

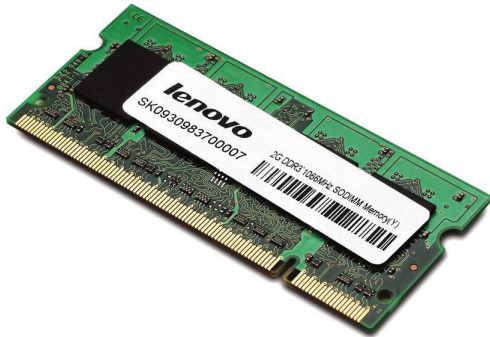


Personal Systems Reference Lenovo® ThinkPad® Notebooks

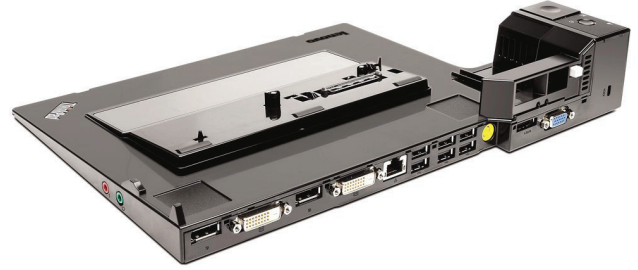
March 2010 - Version 373



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



PC3-8500 DDR3 Low-Halogen SODIMM
1GB 55Y3706
2GB 55Y3707



ThinkPad Mini Dock Plus Series 3
433810U



USB 2.0 Portable Secure Hard Disk
160GB 43R2018
320GB 43R2019



ThinkPad Bluetooth Laser Mouse
41U5008



ThinkPad Checkpoint Friendly
Business Topload Case
51J0418



90W Ultraslim AC/DC Combo Adapter
41R4493

ThinkPad®



Lenovo® ThinkPad R400



ThinkLight on



Lenovo USB-to-DVI Monitor Adapter
45K5296



Lenovo ThinkPad R400



Lenovo ThinkPad R400



ThinkPad Battery 33++ (9-cell)
43R2499

ThinkPad® R400 7438 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

Type-model	Proc-essor	GHz	Memory	Wide-screen display	Cam-era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue-tooth	Bat-tery Preload	Avail date
7438-68U	P8700	2.53	2GB	14.1" WXGA	Cam	GMA	250G 5400	DVD±RW	Intel 5100 ²⁸	None	None	Finger	Blue	6 XP Pro	Oct 09

- This small and medium business (SMB) model is part of the US TopSeller™ Program
- This model has an EasyServ™¹⁹ depot repair service 3-year limited warranty

Positioning Processor	<i>Mainstream business performance; two spindles</i> Intel® Core™ 2 Duo processor P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache										Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) 				
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available;														
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 250GB⁸ (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™														
Widescreen display	14.1" (358.1mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio														
Camera	Camera on top of screen, 1.3-megapixel, fixed focus														
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock <i>Maximum external resolution:</i> 2048x1536@75Hz														
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³ Weight ² Case material	<i>6-cell 14.1W" (WxDxH):</i> 13.2" x 9.4" x 1.2–1.4"; 335.5 x 238mm x 31–35mm <i>6-cell:</i> starting at 5.1 lb (2.3kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic														
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Enhanced <i>6-cell:</i> up to 5 hr; <i>6-cell plus Ultrabay battery:</i> up to 6.5 hr; <i>9-cell:</i> up to 7.5 hr														
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)														
ExpressCard/54 PC Card	One slot (Type I, Type II), CardBus 32-bit														
Smart Card Read Multicard Reader	None														
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)														
Mini PCI Express Intel 5100 ²⁸ WWAN 2G Turbo UWB	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None None None														
Modem	56K V.92 ⁶ modem														
Bluetooth™	Bluetooth 2.1 wireless, LED indicator														
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1														
Intel AMT	None														
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack														
Security Security chip	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant														
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip														
Limited warranty ¹²	3-years/1-yr battery - EasyServ™¹⁹ depot repair service / service upgrades²² available														
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	ThinkPad Battery 33 (4-cell)	41U3196												
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	ThinkPad Battery 33+ (6-cell)	41U3198												
ThinkPad Advanced Mini Dock	250410U	ThinkPad Battery 33++ (9-cell)	43R2499												
Other accessories on O-R400 sheet	Other accessories at lenovo.com/accessories														
													Supports ThinkVantage® technologies 65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™ ²² 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		

See footnotes for important warranty information
US model announced October 22, 2009

• Intel Centrino® 2 processor technology

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(LAG3-7) October 2009

ThinkPad® R400 7443 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

Type-model	Proc-essor	GHz	Memory	Wide-screen display	Cam-era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Avail date
7443-31U	T6670	2.20	2GB	14.1" WXGA	Cam	GMA	250G 5400	DVD±RW	11n ²⁸	None	None	Finger	Blue	6	XP Pro	Oct 09

• This small and medium business (SMB) model is part of the US TopSeller™ Program

Positioning Processor	<i>Mainstream business performance; two spindles</i> Intel® Core™ 2 Duo processor T6670 with dual-core, Intel HD Boost, 800MHz system bus, and 2MB L2 cache											Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32			
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available;											Preloaded applications¹⁴ (only some listed)			
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 250GB⁸ (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™											<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Corel® WinDVD® (DVD±RW) 			
Widescreen display Camera	14.1" (358.1mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus											<ul style="list-style-type: none"> • ThinkVantage System Update • Fingerprint Software • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Corel® WinDVD® (DVD±RW) 			
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock <i>Maximum external resolution:</i> 2048x1536@75Hz														
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions											Supports ThinkVantage® technologies			
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>6-cell 14.1W" (WxDxH):</i> 13.2" x 9.4" x 1.2–1.4"; 335.5 x 238mm x 31–35mm <i>6-cell:</i> starting at 5.1 lb (2.3kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Enhanced <i>6-cell:</i> up to 5 hr; <i>6-cell plus Ultrabay battery:</i> up to 6.5 hr; <i>9-cell:</i> up to 7.5 hr														
Chipset ExpressCard/54 PC Card Smart Card Read Multicard Reader Ports	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None None Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)											65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Mini PCI Express 11n ²⁸ WWAN 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11b/g/n wireless, Mini-PCIe Adapter II None None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack														
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip											ThinkPlus™.22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Limited warranty ¹² 1-year - EasyServ™.19 depot repair service / service upgrades ²² available	1GB PC3-8500 DDR3 L-H SODIMM 55Y3706 2GB PC3-8500 DDR3 L-H SODIMM 55Y3707 ThinkPad Advanced Mini Dock 250410U Other accessories on O-R400 sheet														
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	ThinkPad Battery 33 (4-cell)				41U3196									
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	ThinkPad Battery 33+ (6-cell)				41U3198									
ThinkPad Advanced Mini Dock	250410U	ThinkPad Battery 33++ (9-cell)				43R2499									
Other accessories on O-R400 sheet	Other accessories at lenovo.com/accessories														

See footnotes for important warranty information
US model announced October 22, 2009

