



Personal Systems Reference Lenovo® ThinkCentre Desktops - withdrawn

May 2013 - Version 436 (Western Europe)



Lenovo ThinkCentre M90z with Frame Stand

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Lenovo ThinkCentre M71e Small and
Lenovo ThinkCentre M71e Tower



Lenovo ThinkCentre M71e Tower
with Lenovo ThinkVision monitor



Lenovo ThinkCentre M71e Small



Lenovo ThinkCentre M71e Small
with Lenovo ThinkVision monitor



Lenovo ThinkCentre M71e Tower




Lenovo ThinkCentre M71e Tower

ThinkCentre® M71e Small (3132) - TopSeller - withdrawn

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Media reader	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global Educ	Win7 preload
3132-B2G	3x3	Pentium G840	2GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	Media	Switch	None	None	N N	Pro 64
3132-B3G	3x3	Core i3-2100	2GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	Media	Switch	None	None	N N	Pro 64

- These small and medium business (SMB) models are part of the Western Europe TopSeller™ Program
- These models have a 1-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Essential business features, exceptional value</i>										
Processor	Intel® Pentium® G840 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache), Virtualization Technology, integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller 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										
Implementation	Processor in LGA1155 socket										
Memory	8GB max, UDIMM, PC3-10600 1333MHz DDR3 , two 240-pin DIMM sockets										
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display										
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										
SATA cables	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar										
eSATA port	None										
Media reader	9-in-1 media reader, internal USB 2.0										
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 (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										
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, 1000 dpi, black, Lenovo logo										
Floor Stand	None										
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 99mm H • 14.5 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 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 (45w 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 public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available										
	Preloaded operating system Genuine Windows® 7 Professional 64 Preloaded applications²⁰ (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® Live • 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 										
	GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies										

See footnotes for important warranty information
 WE models announced June 7, 2011
 WE models withdrawn effective November 2012

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 (G-MOSC1-1) November 2012

ThinkCentre® M71e Small (3132) - TopSeller - II - withdrawn

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Media reader	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global Educ	Win7 preload
3132-B4G	3x3	Core i3-2120	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	Media	None	None	None	N N	Pro 64
3132-C3G	3x3	Pentium G850	2GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	Media	None	None	None	N N	Pro 64

- These small and medium business (SMB) models are part of the Western Europe TopSeller™ Program
- These models have a 1-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning Processor	<i>Essential business features, exceptional value</i> Intel® Pentium® G850 Processor (2 cores / 2 threads, 2.9GHz, 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 Processor in LGA1155 socket	Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Preloaded applications¹⁴ (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® Live • 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 ⁷ , UDIMM, PC3-10600 1333MHz DDR3 , two 240-pin DIMM sockets	
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display	
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	
SATA cables	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar	
eSATA port	None	
Media reader	9-in-1 media reader, internal USB 2.0	
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 (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	
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, 1000 dpi, black, Lenovo logo	
Floor Stand	None	
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 99mm H • 14.5 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 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 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1	
		
	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 	
Limited Warranty ¹²	1-year, limited onsite service²⁴ , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades ²² available	
	GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies	

See footnotes for important warranty information
 WE models announced August 9 or November 22, 2011
 WE models withdrawn effective November 2012


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 (G-MOSC1-8) November 2012

ThinkCentre® M71e Small (3167) - GMP - withdrawn

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Media reader	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global Educ	Win7 preload
3167-A1G	3x3	Core i3-2100	2GBx1 1333MHz	250G 7200	DVD±RW	Intel HD	None	Switch	Stand	None	GMP	Pro 32

- 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>Essential business features, exceptional value</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										
Implementation	Processor in LGA1155 socket										
Memory	8GB max, UDIMM, PC3-10600 1333MHz DDR3 , two 240-pin DIMM sockets										
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display										
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										
SATA cables	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 (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										
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, 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 • 13.2" W X 15.0" D X 3.9" H • 335mm W X 382mm D X 99mm H • 14.5 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 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 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1										
											
	Preloaded operating system Genuine Windows® 7 Professional 32 Preloaded applications²⁰ (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® Live • 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 										
Limited Warranty ¹	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available										
	GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies										

See footnotes for important warranty information
 WE model announced June 7, 2011
 WE model withdrawn effective November 2012


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 (G-MOSC1-2) November 2012

ThinkCentre® M71e Small (5033) - ES 5.2 (GMP) - withdrawn

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Media reader	Chassis intr switch	Floor stand	ENERGY STAR 5.2	Global Educ	Win7 preload
5033-A1G	3x3	Core i3-2100	4GBx1 1333MHz	250G 7200	DVD±RW	Intel HD	None	Switch	Stand	ES5.2	G P	Pro 64
5033-A2G	3x3	Core i5-2400	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	None	Switch	Stand	ES5.2	G P	Pro 64
5033-A3G	3x3	Core i3-2120	4GBx1 1333MHz	250G 7200	DVD±RW	Intel HD	None	Switch	Stand	ES5.2	G P	Pro 64

- 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>Essential business features, exceptional value</i>										
Processor	<p>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</p> <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 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>										
Implementation	Processor in LGA1155 socket										
Memory	8GB max, UDIMM, PC3-10600 1333MHz DDR3 , two 240-pin DIMM sockets										
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display										
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										
SATA cables	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 (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										
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, 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 • 13.2" W X 15.0" D X 3.9" H • 335mm W X 382mm D X 99mm H • 14.5 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 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 (45w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1										
											
Limited Warranty ¹	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades ²² available										
	Preloaded operating system Genuine Windows® 7 Professional 64 Preloaded applications²⁰ (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® Live • 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 										
	Climate Saver-compliant EPEAT™ Gold rating ENERGY STAR 5.2-compliant GREENGUARD® certified RoHS-compliant										
	Supports ThinkVantage Technologies										

See footnotes for important warranty information
 WE models announced July 26, 2011 or February 21, 2012
 WE models withdrawn effective November 2012

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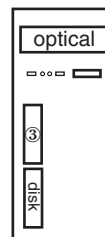
ThinkCentre® M71e Tower (3129) - TopSeller - withdrawn

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 Educ	Win7 preload
3129-A2G	3x4	Pentium G840	2GBx1 1333MHz	320G 7200	Bay	DVD±RW	Intel HD	Media	Switch	None	N N	Pro 64
3129-A3G	3x4	Core i3-2100	2GBx1 1333MHz	500G 7200	Bay	DVD±RW	Intel HD	Media	Switch	None	N N	Pro 64
3129-A4G	3x4	Core i3-2120	4GBx1 1333MHz	500G 7200	Bay	DVD±RW	Intel HD	Media	Switch	None	N N	Pro 64
3129-A6G	3x4	Pentium G620	2GBx1 1333MHz	500G 7200	Bay	DVD±RW	Intel HD	Media	Switch	None	N N	Pro 64
3129-A7G	3x4	Pentium G620	4GBx1 1333MHz	320G 7200	Bay	DVD±RW	Intel HD	Media	Switch	None	N N	Pro 64
3129-A8G	3x4	Core i3-2100	4GBx1 1333MHz	320G 7200	Bay	DVD±RW	Intel HD	Media	Switch	None	N N	Pro 64

- These small and medium business (SMB) models are part of the Western Europe TopSeller™ Program
- These models have a 1-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Essential business features, exceptional value</i>		Preloaded operating system Genuine Windows® 7 Professional 64 Preloaded applications²⁰ (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® Live ● Microsoft Office 2010 preloaded; purchase product key to activate ● Corel® Burn.Now™ (DVD±RW) ● Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Pentium® G620 Processor (2 cores / 2 threads, 2.6GHz, 3MB cache), Virtualization Technology, integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Pentium G840 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache), Virtualization Technology, integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller 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, UDIMM, PC3-10600 1333MHz DDR3 , two 240-pin DIMM sockets		
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display		
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		
SATA cables	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar		
eSATA port	None		
Media reader	9-in-1 media reader, internal USB 2.0		
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 (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		
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, 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 ● 6.3" W X 16.6" D X 15.3" H ● 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: 1.5", .35" high, access, opt reader* Bay 3: 3.5", 1" high, no access, opt disk Bay 4: 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 public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / 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 		
	GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies		



See footnotes for important warranty information
 WE models announced June 7, 2011
 WE models withdrawn effective November 2012

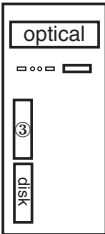
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 (G-MOSC1-3) November 2012

ThinkCentre® M71e Tower (3129) - TopSeller - II - withdrawn

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 (G) GMP (P)	Win7 preload
3129-B1G	3x4	Pentium G840	4GBx1 1333MHz	500G 7200	Bay	DVD±RW	Intel HD	Media	None	None	N N	Pro 64
3129-B2G	3x4	Core i5-2400	4GBx1 1333MHz	500G 7200	Bay	DVD±RW	Intel HD	Media	None	None	N N	Pro 64
3129-B3G	3x4	Core i3-2120	4GBx1 1333MHz	500G 7200	Bay	DVD±RW	HD 5450	Media	None	None	N N	Pro 64
3129-B5G	3x4	Pentium G630	2GBx1 1333MHz	500G 7200	Bay	DVD±RW	Intel HD	Media	None	None	N N	Pro 64
3129-B6G	3x4	Pentium G630	4GBx1 1333MHz	500G 7200	Bay	DVD±RW	Intel HD	Media	None	None	N N	Pro 64
3129-B7G	3x4	Core i3-2120	4GBx1 1333MHz	1TB 7200	Bay	DVD±RW	Intel HD	Media	None	None	N N	Pro 64
3129-B8G	3x4	Core i5-2400	4GBx1 1333MHz	1TB 7200	Bay	DVD±RW	HD 5450	Media	None	None	N N	Pro 64

- These small and medium business (SMB) models are part of the Western Europe TopSeller™ Program
- These models have a 1-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Essential business features, exceptional value</i>		<p>Preloaded operating system²⁰ 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® Live • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
Processor	<p>Intel® Pentium® G630 Processor (2 cores / 2 threads, 2.7GHz, 3MB cache), Virtualization Technology, integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller</p> <p>Intel Pentium G840 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache), Virtualization Technology, integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller</p> <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 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>Processor in LGA1155 socket</p>		
Implementation	Processor in LGA1155 socket		
Memory	8GB max ⁷ , UDIMM, PC3-10600 1333MHz DDR3 , two 240-pin DIMM sockets		
Graphics	<p><i>Some:</i> Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display;</p> <p><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; works along with Intel HD Graphics to support four independent monitors</p>		
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		
SATA cables	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar		
eSATA port	None		
Media reader	9-in-1 media reader, internal USB 2.0		
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 (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		
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, 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 • 6.3" W X 16.6" D X 15.3" H • 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: 1.5", .35" high, access, opt reader*</p> <p>Bay 3: 3.5", 1" high, no access, opt disk</p> <p>Bay 4: 3.5", 1" high, no access, std disk</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 ¹²	<p>1-year, limited onsite service²⁴, 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades²² 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 		
	<p>GREENGUARD® certified RoHS-compliant</p>		
	<p>Supports ThinkVantage Technologies</p>		

See footnotes for important warranty information
WE models announced August 9 or September 6, 2011
WE models withdrawn effective November 2012

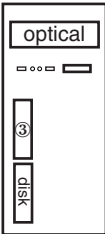
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ThinkCentre® M71e Tower (3129) - TopSeller - III - withdrawn

