • Norton Studio • Intel AppUp® • AccuWeather • PC Device Stage • Evernote™ • Skype™ • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) 			
Implementation	Processor in LGA1155 socket														
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets														
Graphics	<i>Some:</i> Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, VGA) @60Hz <i>Some:</i> AMD Radeon™ HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I) @60Hz; works along with Intel HD Graphics to support up to four independent monitors														
DP dongle	None														
Disk	SATA 6.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support														
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector														
eSATA port	None														
Media reader	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	280 watts, autosensing, 85% PSU														
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk														
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3														
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														



- Security**
- Security chip (see information on left)
 - One lock to secure both cover and entire system to fixed object:
 - Padlock loop (in rear for opt padlock)
 - Security slot (in rear for optional Kensington® MicroSaver® cable)
 - Cable lock
 - Power-on password
 - Hard disk password
 - Boot sequence control
 - Boot without keyboard and mouse
 - Serial port I/O control
 - Individual USB port disablement
 - Chassis intrusion switch on selected model(s)

EPEAT™ Gold rating
 ENERGY STAR® 5.2-compliant
 ULE Gold
 Cisco EnergyWise compatible
 GREENGUARD® certified
 RoHS-compliant

Supports ThinkVantage Technologies

For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet

ThinkCentre® M92p Tower (3212) - Windows 8 - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3212-K7U	4x5	i5-3470	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-K8U	4x5	i7-3770	4GBx1	1TB 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-K9U	4x5	i5-3570	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-L1U	4x5	i5-3570	4GBx1	1TB 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-L2U	4x5	i7-3770	4GBx1	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-L3U	4x5	i5-3570	4GBx1	250G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-L4U	4x5	i5-3470	2GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-L5U	4x5	i7-3770	4GBx1	500G 7200	Bay	DVD±RW	None	HD 7350	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-L6U	4x5	i7-3770	4GBx1	250G 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-L7U	4x5	i5-3470	4GBx1	500G 7200	Bay	DVD±RW	None	HD 7350	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-L8U	4x5	i5-3470	4GBx1	1TB 7200	Bay	DVD±RW	None	HD 7450	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
3212-L9U	4x5	i7-3770	4GBx1	1TB 7200	Bay	DVD±RW	None	HD 7450	None	None	ES52	vPro	None	Win7 Pro64	10/23/12
Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system			
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology											Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo® AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)			
Implementation	Processor in LGA1155 socket														
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets														
Graphics	<i>Some: Intel HD Graphics 2500 / 4000</i> in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i> <i>Some: AMD Radeon™ HD 7350</i> , DirectX 11, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz;</i> works along with Intel HD Graphics to support up to four independent monitors <i>Some: AMD Radeon HD 7450</i> , DirectX 11, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz;</i> works along with Intel HD Graphics to support up to four independent monitors														
DP dongle	None														
Disk	SATA 6.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support														
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector														
eSATA port	None														
Media reader	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	280 watts, autosensing, 85% PSU														
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk														
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3											Security • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s)			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet			

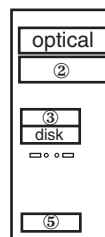
ThinkCentre® M92p Tower (3212) - Windows 8 - III

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory [®]	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3212-N4U	4x5	i5-3475S	4GBx1	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	None	Win7 Pro64	03/12/13

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										Preloaded operating system				
Processor	Intel® Core™ i5-3475S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology										Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit				
Implementation	Processor in LGA1155 socket										Ready to install applications (only some listed)				
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager 				
Graphics	Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>										Preloaded applications (only some listed)				
DP dongle	None										<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo® AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
Disk	SATA 6.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support														
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector														
eSATA port	None														
Media reader	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB devices), one internal DisplayPort connector														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	280 watts, autosensing, 85% PSU														
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 										Security				
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk										<ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) 				
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										Supports ThinkVantage Technologies For compatible accessories, please go to O-M92 sheet; For Lenovo service upgrade options, please go to S-TC sheet				



See footnotes for important warranty information
 US model announced March 12, 2013

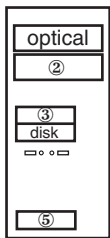
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 (MHTN1-36) March 2013

ThinkCentre® M92p Tower (3228) - GMP

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Intel vPro	Global (G) GMP (P)	Win7 preload (mm/dd/yy)	Ann date
3228-A1U	4x5	i7-3770	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 4000	None	None	ES52	vPro	G P	Pro 64	06/05/12
3228-A2U	4x5	i5-3470	4GBx1 1600MHz	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro	G P	Pro 64	06/19/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system			
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager 			
Implementation	Processor in LGA1155 socket											Preloaded applications (only some listed)			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets											<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • Lenovo AppShop • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 			
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>														
DP dongle	None														
Disk	SATA 6.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support														
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector														
eSATA port	None														
Media reader	None														
Chipset	Intel Q77 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	280 watts, autosensing, 85% PSU														
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal • Toolless disk, optical drive removal • Toolless adapter retention 											Security <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) 			
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk														
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3														
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

See footnotes for important warranty information
US models announced June 5 or June 19, 2012

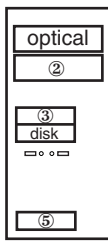
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ThinkCentre® M92p Tower (3228) - GMP (Win 8)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Display-Port dongle	Chassis intrusion switch	ENERGY STAR 5.2	Intel Global (G) vPro GMP (P)	Preload	Ann date (mm/dd/yy)
3228-A3U	4x5	i5-3470	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro G P	Win8 Pro64	10/23/12
3228-A4U	4x5	i5-3470	4GBx1	500G 7200	Bay	DVD±RW	None	HD 2500	None	None	ES52	vPro G P	Win7 Pro64	10/23/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										Preloaded operating system			
Processor	Intel® Core™ i5-3470 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology										Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit			
Implementation	Processor in LGA1155 socket										Some: Windows 8 Pro 64-bit			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										Preloaded applications (only some listed)			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort, VGA) @60Hz</i>										- Windows 7 models			
DP dongle	None										<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® AppShop • Lenovo Message Center Plus • Lenovo SimpleTap • Adobe® Reader® • Windows Live™ Essentials • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 			
Disk	SATA 6.0Gb/s 7200 rpm										- Windows 8 models			
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										<ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) 			
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support										- All models			
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors, one SATA 3.0Gb/s connector, and one eSATA connector										<ul style="list-style-type: none"> • ThinkVantage System Update • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™ 			
eSATA port	None										Security			
Media reader	None										<ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) 			
Chipset	Intel Q77 Express Chipset										EPEAT™ Gold rating			
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										ENERGY STAR® 5.2-compliant			
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort										ULE Gold			
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										GREENGUARD® certified			
Internal connector	Two USB 2.0 planar conn (1 used; one open for media reader or 2 rear USB ports), one internal DisplayPort connector										RoHS-compliant			
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										Supports ThinkVantage Technologies			
Speaker	Internal speaker for business audio										For compatible accessories, please go to O-M92 sheet;			
IEEE 1394	None										For Lenovo service upgrade options, please go to S-TC sheet			
Ethernet	One gigabit ethernet port, Intel 82579, Wake on LAN®													
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)													
Modem	None													
Security chip	Trusted Platform Module (TPM1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Power supply	280 watts, autosensing, 85% PSU													
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 24.2 lb (11.0 kg) in maximum configuration • Toolless cover removal • Toolless disk, optical drive removal • Toolless adapter retention 													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk													
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3													
														
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													

See footnotes for important warranty information
US models announced October 23, 2012

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Memory

Tiny 3234/3243/3238/3237 use notebook memory:
 2GB PC3-12800 DDR3 SODIMM 0A65722 ann 06/05/12
 4GB PC3-12800 DDR3 SODIMM 0A65723 ann 06/05/12
 8GB PC3-12800 DDR3 SODIMM 0A65724 ann 06/05/12

Small 3207/2988/3209/3227, and Tower 3208/2992/3212/3228 use desktop memory:
 2GB PC3-12800 DDR3 UDIMM 0A65728 ann 06/05/12
 4GB PC3-12800 DDR3 UDIMM 0A65729 ann 06/05/12
 8GB PC3-12800 DDR3 UDIMM 0A65730 ann 06/05/12

More information at www.lenovo.com/support/desktopmemorycompatibility

Optical

Small and Tower support:
 DVD-ROM DL SATA 1.5Gb/s 16X-48X Max⁴ 41N5618 ann 09/26/06
 Lenovo® Super Multi-Burner SATA Drive 0A65618 ann 08/23/11

Storage and removable storage

Small and Tower support:
 250GB SATA 3.0Gb/s Disk (7200 rpm) 41N3015 ann 01/24/06
 500GB SATA 3.0Gb/s Disk (7200 rpm) 43R1990 ann 11/06/07
 1TB SATA 3.0Gb/s Disk (7200 rpm) 45J7918 ann 08/19/08
 300GB SATA 3.0Gb/s Disk (10000 rpm) 2.5" 43R2031 ann 03/31/09
 180GB Solid State Drive 0B47308 ann 01/29/13

All:
 USB 2.0 Portable 320GB Hard Disk 45K1689 ann 03/17/09
 USB 2.0 Portable 500GB Hard Disk 45K1690 ann 05/26/09
 USB 2.0 Portable Secure 320GB Hard Disk 43R2019 ann 11/18/08
 USB 3.0 Secure 500GB Hard Drive 0A65619 ann 11/29/11
 USB 3.0 Secure 750GB Hard Drive 0A65616 ann 11/29/11
 USB 3.0 Secure 1TB Hard Drive 0A65621 ann 08/28/12
 Slim USB Portable DVD Burner 0A33988 ann 06/14/11

Graphics

Small 3207/2988/3209/3227 support Low Profile:
 AMD 7450 1GB (DP, DVI-I with a DVI to VGA converter)⁶⁷ 0A36538 ann 05/29/12
 NVIDIA NVS 510 2GB Graphics Card by Lenovo⁶⁷ 0B47077 ann 01/29/13

Tower 3208/2992/3212/3228 support:
 AMD 7450 1GB (DP, DVI-I)⁶⁷ 0A36538 ann 05/29/12
 NVIDIA NVS 510 2GB Graphics Card by Lenovo⁶⁷ 0B47077 ann 01/29/13
⁶⁷ Simultaneously use the graphic card monitor ports along with the systems integrated monitor ports when Multi-Monitor Support is enabled in BIOS Setup.

More information at www.lenovo.com/support/graphiccards

Keyboard

Preferred Pro USB Keyboard 73P5220 ann 06/21/05
 Enhanced Performance USB Keyboard 73P2620 ann 03/23/04
 UltraSlim Plus Wireless Keyboard and Mouse⁵² 0A34032 ann 04/05/11
 ThinkPad® USB Keyboard with TrackPoint 55Y9003 ann 08/18/09
 Lenovo USB Fingerprint Keyboard 73P4730 ann 02/22/05
 Lenovo USB Smartcard Keyboard 51J0155 ann 03/24/09
⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

Lenovo Optical Mouse (USB) 06P4069 ann 05/21/03
 Lenovo ScrollPoint® Mouse(USB, Optical) 31P7405 ann 08/27/02
 ThinkPad Travel Mouse (USB, Optical) 31P7410 ann 06/04/02
 Lenovo Laser Mouse (USB) 41U3074 ann 01/23/07
 Lenovo Wireless Laser Mouse⁵² 0A36188 ann 12/20/11
 ThinkPad USB Laser Mouse 57Y4635 ann 12/15/09

More information at www.lenovo.com/support/mice

Modem

USB 2.0 Lenovo Modem 43R1814 ann 02/26/08

Multimedia

ThinkPad In-Ear Headphones with mic⁶⁰ 57Y4488 ann 01/07/10
 Lenovo Mini Speakers M220 55Y2033 ann 01/07/10
 Lenovo Speakers M0520 (black) 57Y6360 ann 02/08/11
 Lenovo Speakers M0520 (red) 57Y6361 ann 02/08/11
 Lenovo Headset P550 55Y2065
 Lenovo Headset P950 (black) 57Y6605 ann 02/08/11
⁶⁰ Has a 1.2 meter (3.9-foot) cable. Best when systems are in close proximity. Example: SFF placed on a desk.

Security

Kensington® MicroSaver® Cable Lock⁵⁶ 73P2582 ann 12/29/03
 Kensington Twin Head Cable Lock⁵⁶ 45K1620 ann 09/30/08
 Lenovo Security Cable Lock⁵⁶ 57Y4303 ann 08/24/10
 USB Gemplus GemPC Smart Card Reader 41N3040 ann 02/21/06
⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Under Desk Mount

Tiny support:
 ThinkCentre Tiny Under Desk Mount Bracket 0B47097 ann 08/07/12

Monitors

ThinkVision® L1711p 17" (VGA, DVI-D) 5047HB2 ann 10/20/09
 ThinkVision LT1952p Wide 19" (VGA, DP, DVI-D)⁶⁹ 2448MB6 ann 09/13/11
 ThinkVision L2250p Wide 22" (VGA, DVI-D) 2572HB6 ann 10/20/09
 ThinkVision L2251x Wide 22" (VGA, DP) 2572HB6 ann 10/20/09
 ThinkVision LT2252p Wide 22" (VGA, DP, DVI-D)⁶⁹ 2572MB6 ann 09/13/11
 ThinkVision L2321x Wide 23" (VGA, DP) 4014HB6 ann 06/10/10
 ThinkVision LT2323p Wide 23" (VGA, DP, DVI-D)⁶⁹ 3024HC1 ann 05/01/12
 ThinkVision LT2452p Wide 24" (VGA, DP, DVI-D)⁶⁹ 4420MB2 ann 09/13/11
⁶⁹ DisplayPort cable is not included; use optional DisplayPort to DisplayPort Monitor Cable (0A36537).

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

Lenovo USB 3.0 to DVI/VGA Monitor Adapter 0B47072 ann 08/14/12
 DisplayPort™ to Single-link DVI-D Cable 45J7915 ann 08/05/08
 DisplayPort to Dual-DisplayPort Monitor Cable 0B47092 ann 06/05/12
 DisplayPort to VGA Monitor Cable 57Y4393 ann 08/04/09
 DisplayPort to DisplayPort Monitor Cable 0A36537 ann 09/13/11
 Lenovo USB Soundbar 0A36190 ann 05/01/12
 Kensington MicroSaver Cable Lock⁵⁶ 73P2582 ann 12/29/03
 Kensington Twin Head Cable Lock⁵⁶ 45K1620 ann 09/30/08
 Lenovo Security Cable Lock⁵⁶ 57Y4303 ann 08/24/10
 ThinkCentre Extend Arm 57Y4352 ann 07/06/10
⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories
 Purchase Lenovo accessories
www.lenovo.com/support/accessories
 Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide
 Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com
 An Options Compatibility Configurator for Lenovo systems



Lenovo ThinkCentre M92z with Frame Stand



Lenovo ThinkCentre M92z with Monitor Stand



Toolless Back Cover Removal



Toolless Stand Removal



Dual Independent Display with Optional Lenovo ThinkVision Monitor

ThinkCentre® M92z (3280) - 20" (TopSeller) - Win 8

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro Global	Preload	Ann date (mm/dd/yy)
3280-A1U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win8 Pro64 10/23/12
3280-A2U	i5-3470S	4GBx2	2.0M	1TB 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win8 Pro64 10/23/12
3280-A5U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	None	None	Win7 Pro64 11/20/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	<i>Premium All-In-One PC for the enterprise</i>											Preloaded operating system²⁰			
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit			
Implementation	Processor in LGA1155 socket											Preloaded applications (only some listed)			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											- Windows 7 models			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>											<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● RapidBoot HDD Accelerator ● Lenovo® SimpleTap ● Adobe® Reader® ● Microsoft® Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 			
DP dongle	None											- Windows 8 models			
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector											<ul style="list-style-type: none"> ● Lenovo Support ● Lenovo Settings ● Lenovo Companion ● Lenovo Cloud Storage ● Lenovo QuickLaunch ● Norton™ Studio ● AccuWeather ● Evernote® ● Microsoft Office 2013 preloaded; purchase product key to activate ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) 			
Light sensor	None											- All models			
Multi-touch	None											<ul style="list-style-type: none"> ● ThinkVantage System Update ● ThinkVantage Automatic Lock Utility ● Lenovo Solution Center ● View Management Utility ● Norton Internet Security (30 days of virus definitions) ● Skype™ 			
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off											Security			
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons											<ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) 			
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm											EPEAT™ Gold rating			
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable											ENERGY STAR® 5.2-compliant			
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar											TCO Certified Edge			
Media reader	None											TUV Green Mark			
Chipset	Intel Q77 Express Chipset											ULE Gold			
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)											EuP 2013			
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											Cisco EnergyWise compatible			
ExpressCard	None											GREENGUARD® certified			
mSATA	One mSATA slot											RoHS-compliant			
PCIe Mini Card	One PCI Express® Mini Card slot											Supports ThinkVantage Technologies			
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2											For compatible accessories, please go to O-M92Z sheet;			
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter											For Lenovo service upgrade options, please go to S-TC sheet			
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®														
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	150 watts, autosensing, 85% PSU														
Machine	<i>All:</i> <ul style="list-style-type: none"> ● Business black color ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) <i>Model(s) with 20" Non multi-touch, Frame stand:</i> <ul style="list-style-type: none"> ● 19.8" W X 3.6" D X 16.1" H, ● 503mm W X 92.5mm D X 408mm H (including stand) ● 18.5 lb (8.4 kg) in maximum configuration <i>Model(s) with 20" Non multi-touch, Monitor stand:</i> <ul style="list-style-type: none"> ● 19.8" W X 5.6" D X 17.6" H, ● 503mm W X 143mm D X 448mm H (including stand) ● 23.0 lb (10.5 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° 														
Limited Warranty	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

See footnotes for important warranty information
US models announced October 23 or November 20, 2012

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ThinkCentre® M92z (3291) - 20" (TopSeller)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
3291-A8U	G630	4GBx1	2.0M	250G 7200	Intel HD	11b/g/n	None	None	S P	None	Frame	USB	None	None	Pro 64	06/05/12
3291-B9U	i3-2120	4GBx1	2.0M	500G 7200	HD 2000	11b/g/n	None	None	None	None	Monitor	USB	None	None	Pro 64	06/05/12
3291-C1U	i3-2120	4GBx1	2.0M	500G 7200	HD 2000	11b/g/n	None	None	None	None	Monitor	USB	None	None	Prem 32	06/05/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	<p><i>Premium All-In-One PC for the enterprise</i> Intel® Pentium® G630 Processor (2 cores / 2 threads, 2.7GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket</p>											<p>Preloaded operating system²⁰ <i>Some:</i> Genuine Windows® 7 Home Premium 32 <i>Some:</i> Genuine Windows 7 Professional 64</p> <p>Ready to install applications (only some listed)</p> <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager • Business-in-a-Box <p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Automatic Lock Utility • ThinkVantage Power Manager • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • RapidBoot HDD Accelerator • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
Implementation	<p>Processor in LGA1155 socket</p>															
Memory	<p>16GB max, PC3-12800 1600MHz DDR3, two 204-pin SODIMM sockets (notebook)</p>															
Graphics	<p>Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i></p>															
DP dongle	None															
Display	<p>20.0" (508mm) HD+ (1600x900) TFT color, LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector</p>															
Light sensor	None															
Multi-touch	None															
Camera	<p>Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off</p>															
Controls	<p><i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons</p>															
Disk	<p>SATA 6.0Gb/s, 3.5" Wide, 7200 rpm</p>															
Optical	<p>DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable</p>															
Onboard SATA	<p>Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar</p>															
Media reader	None															
Chipset	Intel Q77 Express Chipset															
Rear ports	<p>Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)</p>															
Side ports	<p>Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)</p>															
ExpressCard	None															
mSATA	One mSATA slot															
PCIe Mini Card	One PCI Express® Mini Card slot															
PCIe WLAN	<p>11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2</p>															
Bluetooth	<p>Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter</p>															
Ethernet	<p>One gigabit ethernet port, Intel 82579LM, Wake on LAN®</p>															
Audio support	<p>High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified</p>															
Intel AMT	<p>Intel Active Management Technology 8.0 (Intel AMT 8.0)</p>															
Security chip	<p>Trusted Platform Module (TPM 1.2-compliant)</p>															
Keyboard	<p>Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo</p>															
Mouse	<p>Enhanced Optical USB Mouse, black, Lenovo logo</p>															
Power supply	<p>150 watts, autosensing, 85% PSU</p>															
Machine	<p><i>All:</i></p> <ul style="list-style-type: none"> • Business black color • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm) <p><i>Model(s) with 20" Non multi-touch, Frame stand:</i></p> <ul style="list-style-type: none"> • 19.8" W X 3.6" D X 16.1" H, • 503mm W X 92.5mm D X 408mm H (including stand) • 18.5 lb (8.4 kg) in maximum configuration <p><i>Model(s) with 20" Non multi-touch, Monitor stand:</i></p> <ul style="list-style-type: none"> • 19.8" W X 5.6" D X 17.6" H, • 503mm W X 143mm D X 448mm H (including stand) • 23.0 lb (10.5 kg) in maximum configuration • Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° 											<p>Security</p> <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s) <p>EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant</p> <p>Supports ThinkVantage Technologies</p> <p>For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet</p>				
Limited Warranty	<p>3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available</p>															