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(LAG3-8) October 2009

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ³ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger slot reader	Finger print tooth	Bat- tery cells	Whorse (W) Gbl (G) Avail Preload	date
7439-1WU	Cel 575	2.00	2GB	14.1" WXGA		GMA 160G 5400	DVD±RW	Intel 5100 ²⁸	None			PC	Fing Blue	6 Bus 32	Sep08	
7439-11U	P8400	2.26	1GB	14.1" WXGA		GMA 80G 5400	Combo	Intel 5100	None			PC	Fing Blue	6 Bus 32	G Aug08	
7439-12U	T9400	2.53	1GB	14.1" WXGA		GMA 160G 5400	Combo	Intel 5100	None			PC	Fing Blue	6 Bus 32	WG Aug08	
7439-V1U	T9400	2.53	2GB	14.1" WXGA	Cam	GMA 160G 7200	DVD±RW	Intel 5100	None	2G Turbo		7-in-1	Fing Blue	6 Bus 32	WG Aug08	
7439-V2U	P8400	2.26	1GB	14.1" WXGA	Cam	GMA 160G 5400	Combo	Intel 5100	None			7-in-1	Fing Blue	6 Bus 32	WG Aug08	
7439-V5U	T9400	2.53	1GB	14.1" WXGA	Cam	GMA 160G 5400	DVD±RW	Intel 5100	None			7-in-1	Fing Blue	6 Bus 32	WG Aug08	
7439-1BU	P8600	2.40	2GB	14.1" WXGA+		GMA 160G 5400	DVD±RW	Intel 5100	None	2G Turbo		7-in-1	Fing Blue	6 Bus 32	WG Aug08	
7439-1CU	T9400	2.53	2GB	14.1" WXGA		GMA 160G 5400	DVD±RW	Intel 5300 ²⁸	None	2G Turbo		7-in-1	Fing Blue	6 Bus 32	WG Aug08	
7439-1TU	P8600	2.40	1GB	14.1" WXGA		GMA 160G 5400	DVD±RW	Intel 5100	None			Smart		6 Bus 32	TAA Aug08	
7439-PAU	P8600	2.40	2GB	14.1" WXGA		GMA 160G 5400	Combo	Intel 5100	None			PC	Fing Blue	6 XP Pro	G Sep08	
7439-PCU	P8600	2.40	2GB	14.1" WXGA+		GMA 160G 5400	DVD±RW	Intel 5100	None	2G Turbo		7-in-1	Fing Blue	6 XP Pro	G Sep08	
7439-T1U	P8600	2.40	2GB	14.1" WXGA		GMA 160G 5400	Combo	Intel 5100	None			PC	Fing Blue	6 XP Pro	G Sep08	
7439-V3U	T9400	2.53	2GB	14.1" WXGA	Cam	GMA 160G 7200	DVD±RW	Intel 5100	None	UWB		7-in-1	Fing Blue	9 Bus 32	W Oct08	
7439-T2U	P8600	2.40	1GB	14.1" WXGA		GMA 160G 5400	DVD±RW	Intel 5100	None			Smart		6 Bus 32	TAA Oct08	
7439-PDU	P8600	2.40	2GB	14.1" WXGA		GMA 160G 5400	DVD±RW	Intel 5100	None			PC	Fing Blue	6 Bus 32	WG Dec08	
US Govt (TAA) ⁵ Processor	1TU/2TU: US Government model (Trade Act Agreement-compliant) Intel® Celeron® Processor 575 with single-core, 667MHz system bus, and 1MB L2 cache Intel Core™ 2 Duo processor P8400, P8600, or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; P8400/P8600: 3MB L2 cache; T9400: 6MB L2 cache											Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ◇ Vista models: Vista Premium logo				
Memory	1GB or 2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available											Preloaded applications¹⁴ (all OSes, only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)				
SATA Combo SATA DVD±RW Ultrabay Enhanced SATA disk	Some: DVD-ROM/CD-RW, SATA 1.5Gb/s, 12.7mm Ultrabay Enh, removable (43R9148) Some: DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 80GB⁸ (5400 rpm) or 160GB (5400 or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™															
Widescreen display	Some: 14.1" (358.1mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio Some: 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio															
Camera	Some: camera on top of screen, 1.3-megapixel, fixed focus															
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock <i>Maximum external resolution:</i> 2048x1536 @75Hz (VGA DB-15)															
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions															
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	6-cell 14.1W" (WxDxH): 13.2" x 9.4" x 1.2-1.4"; 335.5 x 238mm x 31-35mm 6-cell: starting at 5.1 lb (2.3kg) Black Top: Super-Elastic PolyCarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Enhanced 6-cell: up to 5 hr; 6-cell plus Ultrabay battery: up to 6.5 hr; 9-cell: up to 7.5 hr															
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)											Supports ThinkVantage® technologies				
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	One slot (ExpressCard/34, ExpressCard/54) Some: One slot (Type I, Type II), CardBus 32-bit Some: Smart Card reader Some: 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)											65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) EPEAT™ Silver rating (except Celeron models) ENERGY STAR® 5.0-compliant (except Celeron models) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378				
Mini PCI Express Intel 5100 ²⁸ Intel 5300 ²⁸ WWAN 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Some: 11a/b/g/n wireless, Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3 None Some: Intel Turbo Memory, Mini PCIe adapter, 2GB flash, disk-cache accelerator Some: Wireless USB based on Ultra-Wideband (UWB), Half-Mini PCIe adapter 56K V.92 ²⁶ modem Some: Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None											ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025				
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Some: Fingerprint reader on palm rest, swipe sensor, supports the security chip											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades²² available															
2GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-R400 sheet	55Y3707											ThinkPad Battery 33+ (9-cell) 43R2499 Other accessories at lenovo.com/accessories				

See footnotes for important warranty information

✦ Intel Centrino® 2 processor technology

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☞ US models announced December 2, 2008; previous models on Aug 5, Sep 2, Sep 30, or October 7, 2008

(LAG3-2) December 2008

✦ US models withdrawn effective August 2009, October 2009, or January 2010

ThinkPad® R400 7440 (Onsite)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam-Integrated era graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Card slot	Blue/ Fing	Bat- tery cells	Whorse (W) Gbl (G) Avail date	
⊗ 7440-11U	P8400	2.26	1GB	14.1" WXGA	GMA 80G	5400	Combo	⊕ Intel 5100 ²⁸	None	None	PC	Yes	6	Bus 32 G P Aug 08	
⊗ 7440-12U	T9400	2.53	1GB	14.1" WXGA	GMA 160G	5400	Combo	⊕ Intel 5100	None	None	PC	Yes	6	Bus 32 W G P Aug 08	
7440-V1U	T9400	2.53	2GB	14.1" WXGA	Cam	GMA 160G	7200	DVD±RW	⊕ Intel 5100	None	2G Turbo	7-in-1	Yes	6	Bus 32 W G P Aug 08
7440-V5U	T9400	2.53	1GB	14.1" WXGA	Cam	GMA 160G	5400	DVD±RW	⊕ Intel 5100	None	7-in-1	Yes	6	Bus 32 W G P Aug 08	
⊗ 7440-T1U	P8600	2.40	2GB	14.1" WXGA	GMA 160G	5400	Combo	⊕ Intel 5100	None	None	PC	Yes	6	XP Pro G P Sep 08	
⊗ 7440-PDU	P8600	2.40	2GB	14.1" WXGA	GMA 160G	5400	DVD±RW	⊕ Intel 5100	None	None	PC	Yes	6	Bus 32 W G P Dec 08	

• These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

Positioning Processor	Mainstream business performance; two spindles Intel® Core™ 2 Duo processor P8400, P8600, or T9400 core with dual-core, Intel HD Boost, 1066MHz system bus; P8400/P8600: 3MB L2 cache; T9400: 6MB L2 cache										Preloaded operating system ²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ⊕ Vista models: Vista Premium logo			
Memory	1GB or 2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available										Preloaded applications ¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (combo, DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (combo, DVD±RW)			
SATA Combo SATA DVD±RW Ultrapay Enhanced SATA disk	Some: DVD-ROM/CD-RW, SATA 1.5Gb/s, 12.7mm Ultrapay Enh, removable (43R9148) Some: DVD burner, SATA 1.5Gb/s, 12.7mm Ultrapay Enhanced, removable (43R9149) One bay for removable devices, Ultrapay Slim-compatible, 12.7mm high 80GB ⁸ (5400 rpm) or 160GB (5400 or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™													
Widescreen display Camera	14.1" (358.1mm) WXGA (1280x800) color, anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio Some: camera on top of screen, 1.3-megapixel, fixed focus													
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock Maximum external resolution: 2048x1536@75Hz													
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	6-cell 14.1W" (WxDxH): 13.2" x 9.4" x 1.2-1.4"; 335.5 x 238mm x 31-35mm 6-cell: starting at 5.1 lb (2.3kg) Black Top: Super-Elastic PolyCarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell, supports unique 2nd battery in Ultrapay Enhanced 6-cell: up to 5 hr; 6-cell plus Ultrapay battery: up to 6.5 hr; 9-cell: up to 7.5 hr													
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub) / ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) Some: One slot (Type I, Type II), CardBus 32-bit													
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	Some: 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)													
Mini PCI Express Intel 5100 ²⁸ WWAN 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None Some: Intel Turbo Memory, Mini PCIe adapter, 2GB flash, disk-cache accelerator None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack										Supports ThinkVantage® technologies			
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip										65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Limited warranty ¹²	3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available										ThinkPlus™.22 4-year LOR 9x5 NBD 45K6038			
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM ThinkPad Advanced Mini Dock Other accessories on O-R400 sheet	55Y3706 55Y3707 250410U		ThinkPad Battery 33 (4-cell) ThinkPad Battery 33+ (6-cell) ThinkPad Battery 33++ (9-cell) Other accessories at lenovo.com/accessories				41U3196 41U3198 43R2499				Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			