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁶	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Media reader	Chassis intr switch	ENERGY STAR 5.2	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
3129-B9G	3x4	Pentium G850	4GBx1 1333MHz	500G 7200	Bay	DVD±RW	Intel HD	Media	None	None	N N	Pro 64	11/22/11
3129-C1G	3x4	Core i3-2130	4GBx1 1333MHz	500G 7200	Bay	DVD±RW	HD 5450	Media	None	None	N N	Pro 64	11/22/11

- These small and medium business (SMB) models are part of the Western Europe TopSeller™ Program
- These models have a 1-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Essential business features, exceptional value</i>										
Processor	Intel® Pentium® G850 Processor (2 cores / 2 threads, 2.9GHz, 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										
Implementation	Processor in LGA1155 socket										
Memory	8GB max ⁷ , UDIMM, PC3-10600 1333MHz DDR3 , two 240-pin DIMM sockets										
Graphics	<i>Some:</i> Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display; <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; works along with Intel HD Graphics to support 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										
SATA cables	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar										
eSATA port	None										
Media reader	9-in-1 media reader, internal USB 2.0										
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 (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										
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, 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 • 6.3" W X 16.6" D X 15.3" H • 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: 1.5", .35" high, access, opt reader* Bay 3: 3.5", 1" high, no access, opt disk Bay 4: 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										
											
	Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Preloaded applications¹⁴ (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® Live • 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 										
Limited Warranty ¹²	1-year, limited onsite service²⁴ , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades ²² available										
	GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies										

See footnotes for important warranty information
 WE models announced November 22, 2011
 WE models withdrawn effective November 2012

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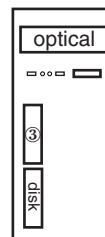
ThinkCentre® M71e Tower (3129) - TopSeller (DOS) - withdrawn

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 Educ	Preload	Ann date (mm/dd/yy)
3129-A5G	3x4	Pentium G620	2GBx1 1333MHz	320G 7200	Bay	DVD±RW	Intel HD	Media	Switch	None	N N	DOS-Lic.	06/07/11
3129-B4G	3x4	Pentium G630	2GBx1 1333MHz	320G 7200	Bay	DVD±RW	Intel HD	Media	None	None	N N	DOS-Lic.	09/06/11
3129-C2G	3x4	Pentium G630	2GBx1 1333MHz	500G 7200	Bay	DVD±RW	Intel HD	Media	Switch	None	N N	DOS-Lic.	12/06/11
3129-C3G	3x4	Pentium G630	2GBx1 1333MHz	250G 7200	Bay	DVD±RW	Intel HD	None	Switch	None	N N	DOS-Lic.	12/13/11

- These small and medium business (SMB) models are part of the Western Europe TopSeller™ Program
- These models have a 1-year limited warranty

Positioning	<i>Essential business features, exceptional value</i>		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 • <i>Some:</i> Chassis intrusion switch GREENGUARD® certified RoHS-compliant Supports ThinkVantage® Technologies
Processor	Intel® Pentium® G620 Processor (2 cores / 2 threads, 2.6GHz, 3MB cache) , Virtualization Technology, integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Pentium G630 Processor (2 cores / 2 threads, 2.7GHz, 3MB cache) , Virtualization Technology, integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller		
Implementation	Processor in LGA1155 socket		
Memory	8GB max, UDIMM, PC3-10600 1333MHz DDR3 , two 240-pin DIMM sockets		
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display		
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		
SATA cables	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar		
eSATA port	None		
Media reader	<i>Some:</i> 9-in-1 media reader, internal USB 2.0		
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 (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		
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, 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 • 6.3" W X 16.6" D X 15.3" H • 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: 1.5", .35" high, access, opt reader* Bay 3: 3.5", 1" high, no access, opt disk Bay 4: 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 public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available		



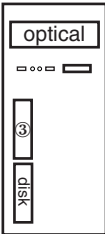
See footnotes for important warranty information
WE models announced June 7, September 6, Dec 6, or Dec 13, 2011
WE models withdrawn effective November 2012

ThinkCentre® M71e Tower (3166) - GMP - withdrawn

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 Educ	Win7 preload
3166-A1G	3x4	Core i3-2100	2GBx1 1333MHz	250G 7200	Bay	DVD±RW	Intel HD	None	Switch	None	GMP	Pro 32

- 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>Essential business features, exceptional value</i>							Preloaded operating system				
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							Genuine Windows® 7 Professional 32				
Implementation	Processor in LGA1155 socket							Preloaded applications²⁰ (only some listed)				
Memory	8GB max, UDIMM, PC3-10600 1333MHz DDR3 , two 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® Live • 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 DVI-D, supports dual independent display											
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											
SATA cables	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 (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											
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, 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 • 6.3" W X 16.6" D X 15.3" H • 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: 1.5", .35" high, access, opt reader* Bay 3: 3.5", 1" high, no access, opt disk Bay 4: 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											
												
								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 				
Limited Warranty ¹	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available							GREENGUARD® certified RoHS-compliant				
								Supports ThinkVantage Technologies				

See footnotes for important warranty information
 WE model announced June 7, 2011
 WE model withdrawn effective November 2012

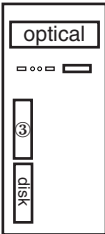
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ThinkCentre® M71e Tower (3177) - ES 5.2 (GMP) - withdrawn

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 (G) GMP (P)	Win7 preload
3177-A1G	3x4	Core i3-2100	4GBx1 1333MHz	250G 7200	Bay	DVD±RW	Intel HD	None	Switch	ES5.2	G P	Pro 64
3177-A2G	3x4	Core i5-2400	4GBx1 1333MHz	500G 7200	Bay	DVD±RW	Intel HD	None	Switch	ES5.2	G P	Pro 64
3177-A3G	3x4	Core i3-2120	4GBx1 1333MHz	250G 7200	Bay	DVD±RW	Intel HD	None	Switch	ES5.2	G P	Pro 64

- 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>Essential business features, exceptional value</i>		<p>Preloaded operating system</p> <p>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® Live • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
Processor	<p>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</p> <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 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>		
Implementation	Processor in LGA1155 socket		
Memory	8GB max, UDIMM, PC3-10600 1333MHz DDR3 , two 240-pin DIMM sockets		
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display		
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		
SATA cables	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 (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		
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, 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 • 6.3" W X 16.6" D X 15.3" H • 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: 1.5", .35" high, access, opt reader*</p> <p>Bay 3: 3.5", 1" high, no access, opt disk</p> <p>Bay 4: 3.5", 1" high, no access, std disk</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 ¹	<p>3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades²² 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 		
	<p>Climate Saver-compliant EPEAT™ Gold rating ENERGY STAR 5.2-compliant GREENGUARD® certified RoHS-compliant</p>		
	Supports ThinkVantage Technologies		

See footnotes for important warranty information
WE models announced July 26, 2011 or February 21, 2012
WE models withdrawn effective November 2012

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(G-MOSC1-7) November 2012



Lenovo ThinkCentre M71z All-In-One
(Wireless Keyboard & mouse on selected models only)



Lenovo ThinkCentre M71z All-In-One



Lenovo ThinkCentre M71z All-In-One



Handle



Lenovo ThinkCentre M71z with Frame Stand



Lenovo ThinkCentre M71z with Monitor Stand

ThinkCentre® M71z (1741) - TopSeller - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Widescreen display	Camera (mega-pixel)	Disk SATA GB rpm	SATA optical	Graphics	PCIe Mini Card WLAN	Media reader	Serial port	PS/2 port	Display-Port dongle	Keyboard /Mouse	Global (G) GMP (P)	Win7 preload
1741-A5G	G620	2GBx1	20.0" HD+	2.0M	320G 7200	DVD±RW	Intel HD	11b/g/n	Media	Serial	None	None	USB	None	Pro 32
1741-A6G	G840	4GBx1	20.0" HD+	2.0M	500G 7200	DVD±RW	Intel HD	11b/g/n	Media	Serial	None	None	USB	None	Pro 64
1741-A7G	i3-2120	4GBx1	20.0" HD+	2.0M	500G 7200	DVD±RW	Intel HD	11b/g/n	Media	Serial	None	None	2.4G	None	Pro 64
1741-B1G	G630	4GBx1	20.0" HD+	None	500G 7200	DVD±RW	Intel HD	11b/g/n	Media	None	None	None	USB	None	Pro 64

- Best space saving solution & excellent cable management
- These small and medium business (SMB) models are part of the Western Europe TopSeller™ Program
- These models have a 1-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>All-In-One PC for the enterprise</i>											Preloaded operating system²⁰			
Processor	Intel® Pentium® G620 Processor (2 cores / 2 threads, 2.6GHz, 3MB cache) , Virtualization Technology, integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Pentium G630 Processor (2 cores / 2 threads, 2.7GHz, 3MB cache) , Virtualization Technology, integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Pentium G840 Processor (2 cores / 2 threads, 2.8GHz, 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 Processor in LGA1155 socket											Some: Genuine Windows® 7 Professional 32 Some: Genuine Windows 7 Professional 64 Preloaded applications¹⁴ (only some listed)			
Implementation												<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) • Corel WinDVD® (DVD, DVD±RW) 			
Memory	8GB max ⁷ , PC3-10600 1333MHz DDR3 , two 204-pin SODIMM sockets (notebook)														
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: 1920x1080 (DisplayPort)@60Hz</i>														
DP dongle	None														
Display	20.0" (508mm) HD+ (1600x900) TFT color , CCFL backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio														
Multi-touch	None														
Camera	<i>Some:</i> 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														
eSATA port	None														
Media reader	8-in-1 Single Slot SD media reader														
Chipset	Intel H61 Express Chipset														
Rear ports	Four USB 2.0, optional serial (9-pin), ethernet (RJ-45), DisplayPort connector														
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 ⁴	11b/g/n wireless, Mini PCIe adapter, Broadcom® BCM43227, 2x2														
Bluetooth™	None														
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB														
Audio	High Definition (HD) Audio, Realtek ALC269Q														
Speaker	Two internal stereo speakers (2x2w) with amplifier														
Intel AMT	None														
Modem	None														
IEEE 1394	None														
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant														
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo <i>Some:</i> Ultraslim Plus Wireless Keyboard (2.4GHz via USB receiver), black														
Mouse	<i>Some:</i> Enhanced Optical USB Mouse, 1000dpi, black, Lenovo logo <i>Some:</i> Ultraslim Plus Wireless Mouse (2.4GHz via USB receiver), black														
Power supply	150 watts, autosensing, 85% PSU														
Machine	<i>Model(s) with Non multi-touch, Frame stand:</i>											Security			
	<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) • 16.4 lb (7.5 kg) in maximum configuration • Handle in rear • Support VESA mount (100mm) • Removable feet 											<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) • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch 			
												EPEAT™ Gold rating Climate Saver-compliant ENERGY STAR® 5.2-compliant TCO Certified Edge GREENGUARD® certified RoHS-compliant			
Limited Warranty ¹²	1-year, limited onsite service²⁴ , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades ²² available														
	Supports ThinkVantage Technologies														

See footnotes for important warranty information
 WE models announced August 23 or November 8, 2011
 WE models withdrawn effective January 2013

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 (G-MTGB1-3) February 2013

ThinkCentre® M71z (1782) - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Widescreen display	Camera (mega-pixel)	Disk SATA GB rpm	SATA optical	Graphics	PCIe Mini Card WLAN	Media reader	Serial port	PS/2 port	Display-Port dongle	Keyboard /Mouse	Global	Win7 preload
1782-B5G	i3-2100	4GBx1	20.0" HD+	2.0M	500G 7200	DVD±RW	Intel HD	11b/g/n	Media	Serial	None	None	2.4G	None	Pro 64
1782-B6G	G620	2GBx1	20.0" HD+	None	320G 7200	DVD±RW	Intel HD	11b/g/n	Media	Serial	None	None	2.4G	None	Pro 64