See footnotes for important warranty information
 US models announced June 5, 2012

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 (MTRL1-1) February 2013

ThinkCentre® M92z (3291) - 20" (TopSeller) - II

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
3291-A4U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64	06/05/12
3291-A6U	i7-3770S	4GBx1	2.0M	1TB 7200	HD 4000	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64	06/05/12
3291-A7U	i5-3550S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64	06/05/12
3291-A9U	i5-3470T	4GBx1	2.0M	250G 7200	HD 2500	11b/g/n	None	None	S P	None	Frame	2.4G	vPro	None	Pro 64	06/05/12
3291-B1U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	S P	None	Frame	2.4G	vPro	None	Pro 64	06/05/12
3291-B2U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	11b/g/n	None	None	S P	None	Frame	2.4G	vPro	None	Pro 64	06/05/12
3291-B6U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	vPro	None	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Premium All-In-One PC for the enterprise</i>											Preloaded operating system²⁰				
Processor	Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550S Processor (4 cores / 4 threads, 3.0GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 				
Implementation																
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)															
Graphics	Intel HD Graphics 2500 / 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>															
DP dongle	None															
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector															
Light sensor	None															
Multi-touch	None															
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off															
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons															
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm															
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable															
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar															
Media reader	None															
Chipset	Intel Q77 Express Chipset															
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)															
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)															
ExpressCard	None															
mSATA	One mSATA slot															
PCIe Mini Card	One PCI Express® Mini Card slot															
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2											Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) 				
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter															
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®															
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified															
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)															
Security chip	Trusted Platform Module (TPM 1.2-compliant)															
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo <i>Some:</i> Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black											EPEAT™ Gold rating				
Mouse	<i>Some:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>Some:</i> Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black											ENERGY STAR® 5.2-compliant				
Power supply	150 watts, autosensing, 85% PSU											TCO Certified Edge				
Machine	<i>Model(s) with 20" Non multi-touch, Frame stand:</i> <ul style="list-style-type: none"> ● Business black color ● 19.8" W X 3.6" D X 16.1" H ● 503mm W X 92.5mm D X 408mm H (including stand) ● 18.5 lb (8.4 kg) in maximum configuration ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) 											TUV Green Mark				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											ULE Gold				
												EuP 2013				
												Cisco EnergyWise compatible				
												GREENGUARD® certified				
												RoHS-compliant				
												Supports ThinkVantage Technologies				
												For compatible accessories, please go to O-M92Z sheet;				
												For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information
 US models announced June 5, 2012

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 (MTRL1-2) February 2013

ThinkCentre® M92z (3291) - 20" (TopSeller) - III

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Win7 Global preload	Ann date (mm/dd/yy)	
3291-B7U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	11b/g/n	Media	None	None	None	Monitor	USB	vPro	None	Pro 64	06/05/12
3291-B8U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Pro 64	06/05/12
3291-C7U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Pro 64	09/04/12
3291-C9U	i3-3220	2GBx1	2.0M	250G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Pro 64	09/04/12
3291-D1U	i3-3240	2GBx1	2.0M	250G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Pro 64	09/04/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Premium All-In-One PC for the enterprise</i>											Preloaded operating system²⁰			
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500 integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager • Business-in-a-Box Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Automatic Lock Utility • ThinkVantage Power Manager • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • RapidBoot HDD Accelerator • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 			
Implementation															
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)														
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>														
DP dongle	None														
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector														
Light sensor	None														
Multi-touch	None														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off														
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons														
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm														
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable														
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar														
Media reader	<i>Some:</i> 11-in-1 Single Slot SD media reader														
Chipset	Intel Q77 Express Chipset														
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)														
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
ExpressCard	None														
mSATA	One mSATA slot														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2														
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter														
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®														
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	150 watts, autosensing, 85% PSU														
Machine	<i>Model(s) with 20" Non multi-touch, Monitor stand:</i> <ul style="list-style-type: none"> • Business black color • 19.8" W X 5.6" D X 17.6" H • 503mm W X 143mm D X 448mm H (including stand) • 23.0 lb (10.5 kg) in maximum configuration • Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm) 											EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Supports ThinkVantage Technologies For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet			

ThinkCentre® M92z (3291) - 20" (TopSeller) - Win 8

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3291-C5U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win8 Pro64	10/23/12
3291-C8U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3291-D2U	i3-3220	2GBx1	2.0M	250G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3291-D3U	i3-3240	2GBx1	2.0M	250G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3291-D6U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64	10/23/12
3291-D7U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win7 Pro64	10/23/12
3291-E1U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	None	None	Win7 Pro64	12/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • RapidBoot HDD Accelerator • Lenovo® SimpleTap • Adobe® Reader® • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models • Lenovo Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models • ThinkVantage System Update • ThinkVantage Automatic Lock Utility • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™ Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s)
Implementation		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>	
DP dongle	None	
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector	
Light sensor	None	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons	
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar	
Media reader	None	
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>All:</i> • Business black color • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm) <i>Model(s) with 20" Non multi-touch, Frame stand:</i> • 19.8" W X 3.6" D X 16.1" H, • 503mm W X 92.5mm D X 408mm H (including stand) • 18.5 lb (8.4 kg) in maximum configuration <i>Model(s) with 20" Non multi-touch, Monitor stand:</i> • 19.8" W X 5.6" D X 17.6" H, • 503mm W X 143mm D X 448mm H (including stand) • 23.0 lb (10.5 kg) in maximum configuration • Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45°	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	

See footnotes for important warranty information
US models announced October 23 or December 4, 2012

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ThinkCentre® M92z (3296) - 20"

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Win7 Global preload	Ann date (mm/dd/yy)
3296-B1U	i3-2130	4GBx1	2.0M	500G 7200	HD 2000	11b/g/n	None	None	S P	None	Frame	USB	None	None	Pro 64 06/05/12
3296-B6U	G630	4GBx1	None	250G 7200	Intel HD	None	None	None	S P	None	Frame	USB	None	None	Pro 64 06/05/12
3296-B7U	G630	4GBx1	2.0M	250G 7200	Intel HD	11b/g/n	None	None	S P	None	Frame	USB	None	None	Pro 64 06/05/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Pentium® G630 Processor (2 cores / 2 threads, 2.7GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box				
Implementation	Processor in LGA1155 socket										Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)				
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)														
Graphics	Intel HD Graphics or Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>														
DP dongle	None														
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector														
Light sensor	None														
Multi-touch	None														
Camera	<i>Some:</i> Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off														
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons														
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm														
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable														
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar														
Media reader	None														
Chipset	Intel Q77 Express Chipset														
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)														
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
ExpressCard	None														
mSATA	One mSATA slot														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2														
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter														
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®														
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	150 watts, autosensing, 85% PSU														
Machine	<i>Model(s) with 20" Non multi-touch, Frame stand:</i> ● Business black color ● 19.8" W X 3.6" D X 16.1" H ● 503mm W X 92.5mm D X 408mm H (including stand) ● 18.5 lb (8.4 kg) in maximum configuration ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm)										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information
US models announced June 5, 2012

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ThinkCentre® M92z (3296) - 20" - II

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Win7 Global preload	Ann date (mm/dd/yy)
3296-B2U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64 06/05/12
3296-B3U	i5-3550S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64 06/05/12
3296-B5U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64 06/05/12
3296-E5U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	vPro	None	Pro 64 06/05/12
3296-E6U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	11b/g/n	Media	None	None	None	Frame	USB	vPro	None	Pro 64 06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	<p><i>Premium All-In-One PC for the enterprise</i></p> <p>Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i5-3550S Processor (4 cores / 4 threads, 3.0GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Processor in LGA1155 socket</p>										<p>Preloaded operating system²⁰</p> <p>Genuine Windows® 7 Professional 64</p> <p>Ready to install applications (only some listed)</p> <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager • Business-in-a-Box <p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Automatic Lock Utility • ThinkVantage Power Manager • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • RapidBoot HDD Accelerator • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
Implementation															
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)														
Graphics	<p>Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i></p>														
DP dongle	None														
Display	<p>20.0" (508mm) HD+ (1600x900) TFT color, LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector</p>														
Light sensor	None														
Multi-touch	None														
Camera	<p>Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off</p>														
Controls	<p><i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button</p> <p><i>Side:</i> Volume up and down buttons</p>														
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm														
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable														
Onboard SATA	<p>Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar</p> <p><i>Some:</i> 11-in-1 Single Slot SD media reader</p>														
Media reader															
Chipset	Intel Q77 Express Chipset														
Rear ports	<p>Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)</p> <p>Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)</p>														
Side ports	None														
ExpressCard	None														
mSATA	One mSATA slot														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	<p>11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2</p>														
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter														
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®														
Audio support	<p>High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified</p> <p>Intel Active Management Technology 8.0 (Intel AMT 8.0)</p> <p>Trusted Platform Module (TPM 1.2-compliant)</p>														
Intel AMT Security chip															
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	150 watts, autosensing, 85% PSU														
Machine	<p><i>Model(s) with 20" Non multi-touch, Frame stand:</i></p> <ul style="list-style-type: none"> • Business black color • 19.8" W X 3.6" D X 16.1" H • 503mm W X 92.5mm D X 408mm H (including stand) • 18.5 lb (8.4 kg) in maximum configuration • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm) 										<p>Security</p> <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s) 				
											<p>EPEAT™ Gold rating</p> <p>ENERGY STAR® 5.2-compliant</p> <p>TCO Certified Edge</p> <p>TUV Green Mark</p> <p>ULE Gold</p> <p>EuP 2013</p> <p>Cisco EnergyWise compatible</p> <p>GREENGUARD® certified</p> <p>RoHS-compliant</p>				
											<p>Supports ThinkVantage Technologies</p>				
											<p>For compatible accessories, please go to O-M92Z sheet;</p> <p>For Lenovo service upgrade options, please go to S-TC sheet</p>				
Limited Warranty	<p>3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available</p>														

See footnotes for important warranty information
US models announced June 5, 2012

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ThinkCentre® M92z (3296) - 20" - III

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Win7 Global preload	Ann date (mm/dd/yy)
3296-E4U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Pro 64 06/05/12
3296-E7U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	11b/g/n	Media	None	None	None	Monitor	USB	vPro	None	Pro 64 06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- These models have a 3-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box				
Implementation	Processor in LGA1155 socket										Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)				
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)														
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz</i>														
DP dongle	None														
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector														
Light sensor	None														
Multi-touch	None														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off														
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons														
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm														
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable														
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar														
Media reader	<i>Some:</i> 11-in-1 Single Slot SD media reader														
Chipset	Intel Q77 Express Chipset														
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)														
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
ExpressCard	None														
mSATA	One mSATA slot														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2														
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter														
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®														
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	150 watts, autosensing, 85% PSU														
Machine	<i>Model(s) with 20" Non multi-touch, Monitor stand:</i> ● Business black color ● 19.8" W X 5.6" D X 17.6" H ● 503mm W X 143mm D X 448mm H (including stand) ● 23.0 lb (10.5 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm)										Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s)				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet				

ThinkCentre® M92z (3296) - 20" (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Intel Mouse vPro	Global	Preload	Ann date (mm/dd/yy)
3296-F6U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500 11b/g/n	None	None	None	None	None	Frame	USB vPro	None	Win8 Pro64	10/23/12
3296-G6U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500 11b/g/n	None	None	None	None	None	Frame	USB	None	Win8 Pro64	10/23/12
3296-G7U	i3-3240	4GBx1	2.0M	500G 7200	HD 2500 11b/g/n	None	None	None	None	None	Frame	USB	None	Win8 Pro64	10/23/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning Processor	<p><i>Premium All-In-One PC for the enterprise</i></p> <p>Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller</p> <p>Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller</p> <p>Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket</p>											<p>Preloaded operating system²⁰</p> <p>Windows® 8 Pro 64-bit</p> <p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> • ThinkVantage® System Update • ThinkVantage Automatic Lock Utility • View Management Utility • Lenovo® Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Lenovo Solution Center • Microsoft® Office 2013 preloaded; purchase product key to activate • Norton™ Internet Security (30 days of virus definitions) • Norton Studio • Intel AppUp® • AccuWeather • PC Device Stage • Evernote™ • Skype™ • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)
Implementation												<p>Security</p> <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s)
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											
Graphics	<p>Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i></p>											
DP dongle	None											
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector											
Light sensor	None											
Multi-touch	None											
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off											
Controls	<p><i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button</p> <p><i>Side:</i> Volume up and down buttons</p>											
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm											
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable											
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar											
Media reader	None											
Chipset	Intel Q77 Express Chipset											
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)											
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
ExpressCard	None											
mSATA	One mSATA slot											
PCIe Mini Card	One PCI Express® Mini Card slot											
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2											
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter											
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®											
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified											
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)											
Security chip	Trusted Platform Module (TPM 1.2-compliant)											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	150 watts, autosensing, 85% PSU											
Machine	<p><i>Model(s) with 20" Non multi-touch, Frame stand:</i></p> <ul style="list-style-type: none"> • Business black color • 19.8" W X 3.6" D X 16.1" H • 503mm W X 92.5mm D X 408mm H (including stand) • 18.5 lb (8.4 kg) in maximum configuration • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm) 											<p>EPEAT™ Gold rating</p> <p>ENERGY STAR® 5.2-compliant</p> <p>TCO Certified Edge</p> <p>TUV Green Mark</p> <p>ULE Gold</p> <p>EuP 2013</p> <p>Cisco EnergyWise compatible</p> <p>GREENGUARD® certified</p> <p>RoHS-compliant</p>
Limited Warranty	<p>3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available</p>											<p>Supports ThinkVantage Technologies</p> <p>For compatible accessories, please go to O-M92Z sheet;</p> <p>For Lenovo service upgrade options, please go to S-TC sheet</p>

See footnotes for important warranty information
US models announced October 23, 2012

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ThinkCentre® M92z (3296) - 20" (Win 8) - II

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3296-F4U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win8 Pro64	10/23/12
3296-F5U	i5-3470S	4GBx2	2.0M	1TB 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win8 Pro64	10/23/12
3296-G8U	i3-3240	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3296-G9U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3296-H1U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win8 Pro64	10/23/12
3296-H2U	i5-3570S	4GBx1	2.0M	1TB 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win8 Pro64	10/23/12
3296-H3U	i5-3570S	4GBx2	2.0M	1TB 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	vPro	None	Win8 Pro64	10/23/12
3296-H7U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64	10/23/12
3296-J8U	i5-3470S	4GBx1	2.0M	180G SSD	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64	11/20/12

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache) , Turbo Boost 2.0 (3.8GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Preloaded operating system²⁰ <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage Communication Utility ThinkVantage Power Manager RapidBoot HDD Accelerator Lenovo® SimpleTap Adobe® Reader® Microsoft Office 2010 preloaded; purchase product key to activate Core!® Burn.Now™ (DVD±RW) Core! DVD MovieFactory® (DVD±RW) - Windows 8 models <ul style="list-style-type: none"> Lenovo Support Lenovo Settings Lenovo Companion Lenovo Cloud Storage Lenovo QuickLaunch Norton™ Studio AccuWeather Evernote® Microsoft Office 2013 preloaded; purchase product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) - All models <ul style="list-style-type: none"> ThinkVantage System Update ThinkVantage Automatic Lock Utility Lenovo Solution Center View Management Utility Norton Internet Security (30 days of virus definitions) Skype™ 				
Implementation	Processor in LGA1155 socket															
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)															
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>															
DP dongle	None															
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector															
Light sensor	None															
Multi-touch	None															
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off															
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons															
Disk	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide <i>Some:</i> Hard Disk Drive / SATA 6.0Gb/s, 3.5" Wide, 7200 rpm															
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable															
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar															
Media reader	<i>Some:</i> 11-in-1 Single Slot SD media reader															
Chipset	Intel Q77 Express Chipset															
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)															
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)															
ExpressCard	None															
mSATA	One mSATA slot															
PCIe Mini Card	One PCI Express® Mini Card slot															
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2															
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter															
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®															
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified															
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)															
Security chip	Trusted Platform Module (TPM 1.2-compliant)															
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo															
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo															
Power supply	150 watts, autosensing, 85% PSU															
Machine	<i>Model(s) with 20" Non multi-touch, Monitor stand:</i> <ul style="list-style-type: none"> Business black color 19.8" W X 5.6" D X 17.6" H 503mm W X 143mm D X 448mm H (including stand) 23.0 lb (10.5 kg) in maximum configuration Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° Toolless back cover, stand removal Toolless disk, optical drive, memory removal Support VESA mount (100mm) 											EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Supports ThinkVantage Technologies For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information
US models announced October 23 or November 20, 2012

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ThinkCentre® M92z (3298) - 20" (GMP)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel Global (G) vPro G P	Win7 preload (mm/dd/yy)	Ann date	
3298-A2U	i7-3770S	4GBx1	2.0M	500G 7200	HD 4000	11b/g/n	Media	Sensor	None	Switch	Frame	USB	vPro	G P	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Premium All-In-One PC for the enterprise</i>	Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Core™ i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	
Implementation		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>	
DP dongle	None	
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector	
Light sensor	Ambient Light Sensor	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons	
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar	
Media reader	11-in-1 Single Slot SD media reader	
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>Model(s) with 20" Non multi-touch, Frame stand:</i> <ul style="list-style-type: none"> ● Business black color ● 19.8" W X 3.6" D X 16.1" H, ● 503mm W X 92.5mm D X 408mm H (including stand) ● 18.5 lb (8.4 kg) in maximum configuration ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) 	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	
	Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet	

See footnotes for important warranty information
 US model announced June 5, 2012

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ThinkCentre® M92z (3298) - 20" (GMP) - Win 8

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
3298-A4U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	Media	Sensor	None	Switch	Frame	USB	vPro	G P	Win8 Pro64	10/23/12
3298-A6U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	Media	Sensor	None	None	Frame	USB	vPro	G P	Win7 Pro64	10/23/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i>											Preloaded operating system²⁰				
Implementation	Intel® Core™ i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit				
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											Preloaded applications (only some listed)				
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>											- Windows 7 models				
DP dongle	None											<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • RapidBoot HDD Accelerator • Lenovo® SimpleTap • Adobe® Reader® • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, work as standalone monitor via DisplayPort-in connector											- Windows 8 models				
Light sensor	Ambient Light Sensor											<ul style="list-style-type: none"> • Lenovo Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) 				
Multi-touch	None											- All models				
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off											<ul style="list-style-type: none"> • ThinkVantage System Update • ThinkVantage Automatic Lock Utility • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™ 				
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons											Security				
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm											<ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s) 				
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable											EPEAT™ Gold rating				
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar											ENERGY STAR® 5.2-compliant				
Media reader	11-in-1 Single Slot SD media reader											TCO Certified Edge				
Chipset	Intel Q77 Express Chipset											TUV Green Mark				
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)											ULE Gold				
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											EuP 2013				
ExpressCard	None											Cisco EnergyWise compatible				
mSATA	One mSATA slot											GREENGUARD® certified				
PCIe Mini Card	One PCI Express® Mini Card slot											RoHS-compliant				
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2											Supports ThinkVantage Technologies				
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter											For compatible accessories, please go to O-M92Z sheet;				
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®											For Lenovo service upgrade options, please go to S-TC sheet				
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified															
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)															
Security chip	Trusted Platform Module (TPM 1.2-compliant)															
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo logo															
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo															
Power supply	150 watts, autosensing, 85% PSU															
Machine	<i>Model(s) with 20" Non multi-touch, Frame stand:</i> <ul style="list-style-type: none"> • Business black color • 19.8" W X 3.6" D X 16.1" H, • 503mm W X 92.5mm D X 408mm H (including stand) • 18.5 lb (8.4 kg) in maximum configuration • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm) 															
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available															