See footnotes for important warranty information ⊕ Intel Centrino® 2 processor technology

⊗ US model announced December 2, 2008; previous models on August 5 or September 2, 2008

⊗ US model withdrawn effective August 2009 or January 2010

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(LAG3-3) December 2008

ThinkPad® R400 7439 (Education) - EasyServ

Personal Systems Reference (PSREF)

Type-model	Proc-essor	GHz	Memory	Wide-screen display	Cam-Integrated era	Graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Bat-tery cells	Whorse (W) Gbl (G)	Avail date	
7439-E1U	Cel 585	2.16	1GB	14.1" WXGA	Cam GMA	80G	5400 Combo	Intel 5100 ²⁸	None	2G Turbo	7-in-1	6	Bus 32	W	Sep 08	
7439-E2U	T9400	2.53	1GB	14.1" WXGA	Cam GMA	80G	5400 Combo	Intel 5100	None	2G Turbo	7-in-1	6	Bus 32	W	Aug 08	
7439-E3U	T9400	2.53	1GB	14.1" WXGA	Cam GMA	160G	5400 DVD±RW	Intel 5100	None	2G Turbo	7-in-1	Fing	6	Bus 32	W	Aug 08
7439-E4U	T9400	2.53	2GB	14.1" WXGA+	Cam GMA	160G	7200 DVD±RW	Intel 5100	None	2G Turbo	7-in-1	Fing	9	Bus 32	W	Aug 08
7439-E5U	P8600	2.40	2GB	14.1" WXGA	Cam GMA	160G	5400 DVD±RW	Intel 5100	None	None	7-in-1	Fing	6	Bus 32	W	Dec 08
7439-E9U	P8700	2.53	2GB	14.1" WXGA	Cam GMA	250G	5400 DVD±RW	Intel 5100	None	None	7-in-1	Fing	6	Bus 32	W	Mar 09
7439-EAU	T9600	2.80	3GB	14.1" WXGA	Cam GMA	160G	7200 DVD±RW	Intel 5100	None	None	7-in-1	Fing	6	Bus 32	W	Mar 09

• **These models have an EasyServ™,19 depot repair service 3-year limited warranty**

These educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Mainstream business performance; two spindles</i> Intel® Celeron® Processor 585 with single-core, 667MHz system bus, and 1MB L2 cache Intel Core™ 2 Duo processor P8600, P8700, T9400, or T9600 with dual-core, Intel HD Boost, 1066MHz system bus; <i>P8600/P8700: 3MB L2 cache; T9400/T9600: 6MB L2 cache</i>											Preloaded operating system²⁰ - Genuine Windows® Vista® Business 32 ◇ Vista Premium logo Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (combo, DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (combo, DVD±RW)			
Memory	1GB, 2GB, or 3GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available														
SATA Combo SATA DVD±RW Ultrabay Enhanced SATA disk	<i>Some:</i> DVD-ROM/CD-RW, SATA 1.5Gb/s, 12.7mm Ultrabay Enh, removable (43R9148) <i>Some:</i> DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 80GB⁸ (5400 rpm), 160GB (5400 or 7200 rpm), or 250GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™														
Widescreen display	<i>Some:</i> 14.1" (358.1mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio														
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus														
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock <i>Maximum external resolution: 2048x1536@75Hz</i>														
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 14.1W" (WxDxH):</i> 13.2" x 9.4" x 1.2-1.4"; 335.5 x 238mm x 31-35mm <i>6-cell:</i> starting at 5.1 lb (2.3kg) Black <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Enhanced <i>6-cell:</i> up to 5 hr; <i>6-cell plus Ultrabay battery:</i> up to 6.5 hr; <i>9-cell:</i> up to 7.5 hr														
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)											Supports ThinkVantage® technologies			
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	One slot (ExpressCard/34, ExpressCard/54) None None 7-in-1 reader (MMC, Memory Stick, Mem Stick PRO™, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)											65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) EPEAT™ Silver rating (except Celeron models) ENERGY STAR® 5.0-compliant (except Celeron models) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Mini PCI Express Intel 5100 ²⁸ WWAN 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None <i>Some:</i> Intel Turbo Memory, Mini PCIe adapter, 2GB flash, disk-cache accelerator None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack											ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025			
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant <i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Limited warranty ¹²	3-years/1-yr battery - EasyServ™,19 depot repair service / service upgrades²² available														
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM ThinkPad Advanced Mini Dock Other accessories on O-R400 sheet	55Y3706 55Y3707 250410U											ThinkPad Battery 33 (4-cell) 41U3196 ThinkPad Battery 33+ (6-cell) 41U3198 ThinkPad Battery 33++ (9-cell) 43R2499 Other accessories at lenovo.com/accessories			

See footnotes for important warranty information

⚡ Intel Centrino® 2 processor technology

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⚡ US models announced March 24, 2009; previous models on Aug 5, Sep 30, or December 2, 2008

(LAG3-4) April 2009

⚡ US models withdrawn effective August 2009

Memory

1GB PC3-8500 DDR3 SODIMM	43R1987	ann	08/05/08
1GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0551	ann	03/17/09
2GB PC3-8500 DDR3 SODIMM	43R1988	ann	08/05/08
2GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0552	ann	03/17/09
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann	06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann	06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann	06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann	06/23/09

Ultrabay Slim 9.5mm

Serial ATA Hard Drive Bay Adapter III ⁴⁸	43N3412	ann	06/23/09
DVD-ROM Ultrabay Slim SATA 1.5Gb/s ⁴⁸	43N3212	ann	08/05/08
CD-RW/DVD-ROM Ultrabay Slim SATA ⁴⁸	43N3213	ann	08/05/08
DVD Burner Ultrabay Slim SATA 1.5Gb/s ⁴⁸	43N3214	ann	08/05/08

⁴⁸ Slim 9.5mm device in 12.7mm bay shows gap above the device.