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

Positioning	<i>All-In-One PC for the enterprise</i>										Preloaded operating system²⁰ Genuine Windows® 7 Professional 64				
Processor	Intel® Pentium® G620 Processor (2 cores / 2 threads, 2.6GHz, 3MB cache) , Virtualization Technology, integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller 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 Processor in LGA1155 socket										Preloaded applications¹⁴ (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) • Corel WinDVD® (DVD±RW) 				
Implementation	Processor in LGA1155 socket														
Memory	8GB max ⁷ , PC3-10600 1333MHz DDR3 , two 204-pin SODIMM sockets (notebook)														
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: 1920x1080 (DisplayPort)@60Hz</i>														
DP dongle	None														
Display	20.0" (508mm) HD+ (1600x900) TFT color , CCFL backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio														
Multi-touch	None														
Camera	<i>Some:</i> 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														
eSATA port	None														
Media reader	8-in-1 Single Slot SD media reader														
Chipset	Intel H61 Express Chipset														
Rear ports	Four USB 2.0, optional serial (9-pin), ethernet (RJ-45), DisplayPort connector														
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 ⁴	11b/g/n wireless, Mini PCIe adapter, Broadcom® BCM43227, 2x2														
Bluetooth™	None														
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB														
Audio	High Definition (HD) Audio, Realtek ALC269Q														
Speaker	Two internal stereo speakers (2x2w) with amplifier														
Intel AMT	None														
Modem	None														
IEEE 1394	None														
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant														
Keyboard	Ultraslim Plus Wireless Keyboard (2.4GHz via USB receiver), black														
Mouse	Ultraslim Plus Wireless Mouse (2.4GHz via USB receiver), black														
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) • 16.4 lb (7.5 kg) in maximum configuration • Handle in rear • Support VESA mount (100mm) • Removable feet 										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) • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch EPEAT™ Gold rating Climate Saver-compliant ENERGY STAR® 5.2-compliant TCO Certified Edge GREENGUARD® certified RoHS-compliant				
Limited Warranty ¹²	3-years, limited onsite service²⁴ , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades ²² available														
Supports ThinkVantage Technologies															

See footnotes for important warranty information
 WE models announced August 9, 2011
 WE models withdrawn effective January 2013

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 (G-MTGB1-1) February 2013

ThinkCentre® M71z (1962) - GMP - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Widescreen display	Camera (mega-pixel)	Disk SATA GB rpm	SATA optical	Graphics	PCIe Mini Card WLAN	Media reader	Serial port	PS/2 port	Display-Port dongle	Keyboard /Mouse	Global (G) GMP (P)	Win7 preload
1962-A1G	i3-2100	4GBx1	20.0" HD+	2.0M	250G 7200	DVD±RW	Intel HD	11b/g/n	Media	None	None	None	USB	G P	Pro 64
1962-E5G	i5-2400S	4GBx1	20.0" HD+	2.0M	250G 7200	DVD±RW	Intel HD	11b/g/n	Media	None	None	None	USB	G P	Pro 64
1962-F1G	i3-2120	4GBx1	20.0" HD+	2.0M	250G 7200	DVD±RW	Intel HD	11b/g/n	Media	None	None	None	USB	G P	Pro 64

- Best space saving solution & excellent cable management
- 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>All-In-One PC for the enterprise</i>											Preloaded operating system²⁰ Genuine Windows® 7 Professional 64		
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 Intel Core i5-2400S Processor (4 cores / 4 threads, 2.5GHz, 6MB cache), Virtualization Technology, Turbo Boost 2.0 (3.3GHz), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller Processor in LGA1155 socket											Preloaded applications¹⁴ (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) ● Corel WinDVD (DVD±RW) 		
Implementation	Processor in LGA1155 socket													
Memory	8GB max ⁷ , PC3-10600 1333MHz DDR3 , two 204-pin SODIMM sockets (notebook)													
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: 1920x1080 (DisplayPort)@60Hz</i>													
DP dongle	None													
Display	20.0" (508mm) HD+ (1600x900) TFT color , CCFL backlight, 250 nits, 16:9 aspect ratio, 1000:1 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													
eSATA port	None													
Media reader	8-in-1 Single Slot SD media reader													
Chipset	Intel H61 Express Chipset													
Rear ports	Four USB 2.0, optional serial (9-pin), ethernet (RJ-45), DisplayPort connector													
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 ⁴	11b/g/n wireless, Mini PCIe adapter, Broadcom® BCM43227, 2x2													
Bluetooth™	None													
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB													
Audio	High Definition (HD) Audio, Realtek ALC269Q													
Speaker	Two internal stereo speakers (2x2w) with amplifier													
Intel AMT	None													
Modem	None													
IEEE 1394	None													
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 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) ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch 		
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	<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) ● 16.4 lb (7.5 kg) in maximum configuration ● Handle in rear ● Support VESA mount (100mm) ● Removable feet 											EPEAT™ Gold rating Climate Saver-compliant ENERGY STAR® 5.2-compliant TCO Certified Edge GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies		
Limited Warranty ¹²	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades ²² available													

See footnotes for important warranty information

WE models announced September 27, 2011 or February 21, 2012

WE models withdrawn effective January 2013

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(G-MTGB1-4) February 2013

ThinkCentre® M71z (1677) - Multi-touch - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁶	Widescreen display	Camera (mega-pixel)	Disk SATA GB rpm	SATA optical	Graphics	PCIe Mini Card WLAN	Media reader	Serial port	PS/2 port	Display-Port dongle	Keyboard /Mouse	Global	Win7 preload
1677-B1G	i3-2100	4GBx1	20.0" HD+	2.0M	500G 7200	DVD±RW	Intel HD	11b/g/n	Media	Serial	None	None	2.4G	None	Pro 64
1677-B2G	G620	2GBx1	20.0" HD+	2.0M	320G 7200	DVD±RW	Intel HD	11b/g/n	Media	Serial	None	None	2.4G	None	Pro 64

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

Positioning	<i>All-In-One PC for the enterprise</i>											Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Preloaded applications¹⁴ (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) • Corel WinDVD® (DVD±RW)
Processor	Intel® Pentium® G620 Processor (2 cores / 2 threads, 2.6GHz, 3MB cache) , Virtualization Technology, integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller 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 Processor in LGA1155 socket											
Implementation	Processor in LGA1155 socket											
Memory	8GB max ⁷ , PC3-10600 1333MHz DDR3 , two 204-pin SODIMM sockets (notebook)											
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: 1920x1080 (DisplayPort)@60Hz</i>											
DP dongle	None											
Display	20.0" (508mm) HD+ (1600x900) TFT color , CCFL backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio											
Multi-touch	Supports Multi-touch function											
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											
eSATA port	None											
Media reader	8-in-1 Single Slot SD media reader											
Chipset	Intel H61 Express Chipset											
Rear ports	Four USB 2.0, optional serial (9-pin), ethernet (RJ-45), DisplayPort connector											
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 ⁴	11b/g/n wireless, Mini PCIe adapter, Broadcom® BCM43227, 2x2											
Bluetooth™	None											
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB											
Audio	High Definition (HD) Audio, Realtek ALC269Q											
Speaker	Two internal stereo speakers (2x2w) with amplifier											
Intel AMT	None											
Modem	None											
IEEE 1394	None											
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant											
Keyboard	Ultraslim Plus Wireless Keyboard (2.4GHz via USB receiver), black											
Mouse	Ultraslim Plus Wireless Mouse (2.4GHz via USB receiver), black											
Power supply	150 watts, autosensing, 85% PSU											
Machine	<i>Model(s) with multi-touch, Frame stand:</i> <ul style="list-style-type: none"> • Business black color • 20.0" W X 4.2" D X 16.2" H • 507mm W X 107mm D X 411mm H (including stand) • 19.5 lb (8.9 kg) in maximum configuration • Handle in rear • Support VESA mount (100mm) • Removable feet 											
Limited Warranty ¹²	3-years, limited onsite service²⁴ , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades ²² 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) • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch EPEAT™ Gold rating Climate Saver-compliant ENERGY STAR® 5.2-compliant TCO Certified Edge GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies

See footnotes for important warranty information
 WE models announced August 9, 2011
 WE models withdrawn effective January 2013

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 (G-MTGB1-2) February 2013

ThinkCentre® M71z (1938) - Multi-touch (GMP) - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Widescreen display	Camera (mega-pixel)	Disk SATA GB rpm	SATA optical	Graphics	PCIe Mini Card WLAN	Media reader	Serial port	PS/2 port	Display-Port dongle	Keyboard/Mouse	Global (G) GMP (P)	Win7 preload
1938-A1G	i3-2100	4GBx1	20.0" HD+	2.0M	250G 7200	DVD±RW	Intel HD	11b/g/n	Media	None	None	None	USB	G P	Pro 64
1938-A4G	i5-2400S	4GBx1	20.0" HD+	2.0M	250G 7200	DVD±RW	Intel HD	11b/g/n	Media	None	None	None	USB	G P	Pro 64
1938-B1G	i3-2120	4GBx1	20.0" HD+	2.0M	250G 7200	DVD±RW	Intel HD	11b/g/n	Media	None	None	None	USB	G P	Pro 64

- Best space saving solution & excellent cable management
- 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>All-In-One PC for the enterprise</i>											Preloaded operating system²⁰ Genuine Windows® 7 Professional 64		
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 Intel Core i5-2400S Processor (4 cores / 4 threads, 2.5GHz, 6MB cache), Virtualization Technology, Turbo Boost 2.0 (3.3GHz), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller Processor in LGA1155 socket											Preloaded applications¹⁴ (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) • Corel WinDVD (DVD±RW) 		
Implementation	Processor in LGA1155 socket													
Memory	8GB max ⁷ , PC3-10600 1333MHz DDR3 , two 204-pin SODIMM sockets (notebook)													
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: 1920x1080 (DisplayPort)@60Hz</i> None													
DP dongle	None													
Display	20.0" (508mm) HD+ (1600x900) TFT color , CCFL backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio Supports Multi-touch function													
Multi-touch	Supports Multi-touch function													
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, physical switch on/off Front facing buttons for brightness up/auto, brightness down, and power 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													
eSATA port	None													
Media reader	8-in-1 Single Slot SD media reader													
Chipset	Intel H61 Express Chipset													
Rear ports	Four USB 2.0, optional serial (9-pin), ethernet (RJ-45), DisplayPort connector													
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
PCIe Mini Card	One PCI Express® Mini Card slots													
PCIe WLAN ⁴	11b/g/n wireless, Mini PCIe adapter, Broadcom® BCM43227, 2x2													
Bluetooth™	None													
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VB													
Audio	High Definition (HD) Audio, Realtek ALC269Q													
Speaker	Two internal stereo speakers (2x2w) with amplifier													
Intel AMT	None													
Modem	None													
IEEE 1394	None													
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 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) • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch 		
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	<i>Model(s) with multi-touch, Frame stand:</i> <ul style="list-style-type: none"> • Business black color • 20.0" W X 4.2" D X 16.2" H • 507mm W X 107mm D X 411mm H (including stand) • 19.5 lb (8.9 kg) in maximum configuration • Handle in rear • Support VESA mount (100mm) • Removable feet 											EPEAT™ Gold rating Climate Saver-compliant ENERGY STAR® 5.2-compliant TCO Certified Edge GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies		
Limited Warranty ¹²	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades ²² available													