See footnotes for important warranty information
US models announced October 23, 2012

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ThinkCentre® M92z (3315) - 23" (TopSeller) - Win 8

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Intel vPro Mouse	Global	Preload	Ann date (mm/dd/yy)
3315-A3U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	vPro	None	Win8 Pro64 10/23/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	<i>Premium All-In-One PC for the enterprise</i>	Preloaded operating system²⁰ Windows® 8 Pro 64-bit Preloaded applications (only some listed) <ul style="list-style-type: none"> ● ThinkVantage® System Update ● ThinkVantage Automatic Lock Utility ● View Management Utility ● Lenovo® Support ● Lenovo Settings ● Lenovo Companion ● Lenovo Cloud Storage ● Lenovo QuickLaunch ● Lenovo Solution Center ● Microsoft® Office 2013 preloaded; purchase product key to activate ● Norton™ Internet Security (30 days of virus definitions) ● Norton Studio ● Intel AppUp® ● AccuWeather ● PC Device Stage ● Evernote® ● Skype™ ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW)
Processor	Intel® Core™ i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology	
Implementation	Processor in LGA1155 socket	
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>	
DP dongle	None	
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector	
Light sensor	None	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons	
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar 11-in-1 Single Slot SD media reader	
Media reader	11-in-1 Single Slot SD media reader	
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>Model(s) with 23" Non multi-touch, Monitor stand:</i> <ul style="list-style-type: none"> ● Business black color ● 22.4" W X 9.7" D X 17.8" H ● 568mm W X 247mm D X 452mm H (including stand) ● 25.7 lb (11.7 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) 	
Limited Warranty	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	
	Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) 	
	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies	
	For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet	

See footnotes for important warranty information
US model announced October 23, 2012

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ThinkCentre® M92z (3318) - 23" (TopSeller)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
3318-C2U	i3-2120	4GBx1	2.0M	500G 7200	HD 2000	11b/g/n	None	None	None	None	Monitor	USB	None	None	Pro 64	06/05/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Premium All-In-One PC for the enterprise</i>	Preloaded operating system²⁰														
Processor	Intel® Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Genuine Windows® 7 Professional 64														
Implementation	Processor in LGA1155 socket	Ready to install applications (only some listed)														
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box 														
Graphics	Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>	Preloaded applications (only some listed)														
DP dongle	None	<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 														
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector															
Light sensor	None															
Multi-touch	None															
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off															
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons															
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm															
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable															
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar															
Media reader	None															
Chipset	Intel Q77 Express Chipset															
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)															
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)															
ExpressCard	None															
mSATA	One mSATA slot															
PCIe Mini Card	One PCI Express® Mini Card slot															
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2															
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter															
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®															
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified															
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)															
Security chip	Trusted Platform Module (TPM 1.2-compliant)	Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) 														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo															
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo															
Power supply	150 watts, autosensing, 85% PSU															
Machine	<i>Model(s) with 23" Non multi-touch, Monitor stand:</i> <ul style="list-style-type: none"> ● Business black color ● 22.4" W X 9.7" D X 17.8" H ● 568mm W X 247mm D X 452mm H (including stand) ● 25.7 lb (11.7 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) 	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies														
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet														

See footnotes for important warranty information
US models announced June 5, 2012

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ThinkCentre® M92z (3318) - 23" (TopSeller) - II

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCle Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
3318-A4U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64	06/05/12
3318-A5U	i5-3550S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64	06/05/12
3318-A6U	i7-3770S	4GBx2	2.0M	500G 7200	HD 4000	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64	06/05/12
3318-B7U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	vPro	None	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	<p><i>Premium All-In-One PC for the enterprise</i></p> <p>Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i5-3550S Processor (4 cores / 4 threads, 3.0GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p> <p>Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4000, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology</p>										<p>Preloaded operating system²⁰</p> <p>Genuine Windows® 7 Professional 64</p> <p>Ready to install applications (only some listed)</p> <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box <p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 					
Implementation	Processor in LGA1155 socket															
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)															
Graphics	<p>Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i></p>															
DP dongle	None															
Display	<p>23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector</p>															
Light sensor	None															
Multi-touch	None															
Camera	<p>Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off</p>															
Controls	<p><i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons</p>															
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm															
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable															
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar															
Media reader	None															
Chipset	Intel Q77 Express Chipset															
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)															
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)															
ExpressCard	None															
mSATA	One mSATA slot															
PCle Mini Card	One PCI Express® Mini Card slot															
PCle WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2															
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter															
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®															
Audio support	<p>High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified</p>															
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)															
Security chip	Trusted Platform Module (TPM 1.2-compliant)															
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo															
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo															
Power supply	150 watts, autosensing, 85% PSU															
Machine	<p><i>Model(s) with 23" Non multi-touch, Frame stand:</i></p> <ul style="list-style-type: none"> ● Business black color ● 22.4" W X 3.7" D X 17.6" H ● 568mm W X 93mm D X 447mm H (including stand) ● 21.5 lb (9.8 kg) in maximum configuration ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) 										<p>Security</p> <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) 					
											<p>EPEAT™ Gold rating</p> <p>ENERGY STAR® 5.2-compliant</p> <p>TCO Certified Edge</p> <p>TUV Green Mark</p> <p>ULE Gold</p> <p>EuP 2013</p> <p>Cisco EnergyWise compatible</p> <p>GREENGUARD® certified</p> <p>RoHS-compliant</p> <p>Supports ThinkVantage Technologies</p>					
											<p>For compatible accessories, please go to O-M92Z sheet;</p> <p>For Lenovo service upgrade options, please go to S-TC sheet</p>					
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available															

See footnotes for important warranty information
 US models announced June 5, 2012

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ThinkCentre® M92z (3318) - 23" (TopSeller) - III

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro	Global	Win7 preload	Ann date (mm/dd/yy)
3318-B6U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Pro 64	06/05/12
3318-B8U	i7-3770S	4GBx1	2.0M	500G 7200	HD 4000	11b/g/n	Media	None	None	None	Monitor	USB	vPro	None	Pro 64	06/05/12
3318-B9U	i7-3770S	4GBx1	2.0M	500G 7200	HD 4000	11b/g/n	None	None	None	None	Monitor	2.4G	vPro	None	Pro 64	06/05/12
3318-C1U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	11b/g/n	None	None	None	None	Monitor	2.4G	vPro	None	Pro 64	06/05/12
3318-E3U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Pro 64	09/04/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Premium All-In-One PC for the enterprise</i>	Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller	
Implementation	Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology	
Memory	Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	
Graphics	16GB max, PC3-12800 1600MHz DDR3, two 204-pin SODIMM sockets (notebook)	
DP dongle	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort)@60Hz	
Display	None	
Light sensor	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector	
Multi-touch	None	
Camera	None	
Controls	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Disk	Front: Microphone mute, speaker mute, monitor mode, OSD menu, and power button Side: Volume up and down buttons	
Optical	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	
Onboard SATA	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Media reader	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar Some: 11-in-1 Single Slot SD media reader	
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Some: Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo Some: Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black	
Mouse	Some: Enhanced Optical USB Mouse, black, Lenovo logo Some: Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black	
Power supply	150 watts, autosensing, 85% PSU	
Machine	Model(s) with 23" Non multi-touch, Monitor stand: <ul style="list-style-type: none"> ● Business black color ● 22.4" W X 9.7" D X 17.8" H ● 568mm W X 247mm D X 452mm H (including stand) ● 25.7 lb (11.7 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) 	
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	
		Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s)
		EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies
		For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
 US models announced June 5 or September 4, 2012

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 (MTRL1-10) February 2013

ThinkCentre® M92z (3318) - 23" (TopSeller) - Win 8

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial PS/2 port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro Global	Preload	Ann date (mm/dd/yy)	
3318-E5U	i5-3470T	4GBx1	2.0M	1TB 7200	HD 2500	Intel 2230 + BT	Media	None	None	None	Frame	USB	vPro	None	Win8 Pro64	10/23/12
3318-E6U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	Media	None	None	None	Frame	USB	vPro	None	Win8 Pro64	10/23/12
3318-E7U	i5-3570S	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	Media	None	None	None	Frame	USB	vPro	None	Win8 Pro64	10/23/12
3318-H5U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	None	None	None	None	Frame	USB	vPro	None	Win7 Pro64	11/20/12
3318-H7U	i3-3220	4GBx1	2.0M	180G SSD	HD 2500	Intel 2230 + BT	None	None	None	None	Frame	USB	None	None	Win7 Pro64	11/20/12
3318-J1U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	None	None	None	None	Frame	USB	None	None	Win7 Pro64	12/04/12
3318-J5U	G870	4GBx1	2.0M	500G 7200	Intel HD	Intel 2230 + BT	None	None	None	None	Frame	USB	None	None	Win7 Pro64	01/22/13
3318-J8U	i5-3330S	4GBx1	2.0M	1TB 7200	HD 2500	Intel 2230 + BT	None	None	None	None	Frame	USB	None	None	Win7 Pro64	03/12/13

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Pentium® G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3330S Processor (4 cores / 4 threads, 2.7GHz, 6MB cache) , Turbo Boost 2.0 (3.2GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache) , Turbo Boost 2.0 (3.8GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Preloaded operating system²⁰ <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage Communication Utility ThinkVantage Power Manager RapidBoot HDD Accelerator Lenovo® SimpleTap Adobe® Reader® Microsoft® Office 2010 preloaded; purchase product key to activate Corel® Burn.Now™ (DVD±RW) Corel DVD MovieFactory® (DVD±RW) - Windows 8 models <ul style="list-style-type: none"> Lenovo Support Lenovo Settings Lenovo Companion Lenovo Cloud Storage Lenovo QuickLaunch Norton™ Studio AccuWeather Evernote® Microsoft Office 2013 preloaded; purchase product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) - All models <ul style="list-style-type: none"> ThinkVantage System Update ThinkVantage Automatic Lock Utility Lenovo Solution Center View Management Utility Norton Internet Security (30 days of virus definitions) Skype™
Implementation		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics or Intel HD Graphics 2500 in processor, uses main memory, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort)@60Hz	
DP dongle	None	
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector	
Light sensor	None	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons	
Disk	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide <i>Some:</i> Hard Disk Drive / SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar	
Media reader	<i>Some:</i> 11-in-1 Single Slot SD media reader	
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>Model(s) with 23" Non multi-touch, Frame stand:</i> <ul style="list-style-type: none"> Business black color 22.4" W X 3.7" D X 17.6" H 568mm W X 93mm D X 447mm H (including stand) 21.5 lb (9.8 kg) in maximum configuration Toolless back cover, stand removal Toolless disk, optical drive, memory removal Support VESA mount (100mm) 	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
US models announced Oct 23, 2012, Nov 20, 2012, Dec 4, 2012, Jan 22, 2013, or Mar 12, 2013

ThinkCentre® M92z (3318) - 23" (TopSeller) - Win 8 - II

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3318-E2U	i3-3220	4GBx1 2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3318-F5U	i3-3220	4GBx1 2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3318-F6U	i3-3240	4GBx1 2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3318-F3U	i3-3240	4GBx1 2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3318-F4U	G870	4GBx1 2.0M	500G 7200	Intel HD	11b/g/n	None	None	None	None	None	Monitor	USB	None	None	Win8 Pro64	10/23/12
3318-F9U	i3-3220	4GBx1 2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	None	Monitor	USB	None	None	Win7 Pro64	10/23/12
3318-J3U	G2120	4GBx1 2.0M	500G 7200	Intel HD	11b/g/n	None	None	None	None	None	Monitor	USB	None	None	Win7 Pro64	12/04/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Pentium® G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller	Preloaded operating system²⁰ <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 8 Pro 64-bit
Implementation	Processor in LGA1155 socket	Preloaded applications (only some listed) - Windows 7 models <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage Communication Utility ● ThinkVantage Power Manager ● Lenovo® SimpleTap ● Adobe® Reader® ● Microsoft® Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) - Windows 8 models <ul style="list-style-type: none"> ● Lenovo Support ● Lenovo Settings ● Lenovo Companion ● Lenovo Cloud Storage ● Norton™ Studio ● AccuWeather ● Evernote® ● Microsoft Office 2013 preloaded; purchase product key to activate ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) - All models <ul style="list-style-type: none"> ● ThinkVantage System Update ● ThinkVantage Automatic Lock Utility ● Lenovo Solution Center ● View Management Utility ● Norton Internet Security (30 days of virus definitions) ● Skype™
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook) <i>System automatically clocks down for processors with 1333MHz DDR3 memory controller</i>	
Graphics	Intel HD Graphics or Intel HD Graphics 2500 in processor, uses main memory, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>	
DP dongle	None	
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector	
Light sensor	None	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons	
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar	
Media reader	<i>Some:</i> 11-in-1 Single Slot SD media reader	
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>Model(s) with 23" Non multi-touch, Monitor stand:</i> <ul style="list-style-type: none"> ● Business black color ● 22.4" W X 9.7" D X 17.8" H ● 568mm W X 247mm D X 452mm H (including stand) ● 25.7 lb (11.7 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) 	Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s)
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
US models announced October 23 or December 4, 2012

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ThinkCentre® M92z (3318) - 23" (TopSeller) - Win 8 - III

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro Global	Preload	Ann date (mm/dd/yy)
3318-D2U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	None	None	None	None	Monitor	USB	vPro	None	Win8 Pro64 10/23/12
3318-E1U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	Media	None	None	None	Monitor	USB	vPro	None	Win8 Pro64 10/23/12
3318-E8U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	Intel 2230 + BT	Media	None	None	None	Monitor	USB	vPro	None	Win8 Pro64 10/23/12
3318-E9U	i5-3570S	4GBx1	2.0M	1TB 7200	HD 2500	Intel 2230 + BT	Media	None	None	None	Monitor	USB	vPro	None	Win8 Pro64 10/23/12
3318-F1U	i5-3570S	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	Media	None	None	None	Monitor	USB	vPro	None	Win8 Pro64 10/23/12
3318-F2U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	Media	None	None	None	Monitor	USB	vPro	None	Win8 Pro64 10/23/12
3318-G1U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 10/23/12
3318-J4U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	Intel 6205	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 01/22/13
3318-J6U	i7-3770S	4GBx1	2.0M	1TB 7200	HD 4000	Intel 2230 + BT	None	None	None	None	Monitor	2.4G	vPro	None	Win7 Pro64 03/05/13

Positioning	<i>Premium All-In-One PC for the enterprise</i>											Preloaded operating system²⁰			
Processor	Intel® Core™ i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology											Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® Message Center Plus • RapidBoot HDD Accelerator • Lenovo SimpleTap • Adobe® Reader® • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models <ul style="list-style-type: none"> • Lenovo Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models <ul style="list-style-type: none"> • ThinkVantage System Update • ThinkVantage Automatic Lock Utility • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™ 			
Implementation	Processor in LGA1155 socket														
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)														
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>														
DP dongle	None														
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector														
Light sensor	None														
Multi-touch	None														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off														
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons														
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm														
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable														
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar														
Media reader	Some: 11-in-1 Single Slot SD media reader														
Chipset	Intel Q77 Express Chipset														
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)														
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
ExpressCard	None														
mSATA	One mSATA slot														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	Some: 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2														
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter														
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®														
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Security chip	Trusted Platform Module (TPM 1.2-compliant)											Security <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s) 			
Keyboard	Some: Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo Some: Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black														
Mouse	Some: Enhanced Optical USB Mouse, black, Lenovo logo Some: Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black														
Power supply	150 watts, autosensing, 85% PSU														
Machine	<i>Model(s) with 23" Non multi-touch, Monitor stand:</i> <ul style="list-style-type: none"> • Business black color • 22.4" W X 9.7" D X 17.8" H • 568mm W X 247mm D X 452mm H (including stand) • 25.7 lb (11.7 kg) in maximum configuration • Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm) 											EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TÜV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information
 US models announced October 23, 2012, January 22, 2013 or March 5, 2013

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 (MTRL1-27) March 2013

ThinkCentre® M92z (3325) - 23"

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁶	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro Global	Win7 preload	Ann date (mm/dd/yy)
3325-A1U	i3-2130	4GBx1	2.0M	500G 7200	HD 2000	11b/g/n	None	None	S P	None	Frame	USB	None	Pro 64	06/05/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Premium All-In-One PC for the enterprise</i>	Preloaded operating system²⁰													
Processor	Intel® Core™ i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD 2000 Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket	Genuine Windows® 7 Professional 64													
Implementation	Processor in LGA1155 socket	Ready to install applications (only some listed)													
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box 													
Graphics	Intel HD Graphics 2000 in processor, uses main memory, HDCP, DirectX® 10.1, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz</i>	Preloaded applications (only some listed)													
DP dongle	None	<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 													
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector														
Light sensor	None														
Multi-touch	None														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off														
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons														
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm														
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable														
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar														
Media reader	None														
Chipset	Intel Q77 Express Chipset														
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)														
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
ExpressCard	None														
mSATA	One mSATA slot														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2														
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter														
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®														
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	Security													
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	<ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) 													
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	150 watts, autosensing, 85% PSU														
Machine	<i>Model(s) with 23" Non multi-touch, Frame stand:</i> <ul style="list-style-type: none"> ● Business black color ● 22.4" W X 3.7" D X 17.6" H ● 568mm W X 93mm D X 447mm H (including stand) ● 21.5 lb (9.8 kg) in maximum configuration ● Toolless back cover, stand removal , ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) 	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies													
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet													

See footnotes for important warranty information
US model announced June 5, 2012

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(MTRL1-11) February 2013

ThinkCentre® M92z (3325) - 23" - II

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro Global	Win7 preload	Ann date (mm/dd/yy)
3325-B3U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64 06/05/12
3325-B4U	i5-3550S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	S P	None	Frame	USB	vPro	None	Pro 64 06/05/12
3325-E2U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	vPro	None	Pro 64 06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	<p><i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550S Processor (4 cores / 4 threads, 3.0GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket</p>										<p>Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed)</p> <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box 				
Implementation	Processor in LGA1155 socket										<p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 				
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)														
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz</i>														
DP dongle	None														
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector														
Light sensor	None														
Multi-touch	None														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off														
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons														
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm														
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable														
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar														
Media reader	None														
Chipset	Intel Q77 Express Chipset														
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)														
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
ExpressCard	None														
mSATA	One mSATA slot														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2														
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter														
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®														
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	150 watts, autosensing, 85% PSU														
Machine	<p><i>Model(s) with 23" Non multi-touch, Frame stand:</i></p> <ul style="list-style-type: none"> ● Business black color ● 22.4" W X 3.7" D X 17.6" H ● 568mm W X 93mm D X 447mm H (including stand) ● 21.5 lb (9.8 kg) in maximum configuration ● Toolless back cover, stand removal , ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) 										<p>Security</p> <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) 				
Limited Warranty	<p>3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available</p>										<p>EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant</p> <p>Supports ThinkVantage Technologies</p> <p>For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet</p>				

See footnotes for important warranty information
 US models announced June 5, 2012

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 (MTRL1-12) February 2013

ThinkCentre® M92z (3325) - 23" - III

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Intel Mouse vPro	Win7 Global preload	Ann date (mm/dd/yy)
3325-E1U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB vPro	None	Pro 64 06/05/12
3325-D9U	i7-3770S	4GBx1	2.0M	500G 7200	HD 4000	11b/g/n	None	None	None	None	Monitor	USB vPro	None	Pro 64 06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	<p><i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket</p>											<p>Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box</p>		
Implementation	Processor in LGA1155 socket											<p>Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)</p>		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)													
Graphics	<p>Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i></p>													
DP dongle	None													
Display	<p>23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector</p>													
Light sensor	None													
Multi-touch	None													
Camera	<p>Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off</p>													
Controls	<p><i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons</p>													
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm													
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable													
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar													
Media reader	None													
Chipset	Intel Q77 Express Chipset													
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)													
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
ExpressCard	None													
mSATA	One mSATA slot													
PCIe Mini Card	One PCI Express® Mini Card slot													
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2													
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter													
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®													
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified													
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)													
Security chip	Trusted Platform Module (TPM 1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, 1000dpi, black, Lenovo logo													
Power supply	150 watts, autosensing, 85% PSU													
Machine	<p><i>Model(s) with 23" Non multi-touch, Monitor stand:</i></p> <ul style="list-style-type: none"> ● Business black color ● 22.4" W X 9.7" D X 17.8" H ● 568mm W X 247mm D X 452mm H (including stand) ● 25.7 lb (11.7 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) 											<p>EPEAT™ Gold rating ENERGY STAR® 6.0-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant</p>		
												Supports ThinkVantage Technologies		
												For compatible accessories, please go to O-M92Z sheet;		
												For Lenovo service upgrade options, please go to S-TC sheet		
Limited Warranty	<p>3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available</p>													