Ultrabay Enhanced 12.7mm

DVD-ROM Ultrabay Enhanced SATA 1.5Gb/s	43R9147	ann	08/05/08
DVD Burner Ultrabay Enh SATA 1.5Gb/s	43R9149	ann	08/05/08
Blu-ray™ Burner Ultrabay Enh SATA 1.5Gb/s	43R9150	ann	08/05/08

Storage and removable storage

160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	41N5692	ann	03/20/07
160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	41N5737	ann	10/16/07
250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43R8152	ann	01/15/08
250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3410	ann	01/20/09
320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3403	ann	08/05/08
320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3411	ann	01/20/09
500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3420	ann	06/23/09
500GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3423	ann	01/07/10

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in the Ultrabay

USB 2.0 Essential Memory Key 4GB	45J7904	ann	06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann	07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann	10/28/08
USB 2.0 Ultra Secure Memory Key 1GB	45J5915	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann	08/26/08

USB 2.0 Portable 320GB Hard Disk	45K1689	ann	03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	ann	11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann	01/07/10
USB 2.0 Super Multi-Burner Drive	41N5565	ann	01/23/07
USB 2.0 Portable DVD Burner	43N3264	ann	01/05/10

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann	05/12/09
USB Port Replicator with Digital Video	45K1610	ann	07/28/09
ThinkPad Essential Port Replicator	250510W	ann	09/20/05
ThinkPad Advanced Mini Dock	250410U	ann	09/20/05

Keyboard

TrackPoint Cap Collection	73P2698	ann	12/16/03
USB Numeric Keypad	33L3225	ann	05/01/00
Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
Ultralim Wireless Keyboard and Mouse ⁵²	57Y4700	ann	09/15/09
⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.			
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann	08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann	02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann	03/24/09

Mouse

Lenovo Mini Optical Mouse - Black (USB)	55Y9308	ann	05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann	05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann	01/22/08

Multimedia

USB 2.0 Lenovo Webcam	40Y8519	ann	08/29/06
ThinkPad In-Ear Headphones	57Y4488	ann	01/07/10

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
ThinkPad T400/T410/R400 Privacy Filter	43R2472	ann	08/05/08
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06
PC Card Gemplus Smart Card Reader	41N3004	ann	12/13/05
ExpressCard Gemplus Smart Card Reader	41N3043	ann	06/27/06

Batteries

ThinkPad Battery 33 (4-cell)	41U3196	ann	05/09/07
ThinkPad Battery 33+ (6-cell)	41U3198	ann	05/09/07
ThinkPad Battery 33++ (9-cell)	43R2499	ann	03/04/08
ThinkPad Battery 42 (3-cell) ⁴³	57Y4536	ann	08/25/09
⁴³ Used in Ultrabay Slim bay.			
ThinkPad External Battery Charger ⁴⁴	40Y7625	ann	09/20/05
⁴⁴ Requires the ThinkPad 90W AC Adapter 40Y7659 or the adapter provided with the system.			

More information at www.lenovo.com/alldaycomputing

ThinkPad 65W AC Adapter ⁴⁵	40Y7696	ann	01/05/06
⁴⁵ Only compatible with the integrated graphics models.			
ThinkPad 90W AC Adapter	40Y7659	ann	09/20/05
90W Ultralim AC/DC Combo Adapter	41R4493	ann	09/22/09

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

•BlackBerry charge tip (L8a)	41R4478	ann	12/18/07
•iPod and iPhone Charge Tip (L10a)	41R4481	ann	12/18/07
•Generic Micro USB charge tip (L18)	41R4490	ann	01/06/09

More information at www.lenovopowertips.com

Carrying Cases

Up to 14.1" widescreen models:

ThinkPad Women's Microfiber Tote	22P8855	ann	06/24/08
ThinkPad Women's Leather Trim Tote	22P8856		
ThinkPad Women's Executive Leather Tote	22P8857		
Women's Executive Red Leather Tote	22P8858		

Up to 15.4" widescreen models:

ThinkPad 15W Case Sleeve	51J0477	ann	08/18/09
Lenovo Business Messenger Case	51J0475	ann	08/18/09
Lenovo Messenger Max	41U5253	ann	05/01/07
Lenovo Performance Backpack	41U5254	ann	05/01/07
Checkpoint Friendly Business Topload Case	51J0418	ann	05/05/09
ThinkPad Business Topload Case	43R2476	ann	05/13/08
ThinkPad Business Backpack	43R2482	ann	05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann	05/13/08
ThinkPad Executive Leather Case	43R2480	ann	05/13/08

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann	10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann	11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann	10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann	10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann	10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann	10/20/09
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann	09/17/08

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann	05/12/09
ThinkVision USB Soundbar	40Y7616	ann	08/23/05
ThinkVision Soundbar	45K1263	ann	09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
Lenovo Easy Reach Monitor Stand	55Y9258	ann	09/22/09
Radial Arm	19K4464	ann	05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide



Lenovo® ThinkPad R500



ThinkPad Battery 41++ (9-cell)
40Y6797



Lenovo ThinkPad R500



Lenovo USB Fingerprint Keyboard
73P4730



Lenovo ThinkPad R500



ThinkPad Essential Port Replicator
250510W

ThinkPad® R500 2714 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe Turbo	Finger print reader	Bat- tery Blue- tooth cells	Workhorse (W) Global (G) Avail date
2714-AFU	T6670	2.20	2GB	15.4" WXGA	Cam	GMA	250G 5400	DVD±RW	11n ²⁸	None	Finger	Blue	6 XP Pro No Oct 09

• This small and medium business (SMB) model is part of the US TopSeller™ Program

Positioning Processor	<i>Mainstream business performance; two spindles</i> Intel® Core™ 2 Duo processor T6670 with dual-core, Intel HD Boost, 800MHz system bus, and 2MB L2 cache											Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software • Lenovo System Toolbox • Adobe® Reader® • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available;											
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 250GB⁸ (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™											Supports ThinkVantage® technologies 65-watt (GMA graphics) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Widescreen display Camera	15.4" (391mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus											
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution: 2048x1536@75Hz</i>											ThinkPlus™.22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³ Weight ² Case color	6-cell 15.4W" (WxDxH): 14.1" x 10.2" x 1.4–1.5"; 358.6mm x 260mm x 36–39mm 6-cell: starting at 6.4 lb (2.93kg) black											
Battery - type Battery - life ¹⁰	Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Enhanced 6-cell: up to 4.5 hr; 6-cell plus Ultrabay battery: up to 6.0 hr; 9-cell: up to 7.1 hr											
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)											
ExpressCard/54 PC Card Smart Card Reader Multicard Reader Ports	One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)											
Mini PCI Express 11n ²⁸ WWAN 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	Two Mini PCI Express slots 11b/g/n wireless, Mini-PCIe Adapter II None None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Gigabit ethernet, Broadcom® BCM5787M (MAC/PHY), PCIe x1, PXE None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip											
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available											

See footnotes for important warranty information
 US model announced October 22, 2009

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 (WKK3-8) October 2009

Type-model	Processor	GHz	Memory	Wide-screen display	Camera	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe Turbo	Finger print reader	Battery Blue-tooth cells	Workhorse (W) Global (G) Preload Educ	Avail date	
2717-ASU	T6670	2.20	3GB	15.4" WXGA	Cam	GMA	320G 5400	DVD±RW	11n ²⁸	None	Finger	6	XP Pro	No	Oct 09
2717-ATU	P8700	2.53	2GB	15.4" WXGA	Cam	GMA	250G 5400	DVD±RW	Intel 5100 ²⁸	None	Finger	6	XP Pro	No	Oct 09

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have an depot repair service 3-year limited warranty

Positioning Processor	<i>Mainstream business performance; two spindles</i> Intel® Core™ 2 Duo processor T6670 with dual-core, Intel HD Boost, 800MHz system bus, and 2MB L2 cache or Intel Core 2 Duo processor P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache											Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32
Memory	2GB or 3GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available;											Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • FingerPrint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 250GB⁸ (5400 rpm) or 320GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™											
Widescreen display Camera	15.4" (391mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus											
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution: 2048x1536@75Hz</i>											
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W" (WxDxH):</i> 14.1" x 10.2" x 1.4–1.5"; 358.6mm x 260mm x 36–39mm <i>6-cell:</i> starting at 6.4 lb (2.93kg) black Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Enhanced <i>6-cell:</i> up to 4.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 6.0 hr; <i>9-cell:</i> up to 7.1 hr											
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)											Supports ThinkVantage® technologies
ExpressCard/54 PC Card Smart Card Read Multicard Reader Ports	One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)											65-watt (GMA graphics) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Mini PCI Express Intel 5100 ²⁸ WWAN 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Two Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11b/g/n wireless, Mini-PCIe Adapter II None None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Gigabit ethernet, Broadcom® BCM5787M (MAC/PHY), PCIe x1, PXE None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack											ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Security Security chip FingerPrint reader Limited warranty ¹²	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant FingerPrint reader on palm rest, swipe sensor, supports the security chip 3-years/1-yr battery - depot repair service / service upgrades ²² available											