See footnotes for important warranty information

WE models announced September 27, 2011 or February 21, 2012

WE models withdrawn effective January 2013

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(G-MTGB1-5) February 2013



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



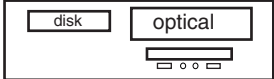
Lenovo ThinkCentre M77 Tower

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

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-A1G	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-B1G	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										<i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> 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														
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										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 				
															
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant GREENGUARD® certified RoHS-compliant				
										Supports ThinkVantage Technologies					

See footnotes for important warranty information
 WE models announced September 20, 2011 or February 28, 2012
 WE models withdrawn effective May 2013

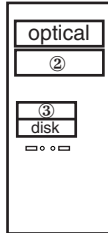
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 (G-ABNY1-1) May 2013

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

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-A1G	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-B1G	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 public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available										EPEAT™ Gold rating ENERGY STAR® 5.2-compliant GREENGUARD® certified RoHS-compliant				
										Supports ThinkVantage Technologies					

See footnotes for important warranty information
 WE models announced September 20, 2011 or February 28, 2012
 WE models withdrawn effective May 2013

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Lenovo ThinkCentre M81
Small and Tower



Lenovo ThinkCentre M81 Tower
with Lenovo ThinkVision monitor



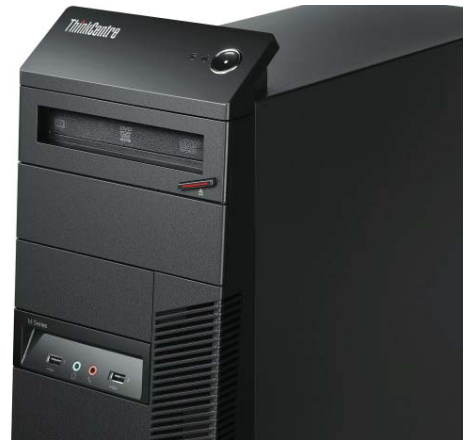
Lenovo ThinkCentre M81 Small



Lenovo ThinkCentre M81 Small
with Lenovo ThinkVision monitor



Lenovo ThinkCentre M81 Tower



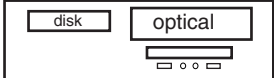
Lenovo ThinkCentre M81 Tower

ThinkCentre® M81 Small (5049) - ES 5.0 - withdrawn

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
5049-D7G	4x3	Core i3-2100	2GBx2 1333MHz	500G 7200	DVD±RW	Intel HD	None	None	ES50	N N	Pro 64
5049-A1G	4x3	Core i5-2400	2GBx2 1333MHz	500G 7200	DVD±RW	Intel HD	Switch	None	ES50	N N	Pro 64

- 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>						Preloaded operating system					
Processor	Intel® Core™ i3-2100 Processor (2 cores / 4 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology 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 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											
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	None											
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 <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 					
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 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 public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available						EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant					
	Supports ThinkVantage Technologies											

See footnotes for important warranty information
 WE models announced April 5, 2011
 WE models withdrawn effective May 2013

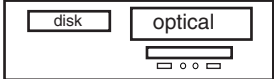
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ThinkCentre® M81 Small (5049) - ES 5.0 - II - withdrawn

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Chassis intr switch	Media reader	Floor stand	ENERGY STAR 5.0	Global Educ	Win7 preload
5049-E5G	4x3	Core i3-2100	2GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	Switch	Media	None	ES50	N N	Pro 64
5049-E6G	4x3	Pentium G840	2GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	Switch	None	Stand	ES50	N N	Pro 32
5049-F8G	4x3	Core i3-2120	2GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	Switch	Media	None	ES50	N N	Pro 64
5049-G8G	4x3	Core i3-2120	2GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	Switch	None	None	ES50	N N	Pro 64
5049-H5G	4x3	Core i3-2120	2GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	Switch	Media	None	ES50	N N	Pro 64
5049-K1G	4x3	Core i3-2120	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	None	None	None	ES50	N N	Pro 64

- 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>		Preloaded operating system <i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> Genuine Windows 7 Professional 64 Preloaded applications ²⁰ (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® Pentium® G840 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache), Virtualization Technology, integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller 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	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	<i>Some:</i> 25-in-1 media reader, internal USB 2.0, slim		
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	<i>Some:</i> 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 ¹	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / 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 • <i>Some:</i> Chassis intrusion switch 		
	EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant		
	Supports ThinkVantage Technologies		

See footnotes for important warranty information
 WE models announced May 24, Aug 9, Nov 8, or Dec 6, 2011, or March 20, 2012
 WE models withdrawn effective May 2013

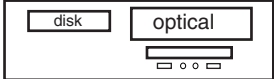
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 (G-METN1-10) May 2013

ThinkCentre® M81 Small (0385) - ES 5.0 (GMP) - withdrawn

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 (G) GMP (P)	Win7 preload
0385-A1G	4x3	Core i5-2400	2GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	None	Stand	ES50	G P	Pro 32

- 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>Mainstream enterprise stability and manageability</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											
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, 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 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 public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / 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					

See footnotes for important warranty information
 WE model announced April 5, 2011
 WE model withdrawn effective May 2013

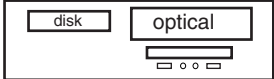
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ThinkCentre® M81 Small (0385) - ES 5.0 (GMP) - II - withdrawn

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 (G) GMP (P)	Win7 preload
0385-A2G	4x3	Core i5-2400	4GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	None	Stand	ES50	G P	Pro 64

- 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>Mainstream enterprise stability and manageability</i>						Preloaded operating system					
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						Genuine Windows® 7 Professional 64					
Implementation	Processor in LGA1155 socket						Preloaded applications²⁰ (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											
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, 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											
							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					
Limited Warranty ¹	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available						Supports ThinkVantage Technologies					

See footnotes for important warranty information
 WE model announced June 21, 2011
 WE model withdrawn effective May 2013

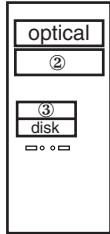
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ThinkCentre® M81 Tower (5048) - ES 5.0 - withdrawn

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	Global Educ	Win7 preload
5048-D7G	4x4	Core i3-2100	2GBx2 1333MHz	500G 7200	None	DVD±RW	Intel HD	Switch	ES50	N N	Pro 64
5048-D8G	4x4	Core i3-2100	2GBx1 1333MHz	320G 7200	None	DVD±RW	Intel HD	Switch	ES50	N N	Pro 64
5048-A1G	4x4	Core i5-2400	2GBx2 1333MHz	500G 7200	None	DVD±RW	Intel HD	Switch	ES50	N N	Pro 64

- 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>						Preloaded operating system					
Processor	Intel® Core™ i3-2100 Processor (2 cores / 4 threads, 3.1GHz, 3MB cache), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology 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 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											
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											
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 • Chassis intrusion switch 					
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available						EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant					
						Supports ThinkVantage Technologies						

See footnotes for important warranty information
 WE models announced April 5, 2011
 WE models withdrawn effective May 2013

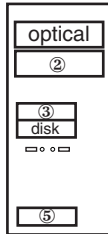
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ThinkCentre® M81 Tower (5048) - ES 5.0 - II - withdrawn

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	Global Educ	Win7 preload
5048-E2G	4x5	Core i3-2100	2GBx1 1333MHz	320G 7200	Bay	DVD±RW	Intel HD	Switch	Media	ES50	N N	Pro 64
5048-E3G	4x4	Pentium G620	2GBx1 1333MHz	320G 7200	None	DVD±RW	Intel HD	Switch	None	ES50	N N	Pro 32
5048-F8G	4x5	Core i3-2120	2GBx1 1333MHz	320G 7200	Bay	DVD±RW	Intel HD	Switch	None	ES50	N N	Pro 64
5048-G9G	4x4	Core i3-2120	2GBx1 1333MHz	320G 7200	None	DVD±RW	Intel HD	Switch	None	ES50	N N	Pro 64
5048-H4G	4x5	Core i3-2120	2GBx1 1333MHz	500G 7200	Bay	DVD±RW	Intel HD	Switch	Media	ES50	N N	Pro 64

- 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>							Preloaded operating system					
Processor	Intel® Pentium® G620 Processor (2 cores / 2 threads, 2.6GHz, 3MB cache) , Virtualization Technology, integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller 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							Some: Genuine Windows® 7 Professional 32 Some: Genuine Windows 7 Professional 64 Preloaded applications²⁰ (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, 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	Some: 25-in-1 media reader, internal USB 2.0												
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												
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 • Chassis intrusion switch 					
Limited Warranty ¹	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available							EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant					
							Supports ThinkVantage Technologies						

See footnotes for important warranty information
 WE models announced May 24, Aug 9, Nov 8, or Dec 6, 2011
 WE models withdrawn effective May 2013

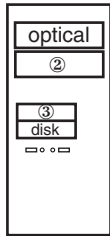
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ThinkCentre® M81 Tower (1730) - ES 5.0 (GMP) - withdrawn

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	Global (G) GMP (P)	Win7 preload
1730-A1G	4x4	Core i5-2400	2GBx1 1333MHz	320G 7200	None	DVD±RW	Intel HD	None	ES50	G P	Pro 32

- 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>Mainstream enterprise stability and manageability</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										
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										
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				
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available						Supports ThinkVantage Technologies				

See footnotes for important warranty information
 WE model announced April 5, 2011
 WE model withdrawn effective May 2013

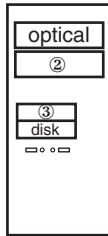
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ThinkCentre® M81 Tower (1730) - ES 5.0 (GMP) - II - withdrawn

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	Global (G) GMP (P)	Win7 preload
1730-A2G	4x4	Core i5-2400	4GBx1 1333MHz	320G 7200	None	DVD±RW	Intel HD	None	ES50	G P	Pro 64

- 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>Mainstream enterprise stability and manageability</i>						Preloaded operating system					
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						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											
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											
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 					
Limited Warranty ¹	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available						EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant					
						Supports ThinkVantage Technologies						

See footnotes for important warranty information
 WE model announced June 21, 2011
 WE model withdrawn effective May 2013

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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

ThinkCentre® M90z (5205) - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Widescreen display	Camera (mega-pixel)	SATA disk	Chassis intr switch	Bluetooth	Media reader	DisplayPort dongle	PCIe Mini Card 802.11	Stand type	Intel vPro	Global Educ	Win7 preload
5205-B2G	i5-670	3.46	2GBx1	23.0" Full HD	2.0M	320GB	Switch	Blue	Media		Intel 1000	Lift	vPro	None	Pro 32
5205-B5G	i5-670	3.46	2GBx1	23.0" Full HD	2.0M	320GB	Switch	Blue	Media		Intel 1000	Frame	vPro	None	Pro 32
5205-B6G	i5-650	3.20	2GBx1	23.0" Full HD	2.0M	320GB	Switch	Blue	Media		Intel 1000	Frame	vPro	None	Pro 32
5205-E3G	i5-650	3.20	2GBx1	23.0" Full HD		250GB	Switch		Media	DP-to-DVI-D		Lift	vPro	None	Pro 32
5205-E4G	i5-650	3.20	2GBx1	23.0" Full HD	2.0M	320GB	Switch	Blue	Media	DP-to-DVI-D	Intel 1000	Frame	vPro	None	Pro 32