See footnotes for important warranty information
 US models announced June 5, 2012

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ThinkCentre® M92z (3325) - 23" (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)
3325-F6U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	vPro	None	Win8 Pro64	10/23/12
3325-G7U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	None	None	Win8 Pro64	10/23/12
3325-G8U	i3-3240	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	None	None	Win8 Pro64	10/23/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- 3-year limited warranty

Positioning Processor	<p><i>Premium All-In-One PC for the enterprise</i></p> <p>Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller</p> <p>Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller</p> <p>Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket</p>											<p>Preloaded operating system²⁰</p> <p>Windows® 8 Pro 64-bit</p> <p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> • ThinkVantage® System Update • ThinkVantage Automatic Lock Utility • View Management Utility • Lenovo® Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Lenovo Solution Center • Microsoft® Office 2013 preloaded; purchase product key to activate • Norton™ Internet Security (30 days of virus definitions) • Norton Studio • Intel AppUp® • AccuWeather • PC Device Stage • Evernote™ • Skype™ • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)
Implementation												<p>Security</p> <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s)
Memory	16GB max, PC3-12800 1600MHZ DDR3 , two 204-pin SODIMM sockets (notebook)											
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz</i>											
DP dongle	None											
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector											
Light sensor	None											
Multi-touch	None											
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off											
Controls	<p><i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button</p> <p><i>Side:</i> Volume up and down buttons</p>											
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm											
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable											
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar											
Media reader	None											
Chipset	Intel Q77 Express Chipset											
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)											
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
ExpressCard	None											
mSATA	One mSATA slot											
PCIe Mini Card	One PCI Express® Mini Card slot											
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2											
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter											
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®											
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified											
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)											
Security chip	Trusted Platform Module (TPM 1.2-compliant)											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	150 watts, autosensing, 85% PSU											
Machine	<p><i>Model(s) with 23" Non multi-touch, Frame stand:</i></p> <ul style="list-style-type: none"> • Business black color • 22.4" W X 3.7" D X 17.6" H • 568mm W X 93mm D X 447mm H (including stand) • 21.5 lb (9.8 kg) in maximum configuration • Toolless back cover, stand removal , • Toolless disk, optical drive, memory removal • Support VESA mount (100mm) 											<p>EPEAT™ Gold rating</p> <p>ENERGY STAR® 5.2-compliant</p> <p>TCO Certified Edge</p> <p>TUV Green Mark</p> <p>ULE Gold</p> <p>EuP 2013</p> <p>Cisco EnergyWise compatible</p> <p>GREENGUARD® certified</p> <p>RoHS-compliant</p>
Limited Warranty	<p>3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available</p>											<p>Supports ThinkVantage Technologies</p> <p>For compatible accessories, please go to O-M92Z sheet;</p> <p>For Lenovo service upgrade options, please go to S-TC sheet</p>

See footnotes for important warranty information
US models announced October 23, 2012

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ThinkCentre® M92z (3325) - 23" (Win 8) - II

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁶	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse vPro	Intel Global	Preload	Ann date (mm/dd/yy)
3325-G9U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win8 Pro64 10/23/12
3325-H1U	i3-3240	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	None	None	Win8 Pro64 10/23/12
3325-H2U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	vPro	None	Win8 Pro64 10/23/12
3325-H3U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	vPro	None	Win8 Pro64 10/23/12
3325-H4U	i5-3570S	4GBx1	2.0M	1TB 7200	HD 2500	11b/g/n	Media	None	None	None	Monitor	USB	vPro	None	Win8 Pro64 10/23/12
3325-H5U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	11b/g/n	Media	None	None	None	Monitor	USB	vPro	None	Win8 Pro64 10/23/12
3325-H8U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 10/23/12
3325-K4U	i5-3470S	4GBx1	2.0M	180G SSD	HD 2500	11b/g/n	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 11/20/12

Positioning	<i>Premium All-In-One PC for the enterprise</i>											Preloaded operating system²⁰			
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated DDR3 memory controller (up to 1600MHz) Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated DDR3 memory controller (up to 1600MHz) Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage Communication Utility ThinkVantage Power Manager Lenovo® Message Center Plus RapidBoot HDD Accelerator Lenovo SimpleTap Adobe® Reader® Microsoft® Office 2010 preloaded; purchase product key to activate Corel® Burn.Now™ (DVD±RW) Corel DVD MovieFactory® (DVD±RW) - Windows 8 models <ul style="list-style-type: none"> Lenovo Support Lenovo Settings Lenovo Companion Lenovo Cloud Storage Lenovo QuickLaunch Norton™ Studio AccuWeather Evernote® Microsoft Office 2013 preloaded; purchase product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) - All models <ul style="list-style-type: none"> ThinkVantage System Update ThinkVantage Automatic Lock Utility Lenovo Solution Center View Management Utility Norton Internet Security (30 days of virus definitions) Skype™ 			
Implementation	Processor in LGA1155 socket														
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)														
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>														
DP dongle	None														
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector														
Light sensor	None														
Multi-touch	None														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off														
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons														
Disk	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide <i>Some:</i> Hard Disk Drive / SATA 6.0Gb/s, 3.5" Wide, 7200 rpm														
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable														
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar														
Media reader	<i>Some:</i> 11-in-1 Single Slot SD media reader														
Chipset	Intel Q77 Express Chipset														
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)														
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
ExpressCard	None														
mSATA	One mSATA slot														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2														
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter														
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®														
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Security chip	Trusted Platform Module (TPM 1.2-compliant)											Security <ul style="list-style-type: none"> Security chip (see information on left) Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) Power-on password Hard disk password Boot sequence control Boot without keyboard and mouse USB port disablement Chassis intrusion switch on selected model(s) 			
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											EPEAT™ Gold rating			
Mouse	Enhanced Optical USB Mouse, 1000dpi, black, Lenovo logo											ENERGY STAR® 6.0-compliant			
Power supply	150 watts, autosensing, 85% PSU											TCO Certified Edge			
Machine	<i>Model(s) with 23" Non multi-touch, Monitor stand:</i> <ul style="list-style-type: none"> Business black color 22.4" W X 9.7" D X 17.8" H 568mm W X 247mm D X 452mm H (including stand) 25.7 lb (11.7 kg) in maximum configuration Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° Toolless back cover, stand removal Toolless disk, optical drive, memory removal Support VESA mount (100mm) 											TUV Green Mark			
												ULE Gold			
												EuP 2013			
												Cisco EnergyWise compatible			
												GREENGUARD® certified			
												RoHS-compliant			
												Supports ThinkVantage Technologies			
												For compatible accessories, please go to O-M92Z sheet;			
												For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

See footnotes for important warranty information
 US models announced October 23 or November 20, 2012

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ThinkCentre® M92z (3327) - 23" (GMP)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse vPro	Intel Global (G) GMP (P)	Win7 preload (mm/dd/yy)	Ann date (mm/dd/yy)	
3327-A4U	i7-3770S	4GBx1	2.0M	500G 7200	HD 4000	11b/g/n	Media	Sensor	None	Switch	Frame	USB	vPro	G P	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Premium All-In-One PC for the enterprise</i>											Preloaded operating system²⁰			
Processor	Intel® Core™ i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Genuine Windows® 7 Professional 64			
Implementation												Ready to install applications (only some listed)			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box 			
Graphics	Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>											Preloaded applications (only some listed)			
DP dongle	None											<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 			
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector														
Light sensor	Ambient Light Sensor														
Multi-touch	None														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off														
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons														
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm														
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable														
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar														
Media reader	11-in-1 Single Slot SD media reader														
Chipset	Intel Q77 Express Chipset														
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)														
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
ExpressCard	None														
mSATA	One mSATA slot														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2														
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter														
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®														
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	150 watts, autosensing, 85% PSU														
Machine	<i>Model(s) with 23" Non multi-touch, Frame stand:</i> <ul style="list-style-type: none"> ● Business black color ● 22.4" W X 3.7" D X 17.6" H, ● 568mm W X 93mm D X 447mm H (including stand) ● 21.5 lb (9.8 kg) in maximum configuration ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) 											Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) 			
												EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant			
												Supports ThinkVantage Technologies			
												For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

ThinkCentre® M92z (3327) - 23" (GMP) - Win 8

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel Global (G) vPro GMP (P)	Preload	Ann date (mm/dd/yy)
3327-A8U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	Media	Sensor	None	Switch	Frame	USB vPro	G P	Win8 Pro64	10/23/12
3327-B2U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	Media	Sensor	None	None	Frame	USB vPro	G P	Win7 Pro64	10/23/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i>											Preloaded operating system²⁰			
Implementation	Intel® Core™ i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											Some: Windows 8 Pro 64-bit			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>											Preloaded applications (only some listed)			
DP dongle	None											- Windows 7 models			
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector											<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® Message Center Plus • RapidBoot HDD Accelerator • Lenovo SimpleTap • Adobe® Reader® • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 			
Light sensor	Ambient Light Sensor											- Windows 8 models			
Multi-touch	None											<ul style="list-style-type: none"> • Lenovo Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Norton™ Studio • AccuWeather • Evernote® • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) 			
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off											- All models			
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons											<ul style="list-style-type: none"> • ThinkVantage System Update • ThinkVantage Automatic Lock Utility • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Skype™ 			
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm											Security			
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable											<ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) 			
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar											<ul style="list-style-type: none"> • Power-on password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s) 			
Media reader	11-in-1 Single Slot SD media reader											EPEAT™ Gold rating			
Chipset	Intel Q77 Express Chipset											ENERGY STAR® 5.2-compliant			
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)											TCO Certified Edge			
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											TUV Green Mark			
ExpressCard	None											ULE Gold			
mSATA	One mSATA slot											EuP 2013			
PCIe Mini Card	One PCI Express® Mini Card slot											Cisco EnergyWise compatible			
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2											GREENGUARD® certified			
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter											RoHS-compliant			
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®											Supports ThinkVantage Technologies			
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified											For compatible accessories, please go to O-M92Z sheet;			
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)											For Lenovo service upgrade options, please go to S-TC sheet			
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	150 watts, autosensing, 85% PSU														
Machine	<i>Model(s) with 23" Non multi-touch, Frame stand:</i> <ul style="list-style-type: none"> • Business black color • 22.4" W X 3.7" D X 17.6" H, • 568mm W X 93mm D X 447mm H (including stand) • 21.5 lb (9.8 kg) in maximum configuration • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm) 														
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

See footnotes for important warranty information
US models announced October 23, 2012

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ThinkCentre® M92z (3311) - 23" (Multi-touch) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro Global	Win7 preload	Ann date (mm/dd/yy)	
3311-A4U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	2.4G	vPro	None	Pro 64	06/05/12
3311-C2U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	vPro	None	Pro 64	11/20/12
3311-C3U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	11b/g/n	None	None	None	None	Frame	USB	None	None	Pro 64	12/11/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Premium All-In-One PC for the enterprise</i>											Preloaded operating system²⁰			
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box			
Implementation	Processor in LGA1155 socket											Preloaded applications (only some listed)			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Microsoft Touch Pack ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)			
Graphics	Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>														
DP dongle	None														
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector														
Light sensor	None														
Multi-touch	Multi-touch, 2-point support														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off														
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons														
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm														
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable														
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar														
Media reader	None														
Chipset	Intel Q77 Express Chipset														
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)														
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
ExpressCard	None														
mSATA	One mSATA slot														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2														
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter														
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®														
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified Intel Active Management Technology 8.0 (Intel AMT 8.0) Trusted Platform Module (TPM 1.2-compliant)											Security ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s)			
Intel AMT															
Security chip															
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo <i>Some:</i> Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black														
Mouse	<i>Some:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>Some:</i> Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black														
Power supply	150 watts, autosensing, 85% PSU														
Machine	<i>Model(s) with 23" multi-touch, Frame stand:</i> ● Business black color ● 22.4" W X 3.9" D X 17.6" H, ● 568mm W X 100mm D X 447mm H (including stand) ● 23.9 lb (10.9 kg) in maximum configuration ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm)											EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information
 US models announced June 5, November 20, or December 11, 2012

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ThinkCentre® M92z (3311) - 23" (Multi-touch) - TopSeller - II

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN / BT	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/Mouse	Intel vPro	Win7 Global preload (mm/dd/yy)	Ann date	
3311-B1U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	None	None	None	None	Monitor	USB	vPro	None	Pro 64	06/05/12
3311-B2U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	Intel 2230 + BT	Media	None	None	None	Monitor	USB	vPro	None	Pro 64	06/05/12
3311-B3U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	Intel 2230 + BT	Media	None	None	None	Monitor	2.4G	vPro	None	Pro 64	06/05/12
3311-B9U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	None	None	None	None	Monitor	USB	None	None	Pro 64	09/04/12
3311-C1U	i5-3470S	4GBx1	2.0M	180G SSD	HD 2500	Intel 2230 + BT	None	None	None	None	Monitor	USB	vPro	None	Pro 64	11/20/12
3311-C4U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	Intel 6205	None	None	None	None	Monitor	USB	vPro	None	Pro 64	01/22/13

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology	Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> Rescue and Recovery™ Password Manager Business-in-a-Box Preloaded applications (only some listed) <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility ThinkVantage Automatic Lock Utility ThinkVantage Power Manager View Management Utility Microsoft Touch Pack Lenovo Solution Center Lenovo Message Center Plus RapidBoot HDD Accelerator Lenovo SimpleTap Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ for Windows Windows Live™ Essentials Microsoft Office 2010 preloaded; purchase product key to activate Corel® Burn.Now™ (DVD±RW) Corel DVD MovieFactory® (DVD±RW)
Implementation	Processor in LGA1155 socket	Security <ul style="list-style-type: none"> Security chip (see information on left) Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) Power-on password Hard disk password Boot sequence control Boot without keyboard and mouse USB port disablement Chassis intrusion switch on selected model(s)
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz</i>	
DP dongle	None	
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector	
Light sensor	None	
Multi-touch	Multi-touch, 2-point support	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off	
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons	
Disk	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide <i>Some:</i> Hard Disk Drive / SATA 6.0Gb/s, 3.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar	
Media reader	<i>Some:</i> 11-in-1 Single Slot SD media reader	
Chipset	Intel Q77 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	<i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo <i>Some:</i> Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black	
Mouse	<i>Some:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>Some:</i> Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<i>Model(s) with 23" multi-touch, Monitor stand:</i> <ul style="list-style-type: none"> Business black color 22.4" W X 10.0" D X 17.8" H 568mm W X 254mm D X 452mm H (including stand) 28.2 lb (12.8 kg) in maximum configuration Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° Toolless back cover, stand removal Toolless disk, optical drive, memory removal Support VESA mount (100mm) 	
Limited Warranty ¹²	3-years, limited onsite service²⁴ , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available	EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
US models announced June 5, 2012, Sep 4, 2012, Nov 20, 2012, or Jan 22, 2013

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ThinkCentre® M92z (3314) - 23" (Multi-touch)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro	Win7 Global pre-load	Ann date (mm/dd/yy)
3314-D8U	i7-3770S	4GBx2	2.0M	1TB 7200	HD 4000	Intel 2230 + BT	None	None	None	None	Monitor	USB	vPro	None	Pro 64 06/05/12
3314-D9U	i5-3470T	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	None	None	None	None	Monitor	USB	vPro	None	Pro 64 06/05/12
3314-E7U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	None	None	None	None	Monitor	USB	vPro	None	Pro 64 08/14/12
3314-E6U	i3-3220	4GBx1	2.0M	500G 7200	HD 2500	Intel 2230 + BT	None	None	None	None	Monitor	USB	None	None	Pro 64 09/04/12
3314-F1U	i5-3470S	4GBx1	2.0M	180G SSD	HD 2500	Intel 2230 + BT	None	None	None	None	Monitor	USB	vPro	None	Pro 64 11/20/12
3314-F2U	i7-3770S	8GBx1	2.0M	1TB 7200	HD 4000	Intel 2230 + BT	None	None	None	None	Monitor	USB	vPro	None	Pro 64 12/11/12
3314-F3U	i5-3470S	4GBx1	2.0M	500G 7200	HD 2500	Intel 6205	None	None	None	None	Monitor	USB	vPro	None	Pro 64 01/22/13

Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> Rescue and Recovery™ Password Manager Business-in-a-Box Preloaded applications (only some listed) <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility ThinkVantage Automatic Lock Utility ThinkVantage Power Manager View Management Utility Microsoft® Touch Pack Lenovo Solution Center Lenovo Message Center Plus RapidBoot HDD Accelerator Lenovo SimpleTap Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ for Windows Windows Live™ Essentials Microsoft Office 2010 preloaded; purchase product key to activate Corel® Burn.Now™ (DVD±RW) Corel DVD MovieFactory® (DVD±RW) 				
Implementation	Processor in LGA1155 socket														
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)														
Graphics	Intel HD Graphics 2500 or Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz</i>														
DP dongle	None														
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector														
Light sensor	None														
Multi-touch	Multi-touch, 2-point support														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off														
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons														
Disk	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide <i>Some:</i> Hard Disk Drive / SATA 6.0Gb/s, 3.5" Wide, 7200 rpm														
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable														
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar														
Media reader	None														
Chipset	Intel Q77 Express Chipset														
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)										Security <ul style="list-style-type: none"> Security chip (see information on left) Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) Power-on password Hard disk password Boot sequence control Boot without keyboard and mouse USB port disablement Chassis intrusion switch on selected model(s) 				
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
ExpressCard	None														
mSATA	One mSATA slot														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	<i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2														
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter														
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®														
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M92Z sheet; For Lenovo service upgrade options, please go to S-TC sheet				
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	150 watts, autosensing, 85% PSU														
Machine	<i>Model(s) with 23" multi-touch, Monitor stand:</i> <ul style="list-style-type: none"> Business black color 22.4" W X 10.0" D X 17.8" H 568mm W X 254mm D X 452mm H (including stand) 28.2 lb (12.8 kg) in maximum configuration Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° Toolless back cover, stand removal Toolless disk, optical drive, memory removal Support VESA mount (100mm) 														
Limited Warranty ¹²	3-years, limited onsite service²⁴ , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available														

See footnotes for important warranty information
US models announced Jun 5, Aug 14, Sep 4, No 20, Dec 11, 2012, or Jan 22, 2013

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ThinkCentre® M92z (3329) - 23" (Multi-touch) - GMP

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse vPro	Intel Global (G) GMP (P)	Win7 preload (mm/dd/yy)	Ann date
3329-A4U	i7-3770S	4GBx1	2.0M	500G 7200	HD 4000	11b/g/n	Media	Sensor	None	Switch	Frame	USB	vPro G P	Pro 64	06/05/12

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Premium All-In-One PC for the enterprise</i>											Preloaded operating system²⁰			
Processor	Intel® Core™ i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Genuine Windows® 7 Professional 64			
Implementation	Processor in LGA1155 socket											Ready to install applications (only some listed)			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box 			
Graphics	Intel HD Graphics 4000 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>											Preloaded applications (only some listed)			
DP dongle	None											<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Microsoft Touch Pack ● Lenovo Solution Center ● Lenovo Message Center Plus ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 			
Display	23.0" (580.4mm) Full HD 1080p (1920x1080) TFT color , IPS wide viewing angle, anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, work as standalone monitor via DisplayPort-in connector														
Light sensor	Ambient Light Sensor														
Multi-touch	Multi-touch, 2-point support														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off														
Controls	<i>Front:</i> Microphone mute, speaker mute, monitor mode, OSD menu, and power button <i>Side:</i> Volume up and down buttons														
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm														
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable														
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 3.0Gb/s connector and one SATA 6.0Gb/s connector on planar														
Media reader	11-in-1 Single Slot SD media reader														
Chipset	Intel Q77 Express Chipset														
Rear ports	Four USB 2.0, ethernet (RJ-45), DisplayPort-out, DisplayPort-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)														
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
ExpressCard	None														
mSATA	One mSATA slot														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2														
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter														
Ethernet	One gigabit ethernet port, Intel 82579LM, Wake on LAN®														
Audio support	High Definition (HD) Audio, Realtek ALC272 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified														
Intel AMT	Intel Active Management Technology 8.0 (Intel AMT 8.0)														
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	150 watts, autosensing, 85% PSU														
Machine	<i>Model(s) with 23" multi-touch, Frame stand:</i> <ul style="list-style-type: none"> ● Business black color ● 22.4" W X 3.9" D X 17.6" H, ● 568mm W X 100mm D X 447mm H (including stand) ● 23.9 lb (10.9 kg) in maximum configuration ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) 											Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s) 			
												EPEAT™ Gold rating			
												ENERGY STAR® 5.2-compliant			
												TCO Certified Edge			
												TUV Green Mark			
												ULE Gold			
												EuP 2013			
												Cisco EnergyWise compatible			
												GREENGUARD® certified			
												RoHS-compliant			
												Supports ThinkVantage Technologies			
												For compatible accessories, please go to O-M92Z sheet;			
												For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