See footnotes for important warranty information
US models announced October 22, 2009

• Intel Centrino® 2 processor technology

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Type-model	Processor	GHz	Memory	Wide-screen display	Cam-era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe Turbo	Finger print reader	Blue-tooth	Battery cells	Workhorse (W) Global (G) Avail date
2716-EBU	Cel 575	2.00	2GB	15.4" WXGA	Cam	GMA	160G 5400	DVD±RW	Intel 5100 ²⁸	None	Finger	Blue	9	Bus 32 Sep 08
2716-3KU	P8400	2.26	1GB	15.4" WXGA		GMA	80G 5400	Combo	Intel 5100	None	Finger	Blue	6	Bus 32 G Aug 08
2716-3LU	T9400	2.53	1GB	15.4" WXGA		GMA	160G 5400	DVD±RW	Intel 5100	None	Finger	Blue	6	Bus 32 W G Aug 08
2716-3MU	T9400	2.53	2GB	15.4" WXGA	Cam	GMA	160G 5400	DVD±RW	Intel 5100	None	Finger	Blue	9	Bus 32 W G Aug 08
2716-6JU	P8400	2.26	1GB	15.4" WXGA		GMA	80G 5400	Combo	Intel 5100	None	Finger	Blue	6	XP Pro G Sep 08
2716-6LU	P8400	2.26	1GB	15.4" WXGA		GMA	80G 5400	DVD±RW	Intel 5100	None	Finger	Blue	6	XP Pro G Sep 08

• These models have an depot repair service 3-year limited warranty

Positioning Processor	Mainstream business performance; two spindles Intel® Celeron® Processor 575 with single-core, 667MHz system bus, and 1MB L2 cache Intel Core™ 2 Duo processor P8400 or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; P8400: 3MB L2 cache; T9400: 6MB L2 cache	Preloaded operating system ²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista Business 32 - Some: Genuine Windows Vista Business 32 ◇ Vista models: Vista Premium logo
Memory	1GB or 2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	
SATA Combo SATA DVD±RW Ultrabay Enhanced SATA disk	Some: DVD-ROM/CD-RW, SATA 1.5Gb/s, 12.7mm Ultrabay Enh, removable (43R9148) Some: DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 80GB ⁸ (5400 rpm) or 160GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	Preloaded applications ¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (combo, DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (combo, DVD±RW)
Widescreen display Camera	15.4" (391mm) WXGA (1280x800) color, anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio Some: camera on top of screen, 1.3-megapixel, fixed focus	
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); Maximum external resolution: 2048x1536@75Hz	
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	6-cell 15.4W" (WxDxH): 14.1" x 10.2" x 1.4–1.5"; 358.6mm x 260mm x 36–39mm 6-cell: starting at 6.4 lb (2.93kg) black PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion 6-cell or 9-cell, supports unique 2nd battery in Ultrabay Enhanced 6-cell: up to 4.5 hr; 6-cell plus Ultrabay battery: up to 6.0 hr; 9-cell: up to 7.1 hr	
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)	Supports ThinkVantage® technologies
ExpressCard/54 PC Card Smart Card Read Multicard Reader Ports	One slot (Type I, Type II), CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	65-watt (GMA graphics) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Silver rating (except Celeron models) ENERGY STAR® 5.0-compliant (except Celeron models) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Mini PCI Express Intel 5100 ²⁸ 2G Turbo WWAN UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Two Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None None None 56K V.92 ⁶ modem Some: Bluetooth 2.1 wireless, LED indicator Gigabit ethernet, Broadcom® BCM5787M (MAC/PHY), PCIe x1, PXE None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack	ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Some: Fingerprint reader on palm rest, swipe sensor, supports the security chip	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available	

See footnotes for important warranty information † Intel Centrino® 2 processor technology

Ⓢ US model announced September 30, 2008; previous models on August 5 or September 2, 2008

Ⓢ US models withdrawn effective August or October 2009

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Type-model	Processor	GHz	Memory	Wide-screen display	Camera	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe Turbo	Finger print reader	Blue-tooth	Battery cells	Preload	Whorse (W) Gbl (G) GMP (P)	Avail date
≈ 2718-3KU	P8400	2.26	1GB	15.4" WXGA		GMA	80G 5400	Combo	⇧ Intel 5100 ²⁸	None	Finger	Blue	6	Bus 32	G P	Aug 08
2718-3LU	T9400	2.53	1GB	15.4" WXGA		GMA	160G 5400	DVD±RW	⇧ Intel 5100	None	Finger	Blue	6	Bus 32	WG P	Aug 08
2718-3MU	T9400	2.53	2GB	15.4" WXGA	Cam	GMA	160G 5400	DVD±RW	⇧ Intel 5100	None	Finger	Blue	9	Bus 32	WG P	Aug 08
≈ 2718-6LU	P8400	2.26	1GB	15.4" WXGA		GMA	80G 5400	DVD±RW	⇧ Intel 5100	None			6	XP Pro	G P	Sep 08

• These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

Positioning Processor	<i>Mainstream business performance; two spindles</i> Intel® Core™ 2 Duo processor P8400 or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; P8400: 3MB L2 cache; T9400: 6MB L2 cache											Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ◇ Vista models: Vista Premium logo				
Memory	1GB or 2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available											Preloaded applications¹⁴ (all OSES, only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)				
SATA Combo SATA DVD±RW Ultrabay Enhanced SATA disk	<i>Some:</i> DVD-ROM/CD-RW, SATA 1.5Gb/s, 12.7mm Ultrabay Enh, removable (43R9148) <i>Some:</i> DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 80GB⁸ (5400 rpm) or 160GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™															
Widescreen display Camera	15.4" (391mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus															
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz															
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions															
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W"</i> (WxDxH): 14.1" x 10.2" x 1.4–1.5"; 358.6mm x 260mm x 36–39mm <i>6-cell:</i> starting at 6.4 lb (2.93kg) black PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Enhanced <i>6-cell:</i> up to 4.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 6.0 hr; <i>9-cell:</i> up to 7.1 hr															
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit															
ExpressCard/54 PC Card Smart Card Read Multicard Reader Ports	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)											Supports ThinkVantage® technologies				
Mini PCI Express Intel 5100 ²⁸ 2G Turbo WWAN UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Two Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None None None 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Gigabit ethernet, Broadcom® BCM5787M (MAC/PHY), PCIe x1, PXE None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack											65-watt (GMA graphics) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378				
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant <i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip											ThinkPlus™.22 4-year LOR 9x5 NBD 45K6038 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available															

See footnotes for important warranty information
US models announced on August 5 or September 2, 2008
≈ US models withdrawn effective August 2009

⇧ Intel Centrino® 2 processor technology

ThinkPad® R500 2716 (Education) - EasyServ

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Wide-screen display	Camera	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe Turbo	Finger print reader	Blue-tooth	Battery cells	Workhorse (W) Global (G) Avail date
⊗ 2716-ECU	Cel 575	2.00	1GB	15.4" WXGA	Cam	GMA 80G	80G 5400	Combo	Intel 5100 ²⁸	None	Finger	Blue	6	Bus 32 No Sep 08
⊗ 2716-5PU	P8400	2.26	1GB	15.4" WXGA	Cam	GMA 80G	80G 5400	Combo	⊕ Intel 5100	None	Finger	Blue	6	Bus 32 No Aug 08
2716-5QU	T9400	2.53	2GB	15.4" WXGA	Cam	GMA 160G	5400	DVD±RW	⊕ Intel 5100	None	Finger	Blue	6	Bus 32 No Aug 08
⊗ 2716-8SU	P8600	2.40	2GB	15.4" WXGA	Cam	GMA 160G	7200	DVD±RW	⊕ Intel 5100	None	Finger	Blue	6	Ult 32 No Feb 09
⊗ 2716-8YU	Cel T1600	1.66	1GB	15.4" WXGA	Cam	GMA 160G	5400	Combo	Intel 5100	None	Finger	Blue	6	Bus 32 No Mar 09
⊗ 2716-8ZU	P8700	2.53	2GB	15.4" WXGA	Cam	GMA 250G	5400	DVD±RW	⊕ Intel 5100	None	Finger	Blue	6	Bus 32 No Mar 09

- **These models have an depot repair service 3-year limited warranty**
- Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.
- Microsoft® Office Ultimate 2007 Academic Edition: Only valid for sale to students, faculty and staff of accredited educational institutions in the United States.