- **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	<i>All-In-One PC for the enterprise</i>										All-In-One				
Processor	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										<i>All:</i> <ul style="list-style-type: none"> • Business black color • Handle in rear • Support VESA mount (100mm) • Tool-less back cover, disk, optical drive, memory removal 				
Implementation	Processor in LGA1156 socket										<i>Model(s) with Frame stand:</i> <ul style="list-style-type: none"> • 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 				
Memory	2GB std, 8GB max ⁸ , PC3-10600 1333MHz DDR3 , dual-channel capable, two 204-pin SODIMM sockets (notebook)										<i>Model(s) with Lift stand:</i> <ul style="list-style-type: none"> • 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° 				
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	<i>Some:</i> DisplayPort to Single-link DVI-D Cable														
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	<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										<i>All:</i> Bay ① 3.5", 1" high, no access, std disk (desktop) Bay ② slim, .5" high, access, std optical (notebook)				
SATA disk	250GB or 320GB , SATA 3.0Gb/s, 3.5" wide, 7200 rpm										Preloaded operating system²⁰ Genuine Windows® 7 Professional 32 Preloaded applications⁵ (only some listed) <ul style="list-style-type: none"> • 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) 				
SATA DVD±RW	DVD burner, SATA 1.5Gb/s, 12.7mm high														
eSATA port	None														
Diskette drive	None														
Media reader	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)														
PCIe Mini Card	One PCI Express Mini Card slot														
Intel 1000	<i>Some:</i> 11b/g/n wireless ¹³ , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2														
Bluetooth™	<i>Some:</i> Bluetooth 2.1 wireless, Broadcom® BCM2070, LED indicator														
Ethernet	One gigabit ethernet port, Intel 82578DM														
Audio	High Definition (HD) Audio, Realtek® ALC269 codec														
Speaker	Two internal speakers (2watt x 2)														
IEEE 1394	None														
Intel AMT	Intel Active Management Technology 6.0 (Intel AMT 6.0)														
Modem	None														
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant										Security <ul style="list-style-type: none"> • 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 • Chassis intrusion switch 				
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														
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades ²² available										Supports ThinkVantage® technologies				
											<ul style="list-style-type: none"> • EPEAT™ Gold rating • ENERGY STAR® 5.0-compliant • TCO Certified Edge • GREENGUARD® certified • RoHS-compliant 				

See footnotes for important warranty information
 WE models announced May 11, 2010
 WE models withdrawn effective August 2012

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Type-model	Processor	GHz	Memory	Widescreen display	Camera (mega-pixel)	SATA disk	Chassis intr switch	Bluetooth	PCIe Mini Card 802.11	Media reader	Stand type	Intel vPro	Global (G) GMP (P)	Win7 pre-load
2471-A1G	i5-650	3.20	2GBx1	23.0" Full HD	2.0M	320GB ²	Switch	None	None	Media	Lift	vPro	G P	Pro 32


- **Best space saving solution & excellent cable management**
- **This model is part of the Global Models Plus (GMP) program with limited onsite service³ 3-year limited warranty**
- **This system is Microsoft® Office 2010 Product Key Ready (O10PKR)**

Positioning Processor	<p><i>All-In-One PC for the enterprise</i> Intel® Core™ Processor i5-650 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</p>		<p>All-In-One <i>All:</i></p> <ul style="list-style-type: none"> • Business black color • Handle in rear • Support VESA mount (100mm) • Tool-less back cover, disk, optical drive, memory removal <p><i>Model(s) with Lift stand:</i></p> <ul style="list-style-type: none"> • 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° <p>Bay ① 3.5", 1" high, no access, std disk (desktop) Bay ② slim, .5" high, access, std optical (notebook)</p>
Implementation			
Memory	<p>2GB std, 8GB max⁸, PC3-10600 1333MHz DDR3, dual-channel capable, two 204-pin SODIMM sockets (notebook)</p>		
Graphics	<p>Intel HD Graphics in processor, HDCP, DirectX® 10, uses main memory (up to 765MB), one DisplayPort™ connector, supports dual independent display</p>		
DP dongle	None		
Widescreen	<p>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</p>		
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>		
SATA disk	<p>320GB, SATA 3.0Gb/s, 3.5" wide, 7200 rpm</p>		
SATA DVD±RW	<p>DVD burner, SATA 1.5Gb/s, 12.7mm high</p>		
eSATA port	None		
Diskette drive	None		
Media reader	<p>Single Slot SD Media Card Reader</p>		
Chipset	<p>Intel Q57 Express Chipset Platform Controller Hub (PCH) for SATA, ethernet, and USB</p>		
Ports	<p><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</p>		
PCIe Mini Card	None		
Intel 1000	None		
Bluetooth™	None		
Ethernet	<p>One gigabit ethernet port, Intel 82578DM</p>		
Audio	<p>High Definition (HD) Audio, Realtek® ALC269 codec</p>		
Speaker	<p>Two internal speakers (2watt x 2)</p>		
IEEE 1394	None		
Intel AMT	<p>Intel Active Management Technology 6.0 (Intel AMT 6.0)</p>		
Modem	None		
Security chip	<p>STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant</p>		
Keyboard	<p>Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo</p>		
Mouse	<p>Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo</p>		
Power supply	<p>150 watts, autosensing, 85% PSU, 80 PLUS® Bronze qualified</p>		
Limited Warranty	<p>3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades²² available</p>		
			<p>Preloaded operating system²⁰ Genuine Windows® 7 Professional 32</p> <p>Preloaded applications⁵ (only some listed)</p> <ul style="list-style-type: none"> • Rescue and Recovery™ • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Message Center Plus • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • 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 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 • Chassis intrusion switch
			<p>Supports ThinkVantage® technologies</p>
			<ul style="list-style-type: none"> • EPEAT™ Gold rating • ENERGY STAR® 5.0-compliant • TCO Certified Edge • GREENGUARD® certified • RoHS-compliant

See footnotes for important warranty information
 WE model announced June 15, 2010
 WE model withdrawn effective August 2012

Type-model	Proc-essor	GHz	Memory	Widescreen display	Camera (mega-pixel)	Integrated graphics	SATA disk	Chassis intr switch	Blue-tooth	PCIe Mini Card 802.11	Media reader	DisplayPort dongle	Intel vPro	Global Educ	Win7 preload
0800-A6G	i5-670	3.46	2GBx1	23.0" Full HD	2.0M	Intel HD	320GB	Switch	Blue	Intel 1000	Media	DP-to-DVI-D	vPro	None	Pro 32
0800-D3G	i5-660	3.33	2GBx1	23.0" Full HD	2.0M	Intel HD	320GB	Switch	Blue	Intel 1000	Media	DP-to-DVI-D	vPro	None	Pro 32
0800-F6G	i5-650	3.20	4GBx1	23.0" Full HD	2.0M	Intel HD	500GB		Blue	Intel 1000	Media		vPro	None	Pro 64


- **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™ i5 Processor i5-650, i5-660, 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	All-In-One <ul style="list-style-type: none"> • Business black color • 22" W X 4.57" D X 17.4" H • 560mm W X 116mm D X 443mm H • 25.3 lb (11.5 kg) in maximum configuration • Handle in rear • Support VESA mount (100mm) • Tool-less back cover, disk, optical drive, memory removal • Frame stand
Implementation	Processor in LGA1156 socket	
Memory	2GB or 4GB std, 8GB max ⁸ , PC3-10600 1333MHz DDR3 , dual-channel capable, two 204-pin SODIMM sockets (notebook)	Bay ① 3.5", 1" high, no access, std disk (desktop) Bay ② slim, .5" high, access, std optical (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 <i>Some:</i> DisplayPort to Single-link DVI-D Cable	
DP dongle	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	
Widescreen	Supports Multi-touch function	
Multi-touch	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical on/off switch	
Camera		
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	Single Slot SD Media Card Reader	
Chipset	Intel Q57 Express Chipset Platform Controller Hub (PCH) for SATA, ethernet, and USB	Preloaded operating system²⁰ <i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> Genuine Windows 7 Professional 64
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)	Preloaded applications⁵ (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Message Center Plus • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
PCIe Mini Card	One PCI Express Mini Card slot	
Intel 1000	11b/g/n wireless ¹³ , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2	
Bluetooth™	Bluetooth 2.1 wireless, Broadcom® BCM2070, LED indicator	
Ethernet	One gigabit ethernet port, Intel 82578DM	
Audio	High Definition (HD) Audio, Realtek® ALC269 codec	
Speaker	Two internal speakers (2watt x 2)	
IEEE 1394	None	
Intel AMT	Intel Active Management Technology 6.0 (Intel AMT 6.0)	
Modem	None	
Security chip	STMicroelectronics ST19NP18 Trusted Platform Module (TPM), TCG 1.2-compliant	Security <ul style="list-style-type: none"> • 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
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo	Supports ThinkVantage® technologies
Mouse	Optical Wheel Mouse (USB connector), 400 dpi, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU, 80 PLUS® Bronze qualified	<ul style="list-style-type: none"> • EPEAT™ Gold rating • ENERGY STAR® 5.0-compliant • TCO Certified Edge • GREENGUARD® certified • RoHS-compliant
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades ²² available	

See footnotes for important warranty information
 WE models announced May 11, 2010 or August 23, 2011
 WE models withdrawn effective August 2012

ThinkCentre® M90z (0852) - GMP (Multi-touch) - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Widescreen display	Camera (mega-pixel)	SATA disk	Chassis intr switch	Blue-tooth	PCIe Mini Card 802.11	Media reader	Intel vPro	Global (G) GMP (P)	Win7 preload						
0852-A1G	i5-650	3.20	2GBx1	23.0" Full HD	2.0M	320GB ²	Switch	None	None	Media	vPro	G P	Pro32						
<ul style="list-style-type: none"> • Best space saving solution & excellent cable management • This model is part of the Global Models Plus (GMP) program with limited onsite service³ 3-year limited warranty • This system is Microsoft® Office 2010 Product Key Ready (O10PKR) 																			
Positioning Processor	<i>All-In-One PC for the enterprise</i> Intel® Core™ i5 Processor i5-650 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 <ul style="list-style-type: none"> • Business black color • 22" W X 4.57" D X 17.4" H • 560mm W X 116mm D X 443mm H • 25.3 lb (11.5 kg) in maximum configuration • Handle in rear • Support VESA mount (100mm) • Tool-less back cover, disk, optical drive, memory removal • Frame stand 											
Implementation								Bay ① 3.5", 1" high, no access, std disk (desktop) Bay ② slim, .5" high, access, std optical (notebook)											
Memory	2GB 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), 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	Supports Multi-touch function																		
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator, physical switch on/off																		
SATA disk	320GB , 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	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)							Preloaded operating system²⁰ Genuine Windows® 7 Professional 32											
PCIe Mini Card	One PCI Express Mini Card slot							Preloaded applications⁵ (only some listed)											
Intel 1000 Bluetooth™	None							<ul style="list-style-type: none"> • Rescue and Recovery™ • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Message Center Plus • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 											
Ethernet	One gigabit ethernet port, Intel 82578DM																		
Audio	High Definition (HD) Audio, Realtek® ALC269 codec																		
Speaker	Two internal speakers (2watt x 2)																		
IEEE 1394	None																		
Intel AMT	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																		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades ²² available							Security <ul style="list-style-type: none"> • 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 • Chassis intrusion switch 											
							Supports ThinkVantage® technologies												
							<ul style="list-style-type: none"> • EPEAT™ Gold rating • ENERGY STAR® 5.0-compliant • TCO Certified Edge • GREENGUARD® certified • RoHS-compliant 												

See footnotes for important warranty information
 WE model announced June 15, 2010
 WE model withdrawn effective August 2012