See footnotes for important warranty information
US model announced June 5, 2012

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Memory

2GB PC3-12800 DDR3 SODIMM	0A65722	ann 06/05/12
4GB PC3-12800 DDR3 SODIMM	0A65723	ann 06/05/12
8GB PC3-12800 DDR3 SODIMM	0A65724	ann 06/05/12

More information at

www.lenovo.com/support/desktopmemorycompatibility

Storage and removable storage

250GB SATA 3.0Gb/s Disk (7200 rpm)	41N3015	ann 01/24/06
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	ann 11/06/07
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918	ann 08/19/08
300GB SATA 3.0Gb/s Disk (10000 rpm) 2.5"	43R2031	ann 03/31/09

USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
USB 3.0 Secure 500GB Hard Drive	0A65619	ann 11/29/11
USB 3.0 Secure 750GB Hard Drive	0A65616	ann 11/29/11
USB 3.0 Secure 1TB Hard Drive	0A65621	ann 08/28/12
Slim USB Portable DVD Burner	0A33988	ann 06/14/11

Keyboard

Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Ultraslim Plus Wireless Keyboard and Mouse ⁵²	0A34032	ann 04/05/11
ThinkPad® USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
Lenovo Wireless Laser Mouse ⁵²	0A36188	ann 12/20/11
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09

More information at www.lenovo.com/support/mice

Modem

USB 2.0 Lenovo Modem	43R1814	ann 02/26/08
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Multimedia

ThinkPad In-Ear Headphones with mic	57Y4488	ann 01/07/10
Lenovo Mini Speakers M220	55Y2033	ann 01/07/10
Lenovo Speakers M0520 (black)	57Y6360	ann 02/08/11
Lenovo Speakers M0520 (red)	57Y6361	ann 02/08/11
Lenovo Headset P550	55Y2065	
Lenovo Headset P950 (black)	57Y6605	ann 02/08/11

Security

Kensington® MicroSaver® Cable Lock ⁵⁶	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann 09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann 08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Monitors

ThinkVision® L1711p 17" (VGA, DVI-D) ⁶⁸	5047HB2	ann 10/20/09
ThinkVision LT1952p Wide 19" (VGA, DP, DVI-D) ⁶⁹	2448MB6	ann 09/13/11
ThinkVision L2250p Wide 22" (VGA, DVI-D) ⁶⁸	2572HB6	ann 10/20/09
ThinkVision L2251x Wide 22" (VGA, DP)	2578HB6	ann 10/20/09
ThinkVision LT2252p Wide 22" (VGA, DP, DVI-D) ⁶⁹	2572MB6	ann 09/13/11
ThinkVision L2321x Wide 23" (VGA, DP)	4014HB6	ann 06/10/10
ThinkVision LT2323p Wide 23" (VGA, DP, DVI-D) ⁶⁹	3024HC1	ann 05/01/12
ThinkVision LT2452p Wide 24" (VGA, DP, DVI-D) ⁶⁹	4420MB2	ann 09/13/11

⁶⁸ Requires a DisplayPort Monitor Cable (DisplayPort to Single-Link DVI-D or DisplayPort to VGA Analog).

⁶⁹ DisplayPort cable is not included; use optional DisplayPort to DisplayPort Monitor Cable (0A36537).

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

Lenovo USB 3.0 to DVI/VGA Monitor Adapter	0B47072	ann 08/14/12
DisplayPort™ to Single-link DVI-D Cable	45J7915	ann 08/05/08
DisplayPort to VGA Monitor Cable	57Y4393	ann 08/04/09
DisplayPort to DisplayPort Monitor Cable	0A36537	ann 09/13/11
Kensington MicroSaver Cable Lock ⁵⁶	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann 09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann 08/24/10

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems



Lenovo ThinkCentre Edge 62z with Frame Stand



Lenovo ThinkCentre Edge 62z with Frame Stand



Lenovo ThinkCentre Edge 62z with Frame Stand



Handle



Lenovo ThinkCentre Edge 62z with Frame Stand



Lenovo ThinkCentre Edge 62z with Frame Stand

ThinkCentre® Edge 62z (2117) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera	Disk SATA GB rpm	SATA optical	Graphics	PCIe Mini Card WLAN	Stand type	Global	Preload	Ann date (mm/dd/yy)
2117-BBU	i3-3220	4GBx1 1600MHz	720p	500G 7200	DVD±RW	HD 2500	Intel 105	Frame	None	Win7 Pro64	03/26/13
2117-EKU	G2020	2GBx1 1600MHz	720p	500G 7200	DVD±RW	Intel HD	Intel 105	Frame	None	Win7 Pro64	03/26/13
2117-ELU	G2020	2GBx1 1600MHz	720p	500G 7200	None	Intel HD	Intel 105	Frame	None	Win7 Pro64	03/26/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	<i>Essential All-In-One PC for small/medium businesses</i>						Preloaded operating system²⁰					
Processor	Intel® Pentium® G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket						Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed)					
Implementation	Processor in LGA1155 socket						<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager • Lenovo® Message Center Plus 					
Memory	8GB max, PC3-12800 1600MHz DDR3 , one 204-pin SODIMM sockets (notebook) <i>System automatically clocks down for processors with 1333MHz DDR3 memory controller</i>						Preloaded applications (only some listed)					
Graphics Display	Intel HD Graphics or Intel HD Graphics 2500 in processor, uses system memory 18.5" (470mm) HD (1366x768) TFT color , CCFL backlight, 200 nits, 16:9 aspect ratio, 600:1 dynamic contrast ratio						<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Automatic Lock Utility • ThinkVantage Power Manager • View Management Utility • Lenovo Solution Center • RapidBoot HDD Accelerator • Lenovo SimpleTap • Lenovo Cloud Storage by SugarSync 					
Multi-touch	None						<ul style="list-style-type: none"> • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Evernote® • Symantec™ VIP • Intel AppUp® • Nitro PDF Pro • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 					
Camera	HD720p Camera on top of screen, 1.0-megapixel, fixed focus											
Controls	Front facing button for power on/off, side buttons for brightness up and brightness down											
Disk	Hard Disk Drive / SATA 3.0Gb/s, 2.5" Wide, 7200 rpm											
Optical	<i>Some:</i> DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable											
Media reader	None											
Chipset	Intel H61 Express Chipset											
Rear ports	Four USB 2.0, ethernet (RJ-45), serial (9-pin)											
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
PCIe Mini Card	One PCI Express® Mini Card slot											
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® wireless-N 105, 1x1											
Bluetooth	None											
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VC											
Audio	High Definition (HD) Audio, Realtek ALC269Q											
Speaker	Two internal stereo speakers (2watt x 2)											
Intel AMT	None											
Security chip	None											
Keyboard	Lenovo® Slim New F5 USB Keyboard (USB connector), black											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	120 watts, autosensing, 87% PSU											
Machine	<i>Model(s) with Frame stand:</i> <ul style="list-style-type: none"> • Business black color • 18.5" W X 2.3" D X 14.5" H • 469.7mm W X 59.5mm D X 368.4mm H (including stand) • 11 lb (5 kg) in maximum configuration • Tilt: 10°-20° back; no lift; no swivel; adjustable stand 						Security <ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement 					
							ENERGY STAR® 5.2-compliant					
							EuP 2013					
							RoHS-compliant					
							Supports ThinkVantage Technologies					
							For compatible accessories, please go to O-Edge62Z sheet;					
							For Lenovo service upgrade options, please go to S-TC sheet					
Limited Warranty	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											



Lenovo ThinkCentre Edge 72 Small and
Lenovo ThinkCentre Edge 72 Tower



Lenovo ThinkCentre Edge 72 Small
with Dual Lenovo ThinkVision Monitors



Lenovo ThinkCentre Edge 72 Small



Lenovo ThinkCentre Edge 72 Small



Lenovo ThinkCentre Edge 72 Tower



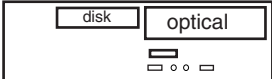
Lenovo ThinkCentre Edge 72 Tower

ThinkCentre® Edge 72 Small (3493) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	PCIe Mini Card WLAN	Blue-tooth	Media reader	Parallel port	Serial port	Floor stand	Win7 Global preload	Ann date (mm/dd/yy)
3493-A7U	3x2	G630	2GBx1 1600MHz	250G 7200	DVD±RW	HD 7350	None	None	None	Parallel	Serial	Stand	None Pro 64	06/19/12
3493-A8U	3x2	i3-2120	4GBx1 1600MHz	500G 7200	DVD±RW	HD 7350	None	None	None	Parallel	Serial	Stand	None Pro 64	06/19/12
3493-EKU	3x2	G640	4GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	None	None	None	Serial	Stand	None Pro 64	07/10/12
3493-F8U	3x2	G640	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	None	None	None	Serial	Stand	None Pro 64	07/17/12
3493-BNU	3x2	G640	2GBx1 1600MHz	250G 7200	DVD±RW	Intel HD	None	None	None	Parallel	Serial	Stand	None Pro 64	08/14/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	Stylish design, reliability, and productivity for small/medium businesses											Preloaded operating system		
Processor	Intel® Pentium® G630 Processor (2 cores / 2 threads, 2.7GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Genuine Windows® 7 Professional 64		
Implementation												Ready to install applications (only some listed)		
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets											<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager 		
Graphics	Some: Intel HD Graphics in processor, uses main memory, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i> Some: AMD Radeon™ HD 7350 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort™, 30 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz;</i> works along with Intel HD Graphics to support up to four independent monitors											Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 		
DP dongle	None													
Disk	SATA 3.0Gb/s 7200 rpm													
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset													
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar													
eSATA port	None													
Media reader	None													
Chipset	Intel H61 Express Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Four USB 2.0, optional serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA DB-15, DVI-D													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)													
Internal connector	Three USB 2.0 planar conn (1 used; two open for additional USB devices)													
PCIe WLAN	None													
Bluetooth	None													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®													
Intel AMT	None													
Modem	None													
Security chip	None													
Keyboard	Lenovo® Slim USB Keyboard (USB connector), black, Lenovo logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Floor Stand	System floor stand for vertical orientation													
Power supply	180 watts, universal, manual switch													
Machine	<ul style="list-style-type: none"> • Glossy black bezel; metal case • 13.2" W X 15.0" D X 3.9" H • 336mm W X 382mm D X 101mm H • 13.2 lb (6.0 kg) in maximum configuration • Highlighted optical drive button for easy access 													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 1.5", .35" high, access, opt reader* *bay only available on models with media reader installed													
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1													
Limited Warranty ¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													
												Security <ul style="list-style-type: none"> • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement 		
												RoHS-compliant		
												Supports ThinkVantage Technologies		
												For compatible accessories, please go to O-Edge72 sheet; For Lenovo service upgrade options, please go to S-TC sheet		

See footnotes for important warranty information
 US model(s) announced June 19, July 10, July 17, or August 14, 2012
 < US models withdrawn effective August 2012

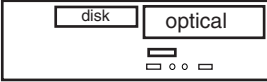
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ThinkCentre® Edge 72 Small (3493) - TopSeller - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	PCIe Mini Card WLAN	Blue-tooth	Media reader	Parallel port	Serial port	Floor stand	Win7 Global preload	Ann date (mm/dd/yy)
3493-A6U	3x2	i5-3550S	4GBx1 1600MHz	1TB 7200	DVD±RW	HD 7350	None	None	None	Parallel	Serial	Stand	None Pro 64	06/19/12
3493-B7U	3x2	i5-3470S	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	None	None	None	None	Stand	None Pro 64	06/19/12
3493-EJU	3x2	i5-3470S	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	None	None	None	Serial	Stand	None Pro 64	07/10/12
3493-BKU	3x2	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	None	None	Parallel	None	Stand	None Pro 64	09/04/12
3493-BPU	3x2	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	HD 2500	None	None	None	Parallel	Serial	Stand	None Pro 64	09/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Stylish design, reliability, and productivity for small/medium businesses</i>											Preloaded operating system		
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550S Processor (4 cores / 4 threads, 3.0GHz, 6MB cache) , Turbo Boost 2.0 (3.7GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology											Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo Simple Tap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 		
Implementation	Processor in LGA1155 socket													
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets													
Graphics	<i>Some: Intel HD Graphics 2500</i> in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i> <i>Some: AMD Radeon™ HD 7350</i> , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort™, 30 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz;</i> works along with Intel HD Graphics to support up to four independent monitors													
DP dongle	None													
Disk	SATA 3.0Gb/s 7200 rpm													
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset													
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar													
eSATA port	None													
Media reader	None													
Chipset	Intel H61 Express Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Four USB 2.0, optional serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA DB-15, DVI-D													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)													
Internal connector	Three USB 2.0 planar conn (1 used; two open for additional USB devices)													
PCIe WLAN	None													
Bluetooth	None													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®													
Intel AMT	None													
Modem	None													
Security chip	None													
Keyboard	Lenovo® Slim USB Keyboard (USB connector), black, Lenovo logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Floor Stand	System floor stand for vertical orientation													
Power supply	180 watts, universal, manual switch													
Machine	<ul style="list-style-type: none"> • Glossy black bezel; metal case • 13.2" W X 15.0" D X 3.9" H • 336mm W X 382mm D X 101mm H • 13.2 lb (6.0 kg) in maximum configuration • Highlighted optical drive button for easy access 													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 1.5", .35" high, access, opt reader* *bay only available on models with media reader installed													
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1													
Limited Warranty ¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Security <ul style="list-style-type: none"> • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-Edge72 sheet; For Lenovo service upgrade options, please go to S-TC sheet		

See footnotes for important warranty information
 US model(s) announced June 19, July 10, or September 4, 2012
 < US models withdrawn effective August 2012

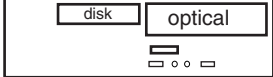
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ThinkCentre® Edge 72 Small (3493) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁶	SATA disk GB rpm	SATA optical	Graphics	PCIe Mini Card WLAN	Blue-tooth	Media reader	Parallel port	Serial port	Floor stand	Global	Preload	Ann date (mm/dd/yy)
3493-DFU	3x2	G640	4GBx1 1600MHz	500G 7200	DVD	Intel HD	None	None	None	None	Serial	Stand	None	Win7 Pro64	10/23/12
3493-DGU	3x2	G640	4GBx1 1600MHz	500G 7200	DVD	Intel HD	None	None	None	Parallel	Serial	Stand	None	Win7 Pro64	10/23/12
3493-GPU	3x2	i3-3220	4GBx1 1600MHz	500G 7200	DVD±RW	Intel HD 2500	None	None	None	Parallel	Serial	Stand	None	Win7 Pro64	11/20/12
3493-GRU	3x2	G645	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	None	None	Parallel	Serial	Stand	None	Win7 Pro64	11/20/12
3493-H5U	3x2	G2120	4GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	None	None	Parallel	Serial	Stand	None	Win7 Pro64	12/25/12
3493-HAU	3x2	G2020	2GBx1 1600MHz	500G 7200	DVD±RW	Intel HD	None	None	None	Parallel	Serial	Stand	None	Win7 Pro64	02/19/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	Stylish design, reliability, and productivity for small/medium businesses											Preloaded operating system			
Processor	Intel® Pentium® G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G645 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller											Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo® Solution Center • Lenovo Message Center Plus • Lenovo Simple Tap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)			
Implementation	Processor in LGA1155 socket														
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets <i>System automatically clocks down for processors with 1066MHz DDR3 memory controller</i>														
Graphics	Intel HD Graphics or Intel HD Graphics 2500 in processor, uses main memory, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>														
DP dongle	None														
Disk	SATA 3.0Gb/s 7200 rpm														
Optical	<i>Some:</i> DVD-ROM DL SATA 1.5Gb/s 16-48X Max ⁴ Drive <i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset														
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar														
eSATA port	None														
Media reader	None														
Chipset	Intel H61 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 2.0, optional serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA DB-15, DVI-D														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)														
Internal connector	Three USB 2.0 planar conn (1 used; two open for additional USB devices)														
PCIe WLAN	None														
Bluetooth	None														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®														
Intel AMT	None														
Modem	None														
Security chip	None														
Keyboard	Lenovo® Slim USB Keyboard (USB connector), black, Lenovo logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Floor Stand	System floor stand for vertical orientation														
Power supply	180 watts, universal, manual switch														
Machine	<ul style="list-style-type: none"> • Glossy black bezel; metal case • 13.2" W X 15.0" D X 3.9" H • 336mm W X 382mm D X 101mm H • 13.2 lb (6.0 kg) in maximum configuration • Highlighted optical drive button for easy access 														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 1.5", .35" high, access, opt reader* *bay only available on models with media reader installed														
Slot	Slot 1: Low Profile, PCI Express® 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1											Security • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-Edge72 sheet; For Lenovo service upgrade options, please go to S-TC sheet			
Limited Warranty ¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

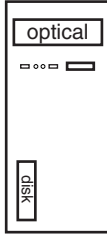
See footnotes for important warranty information
 US model(s) announced Oct 23, 2012, Nov 20, 2012, Dec 25, 2012, or Feb 19, 2013
 < US models withdrawn effective November 2012 or January 2013

ThinkCentre® Edge 72 Tower (3484) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	PCIe Mini Card WLAN	Blue-tooth	Media reader	Parallel port	Serial port	Global	Win7 preload	Ann date (mm/dd/yy)
3484-A7U	3x2	i3-2130	4GBx1 1600MHz	500G 7200	None	DVD±RW	HD 7350	None	None	None	Parallel	Serial	None	Pro 64	06/19/12
3484-A8U	3x2	i3-2120	4GBx1 1600MHz	500G 7200	None	DVD±RW	HD 7350	None	None	None	Parallel	Serial	None	Pro 64	06/19/12
3484-A9U	3x2	G630	2GBx1 1600MHz	250G 7200	None	DVD±RW	HD 7350	None	None	None	Parallel	Serial	None	Pro 64	06/19/12
3484-FDU	3x2	G640	4GBx1 1600MHz	500G 7200	None	DVD±RW	Intel HD	None	None	None	None	Serial	None	Pro 64	07/10/12
3484-GAU	3x2	G640	2GBx1 1600MHz	500G 7200	None	DVD±RW	Intel HD	None	None	None	None	Serial	None	Pro 64	07/17/12
3484-BFU	3x2	G640	2GBx1 1600MHz	250G 7200	None	DVD±RW	Intel HD	None	None	None	Parallel	Serial	None	Pro 64	08/14/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	Stylish design, reliability, and productivity for small/medium businesses										Preloaded operating system				
Processor	Intel® Pentium® G630 Processor (2 cores / 2 threads, 2.7GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i3-2130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache) , integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
Implementation	Processor in LGA1155 socket														
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets														
Graphics	Some: Intel HD Graphics in processor, uses main memory, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i> Some: AMD Radeon™ HD 7350 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort™, 30 watts; <i>Maximum resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz;</i> works along with Intel HD Graphics to support up to four independent monitors														
DP dongle	None														
Disk	SATA 3.0Gb/s 7200 rpm														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset														
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar														
eSATA port	None														
Media reader	None														
Chipset	Intel H61 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 2.0, optional serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA DB-15, DVI-D														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)														
Internal connector	Three USB 2.0 planar conn (1 used; two open for additional USB devices)														
PCIe WLAN	None														
Bluetooth	None														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio														
IEEE 1394	None														
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®														
Intel AMT	None														
Modem	None														
Security chip	None														
Keyboard	Lenovo® Slim USB Keyboard (USB connector), black, Lenovo logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	180 watts, universal, manual switch														
Machine	<ul style="list-style-type: none"> • Glossy black bezel; metal case • 6.3" W X 15.7" D X 15.6" H (with handle) • 160mm W X 399mm D X 397mm H • 16.5 lb (7.5 kg) in maximum configuration • Ergonomic rubberized handle • Highlighted optical drive button for easy access 														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 1.5", .35" high, access, opt reader* Bay 3: 3.5", 1" high, no access, std disk *bay only available on models with media reader installed														
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1														
Limited Warranty ¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														
											Security				
											<ul style="list-style-type: none"> • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement 				
											RoHS-compliant				
											Supports ThinkVantage Technologies				
											For compatible accessories, please go to O-Edge72 sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information
 US model(s) announced June 19, July 10, July 17, or August 14, 2012
 ✕ US models withdrawn effective August 2012