Positioning Processor	<i>Mainstream business performance; two spindles</i> Intel® Celeron® Processor 575 with single-core, 667MHz system bus, and 1MB L2 cache or Intel Celeron Processor T1600 with dual-core, 667MHz system bus, and 1MB L2 cache or Intel Core™ 2 Duo processor P8400, P8600, P8700, or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; <i>P8400/P8600/P8700: 3MB L2 cache; T9400: 6MB L2 cache</i>	Preloaded operating system²⁰ - <i>Some:</i> Genuine Windows® Vista® Business 32 - <i>Some:</i> Genuine Windows Vista Ultimate 32 ⊕ Vista Premium logo Preloaded applications¹⁴ (all OSes, only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
Memory	1GB or 2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	
SATA Combo SATA DVD±RW Ultrabay Enhanced SATA disk	<i>Some:</i> DVD-ROM/CD-RW, SATA 1.5Gb/s, 12.7mm Ultrabay Enh, removable (43R9148) <i>Some:</i> DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high 80GB⁸ (5400 rpm), 160GB (5400 or 7200 rpm), or 250GB (5400rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	
Widescreen display Camera	15.4" (391mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus	
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution: 2048x1536@75Hz</i>	
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case Battery - type Battery - life ¹⁰	<i>6-cell 15.4W"</i> (WxDxH): 14.1" x 10.2" x 1.4–1.5"; 358.6mm x 260mm x 36–39mm <i>6-cell:</i> starting at 6.4 lb (2.93kg) <i>Color:</i> black; <i>Material:</i> PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Enhanced <i>6-cell:</i> up to 4.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 6.0 hr; <i>9-cell:</i> up to 7.1 hr	
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)	Supports ThinkVantage® technologies
ExpressCard slot PC Card Std slot Smart Card Read Multicard Reader Ports	One ExpressCard/34 or ExpressCard/54 One Type I or Type II slot, CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	65-watt (GMA graphics) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Silver rating (except Celeron models) ENERGY STAR® 5.0-compliant (except Celeron models) RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Mini PCI Express	Two Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)	ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021
Intel 5100 ²⁸ 2G Turbo WWAN UWB	None None None None	ThinkPlus 4-year LOR 9x5 NBD 45K6022
Modem	56K V.92 ⁶ modem	ThinkPlus 5-year LOR 9x5 NBD 45K6024
Bluetooth™ Ethernet Intel AMT	Bluetooth 2.1 wireless, LED indicator Gigabit ethernet, Broadcom® BCM5787M (MAC/PHY), PCIe x1, PXE None	ThinkPlus 4-year P&L P/U Depot 45K6023
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack	ThinkPlus 5-year P&L P/U Depot 45K6025
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available	

See footnotes for important warranty information

⊕ Intel Centrino® 2 processor technology

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⊗ US models announced March 24, 2009; previous models on August 5, September 30, 2008 or February 17, 2009

(WKK3-4) April 2009

⊗ US models withdrawn effective August 2009, February 2010, or March 2010

Memory

1GB PC3-8500 DDR3 SODIMM	43R1987	ann	08/05/08
1GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0551	ann	03/17/09
2GB PC3-8500 DDR3 SODIMM	43R1988	ann	08/05/08
2GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0552	ann	03/17/09
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann	06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann	06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann	06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann	06/23/09

Ultrabay Slim 9.5mm

Serial ATA Hard Drive Bay Adapter III ⁴⁸	43N3412	ann	06/23/09
DVD-ROM Ultrabay Slim SATA 1.5Gb/s ⁴⁸	43N3212	ann	08/05/08
CD-RW/DVD-ROM Ultrabay Slim SATA ⁴⁸	43N3213	ann	08/05/08
DVD Burner Ultrabay Slim SATA 1.5Gb/s ⁴⁸	43N3214	ann	08/05/08

⁴⁸ Slim 9.5mm device in 12.7mm bay shows gap above the device.

Ultrabay Enhanced 12.7mm

DVD-ROM Ultrabay Enhanced SATA 1.5Gb/s	43R9147	ann	08/05/08
DVD Burner Ultrabay Enh SATA 1.5Gb/s	43R9149	ann	08/05/08
Blu-ray™ Burner Ultrabay Enh SATA 1.5Gb/s	43R9150	ann	08/05/08

Storage and removable storage

160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	41N5692	ann	03/20/07
160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	41N5737	ann	10/16/07
250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43R8152	ann	01/15/08
250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3410	ann	01/20/09
320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3403	ann	08/05/08
320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3411	ann	01/20/09
500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3420	ann	06/23/09
500GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3423	ann	01/07/10

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in the Ultrabay

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	ann	08/26/08
USB 2.0 Essential Memory Key 4GB	45J7904	ann	06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann	07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann	10/28/08
USB 2.0 Ultra Secure Memory Key 1GB	45J5915	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann	08/26/08
USB 2.0 Portable 320GB Hard Disk	45K1689	ann	03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	ann	11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann	01/07/10
USB 2.0 Super Multi-Burner Drive	41N5565	ann	01/23/07
USB 2.0 Portable DVD Burner	43N3264	ann	01/05/10

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann	05/12/09
USB Port Replicator with Digital Video	45K1610	ann	07/28/09
ThinkPad Essential Port Replicator	250510W	ann	09/20/05
ThinkPad Advanced Mini Dock	250410U	ann	09/20/05

Keyboard

TrackPoint Cap Collection	73P2698	ann	12/16/03
USB Numeric Keypad	33L3225	ann	05/01/00
Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
Ultralim Wireless Keyboard and Mouse ⁵²	57Y4700	ann	09/15/09
⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.			
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann	08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann	02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann	03/24/09

Mouse

Lenovo Mini Optical Mouse - Black (USB)	55Y9308	ann	05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann	05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann	01/22/08

Multimedia

USB 2.0 Lenovo Webcam	40Y8519	ann	08/29/06
ThinkPad In-Ear Headphones	57Y4488	ann	01/07/10

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
T500/R500/W500 Series 15W Privacy Filter	43R2474	ann	08/05/08
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06
PC Card Gemplus Smart Card Reader	41N3004	ann	12/13/05
ExpressCard Gemplus Smart Card Reader	41N3043	ann	06/27/06

Batteries

ThinkPad Battery 41+ (6-cell)	40Y6799	ann	01/05/06
ThinkPad Battery 41++ (9-cell)	40Y6797	ann	09/20/05
ThinkPad Battery 42 (3-cell) ⁴³	57Y4536	ann	08/25/09
⁴³ Used in Ultrabay Slim bay.			
ThinkPad External Battery Charger ⁴⁴	40Y7625	ann	09/20/05

⁴⁴ Requires the ThinkPad 90W AC Adapter 40Y7659 or the adapter provided with the system.