Lenovo ThinkCentre M91/M91p
Small and Tower



Lenovo ThinkCentre M91/M91p Eco Ultra Small
with Lenovo ThinkVision monitor



Lenovo ThinkCentre M91/M91p Small



Lenovo ThinkCentre M91/M91p Small
with Lenovo ThinkVision monitor



Lenovo ThinkCentre M91/M91p Tower




Lenovo ThinkCentre M91/M91p Tower
with Lenovo ThinkVision monitor

ThinkCentre® M91 Eco Ultra Small (2491) - TopSeller - withdrawn

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Media reader	Chassis intr switch	Floor stand	ENERGY STAR 5.0	Intel vPro	Global Educ	Win7 preload	Ann date (mm/dd/yy)
2491-A3G	1x3	Core i3-2120	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	Media	Switch	None	ES50	None	N N	Pro 64	12/06/11
2491-A4G	1x3	Pentium G630	2GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	Media	Switch	None	ES50	None	N N	Pro 64	12/06/11

- The most powerful, stable, and manageable desktop with next generation Intel platform
- These small and medium business (SMB) models are part of the Western Europe 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® Pentium® G630 Processor (2 cores / 2 threads, 2.7GHz, 3MB cache) , integrated Intel HD Graphics 2000, 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 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>													
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	Single Slot SD Media Card Reader													
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													
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo® logo													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, 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 Bay 3: 1.5", .35" high, access, opt reader (some models)													
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 • Chassis intrusion switch 			
											EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available										Supports ThinkVantage Technologies			

See footnotes for important warranty information
 WE models announced December 6, 2011
 WE models withdrawn effective May 2013

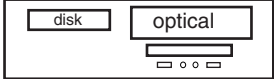
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ThinkCentre® M91 Small (4514) - withdrawn

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
4514-A1G	4x3	Core i3-2100	2GBx1 1333MHz	250G 7200	DVD±RW	Intel HD	None	Stand	ES50	None	N N	Pro 32

- The most powerful, stable, and manageable desktop with next generation Intel platform
- 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>										
Processor	Intel® Core™ i3-2100 Processor (2 cores / 4 threads, 3.1GHz, 3MB cache), 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	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, 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										
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available										
	Supports ThinkVantage Technologies										

See footnotes for important warranty information
 WE model announced March 1, 2011
 WE model withdrawn effective May 2013

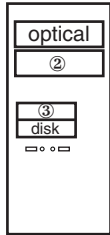
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ThinkCentre® M91 Tower (4517) - withdrawn

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
4517-A1G	4x4	Core i3-2100	2GBx1 1333MHz	250G 7200	None	DVD±RW	Intel HD	None	ES50	None	N N	Pro 32

- The most powerful, stable, and manageable desktop with next generation Intel platform
- 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™ i3-2100 Processor (2 cores / 4 threads, 3.1GHz, 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							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	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											
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 public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / 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 • 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				

See footnotes for important warranty information
 WE model announced March 1, 2011
 WE model withdrawn effective May 2013

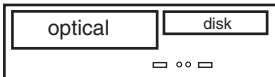
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ThinkCentre® M91p Eco Ultra Small (0384) - withdrawn

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
0384-A9G	1x2	Core i5-2400S	2GBx1 1333MHz	250G 7200	DVD±RW	Intel HD	Switch	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 1-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											
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo® logo											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, 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 ● Chassis intrusion switch 				
								EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant				
Limited Warranty	1-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available							Supports ThinkVantage Technologies				

See footnotes for important warranty information
WE model announced April 5, 2011
WE model withdrawn effective May 2013


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(G-MAST1-3) May 2013

ThinkCentre® M91p Eco Ultra Small (0266) - withdrawn

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Media reader	Chassis intr switch	Floor stand	ENERGY STAR 5.0	Intel vPro	Global Educ	Win7 preload
0266-C8G	1x2	Core i5-2400S	2GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	None	Switch	None	ES50	vPro	N N	Pro 64
0266-C9G	1x2	Core i5-2400S	2GBx2 1333MHz	500G 7200	DVD±RW	Intel HD	None	Switch	None	ES50	vPro	N N	Pro 64
0266-D9G	1x3	Core i5-2400S	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	Media	Switch	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	
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; 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, 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	Some: Single Slot SD Media Card Reader												
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												
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo® logo												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, 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 Bay 3: 1.5", .35" high, access, opt reader (some models)												
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 • Chassis intrusion switch 	
												EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant	
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available											Supports ThinkVantage Technologies	

See footnotes for important warranty information
 WE models announced April 5 or August 9, 2011
 WE models withdrawn effective May 2013


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 (G-MAST1-4) May 2013

ThinkCentre® M91p Eco Ultra Small (4168) - withdrawn

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
4168-A1G	1x2	Core i5-2400S	2GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	Switch	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											
Mouse	Enhanced Optical USB Mouse, 1000 dpi, black, Lenovo® logo											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, 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 • Chassis intrusion switch 				
								EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant				
Limited Warranty 3-years, customer carry-in service / service upgrades available								Supports ThinkVantage Technologies				

See footnotes for important warranty information
WE model announced April 5, 2011
WE model withdrawn effective May 2013

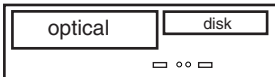
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(G-MAST1-5) May 2013

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

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-A1G	1x2	Core i5-2400S	2GBx1 1333MHz	250G 7200	DVD±RW	Intel HD	None	None	ES50	vPro	G P	Pro 32
5067-A3G	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
- 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>							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							Some: Genuine Windows® 7 Professional 32					
Implementation	Processor in LGA1155 socket							Some: Genuine Windows 7 Professional 64					
Memory	8GB max, PC3-10600 1333MHz DDR3 , two 204-pin SODIMM sockets (notebook)							Preloaded applications (only some listed)					
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>							<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) 					
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					
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available							Supports ThinkVantage Technologies					

See footnotes for important warranty information
WE models announced April 5 or May 10, 2011
WE models withdrawn effective May 2013

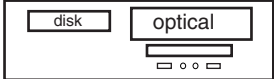
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ThinkCentre® M91p Small (4466) - TopSeller - withdrawn

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
4466-A1G	4x3	Core i5-2400	2GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	Switch	None	ES50	vPro	N N	Pro 64

- 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 Western Europe TopSeller™ Program
- This model has a 1-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-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	None											
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, 32-bit PCI 2.3 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 ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch 				
								EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant				
Limited Warranty	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available							Supports ThinkVantage Technologies				

See footnotes for important warranty information
 WE model announced March 1, 2011
 WE model withdrawn effective May 2013

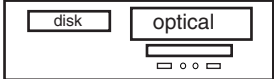
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 (G-MAST1-7) May 2013

ThinkCentre® M91p Small (4480) - TopSeller - withdrawn

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-A6G	4x3	Core i7-2600	2GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	Switch	None	ES50	vPro	N N	Pro 64
4480-A7G	4x3	Core i5-2500	2GBx1 1333MHz	250G 7200	DVD±RW	Intel HD	Switch	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 Western Europe 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), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology							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-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	None											
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 <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 ● Chassis intrusion switch 				
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® 5.0-compliant GREENGUARD® certified RoHS-compliant				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available							Supports ThinkVantage Technologies				

See footnotes for important warranty information
 WE models announced March 1, 2011
 WE models withdrawn effective May 2013

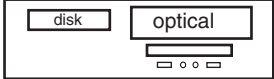
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 (G-MAST1-8) May 2013

ThinkCentre® M91p Small (7072) - withdrawn

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
7072-A1G	4x3	Core i5-2500	2GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	Switch	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 1-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™ i5-2500 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										
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	None										
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	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / 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) ● 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 ● Chassis intrusion switch 										
	EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant										
	Supports ThinkVantage Technologies										

See footnotes for important warranty information
 WE model announced March 1, 2011
 WE model withdrawn effective May 2013

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ThinkCentre® M91p Small (4518) - withdrawn

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-A2G	4x3	Core i7-2600	2GBx2 1333MHz	500G 7200	DVD±RW	HD 5450	Switch	None	ES50	vPro	N N	Pro 64
4518-A3G	4x3	Core i5-2500	2GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	Switch	None	ES50	vPro	N N	Pro 32
4518-A4G	4x3	Core i5-2400	2GBx1 1333MHz	250G 7200	DVD±RW	Intel HD	None	None	ES50	vPro	N N	Pro 32
4518-D8G	4x3	Core i5-2400	2GBx1 1333MHz	250G 7200	DVD±RW	Intel HD	Switch	None	ES50	vPro	N N	Pro 64
4518-D9G	4x3	Core i5-2500	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	Switch	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>										
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><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:</i> 2560x1600 (DisplayPort, VGA) @60Hz;</p> <p><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; 2048x1536 @85Hz (VGA via DVI-to-VGA dongle); 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										
Floor Stand	None										
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 public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available										
	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <div style="display: flex; justify-content: space-around; width: 100%;"> <div style="border: 1px solid black; padding: 2px; text-align: center;">disk</div> <div style="border: 1px solid black; padding: 2px; text-align: center;">optical</div> </div> <div style="text-align: center; margin-top: 5px;"> </div> </div>										
	Preloaded operating system <i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> 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 • <i>Some:</i> Chassis intrusion switch 										
	EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant										
	Supports ThinkVantage Technologies										

See footnotes for important warranty information
 WE models announced March 1, 2011
 WE models withdrawn effective May 2013

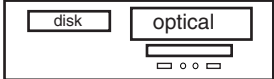
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ThinkCentre® M91p Small (4512) - withdrawn

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
4512-A6G	4x3	Core i5-2500	2GBx1 1333MHz	250G 7200	DVD±RW	Intel HD	Switch	None	ES50	vPro	N N	Pro 64
4512-A7G	4x3	Core i7-2600	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	Switch	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>										
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), 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	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	None										
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 ● Chassis intrusion switch 										
	EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant										
Limited Warranty	3-years, customer carry-in service / service upgrades available										
	Supports ThinkVantage Technologies										

See footnotes for important warranty information
 WE models announced March 1, 2011
 WE models withdrawn effective May 2013

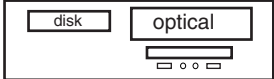
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ThinkCentre® M91p Small (7033) - GMP - withdrawn

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-A1G	4x3	Core i5-2400	2GBx1 1333MHz	250G 7200	DVD±RW	Intel HD	None	Stand	ES50	vPro	G P	Pro 32
7033-A2G	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
- 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™ 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 Some: Genuine Windows® 7 Professional 32 Some: 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										
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available										
	Supports ThinkVantage Technologies										

See footnotes for important warranty information
 WE models announced March 1 or May 10, 2011
 WE models withdrawn effective May 2013

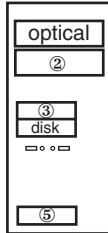
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ThinkCentre® M91p Tower (7052) - TopSeller - withdrawn

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
7052-A3G	4x4	Core i5-2500	2GBx1 1333MHz	250G 7200	None	DVD±RW	Intel HD	Switch	None	ES50	vPro	N N	Pro 64
7052-A4G	4x4	Core i7-2600	2GBx1 1333MHz	320G 7200	None	DVD±RW	Intel HD	Switch	None	ES50	vPro	N N	Pro 64
7052-C1G	4x5	Core i7-2600	4GBx1 1333MHz	1TB 7200	Bay	DVD±RW	Intel HD	Switch	Media	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 Western Europe 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), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 2000, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1155 socket										Genuine Windows® 7 Professional 64		
Implementation											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	<i>Some:</i> 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-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 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												
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / 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 ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch 		
											EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant		
											Supports ThinkVantage Technologies		