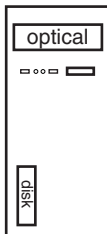
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 (TAPI1-3) August 2012

ThinkCentre® Edge 72 Tower (3484) - TopSeller - II

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	PCIe Mini Card	Blue-tooth	Media reader	Parallel port	Serial port	Global	Win7 preload	Ann date (mm/dd/yy)
3484-A6U	3x2	i5-3550S	4GBx1 1600MHz	1TB 7200	None	DVD±RW	HD 7350	None	None	None	Parallel	Serial	None	Pro 64	06/19/12
3484-C1U	3x2	i5-3470S	4GBx1 1600MHz	500G 7200	None	DVD±RW	HD 2500	None	None	None	None	None	None	Pro 64	06/19/12
3484-FCU	3x2	i5-3470S	4GBx1 1600MHz	500G 7200	None	DVD±RW	HD 2500	None	None	None	None	Serial	None	Pro 64	07/10/12
3484-BGU	3x2	i3-3220	4GBx1 1600MHz	500G 7200	None	DVD±RW	HD 2500	None	None	None	Parallel	Serial	None	Pro 64	09/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	Stylish design, reliability, and productivity for small/medium businesses											Preloaded operating system		
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550S Processor (4 cores / 4 threads, 3.0GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)		
Implementation														
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets													
Graphics	<i>Some:</i> Intel HD Graphics 2500 in processor, uses main memory, DirectX® 11, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz <i>Some:</i> AMD Radeon™ HD 7350 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort™, 30 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I)@60Hz; works along with Intel HD Graphics to support up to four independent monitors													
DP dongle	None													
Disk	SATA 3.0Gb/s 7200 rpm													
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset													
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar													
eSATA port	None													
Media reader	None													
Chipset	Intel H61 Express Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Four USB 2.0, optional serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA DB-15, DVI-D													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)													
Internal connector	Three USB 2.0 planar conn (1 used; two open for additional USB devices)													
PCIe WLAN	None													
Bluetooth	None													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®													
Intel AMT	None													
Modem	None													
Security chip	None													
Keyboard	Lenovo® Slim USB Keyboard (USB connector), black, Lenovo logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Power supply	180 watts, universal, manual switch													
Machine	<ul style="list-style-type: none"> • Glossy black bezel; metal case • 6.3" W X 15.7" D X 15.6" H (with handle) • 160mm W X 399mm D X 397mm H • 16.5 lb (7.5 kg) in maximum configuration • Ergonomic rubberized handle • Highlighted optical drive button for easy access 													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 1.5", .35" high, access, opt reader* Bay 3: 3.5", 1" high, no access, std disk *bay only available on models with media reader installed													
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1													
Limited Warranty ¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Security • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-Edge72 sheet; For Lenovo service upgrade options, please go to S-TC sheet		

See footnotes for important warranty information
 US model(s) announced June 19, July 10, or September 4, 2012

✗ US models withdrawn effective August 2012

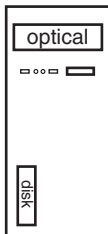
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 (TAPI1-4) September 2012

ThinkCentre® Edge 72 Tower (3484) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	2nd Disk Bay	SATA optical	PCle Graphics	Mini Card WLAN	Blue-tooth	Media reader	Parallel port	Serial port	Global	Preload	Ann date (mm/dd/yy)
3484-DEU	3x2	G640	4GBx1 1600MHz	500G 7200	None	DVD	Intel HD	None	None	None	Parallel	Serial	None	Win7 Pro64	10/23/12
3484-DFU	3x2	i3-3220	4GBx1 1600MHz	500G 7200	None	DVD	HD 2500	None	None	None	Parallel	Serial	None	Win7 Pro64	10/23/12
3484-HNU	3x2	G645	2GBx1 1600MHz	500G 7200	None	DVD±RW	Intel HD	None	None	None	Parallel	Serial	None	Win7 Pro64	11/20/12
3484-HPU	3x2	i3-3220	4GBx1 1600MHz	500G 7200	None	DVD±RW	HD 2500	None	None	None	Parallel	Serial	None	Win7 Pro64	11/20/12
3484-JJU	3x2	G2120	4GBx1 1600MHz	500G 7200	None	DVD±RW	Intel HD	None	None	None	Parallel	Serial	None	Win7 Pro64	12/25/12
3484-JMU	3x2	G2020	2GBx1 1600MHz	500G 7200	None	DVD±RW	Intel HD	None	None	None	Parallel	Serial	None	Win7 Pro64	02/19/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	Stylish design, reliability, and productivity for small/medium businesses											Preloaded operating system		
Processor	Intel® Pentium® G640 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G645 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller											Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Communication Utility • View Management Utility • Lenovo® Solution Center • Lenovo Message Center Plus • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Core!® Burn.Now™ (DVD±RW) • Core! DVD MovieFactory® (DVD±RW) 		
Implementation	Processor in LGA1155 socket													
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets <i>System automatically clocks down for processors with 1066MHz DDR3 memory controller</i>													
Graphics	Intel HD Graphics or Intel HD Graphics 2500 in processor, uses main memory, one VGA, one DVI-D, supports dual independent display; <i>Maximum resolution: 2560x1600 (VGA)@60Hz; 1920x1200 (DVI-D)@60Hz</i>													
DP dongle	None													
Disk	SATA 3.0Gb/s 7200 rpm													
Optical	<i>Some:</i> DVD-ROM DL SATA 1.5Gb/s 16-48X Max ⁴ Drive <i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in chipset													
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar													
eSATA port	None													
Media reader	None													
Chipset	Intel H61 Express Chipset													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Four USB 2.0, optional serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA DB-15, DVI-D													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)													
Internal connector	Three USB 2.0 planar conn (1 used; two open for additional USB devices)													
PCle WLAN	None													
Bluetooth	None													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	Gigabit ethernet port, Realtek RTL8111E, Wake on LAN®													
Intel AMT	None													
Modem	None													
Security chip	None													
Keyboard	Lenovo® Slim USB Keyboard (USB connector), black, Lenovo logo											Security		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											<ul style="list-style-type: none"> • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement 		
Power supply	180 watts, universal, manual switch													
Machine	<ul style="list-style-type: none"> • Glossy black bezel; metal case • 6.3" W X 15.7" D X 15.6" H (with handle) • 160mm W X 399mm D X 397mm H • 16.5 lb (7.5 kg) in maximum configuration • Ergonomic rubberized handle • Highlighted optical drive button for easy access 													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 1.5", .35" high, access, opt reader* Bay 3: 3.5", 1" high, no access, std disk *bay only available on models with media reader installed													
Slot	Slot 1: half-length, full-height, PCI Express® 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1											RoHS-compliant Supports ThinkVantage Technologies		
Limited Warranty ¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											For compatible accessories, please go to O-Edge72 sheet; For Lenovo service upgrade options, please go to S-TC sheet		

See footnotes for important warranty information
 US model(s) announced Oct 23, 2012, Nov 20, 2012, Dec 25, 2012, or Feb 19, 2013
 ✕ US models withdrawn effective January 2013

Memory

2GB PC3-12800 DDR3 UDIMM	0A65728	ann	06/05/12
4GB PC3-12800 DDR3 UDIMM	0A65729	ann	06/05/12
8GB PC3-12800 DDR3 UDIMM	0A65730	ann	06/05/12

More information at

www.lenovo.com/support/desktopmemorycompatibility

Optical

DVD-ROM DL SATA 1.5Gb/s 16X-48X Max ⁴	41N5618	ann	09/26/06
Lenovo® Super Multi-Burner SATA Drive	0A65618	ann	08/23/11
Blu-ray™ Burner SATA 1.5Gb/s Drive	45K1675	ann	03/31/09

Storage and removable storage

250GB SATA 3.0Gb/s Disk (7200 rpm)	41N3015	ann	01/24/06
500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	ann	11/06/07
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918	ann	08/19/08

USB 2.0 Portable 320GB Hard Disk	45K1689	ann	03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
USB 3.0 Secure 500GB Hard Drive	0A65619	ann	11/29/11
USB 3.0 Secure 750GB Hard Drive	0A65616	ann	11/29/11
USB 3.0 Secure 1TB Hard Drive	0A65621	ann	08/28/12
Slim USB Portable DVD Burner	0A33988	ann	06/14/11

Graphics

Small 3493 support Low Profile:

AMD 7450 1GB (DP, DVI-I with a DVI to VGA converter) ⁶⁷	0A36538	ann	05/29/12
NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann	01/29/13

Tower 3484 support:

AMD 7450 1GB (DP, DVI-I) ⁶⁷	0A36538	ann	05/29/12
NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann	01/29/13

⁶⁷ Simultaneously use the graphic card monitor ports along with the system's integrated monitor ports when Multi-Monitor Support is enabled in BIOS Setup.

More information at www.lenovo.com/support/graphiccards

Keyboard

Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
Ultraslim Plus Wireless Keyboard and Mouse ⁵²	0A34032	ann	04/05/11
Lenovo Mini Wireless Keyboard N5901 ⁵²	57Y6336	ann	12/08/09
ThinkPad® USB Keyboard with TrackPoint	55Y9003	ann	08/18/09
Lenovo USB Fingerprint Keyboard	73P4730	ann	02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann	03/24/09
Lenovo Cherry Smartcard Keyboard	0A36328	ann	05/10/11

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo ScrollPoint® Mouse(USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
Lenovo Wireless Laser Mouse ⁵²	0A36188	ann	12/20/11
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09

More information at www.lenovo.com/support/mice

Modem

USB 2.0 Lenovo Modem	43R1814	ann	02/26/08
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Multimedia

ThinkPad In-Ear Headphones with mic ⁶⁰	57Y4488	ann	01/07/10
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⁶⁰ Has a 1.2 meter (3.9-foot) cable. Best when systems are in close proximity. Example: SFF placed on a desk.

Security

Kensington® MicroSaver® Cable Lock ⁵⁶	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann	09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann	08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Monitors

ThinkVision® L1711p 17" (VGA, DVI-D)	5047HB2	ann	10/20/09
ThinkVision LT1952p Wide 19" (VGA, DP, DVI-D)	2448MB6	ann	09/13/11
ThinkVision L2250p Wide 22" (VGA, DVI-D)	2572HB6	ann	10/20/09
ThinkVision L2251x Wide 22" (VGA, DP)	2578HB6	ann	10/20/09
ThinkVision LT2252p Wide 22" (VGA, DP, DVI-D)	2572MB6	ann	09/13/11
ThinkVision L2321x Wide 23" (VGA, DP)	4014HB6	ann	06/10/10
ThinkVision LT2323p Wide 23" (VGA, DP, DVI-D)	3024HC1	ann	05/01/12
ThinkVision LT2452p Wide 24" (VGA, DP, DVI-D)	4420MB2	ann	09/13/11

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann	05/12/09
Lenovo USB Soundbar	0A36190	ann	05/01/12
Lenovo DVI to DVI Monitor Cable	0B47071		
Kensington MicroSaver Cable Lock ⁵⁶	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann	09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann	08/24/10
ThinkCentre Extend Arm	57Y4352	ann	07/06/10

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems



Lenovo ThinkCentre Edge 92z with Frame Stand



Lenovo ThinkCentre Edge 92z with Frame Stand



Lenovo ThinkCentre Edge 92z with Frame Stand



Handle



Lenovo ThinkCentre Edge 92z with Frame Stand



Lenovo ThinkCentre Edge 92z with Frame Stand

ThinkCentre® Edge 92z (3396) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	mSATA SSD	SATA optical	Graphics	PCIe Mini Card WLAN / BT	Media reader	Key-board/Mouse	Global	Win7 preload	Ann date (mm/dd/yy)
3396-A3U	i5-3470S	4GBx1	2.0M	1TB 7200	None	DVD±RW	HD 2500	Intel 105	None	2.4G	None	Pro 64	07/03/12
3396-B2U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 2500	Intel 2230 + BT	Media	USB	None	Pro 64	07/03/12
3396-B3U	i7-3770S	4GBx2	2.0M	1TB 7200	None	DVD±RW	HD 4000	Intel 2230 + BT	Media	USB	None	Pro 64	07/03/12
3396-B4U	i7-3770S	4GBx2	2.0M	1TB 7200	None	DVD±RW	HD 4000	Intel 2230 + BT	Media	2.4G	None	Pro 64	07/03/12
3396-B5U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 2500	Intel 2230 + BT	Media	2.4G	None	Pro 64	07/03/12
3396-B6U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 2500	Intel 2230 + BT	Media	2.4G	None	Prem 64	07/03/12
3396-BUU	i3-3220	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 2500	Intel 2230 + BT	Media	USB	None	Pro 64	09/04/12
3396-C3U	G870	4GBx1	2.0M	500G 7200	None	DVD±RW	Intel HD	Intel 2230 + BT	None	USB	None	Pro 64	09/11/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	Stylish All-In-One PC for small/medium businesses											
Processor	Intel® Pentium® G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket											
Implementation	Processor in LGA1155 socket											
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											
Graphics	Intel HD Graphics, Intel HD Graphics 2500, or Intel HD Graphics 4000 in processor, use main memory, external digital monitor support via HDMI, supports dual independent display; Maximum resolution: 1920x1200 (HDMI)@60Hz											
Widescreen display	21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color , infinity display, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via HDMI-in connector											
Multi-touch	None											
Camera	Camera on top of screen, 2.0-megapixel, Full HD 1080p, fixed focus, integrated digital MIC array with stereo, LED indicator											
Controls	Front facing buttons for brightness up, brightness down, power on/off, and Video in											
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm											
mSATA™ SSD	None											
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable											
Media reader	Some: 7-in-1 Single Slot SD media reader											
Chipset	Intel B75 Express Chipset											
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in											
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
PCIe Mini Card	Two PCI Express® Mini Card slots											
PCIe WLAN [†]	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® wireless-N 105, 1x1 Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2											
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter											
PCIe mSATA	One Mini PCIe mSATA slot											
Ethernet	One gigabit ethernet port, Intel 82579LM											
Audio support	High Definition (HD) Audio, Realtek® ALC662 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync® certified											
Intel AMT	None											
Security chip	None											
Keyboard	Some: Lenovo® Slim New F5 USB Keyboard (USB connector), black Some: Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black											
Mouse	Some: Enhanced Optical USB Mouse, black Some: Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black											
Power supply	150 watts, autosensing, 85% PSU											
Machine	Model(s) with Frame stand: <ul style="list-style-type: none"> ● Business black color ● 21.5" W X 3.2" D X 16.3" H ● 545mm W X 81mm D X 414mm H (with feet) ● 18.5 lb (8.4 kg) in maximum configuration ● Handle in rear, removable feet ● Support VESA mount (100mm) 											
Limited Warranty ¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											
	Preloaded operating system Some: Genuine Windows® 7 Professional 64 Some: Genuine Windows 7 Home Premium 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box Preloaded applications (only some listed) <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Intel Small Business Advantage ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Evernote® ● Symantec™ VIP ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 											
	Security <ul style="list-style-type: none"> ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ENERGY STAR® 5.2-compliant RoHS-compliant Supports ThinkVantage Technologies											
	For compatible accessories, please go to O-Edge92Z sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet											

See footnotes for important warranty information
 US model(s) announced July 3, September 4, or September 11, 2012

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 (TROY1-1) November 2012

ThinkCentre® Edge 92z (3396) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	mSATA SSD	SATA optical	Graphics	PCIe Mini Card WLAN / BT	Media reader	Key-board/Mouse	Global	Preload	Ann date (mm/dd/yy)
3396-BPU	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 2500	Intel 2230 + BT	None	USB	None	Win8 Pro64	10/23/12
3396-BQU	i7-3770S	4GBx2	2.0M	500G 7200	None	DVD±RW	HD 4000	Intel 2230 + BT	None	USB	None	Win8 Pro64	10/23/12
3396-BRU	i7-3770S	4GBx2	2.0M	1TB 7200	None	DVD±RW	HD 4000	Intel 2230 + BT	Media	2.4G	None	Win8 Pro64	10/23/12
3396-BVU	i3-3220	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 2500	Intel 2230 + BT	Media	USB	None	Win8 Pro64	10/23/12
3396-BTU	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 2500	Intel 2230 + BT	Media	2.4G	None	Win8 Pro64	10/23/12
3396-C6U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 2500	Intel 2230 + BT	None	USB	None	Win7 Pro64	10/23/12
3396-C7U	i3-3220	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 2500	Intel 2230 + BT	None	USB	None	Win7 Pro64	10/23/12
3396-CMU	G2120	4GBx1	2.0M	500G 7200	None	DVD±RW	Intel HD	Intel 105	Media	USB	None	Win7 Pro64	12/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	<i>Stylish All-In-One PC for small/medium businesses</i>										
Processor	Intel® Pentium® G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										
Implementation	Processor in LGA1155 socket										
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)										
Graphics	Intel HD Graphics / 2500 / 4000 in processor, use main memory, external digital monitor support via HDMI, supports dual independent display; <i>Maximum resolution: 1920x1200 (HDMI)@60Hz</i> 21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color , infinity display, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via HDMI-in connector										
Widescreen display	21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color , infinity display, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via HDMI-in connector										
Multi-touch	None										
Camera	Camera on top of screen, 2.0-megapixel, Full HD 1080p, fixed focus, integrated digital MIC array with stereo, LED indicator										
Controls	Front facing buttons for brightness up, brightness down, power on/off, and Video in										
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm										
mSATA™ SSD	None										
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable										
Media reader	<i>Some: 7-in-1 Single Slot SD media reader</i>										
Chipset	Intel B75 Express Chipset										
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in										
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
PCIe Mini Card	Two PCI Express® Mini Card slots										
PCIe WLAN [†]	<i>Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® wireless-N 105, 1x1</i> <i>Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2</i>										
Bluetooth	<i>Some: Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter</i>										
PCIe mSATA	One Mini PCIe mSATA slot										
Ethernet	One gigabit ethernet port, Intel 82579LM										
Audio support	High Definition (HD) Audio, Realtek® ALC662 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync® certified										
Intel AMT	None										
Security chip	None										
Keyboard	<i>Some: Lenovo® Slim New F5 USB Keyboard (USB connector), black</i> <i>Some: Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black</i> <i>Some: Enhanced Optical USB Mouse, black</i> <i>Some: Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black</i>										
Mouse	<i>Some: Enhanced Optical USB Mouse, black</i> <i>Some: Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black</i>										
Power supply	150 watts, autosensing, 85% PSU										
Machine	Model(s) with Frame stand: <ul style="list-style-type: none"> • Business black color • 21.5" W X 3.2" D X 16.3" H • 545mm W X 81mm D X 414mm H (with feet) • 18.5 lb (8.4 kg) in maximum configuration • Handle in rear, removable feet • Support VESA mount (100mm) 										
Limited Warranty ¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										
	Preloaded operating system <i>Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</i> <i>Some: Windows 8 Pro 64-bit</i> Preloaded applications (only some listed) - Windows 7 models <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Lenovo® Message Center Plus • Intel Small Business Advantage • RapidBoot HDD Accelerator • Lenovo SimpleTap • Adobe® Reader® • Symantec™ VIP • Windows Live™ Essentials • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) - Windows 8 models <ul style="list-style-type: none"> • Lenovo Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Norton™ Studio • Intel AppUp® • AccuWeather • PC Device Stage • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) - All models <ul style="list-style-type: none"> • ThinkVantage System Update • ThinkVantage Automatic lock Utility • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Evernote™ • Skype™ 										
	Security <ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Boot sequence control • Boot without keyboard and mouse • USB port disablement 										
	ENERGY STAR® 5.2-compliant RoHS-compliant										
	Supports ThinkVantage Technologies										
	For compatible accessories, please go to O-Edge92Z sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet										

See footnotes for important warranty information
US model(s) announced October 23 or December 4, 2012