More information at www.lenovo.com/alldaycomputing

ThinkPad 65W AC Adapter ⁴⁵	40Y7696	ann	01/05/06
⁴⁵ Only compatible with the integrated graphics models.			
ThinkPad 90W AC Adapter	40Y7659	ann	09/20/05
90W Ultralim AC/DC Combo Adapter	41R4493	ann	09/22/09

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

•Palm device charge tip (L7)	41R4315	ann	12/18/07
•BlackBerry charge tip (L8a)	41R4478	ann	12/18/07
•iPod and iPhone Charge Tip (L10a)	41R4481	ann	12/18/07
•Generic Micro USB charge tip (L18)	41R4490	ann	01/06/09

More information at www.lenovopowertips.com

Carrying Cases

Up to 15.4" widescreen models:

ThinkPad 15W Case Sleeve	51J0477	ann	08/18/09
Lenovo Business Messenger Case	51J0475	ann	08/18/09
Lenovo Messenger Max	41U5253	ann	05/01/07
Lenovo Performance Backpack	41U5254	ann	05/01/07
Checkpoint Friendly Business Topload Case	51J0418	ann	05/05/09
ThinkPad Business Topload Case	43R2476	ann	05/13/08
ThinkPad Business Backpack	43R2482	ann	05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann	05/13/08
ThinkPad Executive Leather Case	43R2480	ann	05/13/08

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann	10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann	11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann	10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann	10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann	10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann	10/20/09
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann	09/17/08

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann	05/12/09
Lenovo DisplayPort to VGA Monitor Cable	57Y4393	ann	08/04/09
DisplayPort to Single-link DVI-D Cable	45J7915	ann	08/05/08
ThinkVision USB Soundbar	40Y7616	ann	08/23/05
ThinkVision Soundbar	45K1263	ann	09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
Lenovo Easy Reach Monitor Stand	55Y9258	ann	09/22/09
Radial Arm	19K4464	ann	05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

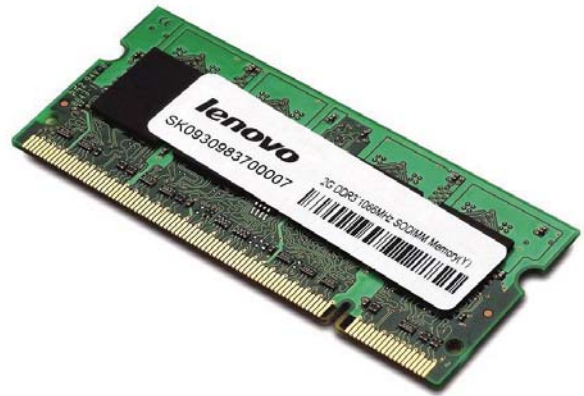
More information at www.lenovo.com/support/monitoraccessories

For more information on ThinkPad accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide



Lenovo® ThinkPad T400



PC3-8500 DDR3 Low-Halogen SODIMM
1GB 55Y3706
2GB 55Y3707
4GB 55Y3708



Lenovo ThinkPad T400 with
ThinkPad T400/T410/R400 Privacy Filter
43R2472



Lenovo ThinkPad T400



Lenovo ThinkPad T400



Lenovo ThinkPad T400

ThinkPad® T400 6473 (GMA) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print readertooth	Blue- tooth	Card slot	Preload	Avail date	
6473-41U	P8700	2.53	2GB	14.1"	WXGA	LED	Cam	GMA	320G	7200	DVD±RW	Intel 5100 ²⁸	None	None	Finger	Blue	PC XP Pro	Oct 09
6473-43U	P8700	2.53	2GB	14.1"	WXGA	LED	Cam	GMA	128G	SSD	DVD±RW	Intel 5100	None	None	Finger	Blue	PC XP Pro	Oct 09

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache											Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32				
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available											Preloaded applications¹⁴ (only some listed)				
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel <i>Some:</i> 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 320GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive											<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) 				
Widescreen display Camera	14.1" (358.1mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus											Supports ThinkVantage® technologies				
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536@75Hz															
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions											65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378				
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>6-cell 14.1W"</i> (WxDxH): 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm <i>6-cell:</i> starting at 5.0 lb (2.3kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 8.0 hr; <i>9-cell:</i> up to 9.8 hr															
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)											ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
ExpressCard/54 PC Card Smart Card Read Multicard Reader Ports	One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None None Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)															
Mini PCI Express	Three Mini PCI Express slots Intel 5100 ²⁸ 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)											ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025				
WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	None None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack															
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available															

See footnotes for important warranty information
US models announced October 22, 2009

Intel Centrino® 2 processor technology

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(ML3-17) October 2009

ThinkPad® T400 6473 (GMA) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ⁸	SATA rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue- tooth	Card slot	Preload	Avail date	
6473-4FU	P8700	2.53	2GB	14.1"	WXGA	LED	Cam	GMA	320G	7200	DVD±RW	Intel 5100 ²⁸	None	Finger	Blue	PC	Pro 32	Oct 09	
6473-5BU	P8700	2.53	2GB	14.1"	WXGA	LED	Cam	GMA	320G	7200	DVD±RW	Intel 5100	Verizon ¹⁶	None	Finger	Blue	PC	Pro 32	Nov 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning	<i>Premiere performance; two spindles</i>											Preloaded operating system²⁰					
Processor	Intel® Core™ 2 Duo processor P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache											- Genuine Windows® 7 Professional 32					
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available											Preloaded applications¹⁴ (only some listed)					
SATA DVD±RW	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable											<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) 					
Ultrabay Slim	One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel																
SATA disk	320GB⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™																
Widescreen display	14.1" (358.1mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 300:1 contrast ratio																
Camera	Camera on top of screen, 1.3-megapixel, fixed focus											<ul style="list-style-type: none"> • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) 					
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution: 2048x1536@75Hz</i>																
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys																
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass																
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label																
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions																
Dimensions ³	<i>6-cell 14.1W" (WxDxH):</i> 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm																
Weight ²	<i>6-cell:</i> starting at 5.0 lb (2.3kg)																
Case material	<i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic																
Battery - type	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim																
Battery - life ¹⁰	<i>6-cell:</i> up to 6.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 8.0 hr; <i>9-cell:</i> up to 9.8 hr																
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)											Supports ThinkVantage® technologies					
ExpressCard/54	One slot (Type I, Type II), CardBus 32-bit											65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™. ²² 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty					
PC Card	None																
Smart Card Read	None																
Multicard Reader	None																
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)																
Mini PCI Express	Three Mini PCI Express slots																
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)																
Verizon ¹⁶	<i>Some:</i> Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adptr, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon®																
2G Turbo	None																
UWB	None																
Modem	56K V.92 ⁶ modem																
Bluetooth™	Bluetooth 2.1 wireless, LED indicator																
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1																
Intel AMT	None																
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack																
Security	Power-on password, hard disk password, supervisor password, security keyhole																
Security chip	<i>4FU model:</i> Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant																
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip																
Limited warranty ¹²	3-years/1-yr battery - EasyServ™. ¹⁹ depot repair service / service upgrades ²² available																

See footnotes for important warranty information

⚡ Intel Centrino® 2 processor technology

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⚡ US model announced November 3, 2009; previous model on October 22, 2009

(ML3-18) March 2010

ThinkPad® T400 7417 (GMA) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue- Card tooth slot	Pre- load	Avail date
7417-21U	P8600	2.40	2GB	14.1" WXGA	LED	GMA	250G 5400	DVD±RW	Intel 5100 ²⁸	None	None	Fing	PC	XP Pro	Oct 09
7417-23U	P8600	2.40	2GB	14.1" WXGA	LED Cam	GMA	320G 5400	DVD±RW	Intel 5100	None	None	Fing	Blue PC	XP Pro	Oct 09

- These small and medium business (SMB) models are part of the US TopSeller™ Program