See footnotes for important warranty information
 WE models announced March 1 or November 22, 2011
 WE models withdrawn effective May 2013

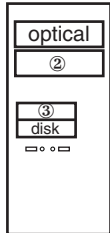
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ThinkCentre® M91p Tower (4524) - withdrawn

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-A4G	4x4	Core i7-2600	2GBx1 1333MHz	500G 7200	None	DVD±RW	HD 5450	Switch	ES50	vPro	N N	Pro 64
4524-A5G	4x4	Core i5-2500	2GBx1 1333MHz	320G 7200	None	DVD±RW	Intel HD	Switch	ES50	vPro	N N	Pro 32
4524-E4G	4x4	Core i5-2500	4GBx1 1333MHz	500G 7200	None	DVD±RW	Intel HD	Switch	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 <i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> 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™ i5-2500 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 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;</i> 2048x1536@85Hz (VGA via DVI-to-VGA dongle); 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, 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 public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / 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 ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Serial port I/O control ● Individual USB port disablement ● Chassis intrusion switch 			
EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant			
Supports ThinkVantage Technologies			

See footnotes for important warranty information
 WE models announced March 1, 2011
 WE models withdrawn effective May 2013

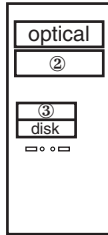
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ThinkCentre® M91p Tower (4513) - withdrawn

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
4513-A7G	4x4	Core i5-2400	2GBx1 1333MHz	250G 7200	None	DVD±RW	Intel HD	Switch	ES50	vPro	N N	Pro 64
4513-A8G	4x4	Core i7-2600	4GBx1 1333MHz	500G 7200	None	DVD±RW	Intel HD	Switch	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				
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							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-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 ● Chassis intrusion switch 				
								EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant				
Limited Warranty	3-years, customer carry-in service / service upgrades available							Supports ThinkVantage Technologies				

See footnotes for important warranty information
 WE models announced March 1, 2011
 WE models withdrawn effective May 2013

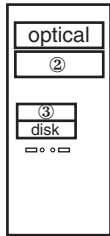
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ThinkCentre® M91p Tower (7034) - GMP - withdrawn

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-A1G	4x4	Core i5-2400	2GBx1 1333MHz	250G 7200	None	DVD±RW	Intel HD	None	ES50	vPro	G P	Pro 32
7034-A2G	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
- 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>							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							Some: Genuine Windows® 7 Professional 32				
Implementation	Processor in LGA1155 socket							Some: Genuine Windows 7 Professional 64				
Memory	16GB max, UDIMM, PC3-10600 1333MHz DDR3 , four 240-pin DIMM sockets							Preloaded applications (only some listed)				
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>							<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) 				
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 				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available							EPEAT™ Gold rating ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant				
							Supports ThinkVantage Technologies					

See footnotes for important warranty information
 WE models announced March 1 or May 10, 2011
 WE models withdrawn effective May 2013

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Lenovo ThinkCentre Edge 71 Small and
Lenovo ThinkCentre Edge 71 Tower



Lenovo ThinkCentre Edge 71 Tower
with dual Lenovo ThinkVision monitors



Lenovo ThinkCentre Edge 71 Small



Lenovo ThinkCentre Edge 71 Small
with Lenovo ThinkVision monitor



Lenovo ThinkCentre Edge 71 Tower



Lenovo ThinkCentre Edge 71 Tower

ThinkCentre® Edge 71 Small (1578) - TopSeller - withdrawn

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Media reader	Parallel port	Serial port	Floor stand	Global Educ	Win7 preload
1578-D7G	3x3	Core i3-2120	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	Media	Parallel	Serial	Stand	N N	Pro 64
1578-D8G	3x3	Core i3-2100	2GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	Media	Parallel	Serial	None	N N	Pro 64
1578-E1G	3x3	Pentium G840	2GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	Media	Parallel	Serial	None	N N	Pro 64
1578-F2G	3x3	Pentium G620	2GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	Media	None	Serial	Stand	N N	Pro 64
1578-F3G	3x3	Core i3-2120	2GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	Media	None	Serial	None	N N	Pro 64
1578-G3G	3x3	Pentium G630	2GBx1 1333MHz	250G 7200	DVD±RW	Intel HD	Media	None	Serial	Stand	N N	Prem 32
1578-G4G	3x3	Pentium G630	2GBx1 1333MHz	320G 7200	DVD±RW	Intel HD	Media	None	Serial	Stand	N N	Pro 64

- These small and medium business (SMB) models are part of the Western Europe TopSeller™ Program
- These models have a 1-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Stylish design, reliability, and productivity for small/medium businesses</i>		Preloaded operating system Some: Genuine Windows® 7 Professional 64 Some: Genuine Windows 7 Home Premium 32 Preloaded applications²⁰ (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® Live • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Pentium® G620 Processor (2 cores / 2 threads, 2.6GHz, 3MB cache) , Virtualization Technology, integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Pentium G630 Processor (2 cores / 2 threads, 2.7GHz, 3MB cache) , Virtualization Technology, integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Pentium G840 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache) , Virtualization Technology, integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller 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, UDIMM, PC3-10600 1333MHz DDR3 , two 240-pin DIMM sockets		
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display		
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		
SATA cables	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar		
eSATA port	None		
Media reader	11-in-1 media reader, internal USB 2.0		
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)		
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, 1000 dpi, black, Lenovo logo		
Floor Stand	Some: 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 • 13.1" W X 14.5" D X 3.8" H • 333mm W X 368mm D X 97mm H • 14.3 lb (6.5 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: 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 (45w 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 public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / 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		

See footnotes for important warranty information
 WE models announced July 5, August 9, or September 6, 2011
 WE models withdrawn effective August 2012

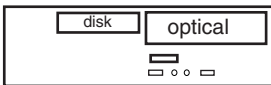
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 (G-TAIP1-1) August 2012

ThinkCentre® Edge 71 Small (1578) - TopSeller - II - withdrawn

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	Graphics	Media reader	Parallel port	Serial port	Floor stand	Global Educ	Win7 preload	Ann date (mm/dd/yy)
1578-L3G	3x3	Core i5-2400S	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	None	None	None	None	N N	Pro 64	11/08/11
1578-K9G	3x3	Core i3-2130	2GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	None	None	None	None	N N	Pro 64	11/08/11
1578-L2G	3x3	Core i3-2130	4GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	None	None	None	None	N N	Pro 64	11/08/11
1578-M7G	3x3	Pentium G630	2GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	Media	Parallel	Serial	None	N N	Pro 64	12/06/11
1578-N9G	3x3	Pentium G630	2GBx1 1333MHz	250G 7200	DVD±RW	Intel HD	Media	None	None	None	N N	Pro 64	12/13/11
1578-P4G	3x3	Pentium G850	2GBx1 1333MHz	500G 7200	DVD±RW	Intel HD	Media	None	None	None	N N	Pro 64	01/10/12

- These small and medium business (SMB) models are part of the Western Europe TopSeller™ Program
- These models have a 1-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Stylish design, reliability, and productivity for small/medium businesses</i>		Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Preloaded applications²⁰ (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® Live • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Pentium® G630 Processor (2 cores / 2 threads, 2.7GHz, 3MB cache) , Virtualization Technology, integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Pentium G850 Processor (2 cores / 2 threads, 2.9GHz, 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 Intel Core i5-2400S Processor (4 cores / 4 threads, 2.5GHz, 6MB cache) , Virtualization Technology, Turbo Boost 2.0 (3.3GHz), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller		
Implementation	Processor in LGA1155 socket		
Memory	8GB max, UDIMM, PC3-10600 1333MHz DDR3 , two 240-pin DIMM sockets		
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display		
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		
SATA cables	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar		
eSATA port	None		
Media reader	Some: 11-in-1 media reader, internal USB 2.0		
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)		
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, 1000 dpi, black, Lenovo logo		
Floor Stand	None		
Power supply	180 watts, universal, manual switch		
Machine	<ul style="list-style-type: none"> • Glossy black bezel; metal case • 13.1" W X 14.5" D X 3.8" H • 333mm W X 368mm D X 97mm H • 14.3 lb (6.5 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: 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 (45w 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 public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / 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		

See footnotes for important warranty information

WE models announced Nov 8, 2011, Dec 6, 2011, Dec 13, 2011, or Jan 10, 2012

WE models withdrawn effective August 2012

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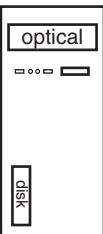
(G-TAIP1-3) August 2012

ThinkCentre® Edge 71 Tower (1577) - TopSeller - withdrawn

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Media reader	Parallel port	Serial port	Global Educ	Win7 preload
1577-G1G	3x3	Pentium G840	2GBx1 1333MHz	320G 7200	None	DVD±RW	Intel HD	Media	Parallel	Serial	N N	Pro 64
1577-G2G	3x3	Core i3-2100	2GBx1 1333MHz	500G 7200	None	DVD±RW	Intel HD	Media	Parallel	Serial	N N	Pro 64
1577-G3G	3x3	Core i3-2120	4GBx1 1333MHz	500G 7200	None	DVD±RW	Intel HD	Media	Parallel	Serial	N N	Pro 64
1577-H4G	3x3	Pentium G620	2GBx1 1333MHz	320G 7200	None	DVD±RW	Intel HD	Media	None	Serial	N N	Pro 64
1577-H5G	3x3	Core i3-2120	2GBx1 1333MHz	500G 7200	None	DVD±RW	Intel HD	Media	None	Serial	N N	Pro 64
1577-J9G	3x3	Pentium G630	2GBx1 1333MHz	320G 7200	None	DVD±RW	Intel HD	Media	None	Serial	N N	Pro 64
1577-J8G	3x3	Celeron G530	2GBx1 1333MHz	320G 7200	None	DVD±RW	Intel HD	Media	None	Serial	N N	Pro 32

- These small and medium business (SMB) models are part of the Western Europe TopSeller™ Program
- These models have a 1-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Stylish design, reliability, and productivity for small/medium businesses</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® Live • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
Processor	<p>Intel® Celeron® G530 Processor (2 cores / 2 threads, 2.4GHz, 2MB cache), Virtualization Technology, integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller</p> <p>Intel Pentium® G620 Processor (2 cores / 2 threads, 2.6GHz, 3MB cache), Virtualization Technology, integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller</p> <p>Intel Pentium G630 Processor (2 cores / 2 threads, 2.7GHz, 3MB cache), Virtualization Technology, integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller</p> <p>Intel Pentium G840 Processor (2 cores / 2 threads, 2.8GHz, 3MB cache), Virtualization Technology, integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller</p> <p>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</p> <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>		
Implementation	Processor in LGA1155 socket		
Memory	8GB max, UDIMM, PC3-10600 1333MHz DDR3 , two 240-pin DIMM sockets		
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display		
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		
SATA cables	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar		
eSATA port	None		
Media reader	11-in-1 media reader, internal USB 2.0		
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)		
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, 1000 dpi, 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 14.0" D X 15.4" H • 160mm W X 355mm D X 392mm H • 15.4 lb (7.0 kg) in maximum configuration • Ergonomic rubberized handle • Highlighted optical drive button for easy access 		
Bay	<p>Bay 1: 5.25", 1.6" high, access, std optical</p> <p>Bay 2: 1.5", .35" high, access, opt reader*</p> <p>Bay 3: 3.5", 1" high, no access, std disk</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 (45w 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 ¹	<p>1-year, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / 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 • Individual USB port disablement 		
	RoHS-compliant		
	Supports ThinkVantage Technologies		