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(TROY1-5) December 2012

ThinkCentre® Edge 92z (3399) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁵	Camera (mega-pixel)	Disk SATA GB rpm	mSATA SSD	SATA optical	Graphics	PCIe Mini Card WLAN / BT	Media reader	Key-board/Mouse	Global	Preload	Ann date (mm/dd/yy)
3399-GJU	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 2500	Intel 2230 + BT	Media	USB	None	Win7 Pro64	11/20/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Stylish All-In-One PC for small/medium businesses</i>										
Processor	Intel® Core™ i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology										
Implementation	Processor in LGA1155 socket										
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)										
Graphics	Intel HD Graphics 2500 in processor, use main memory, external digital monitor support via HDMI, supports dual independent display; <i>Maximum resolution: 1920x1200 (HDMI)@60Hz</i>										
Widescreen display	21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color , infinity display, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via HDMI-in connector										
Multi-touch	None										
Camera	Camera on top of screen, 2.0-megapixel, Full HD 1080p, fixed focus, integrated digital MIC array with stereo, LED indicator										
Controls	Front facing buttons for brightness up, brightness down, power on/off, and Video in										
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm										
mSATA™ SSD	None										
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable										
Media reader	7-in-1 Single Slot SD media reader										
Chipset	Intel B75 Express Chipset										
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in										
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
PCIe Mini Card	Two PCI Express® Mini Card slots										
PCIe WLAN ⁴	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2										
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter										
PCIe mSATA	One Mini PCIe mSATA slot										
Ethernet	One gigabit ethernet port, Intel 82579LM										
Audio support	High Definition (HD) Audio, Realtek® ALC662 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync® certified										
Intel AMT	None										
Security chip	None										
Keyboard	Lenovo® Slim New F5 USB Keyboard (USB connector), black										
Mouse	Enhanced Optical USB Mouse, black										
Power supply	150 watts, autosensing, 85% PSU										
Machine	<p><i>Model(s) with Frame stand:</i></p> <ul style="list-style-type: none"> • Business black color • 21.5" W X 3.2" D X 16.3" H • 545mm W X 81mm D X 414mm H (with feet) • 18.5 lb (8.4 kg) in maximum configuration • Handle in rear, removable feet • Support VESA mount (100mm) 										
	<p>Preloaded operating system</p> <p>Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</p> <p>Ready to install applications (only some listed)</p> <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager • Business-in-a-Box <p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Automatic Lock Utility • ThinkVantage Power Manager • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Intel Small Business Advantage • RapidBoot HDD Accelerator • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Evernote® • Symantec™ VIP • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 										
	<p>Security</p> <ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Boot sequence control • Boot without keyboard and mouse • USB port disablement 										
	ENERGY STAR® 5.2-compliant										
	RoHS-compliant										
	Supports ThinkVantage Technologies										
	For compatible accessories, please go to O-Edge92Z sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet										
Limited Warranty ¹	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										

See footnotes for important warranty information
US model(s) announced November 20, 2012

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(TROY1-8) November 2012

ThinkCentre® Edge 92z (3418) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	mSATA SSD	SATA optical	Graphics	PCIe Mini Card WLAN / BT	Media reader	Key-board/Mouse	Global	Win7 preload	Ann date (mm/dd/yy)
3418-A2U	i3-2120	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 105	None	2.4G	None	Pro 64	07/03/12
3418-B2U	i3-2120	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 105	None	USB	None	Pro 64	07/03/12
3418-B3U	G630	4GBx1	2.0M	250G 7200	None	DVD±RW	HD 7650A	Intel 105	None	USB	None	Pro 64	07/03/12
3418-B4U	G850	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 105	None	USB	None	Pro 64	07/03/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Stylish All-In-One PC for small/medium businesses</i>								Preloaded operating system				
Processor	Intel® Pentium® G630 Processor (2 cores / 2 threads, 2.7GHz, 3MB cache), integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G850 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD 2000 Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket								Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager • Business-in-a-Box Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Automatic Lock Utility • ThinkVantage Power Manager • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Intel Small Business Advantage • RapidBoot HDD Accelerator • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Evernote® • Symantec™ VIP • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)				
Implementation													
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)												
Graphics	AMD Radeon™ HD 7650A , 2GB memory, PCI Express® x16, 35 watts, DirectX® 11, external digital monitor support via HDMI, supports dual independent display; <i>Maximum resolution: 1920x1200(HDMI)@60Hz</i> 21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color , infinity display, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via HDMI-in connector												
Widescreen display													
Multi-touch	None												
Camera	Camera on top of screen, 2.0-megapixel, Full HD 1080p, fixed focus, integrated digital MIC array with stereo, LED indicator												
Controls	Front facing buttons for brightness up, brightness down, power on/off, and Video in												
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm												
mSATA™ SSD	None												
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable												
Media reader	None												
Chipset	Intel B75 Express Chipset												
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in												
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
PCIe Mini Card	Two PCI Express® Mini Card slots												
PCIe WLAN ¹	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® wireless-N 105, 1x1												
Bluetooth	None												
PCIe mSATA	One Mini PCIe mSATA slot												
Ethernet	One gigabit ethernet port, Intel 82579LM												
Audio support	High Definition (HD) Audio, Realtek® ALC662 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync® certified												
Intel AMT	None												
Security chip	None												
Keyboard	<i>Some:</i> Lenovo® Slim New F5 USB Keyboard (USB connector), black <i>Some:</i> Ultraslim Plus Wireless Keyboard (2.4GHz via USB receiver), black <i>Some:</i> Enhanced Optical USB Mouse, black <i>Some:</i> Ultraslim Plus Wireless Mouse (2.4GHz via USB receiver), black												
Mouse													
Power supply	180 watts, autosensing, 92% PSU												
Machine	<i>Model(s) with Frame stand:</i> • Business black color • 21.5" W X 3.2" D X 16.3" H • 545mm W X 81mm D X 414mm H (with feet) • 18.5 lb (8.4 kg) in maximum configuration • Handle in rear, removable feet • Support VESA mount (100mm)								Security • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Boot sequence control • Boot without keyboard and mouse • USB port disablement ENERGY STAR® 5.2-compliant RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-Edge92Z sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet				
Limited Warranty ¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												

See footnotes for important warranty information
US model(s) announced July 3, 2012

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(TROY1-2) November 2012

ThinkCentre® Edge 92z (3418) - TopSeller - II

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	mSATA SSD	SATA optical	Graphics	PCIe Mini Card WLAN / BT	Media reader	Key-board/Mouse	Global	Win7 preload	Ann date (mm/dd/yy)
3418-A8U	i7-3770S	4GBx2	2.0M	500G 7200	64GB	DVD±RW	HD 7650A	Intel 105	Media	2.4G	None	Pro 64	07/03/12
3418-A9U	i5-3550S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 105	None	2.4G	None	Pro 64	07/03/12
3418-B1U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 105	None	2.4G	None	Pro 64	07/03/12
3418-C8U	i7-3770S	4GBx2	2.0M	1TB 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Pro 64	07/03/12
3418-C7U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Pro 64	07/03/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Stylish All-In-One PC for small/medium businesses</i>										Preloaded operating system		
Processor	Intel® Core™ i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3550S Processor (4 cores / 4 threads, 3.0GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager • Business-in-a-Box Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Automatic Lock Utility • ThinkVantage Power Manager • View Management Utility • Lenovo Solution Center • Lenovo Message Center Plus • Intel Small Business Advantage • RapidBoot HDD Accelerator • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Evernote® • Symantec™ VIP • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 		
Implementation	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)												
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)												
Graphics	AMD Radeon™ HD 7650A , 2GB memory, PCI Express® x16, 35 watts, DirectX® 11, external digital monitor support via HDMI, supports dual independent display; <i>Maximum resolution: 1920x1200(HDMI)@60Hz</i> 21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color , infinity display, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via HDMI-in connector												
Widescreen display	None Camera on top of screen, 2.0-megapixel, Full HD 1080p, fixed focus, integrated digital MIC array with stereo, LED indicator												
Multi-touch	None												
Camera	Camera on top of screen, 2.0-megapixel, Full HD 1080p, fixed focus, integrated digital MIC array with stereo, LED indicator												
Controls	Front facing buttons for brightness up, brightness down, power on/off, and Video in												
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm												
mSATA™ SSD	<i>Some:</i> mSATA Solid State Drive (SSD), via PCIe Mini Card slot												
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable												
Media reader	<i>Some:</i> 7-in-1 Single Slot SD media reader												
Chipset	Intel B75 Express Chipset												
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in												
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
PCIe Mini Card	Two PCIe Express® Mini Card slots												
PCIe WLAN ¹	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® wireless-N 105, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2												
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter												
PCIe mSATA	One Mini PCIe mSATA slot												
Ethernet	One gigabit ethernet port, Intel 82579LM												
Audio support	High Definition (HD) Audio, Realtek® ALC662 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync® certified												
Intel AMT	None												
Security chip	None												
Keyboard	<i>Some:</i> Lenovo® Slim New F5 USB Keyboard (USB connector), black <i>Some:</i> Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black <i>Some:</i> Enhanced Optical USB Mouse, black <i>Some:</i> Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black												
Mouse	<i>Some:</i> Enhanced Optical USB Mouse, black <i>Some:</i> Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black												
Power supply	180 watts, autosensing, 92% PSU												
Machine	<i>Model(s) with Frame stand:</i> <ul style="list-style-type: none"> • Business black color • 21.5" W X 3.2" D X 16.3" H • 545mm W X 81mm D X 414mm H (with feet) • 18.5 lb (8.4 kg) in maximum configuration • Handle in rear, removable feet • Support VESA mount (100mm) 										Security <ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Boot sequence control • Boot without keyboard and mouse • USB port disablement ENERGY STAR® 5.2-compliant RoHS-compliant Supports ThinkVantage Technologies		
Limited Warranty ¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										For compatible accessories, please go to O-Edge92Z sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet		

See footnotes for important warranty information
 US model(s) announced July 3, 2012

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 (TROY1-3) November 2012

ThinkCentre® Edge 92z (3418) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	mSATA SSD	SATA optical	Graphics	PCIe Mini Card WLAN / BT	Media reader	Key-board/ Mouse	Global	Preload	Ann date (mm/dd/yy)
3418-CAU	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	None	USB	None	Win8 Pro64	10/23/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	<i>Stylish All-In-One PC for small/medium businesses</i>										Preloaded operating system
Processor	Intel® Core™ i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology										Windows® 8 Pro 64-bit
Implementation	Processor in LGA1155 socket										Preloaded applications (only some listed)
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)										<ul style="list-style-type: none"> • ThinkVantage® System Update • ThinkVantage Automatic lock Utility • View Management Utility • Lenovo® Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Lenovo Solution Center • Microsoft® Office 2013 preloaded; purchase product key to activate • Norton™ Internet Security (30 days of virus definitions) • Norton Studio • Intel AppUp® • AccuWeather • PC Device Stage • Evernote® • Skype™ • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW)
Graphics	AMD Radeon™ HD 7650A , 2GB memory, PCI Express® x16, 35 watts, DirectX® 11, external digital monitor support via HDMI, supports dual independent display; <i>Maximum resolution: 1920x1200(HDMI)@60Hz</i>										
Widescreen display	21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color , infinity display, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via HDMI-in connector										
Multi-touch	None										
Camera	Camera on top of screen, 2.0-megapixel, Full HD 1080p, fixed focus, integrated digital MIC array with stereo, LED indicator										
Controls	Front facing buttons for brightness up, brightness down, power on/off, and Video in										
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm										
mSATA™ SSD	None										
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable										
Media reader	None										
Chipset	Intel B75 Express Chipset										
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in										
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
PCIe Mini Card	Two PCI Express® Mini Card slots										
PCIe WLAN ⁴	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2										
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter										
PCIe mSATA	One Mini PCIe mSATA slot										
Ethernet	One gigabit ethernet port, Intel 82579LM										
Audio support	High Definition (HD) Audio, Realtek® ALC662 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync® certified										
Intel AMT	None										
Security chip	None										
Keyboard	Lenovo® Slim New F5 USB Keyboard (USB connector), black										
Mouse	Enhanced Optical USB Mouse, black										
Power supply	180 watts, autosensing, 92% PSU										
Machine	<p><i>Model(s) with Frame stand:</i></p> <ul style="list-style-type: none"> • Business black color • 21.5" W X 3.2" D X 16.3" H • 545mm W X 81mm D X 414mm H (with feet) • 18.5 lb (8.4 kg) in maximum configuration • Handle in rear, removable feet • Support VESA mount (100mm) 										
Limited Warranty ¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										Security <ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Boot sequence control • Boot without keyboard and mouse • USB port disablement
											ENERGY STAR® 5.2-compliant RoHS-compliant
											Supports ThinkVantage Technologies
											For compatible accessories, please go to O-Edge92Z sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
US model(s) announced October 23, 2012

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(TROY1-6) November 2012

ThinkCentre® Edge 92z (3426) - TopSeller (Win 8)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	mSATA SSD	SATA optical	Graphics	PCIe Mini Card WLAN / BT	Media reader	Key-board/Mouse	Global	Preload	Ann date (mm/dd/yy)
3426-HEU	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win7 Pro64	11/20/12
3426-HFU	i3-3220	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win7 Pro64	11/20/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Stylish All-In-One PC for small/medium businesses</i>										Preloaded operating system		
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed)		
Implementation	Processor in LGA1155 socket										<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager ● Business-in-a-Box 		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)										Preloaded applications (only some listed)		
Graphics	AMD Radeon™ HD 7650A , 2GB memory, PCI Express® x16, 35 watts, DirectX® 11, external digital monitor support via HDMI, supports dual independent display; <i>Maximum resolution: 1920x1200(HDMI)@60Hz</i> 21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color , infinity display, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via HDMI-in connector										<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Automatic Lock Utility ● ThinkVantage Power Manager ● View Management Utility ● Lenovo Solution Center ● Lenovo Message Center Plus ● Intel Small Business Advantage ● RapidBoot HDD Accelerator ● Lenovo SimpleTap ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Evernote® ● Symantec™ VIP ● Skype™ for Windows ● Windows Live™ Essentials ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW) 		
Widescreen display	IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via HDMI-in connector												
Multi-touch	None												
Camera	Camera on top of screen, 2.0-megapixel, Full HD 1080p, fixed focus, integrated digital MIC array with stereo, LED indicator												
Controls	Front facing buttons for brightness up, brightness down, power on/off, and Video in												
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm												
mSATA™ SSD	None												
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable												
Media reader	7-in-1 Single Slot SD media reader												
Chipset	Intel B75 Express Chipset												
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in												
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
PCIe Mini Card	Two PCI Express® Mini Card slots												
PCIe WLAN ⁴	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2												
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter												
PCIe mSATA	One Mini PCIe mSATA slot												
Ethernet	One gigabit ethernet port, Intel 82579LM												
Audio support	High Definition (HD) Audio, Realtek® ALC662 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync® certified												
Intel AMT	None												
Security chip	None												
Keyboard	Lenovo® Slim New F5 USB Keyboard (USB connector), black												
Mouse	Enhanced Optical USB Mouse, black												
Power supply	180 watts, autosensing, 92% PSU												
Machine	<i>Model(s) with Frame stand:</i> <ul style="list-style-type: none"> ● Business black color ● 21.5" W X 3.2" D X 16.3" H ● 545mm W X 81mm D X 414mm H (with feet) ● 18.5 lb (8.4 kg) in maximum configuration ● Handle in rear, removable feet ● Support VESA mount (100mm) 										Security <ul style="list-style-type: none"> ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement 		
											ENERGY STAR® 5.2-compliant		
											RoHS-compliant		
											Supports ThinkVantage Technologies		
											For compatible accessories, please go to O-Edge92Z sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet		
Limited Warranty ¹	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												

See footnotes for important warranty information
 US model(s) announced November 20, 2012

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ThinkCentre® Edge 92z (3414) - Multi-touch (TopSeller)

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	mSATA SSD	SATA optical	Graphics	PCIe Mini Card WLAN	Media reader	Key-board/ Mouse	Global	Win7 preload	Ann date (mm/dd/yy)
3414-A7U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 105	None	2.4G	None	Pro 64	07/03/12
3414-A8U	i5-3570S	4GBx1	2.0M	1TB 7200	None	DVD±RW	HD 7650A	Intel 105	None	2.4G	None	Pro 64	07/03/12
3414-A9U	i7-3770S	4GBx2	2.0M	1TB 7200	64GB	DVD±RW	HD 7650A	Intel 105	None	2.4G	None	Pro 64	07/03/12
3414-B3U	i3-2120	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 105	None	USB	None	Pro 64	07/03/12
3414-B4U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 105	None	USB	None	Pro 64	07/03/12
3414-B5U	i7-3770S	4GBx2	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 105	None	2.4G	None	Pro 64	07/03/12
3414-C7U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Pro 64	07/03/12
3414-C8U	i7-3770S	4GBx1	2.0M	1TB 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Pro 64	07/03/12
3414-C9U	i7-3770S	4GBx1	2.0M	1TB 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	2.4G	None	Pro 64	07/03/12
3414-CAU	i7-3770S	4GBx2	2.0M	1TB 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	2.4G	None	Pro 64	07/03/12
3414-CPU	i5-3470S	4GBx1	2.0M	1TB 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	2.4G	None	Pro 64	07/10/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	Stylish All-In-One PC for small/medium businesses								Preloaded operating system				
Processor	Intel® Core™ i3-2120 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD 2000 Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-3570S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket								Genuine Windows® 7 Professional 64 Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager • Business-in-a-Box Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Automatic Lock Utility • ThinkVantage Power Manager • View Management Utility • Microsoft Touch Pack • Lenovo Solution Center • Lenovo Message Center Plus • Intel Small Business Advantage • RapidBoot HDD Accelerator • Lenovo SimpleTap • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Evernote® • Symantec™ VIP • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)				
Implementation													
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)												
Graphics	AMD Radeon™ HD 7650A , 2GB memory, PCI Express® x16, 35 watts, DirectX® 11, external digital monitor support via HDMI, supports dual independent display; <i>Maximum resolution: 1920x1200(HDMI)@60Hz</i> 21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color , infinity display, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via HDMI-in connector												
Widescreen display													
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch												
Camera	Camera on top of screen, 2.0-megapixel, Full HD 1080p, fixed focus, integrated digital MIC array with stereo, LED indicator												
Controls	Front facing buttons for brightness up, brightness down, power on/off, and Video in												
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm												
mSATA™ SSD	Some: mSATA Solid State Drive (SSD), via PCIe Mini Card slot												
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable												
Media reader	Some: 7-in-1 Single Slot SD media reader												
Chipset	Intel B75 Express Chipset												
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in												
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
PCIe Mini Card	Two PCI Express® Mini Card slots												
PCIe WLAN [†]	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2												
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter												
PCIe mSATA	One Mini PCIe mSATA slot												
Ethernet	One gigabit ethernet port, Intel 82579LM												
Audio support	High Definition (HD) Audio, Realtek® ALC662 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync® certified												
Intel AMT	None												
Security chip	None												
Keyboard	Some: Lenovo® Slim New F5 USB Keyboard (USB connector), black Some: Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black Some: Enhanced Optical USB Mouse, black Some: Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black								Security				
Mouse									• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Boot sequence control • Boot without keyboard and mouse • USB port disablement				
Power supply	180 watts, autosenesing, 92% PSU												
Machine	<i>Model(s) with Frame stand:</i> • Business black color • 21.5" W X 3.2" D X 16.3" H • 545mm W X 81mm D X 414mm H (with feet) • 18.5 lb (8.4 kg) in maximum configuration • Handle in rear, removable feet • Support VESA mount (100mm)								ENERGY STAR® 5.2-compliant RoHS-compliant Supports ThinkVantage Technologies				
Limited Warranty [†]	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available								For compatible accessories, please go to O-Edge92Z sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information
 US model(s) announced July 3 or July 10, 2012

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ThinkCentre® Edge 92z (3414) - Multi-touch (TS) - Win 8

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	mSATA SSD	SATA optical	Graphics	PCIe Mini Card WLAN	Media reader	Key-board/Mouse	Global	Preload	Ann date (mm/dd/yy)
3414-CVU	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	None	USB	None	Win8 Pro64	10/23/12
3414-D3U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win8 Pro64	10/23/12
3414-D4U	i7-3770S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win8 Pro64	10/23/12
3414-DJU	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win7 Pro64	10/23/12
3414-DKU	i3-3220	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win7 Pro64	10/23/12
3414-DLU	G870	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win7 Pro64	10/23/12
3414-DNU	i7-3770S	8GBx2	2.0M	1TB 7200	None	BD player	HD 7650A	Intel 2230 + BT	Media	2.4G	None	Win7 Pro64	11/13/12
3414-ELU	G2120	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win8 Pro64	12/04/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	<i>Stylish All-In-One PC for small/medium businesses</i>										Preloaded operating system		
Processor	Intel® Pentium® G870 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Pentium G2120 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache) , integrated Intel HD Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit		
Implementation											Preloaded applications (only some listed)		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)										- Windows 7 models		
Graphics	AMD Radeon™ HD 7650A , 2GB memory, PCI Express® x16, 35 watts, DirectX® 11, external digital monitor support via HDMI, supports dual independent display; <i>Maximum resolution: 1920x1200(HDMI)@60Hz</i> 21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color , infinity display, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via HDMI-in connector										<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Microsoft Touch Pack • Lenovo® Message Center Plus • Intel Small Business Advantage • RapidBoot HDD Accelerator • Lenovo SimpleTap • Adobe® Reader® • Symantec™ VIP • Windows Live™ Essentials • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) • Corel WinDVD® (BD player) 		
Widescreen display											- Windows 8 models		
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch										<ul style="list-style-type: none"> • Lenovo Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Norton™ Studio • Intel AppUp® • AccuWeather • PC Device Stage • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) 		
Camera	Camera on top of screen, 2.0-megapixel, Full HD 1080p, fixed focus, integrated digital MIC array with stereo, LED indicator										- All models		
Controls	Front facing buttons for brightness up, brightness down, power on/off, and Video in										<ul style="list-style-type: none"> • ThinkVantage System Update • ThinkVantage Automatic lock Utility • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Evernote® • Skype™ 		
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm										Security		
mSATA™ SSD	None										<ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Boot sequence control • Boot without keyboard and mouse • USB port disablement 		
Optical	Some: Blu-ray™ disc reader (no Blu-ray media burning), DVD recordable, not removable, 12.7mm high, tray-in Some: DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable Some: 7-in-1 Single Slot SD media reader										ENERGY STAR® 5.2-compliant		
Media reader											RoHS-compliant		
Chipset	Intel B75 Express Chipset										Supports ThinkVantage Technologies		
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in										For compatible accessories, please go to O-Edge92Z sheet;		
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										For ThinkPlus™ service upgrade options, please go to S-TC sheet		
PCIe Mini Card	Two PCI Express® Mini Card slots												
PCIe WLAN ⁴	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2												
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter												
PCIe mSATA	One Mini PCIe mSATA slot												
Ethernet	One gigabit ethernet port, Intel 82579LM												
Audio support	High Definition (HD) Audio, Realtek® ALC662 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync® certified												
Intel AMT	None												
Security chip	None												
Keyboard	Some: Lenovo® Slim New F5 USB Keyboard (USB connector), black Some: Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black Some: Enhanced Optical USB Mouse, black Some: Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black												
Mouse													
Power supply	180 watts, autosensing, 92% PSU												
Machine	<i>Model(s) with Frame stand:</i> <ul style="list-style-type: none"> • Business black color • 21.5" W X 3.2" D X 16.3" H • 545mm W X 81mm D X 414mm H (with feet) • 18.5 lb (8.4 kg) in maximum configuration • Handle in rear, removable feet • Support VESA mount (100mm) 												
Limited Warranty ¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												

See footnotes for important warranty information
 US model(s) announced October 23, November 13, or December 4, 2012

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 (TROY1-7) December 2012

ThinkCentre® Edge 92z (3417) - Multi-touch (TS) - Win 8

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	mSATA SSD	SATA optical	Graphics	PCIe Mini Card WLAN	Media reader	Key-board/Mouse	Global	Preload	Ann date (mm/dd/yy)
3417-K1U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win7 Pro64	11/20/12
3417-K2U	i3-3220	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 105	Media	USB	None	Win7 Pro64	11/20/12
3417-K3U	i7-3770S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win7 Pro64	11/20/12
3417-K4U	i3-3220	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win8 Pro64	11/20/12
3417-K5U	i5-3470S	4GBx1	2.0M	500G 7200	None	DVD±RW	HD 7650A	Intel 2230 + BT	Media	USB	None	Win8 Pro64	11/20/12

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	<i>Stylish All-In-One PC for small/medium businesses</i>								Preloaded operating system				
Processor	Intel® Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache) , integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller Intel Core i5-3470S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), integrated Intel HD 2500 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-3770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), integrated Intel HD 4000 Graphics, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket								Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 8 Pro 64-bit				
Implementation	Processor in LGA1155 socket								Preloaded applications (only some listed)				
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)								- Windows 7 models				
Graphics	AMD Radeon™ HD 7650A , 2GB memory, PCI Express® x16, 35 watts, DirectX® 11, external digital monitor support via HDMI, supports dual independent display; <i>Maximum resolution: 1920x1200(HDMI)@60Hz</i> 21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color , infinity display, IPS wide viewing angle, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via HDMI-in connector								<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Power Manager • Microsoft Touch Pack • Lenovo® Message Center Plus • Intel Small Business Advantage • RapidBoot HDD Accelerator • Lenovo SimpleTap • Adobe® Reader® • Symantec™ VIP • Windows Live™ Essentials • Microsoft® Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 				
Widescreen display	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch Camera on top of screen, 2.0-megapixel, Full HD 1080p, fixed focus, integrated digital MIC array with stereo, LED indicator Front facing buttons for brightness up, brightness down, power on/off, and Video in								- Windows 8 models				
Multi-touch	Front facing buttons for brightness up, brightness down, power on/off, and Video in								<ul style="list-style-type: none"> • Lenovo Support • Lenovo Settings • Lenovo Companion • Lenovo Cloud Storage • Lenovo QuickLaunch • Norton™ Studio • Intel AppUp® • AccuWeather • PC Device Stage • Microsoft Office 2013 preloaded; purchase product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) 				
Camera	Front facing buttons for brightness up, brightness down, power on/off, and Video in								- All models				
Controls	Front facing buttons for brightness up, brightness down, power on/off, and Video in								<ul style="list-style-type: none"> • ThinkVantage System Update • ThinkVantage Automatic lock Utility • Lenovo Solution Center • View Management Utility • Norton Internet Security (30 days of virus definitions) • Evernote™ • Skype™ 				
Disk mSATA™ SSD	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm												
Optical	None												
Media reader	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable												
Chipset	7-in-1 Single Slot SD media reader												
Rear ports	Intel B75 Express Chipset												
Side ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in												
PCIe Mini Card	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
PCIe WLAN ¹	Two PCI Express® Mini Card slots												
Bluetooth	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® wireless-N 105, 1x1 Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2												
PCle mSATA	Bluetooth 4.0 wireless, integrated in Intel 2230 Wi-Fi + Bluetooth combo adapter												
Ethernet	One Mini PCIe mSATA slot												
Audio support	One gigabit ethernet port, Intel 82579LM												
Intel AMT Security chip	High Definition (HD) Audio, Realtek® ALC662 / Two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync® certified												
Keyboard	None												
Mouse	None												
Power supply	Lenovo® Slim New F5 USB Keyboard (USB connector), black												
Machine	Enhanced Optical USB Mouse, black												
	180 watts, autosensing, 92% PSU												
	Model(s) with Frame stand: <ul style="list-style-type: none"> • Business black color • 21.5" W X 3.2" D X 16.3" H • 545mm W X 81mm D X 414mm H (with feet) • 18.5 lb (8.4 kg) in maximum configuration • Handle in rear, removable feet • Support VESA mount (100mm) 												
Limited Warranty ¹	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available												
									Security <ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Boot sequence control • Boot without keyboard and mouse • USB port disablement 				
									ENERGY STAR® 5.2-compliant				
									RoHS-compliant				
									Supports ThinkVantage Technologies				
									For compatible accessories, please go to O-Edge92Z sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information
US model(s) announced November 20, 2012

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Memory

2GB PC3-12800 DDR3 SODIMM	0A65722	<i>ann 06/05/12</i>
4GB PC3-12800 DDR3 SODIMM	0A65723	<i>ann 06/05/12</i>
8GB PC3-12800 DDR3 SODIMM	0A65724	<i>ann 06/05/12</i>

More information at

www.lenovo.com/support/desktopmemorycompatibility

Storage and removable storage

USB 3.0 Secure 500GB Hard Drive	0A65619	<i>ann 11/29/11</i>
USB 3.0 Secure 750GB Hard Drive	0A65616	<i>ann 11/29/11</i>
USB 3.0 Secure 1TB Hard Drive	0A65621	<i>ann 08/28/12</i>

Keyboard

Enhanced Performance USB Keyboard	73P2620	<i>ann 03/23/04</i>
Ultraslim Plus Wireless Keyboard and Mouse ⁵²	0A34032	<i>ann 04/05/11</i>
ThinkPad® USB Keyboard with TrackPoint	55Y9003	<i>ann 08/18/09</i>
Lenovo® USB Fingerprint Keyboard	73P4730	<i>ann 02/22/05</i>
Lenovo USB Smartcard Keyboard	51J0155	<i>ann 03/24/09</i>

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

Lenovo Laser Mouse (USB)	41U3074	<i>ann 01/23/07</i>
Lenovo Wireless Laser Mouse ⁵²	0A36188	<i>ann 12/20/11</i>

More information at www.lenovo.com/support/mice

Multimedia

ThinkPad In-Ear Headphones with mic	57Y4488	<i>ann 01/07/10</i>
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Security

Kensington® MicroSaver® Cable Lock ⁵⁶	73P2582	<i>ann 12/29/03</i>
Kensington Twin Head Cable Lock ⁵⁶	45K1620	<i>ann 09/30/08</i>
3M ThinkCentre Edge91z/92z Privacy Filter	4Z10A23290	<i>ann 09/30/08</i>

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Stand

ThinkCentre Edge 91z/92z Stand ⁵⁹	0A33969	<i>ann 07/26/11</i>
ThinkCentre Extend Arm ⁵⁷	57Y4352	<i>ann 07/06/10</i>

⁵⁷ Compatible when ThinkCentre Extend Arm is desk (clamp) mounted only, wall mount is not supported.
⁵⁹ Not compatible to Multi-touch models.

Monitor Accessories⁴⁶

Lenovo HDMI to VGA Monitor Cable	0B47069	<i>ann 06/26/12</i>
Kensington MicroSaver Cable Lock ⁵⁶	73P2582	<i>ann 12/29/03</i>
Kensington Twin Head Cable Lock ⁵⁶	45K1620	<i>ann 09/30/08</i>

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems

The TopSeller™ services are designed to make selling the popular services with TopSeller systems faster and easier. Channel partners should always use TopSeller services with TopSeller systems. TopSeller services part numbers typically provide enhanced discounts and incentives for channel partners. The TopSeller service delivered to the customer is identical to the service delivered using a standard service part number. In situations where a desired service is not offered under a TopSeller service part number or the sale requires a special bid process, use available standard service part numbers.

TopSeller services should always be offered by channel business partners with TopSeller hardware, unless the sale requires special bid pricing or the desired service is not offered as a TopSeller service part.

For more information see:

<http://www2.partnerinfo.lenovo.com/partners/us/resources/salestoolkit.shtml>

<p><u>TopSeller service upgrade options for ThinkCentre M series</u></p> <p>ThinkCentre desktop with 1-year Onsite warranty <i>LOR = Lenovo Onsite Repair</i></p> <table border="0"> <tr> <td>3-year LOR 9x5 Next Business Day</td> <td>04W8710</td> </tr> <tr> <td>4-year LOR 9x5 Next Business Day</td> <td>04W8711</td> </tr> </table> <p>ThinkCentre desktop with 3-year Onsite warranty <i>LOR = Lenovo Onsite Repair</i></p> <table border="0"> <tr> <td>4-year LOR 9x5 Next Business Day</td> <td>04W8712</td> </tr> </table>	3-year LOR 9x5 Next Business Day	04W8710	4-year LOR 9x5 Next Business Day	04W8711	4-year LOR 9x5 Next Business Day	04W8712	<p>TopSeller Priority Support</p> <ul style="list-style-type: none"> • 24x7 support with priority routing and advanced level technicians <p>ThinkCentre desktop with 1-year Onsite warranty Add to 3-year warranty coverage - 3-year Priority Support* 04W8721 Add to 4-year warranty coverage - 4-year Priority Support* 04W8722</p> <p>ThinkCentre desktop with 3-year Onsite warranty Add to 3-year warranty coverage - 3-year Priority Support* 04W8721 Add to 4-year warranty coverage - 4-year Priority Support* 04W8722</p> <p>* Covered machine must have concurrent warranty coverage.</p>
3-year LOR 9x5 Next Business Day	04W8710						
4-year LOR 9x5 Next Business Day	04W8711						
4-year LOR 9x5 Next Business Day	04W8712						
<p><u>TopSeller service upgrade options for ThinkCentre A series and Edge series</u></p> <p>ThinkCentre desktop with 1-year Onsite warranty <i>LOR = Lenovo Onsite Repair</i></p> <table border="0"> <tr> <td>3-year LOR 9x5 Next Business Day</td> <td>04W8710</td> </tr> <tr> <td>4-year LOR 9x5 Next Business Day</td> <td>04W8711</td> </tr> </table> <p>ThinkCentre desktop with 3-year Onsite warranty</p> <table border="0"> <tr> <td>4-year LOR 9x5 Next Business Day</td> <td>04W8712</td> </tr> </table>	3-year LOR 9x5 Next Business Day	04W8710	4-year LOR 9x5 Next Business Day	04W8711	4-year LOR 9x5 Next Business Day	04W8712	
3-year LOR 9x5 Next Business Day	04W8710						
4-year LOR 9x5 Next Business Day	04W8711						
4-year LOR 9x5 Next Business Day	04W8712						

**Partial list of Lenovo Services⁷
for ThinkCentre desktops**

For more information see:

http://www.lenovo.com/services_warranty/us/en/index.html

<p><u>Lenovo service upgrade options for ThinkCentre M series</u></p> <p><i>ThinkCentre desktop with 1-year Onsite warranty</i> <i>LOR = Lenovo Onsite Repair</i></p> <table> <tr> <td>2-year LOR 9x5 Next Business Day</td> <td>41C9187</td> </tr> <tr> <td>3-year LOR 9x5 Next Business Day</td> <td>41C9188</td> </tr> </table> <p><i>ThinkCentre desktop with 3-year Onsite warranty</i> <i>LOR = Lenovo Onsite Repair</i></p> <table> <tr> <td>4-year LOR 9x5 Next Business Day</td> <td>41C9194</td> </tr> </table>	2-year LOR 9x5 Next Business Day	41C9187	3-year LOR 9x5 Next Business Day	41C9188	4-year LOR 9x5 Next Business Day	41C9194	<p><u>Lenovo service upgrade options for ThinkCentre A series and Edge series</u></p> <p><i>ThinkCentre desktop with 1-year Onsite warranty</i> <i>LOR = Lenovo Onsite Repair</i></p> <table> <tr> <td>2-year LOR 9x5 Next Business Day</td> <td>45K5949</td> </tr> <tr> <td>3-year LOR 9x5 Next Business Day</td> <td>45K5950</td> </tr> </table> <p><i>ThinkCentre desktop with 3-year Onsite warranty</i> <i>LOR = Lenovo Onsite Repair</i></p> <table> <tr> <td>4-year LOR 9x5 Next Business Day</td> <td>45K5957</td> </tr> <tr> <td>5-year LOR 9x5 Next Business Day</td> <td>45K5963</td> </tr> </table>	2-year LOR 9x5 Next Business Day	45K5949	3-year LOR 9x5 Next Business Day	45K5950	4-year LOR 9x5 Next Business Day	45K5957	5-year LOR 9x5 Next Business Day	45K5963
2-year LOR 9x5 Next Business Day	41C9187														
3-year LOR 9x5 Next Business Day	41C9188														
4-year LOR 9x5 Next Business Day	41C9194														
2-year LOR 9x5 Next Business Day	45K5949														
3-year LOR 9x5 Next Business Day	45K5950														
4-year LOR 9x5 Next Business Day	45K5957														
5-year LOR 9x5 Next Business Day	45K5963														

<p><u>Lenovo Priority Support for enterprise customers</u></p> <ul style="list-style-type: none"> • 24x7 support with priority routing and advanced level technicians <p><i>ThinkCentre desktop with 1-year Onsite warranty</i> Add to 3-year warranty coverage - 3-year Priority Support* 45J9087</p> <p><i>ThinkCentre desktop with 3-year Onsite warranty</i> Add to 3-year warranty coverage - 3-year Priority Support* 45J9088 Add to 4-year warranty coverage - 4-year Priority Support* 45J9089 Add to 5-year warranty coverage - 5-year Priority Support* 45J9090</p> <p>* Covered machine must have concurrent warranty coverage.</p>	
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Availability: All offers subject to availability. Lenovo reserves the right to alter product offerings and specifications at any time, without notice. Lenovo is not responsible for photographic or typographic errors.

Warranty: For a copy of applicable product warranties, go to http://support.lenovo.com/en_US/product-service/warranty-status/WarrantyPolicies.page. Lenovo makes no representation or warranty regarding third party products or services.

- ¹ **Limited warranty:** Support unrelated to a warranty issue may be subject to additional charges.
- ² **Hard drive:** GB = billion bytes, TB = trillion bytes. Accessible capacity is less; up to 4GB is service partition.
- ³ **Limited onsite service systems** are designed to be repaired during the applicable warranty period primarily with customer-replaceable parts provided by Lenovo. Lenovo will only send a technician onsite to perform a repair if (a) remote telephone diagnosis and/or customer part replacement are unable to resolve the problem, or (b) the part is one of the few designated by Lenovo for onsite replacement. For a list of onsite replaceable parts, contact Lenovo. Support unrelated to a warranty issue may be subject to additional charges. Lenovo onsite repair (LOR), 8 am to 5 pm, Monday through Friday coverage excluding holidays, next business day (NBD) response time.
- ⁴ **CD and DVD list** maximum rates; rates are variable and are often less than the maximum.
- ⁵ **Included software** may differ from its retail version (if available), and may not include user manuals or all program functionality. License agreements may apply.

⁷ **Lenovo Services:** These services are available for machines normally used for business, professional, or trade purposes, rather than personal, family, or household purposes. Not all machine types and models are covered. Service period begins with the equipment date of purchase. Service must be purchased during the original limited product warranty period. Service levels are response time objectives and are not guarantees. If the machine problem turns out to be a Customer Replaceable Unit (CRU), a part will be express shipped to you for quick replacement. Onsite 24x7x2-hour service is not available in all locations. P&L means parts and labor. P/U means pick-up. See lenovo terms and conditions for complete details and restrictions.

⁸ **Memory:** For PCs without a separate graphics card, memory supports both system and video. Accessible system memory may be up to 384MB less than the amount stated, depending on video mode.

⁹ **International Warranty Service** is available in any country in which this product is sold and serviced. Service delivery methods and parts availability vary by country, may be different from that in the country of purchase, and are subject to change without notice. Fees and restrictions may apply in some countries.

¹⁰ **Modem speeds:** Public network download speeds are limited to 53Kbps. Upload speeds are limited to 48Kbps for V.92 modems. Actual speeds depend on many factors and are often less than the maximum possible. V.92 functions and speeds require compatible phone line and server equipment. Check with your telephone and ISP service providers for availability.

¹¹ **For combination drives,** maximum speeds only are given in the following order: CD read, CD write, CD re-write, DVD read.

¹² **The IEEE 802.11n specification (MIMO)** has been finalized and is currently in IEEE 802.11n-2009 release. The maximum speed depends on the access point device and the number of integrated antenna used for connection. An adapter with 11a/b, 11a/b/g, 11b/g/n, or 11a/b/g/n can communicate on any of its supported formats.

¹³ **Wireless capability:** Requires compatible wireless-enabled options sold separately.

¹⁴ **Response times may vary.** May exclude some holidays. Telephone support may be subject to additional charges.

¹⁵ **Update Connector** is available at no charge to registered customers during the limited warranty period. Line charges may apply.

¹⁶ **Embedded Security Subsystem** works with optional VPN software.

- ¹⁸ **Embedded Security Subsystem** may require download of client security software from the Web.
- ¹⁹ **Asset ID** allows system-specific information to be stored in a chip inside the system; it does not have any radio frequency support.
- ²⁰ **Operating System:** Level of support varies by operating system. Operating systems not preloaded on the system may not provide full feature functionality. Refer to lenovo.com/pc/support and enter your machine type and model number for more information.

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Visit www.lenovo.com/psref for the latest version of Personal Systems Reference.

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March 2013
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