See footnotes for important warranty information

WE models announced July 5, August 9, or September 6, 2011

WE models withdrawn effective August 2012

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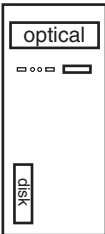
(G-TAIP1-2) August 2012

ThinkCentre® Edge 71 Tower (1577) - TopSeller - II - withdrawn

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	2nd Disk Bay	SATA optical	Graphics	Media reader	Parallel port	Serial port	Global Educ	Win7 preload (mm/dd/yy)	Ann date (mm/dd/yy)
1577-M2G	3x3	Core i3-2130	2GBx1 1333MHz	500G 7200	None	DVD±RW	Intel HD	None	None	None	N N	Pro 64	11/08/11
1577-M3G	3x3	Core i3-2130	4GBx1 1333MHz	500G 7200	None	DVD±RW	Intel HD	None	None	None	N N	Pro 64	11/08/11
1577-M4G	3x3	Core i5-2400S	4GBx1 1333MHz	500G 7200	None	DVD±RW	Intel HD	None	None	None	N N	Pro 64	11/08/11
1577-N3G	3x3	Pentium G630	2GBx1 1333MHz	500G 7200	None	DVD±RW	Intel HD	Media	Parallel	Serial	N N	Pro 64	12/06/11
1577-N8G	3x3	Pentium G630	2GBx1 1333MHz	250G 7200	None	DVD±RW	Intel HD	Media	None	None	N N	Pro 64	12/13/11
1577-P1G	3x3	Pentium G850	2GBx1 1333MHz	500G 7200	None	DVD±RW	Intel HD	Media	None	None	N N	Pro 64	01/10/12

- These small and medium business (SMB) models are part of the Western Europe TopSeller™ Program
- These models have a 1-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Stylish design, reliability, and productivity for small/medium businesses</i>		Preloaded operating system²⁰ Genuine Windows® 7 Professional 64 Preloaded applications²⁰ (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® Live • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW)
Processor	Intel® Pentium® G630 Processor (2 cores / 2 threads, 2.7GHz, 3MB cache) , Virtualization Technology, integrated Intel HD Graphics, integrated 1066MHz dual-channel DDR3 memory controller Intel Pentium G850 Processor (2 cores / 2 threads, 2.9GHz, 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 Intel Core i5-2400S Processor (4 cores / 4 threads, 2.5GHz, 6MB cache) , Virtualization Technology, Turbo Boost 2.0 (3.3GHz), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller		
Implementation	Processor in LGA1155 socket		
Memory	8GB max, UDIMM, PC3-10600 1333MHz DDR3 , two 240-pin DIMM sockets		
Graphics	Intel HD Graphics in processor, uses main memory, HDCP, DirectX® 10.1, one VGA, one DVI-D, supports dual independent display		
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		
SATA cables	Two SATA cables (each 1-drop to device), three SATA 3.0Gb/s connectors on planar		
eSATA port	None		
Media reader	<i>Some:</i> 11-in-1 media reader, internal USB 2.0		
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)		
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, 1000 dpi, 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 14.0" D X 15.4" H • 160mm W X 355mm D X 392mm H • 15.4 lb (7.0 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 (45w 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 public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / 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		

See footnotes for important warranty information
 WE models announced Nov 8, 2011, Dec 6, 2011, Dec 13, 2011, or Jan 10, 2012
 WE models withdrawn effective August 2012

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 (G-TAIP1-4) August 2012



Lenovo ThinkCentre Edge 91z All-In-One
(Wireless Keyboard & mouse on selected models only)



Lenovo ThinkCentre Edge 91z All-In-One



Lenovo ThinkCentre Edge 91z All-In-One



Handle



Lenovo ThinkCentre Edge 91z All-In-One



Lenovo ThinkCentre Edge 91z with Stand
(ThinkCentre Edge 91z Stand 0A33969)

ThinkCentre® Edge 91z (7075) - TopSeller - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Widescreen display	Camera (mega-pixel)	Disk SATA GB rpm	mSATA SSD	SATA optical	Graphics	PCIe Mini Card WLAN	Media reader	Stand type	Keyboard /Mouse	Global	Win7 preload
7075-B5G	i5-2400S	4GBx1	21.5" Full HD	2.0M	500G 7200	None	DVD±RW	Intel HD	Intel 1000	Media	Frame	Wireless	None	Pro 64
7075-D2G	i5-2400S	4GBx1	21.5" Full HD	2.0M	320G 7200	None	DVD±RW	Intel HD	Intel 1000	Media	Frame	Wireless	None	Pro 64
7075-G6G	i3-2100	2GBx1	21.5" Full HD	2.0M	320G 7200	None	DVD±RW	Intel HD	Intel 1000	Media	Frame	Edge USB	None	Prem 32
7075-H3G	i3-2120	4GBx1	21.5" Full HD	2.0M	500G 7200	None	DVD±RW	Intel HD	Intel 1000	Media	Frame	Wireless	None	Pro 64
7075-J1G	i3-2120	2GBx1	21.5" Full HD	2.0M	320G 7200	None	DVD±RW	Intel HD	Intel 1000	Media	Frame	Edge USB	None	Pro 64
7075-K7G	i3-2130	4GBx1	21.5" Full HD	2.0M	500G 7200	None	DVD±RW	Intel HD	Intel 1000	Media	Frame	Wireless	None	Pro 64
7075-K8G	i5-2400S	4GBx1	21.5" Full HD	2.0M	500G 7200	None	DVD±RW	Intel HD	Intel 1000	Media	Frame	Wireless	None	Pro 64

- Best space saving solution & excellent cable management
- These small and medium business (SMB) models are part of the Western Europe TopSeller Program
- These models have a 1-year limited warranty
- These systems are 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™ i3-2100 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 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 Intel Core i5-2400S Processor (4 cores / 4 threads, 2.5GHz, 6MB cache) , Virtualization Technology, Turbo Boost 2.0 (3.3GHz), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller Processor in LGA1155 socket										Some: Genuine Windows® 7 Professional 64 Some: Genuine Windows 7 Home Premium 32 Preloaded applications²⁰ (only some listed)			
Implementation											<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) • Corel WinDVD (DVD, DVD±RW) 			
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, external digital monitor support via HDMI, supports dual independent display													
Widescreen display	21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color , infinity display, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via VGA-in connector													
Multi-touch	None													
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator													
Controls	Front facing buttons for brightness up/auto, 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													
eSATA port	None													
Media reader	7-in-1 media reader, internal USB 2.0													
Chipset	Intel B65 Express Chipset													
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI, VGA-in connector													
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
PCIe Mini Card	Two PCI Express® Mini Card slots													
PCIe WLAN	11b/g/n wireless, Mini PCIe adapter, Intel Condor Peak 1000, 1x2													
Bluetooth	None													
Ethernet	One gigabit ethernet port, Intel 82579LM													
Audio	High Definition (HD) Audio, Realtek® ALC269Q													
Speaker	Two internal stereo speakers (2x2w) with amplifier													
Intel AMT	None													
Modem	None													
IEEE 1394	None													
Security chip	None													
Keyboard	Some: Lenovo® Slim USB Keyboard (USB connector), black, Lenovo logo													
Mouse	Some: Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black													
Power supply	Some: Enhanced Optical USB Mouse, 1000dpi, black, Lenovo logo													
Machine	Some: Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black													
	150 watts, autosensing, 85% PSU													
	<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 • Support VESA mount (100mm) • Removable feet 										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 			
Limited Warranty ¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available										Climate Saver-compliant ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant			
											Supports ThinkVantage Technologies			

See footnotes for important warranty information
 WE models announced May 17, May 24, June 21, Aug 9, or Nov8, 2011
 WE models withdrawn effective August 2012

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ThinkCentre® Edge 91z (1732) - Multi-touch (TopSeller) - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	Memory ⁸	Widescreen display	Camera (mega-pixel)	Disk SATA GB rpm	mSATA SSD	SATA optical	Graphics	PCIe Mini Card WLAN	Media reader	Stand type	Keyboard /Mouse	Global	Win7 preload
1732-A5G	i3-2120	4GBx1	21.5" Full HD	2.0M	500G 7200	None	DVD±RW	HD 6650A	Intel 1000	Media	Frame	Wireless	None	Pro 64
1732-A9G	i3-2130	4GBx1	21.5" Full HD	2.0M	500G 7200	None	DVD±RW	HD 6650A	Intel 1000	Media	Frame	Wireless	None	Pro 64

- Best space saving solution & excellent cable management
- These small and medium business (SMB) models are part of the Western Europe TopSeller Program
- These models have a 1-year limited warranty
- These systems are Microsoft Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Stylish All-In-One PC for small/medium businesses</i>										Preloaded operating system²⁰			
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 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, Blu-ray™) ● Corel DVD MovieFactory® (DVD±RW) ● Corel WinDVD® (DVD, DVD±RW, Blu-ray) ● Ulead DVD MovieFactory (Blu-ray model(s) only) 			
Memory	8GB max ⁷ , PC3-10600 1333MHz DDR3 , two 204-pin SODIMM sockets (notebook)													
Graphics	AMD Radeon™ HD 6650A , 1GB memory, DirectX® 11, PowerPlay™ technology, external digital monitor support via HDMI™, supports dual independent display													
Display	21.5" (545.2mm) Full HD 1080p (1920x1080) TFT color , infinity display, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio; works as standalone monitor via VGA-in connector													
Multi-touch	Supports Multi-touch function													
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, integrated digital MIC array with stereo, LED indicator													
Controls	Front facing buttons for brightness up/auto, brightness down, power on/off, and Video in													
Disk	SATA 6.0Gb/s, 3.5" Wide, 7200 rpm													
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable													
mSATA™ SSD	None													
eSATA port	None													
Media reader	7-in-1 media reader, internal USB 2.0													
Chipset	Intel B65 Express Chipset													
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI, VGA-in connector													
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
PCIe Mini Card	Two PCI Express® Mini Card slots													
PCIe WLAN ⁴	11b/g/n wireless, Mini PCIe adapter, Intel Condor Peak 1000, 1x2													
Bluetooth™	None													
Ethernet	One gigabit ethernet port, Intel 82579LM													
Audio	High Definition (HD) Audio, Realtek® ALC269Q													
Speaker	Two internal stereo speakers (2x2w) with amplifier													
Intel AMT	None													
Modem	None													
IEEE 1394	None													
Security chip	None													
Keyboard	UltraSlim Plus Wireless Keyboard (2.4GHz via USB receiver), black													
Mouse	UltraSlim 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 ● Support VESA mount (100mm) ● Removable feet 										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 			
Limited Warranty ¹²	1-year, limited onsite service²⁴ , 8 am-5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades ²² available										Climate Saver-compliant ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant			
Supports ThinkVantage Technologies														

See footnotes for important warranty information
 WE models announced September 6 or November 8, 2011
 WE models withdrawn effective August 2012

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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, write to: Warranty Information, P.O. Box 12195, RTP, NC, 27709, Attn: Dept ZPYA/B676. 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. In the United States call 1-800-426-7378. 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.
 - ⁶ **Multi-Burner Plus** (part number 73P3305 or 73P3370) is a DVD±RW device that reads and writes to DVD-RAM, DVD-R, DVD-RW, DVD+R, and DVD+RW. It also reads and writes to CD-R and CD-RW media. 73P3370 also writes to DVD+R double layer media.
 - ⁷ **ThinkPlus 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 ThinkPlus 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.
 - 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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