Processor	Intel® Core™ 2 Duo processor P8600 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache											Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32	
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available												
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 250GB⁸ (5400 rpm) or 320GB⁸ (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™											Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software • Lenovo System Toolbox • Adobe® Reader® • Roxio® Creator® Business Edition (DVD±RW)	
Widescreen display Camera	14.1" (358.1mm) WXGA (1280x800) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus												
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA DB-15)											Supports ThinkVantage® technologies	
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	6-cell 14.1W" (WxDxH): 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm 6-cell: starting at 5.0 lb (2.3kg) Black <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell, supports unique 2nd battery in Ultrabay Slim 6-cell: up to 6.5 hr; 6-cell plus Ultrabay battery: up to 8.0 hr; 9-cell: up to 9.8 hr											65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378	
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)												
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None None Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)											ThinkPlus™.22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976	
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None None None 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack												
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty	
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available												

See footnotes for important warranty information
US models announced October 22, 2009

• Intel Centrino® 2 processor technology

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(ML3-19) October 2009

ThinkPad® T400 7417 (GMA) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue-Card tooth slot	Pre- load	Avail date
7417-22U	P8600	2.40	2GB	14.1" WXGA	LED		GMA	250G 5400	DVD±RW	Intel 5100 ²⁸	None	None	Fing	None	PC Pro 32	Oct 09
7417-31U	P8700	2.53	2GB	14.1" WXGA	LED	Cam	GMA	250G 5400	DVD±RW	WiMAX	None	None	None	None	PC Pro 32	Nov 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Processor	Intel® Core™ 2 Duo processor P8600 or P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache	Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32 Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • ThinkVantage Toolbox • Lenovo Online Data Backup • Skype™ for Windows • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 250GB⁸ (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	
Widescreen display Camera	14.1" (358.1mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus	
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA DB-15)	
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 14.1W" (WxDxH):</i> 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm <i>6-cell:</i> starting at 5.0 lb (2.3kg) Black <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 8.0 hr; <i>9-cell:</i> up to 9.8 hr	
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)	
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None None Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	
Mini PCI Express Intel 5100 ²⁸ WiMAX WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5150, 1x2 (300Mbps) WiFi + 1x2 WiMAX (Echo Peak) None None None 56K V.92 ⁶ modem None Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole <i>22U model:</i> Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant <i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip	
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available	65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™.22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

See footnotes for important warranty information Intel Centrino® 2 processor technology

US model announced November 3, 2009; previous model on October 22, 2009

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ThinkPad® T400 2765 (Switchable) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Card slot	Pre- load	Avail date
2765-81U	P8700	2.53	3GB	14.1" WXGA+	LED	Cam	GMA, HD 3470	320G 7200	DVD±RW	Intel 5100 ²⁸		None	PC	XP Pro	Oct 09
2765-82U	P8700	2.53	3GB	14.1" WXGA+		Cam	GMA, HD 3470	320G 7200	DVD±RW	Intel 5100	AT&T ²³	None	PC	XP Pro	Oct 09
2765-83U	T9600	2.80	4GB	14.1" WXGA+	LED	Cam	GMA, HD 3470	320G 7200	DVD±RW	Intel 5100		None	PC	XP Pro	Oct 09
2765-94U	P8700	2.53	3GB	14.1" WXGA+		Cam	GMA, HD 3470	320G 7200	DVD±RW	Intel 5100	WWAN upg	None	PC	XP Pro	Nov 09
2765-95U	T9600	2.80	4GB	14.1" WXGA+		Cam	GMA, HD 3470	320G 7200	DVD±RW	Intel 5100	WWAN upg	None	PC	XP Pro	Nov 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning	<i>Premiere performance; two spindles</i>										Preloaded operating system²⁰				
Processor	Intel® Core™ 2 Duo processor P8700 or T9600 with dual-core, Intel HD Boost, 1066MHz system bus; <i>P8700: 3MB L2 cache; T9600: 6MB L2 cache</i>										- Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32				
Memory	3GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available										Preloaded applications¹⁴ (only some listed)				
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 320GB⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™										<ul style="list-style-type: none"> Rescue and Recovery™ Access Connections™ Client Security Solution™ ThinkVantage Productivity Center ThinkVantage System Update Fingerprint Software (fingerprint models) McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) Lenovo System Toolbox ThinkPad Utilities (Power Manager and Presentation Director) Adobe® Reader® Windows Live™ Toolbar Microsoft® Office 2007 Trial (60-day) Roxio® Creator® Business Edition (DVD±RW) Roxio MyDVD® (DVD±RW) Corel® WinDVD® (DVD±RW) 				
Widescreen display	<i>Some:</i> 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 250 nits, 16:10 aspect ratio, 300:1 contrast ratio										Supports ThinkVantage® technologies				
Camera	Camera on top of screen, 1.3-megapixel, fixed focus														
Switchable graphics	Switches between discrete and integrated graphics (Windows 7 only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility Radeon™ HD 3470 , PCI Express x16, 256MB memory, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution: 2048x1536@75Hz (VGA)</i>										90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver rating (other models) ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378				
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>6-cell 14.1W" (WxDxH):</i> 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm <i>9-cell:</i> starting at 5.4 lb (2.4kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 9-cell , supports unique 2nd battery in Ultrabay Slim <i>9-cell:</i> up to 9.8 hr; <i>9-cell plus Ultrabay battery:</i> up to 11.3 hr										ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)														
ExpressCard/54 PC Card Smart Card Read Multicard Reader Ports	One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None None Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)														
Mini PCI Express Intel 5100 ²⁸ WWAN upg AT&T ²³	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T														
2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack														
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip														
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available														

See footnotes for important warranty information • Intel Centrino® 2 processor technology
 US models announced November 3, 2009; previous models on October 22, 2009

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 (ML3-16) March 2010

Type-model	Proc- essor GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Inte- grated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery UWB or Turbo	Blue/Card Fing slot	Whorse (W) Pre- Gbl (G) Avail load date
6474-11U	P8400	2.26 1GB	14.1" WXGA			GMA 80G	5400 Combo	✦ Intel 5100 ²⁸	WWAN upg		6 Yes	PC	B32 G Aug 08
6474-R1U	P8400	2.26 2GB	14.1" WXGA		Cam	GMA 160G	5400 Combo	✦ Intel 5100	WWAN upg		6 Yes	7-in-1	B32 WG Aug 08
6474-R2U	T9400	2.53 2GB	14.1" WXGA		Cam	GMA 160G	7200 DVD±RW	✦ Intel 5100	WWAN upg	2G Turbo	9 Yes	PC	B32 WG Aug 08
6474-R3U	T9400	2.53 2GB	14.1" WXGA		Cam	GMA 160G	5400 DVD±RW	✦ Intel 5100	Verizon ¹⁶		6 Yes	7-in-1	B32 W Aug 08
6474-P1U	T9400	2.53 2GB	14.1" WXGA			GMA 160G	5400 DVD±RW	✦ Intel 5100	WWAN upg		6 Yes	PC	XP G Sep 08
✧ 6474-P2U	P8400	2.26 1GB	14.1" WXGA			GMA 80G	5400 Combo	✦ Intel 5100	WWAN upg		6 Yes	PC	XP G Sep 08
6474-T1U	P8600	2.40 1GB	14.1" WXGA			GMA 160G	5400 DVD±RW	✦ Intel 5100	WWAN upg		6	Smart	B32 TAA Oct 08
6474-44U	P8400	2.26 3GB	14.1" WXGA		Cam	GMA 160G	5400 Combo	✦ Intel 5100	WWAN upg		6 Yes	7-in-1	B32 WG Nov 08
6474-45U	T9400	2.53 3GB	14.1" WXGA		Cam	GMA 160G	5400 DVD±RW	✦ Intel 5100	WWAN upg		6 Yes	PC	B32 WG Nov 08
6474-P8U	P8600	2.40 2GB	14.1" WXGA			GMA 160G	5400 DVD±RW	✦ Intel 5100	WWAN upg		6 Yes	PC	B32 WG Dec 08
6474-P9U	P8600	2.40 2GB	14.1" WXGA+ LED			GMA 160G	7200 DVD±RW	✦ Intel 5100	WWAN upg		9 Yes	PC	B32 WG Dec 08
✧ 6474-R8U	P8600	2.40 3GB	14.1" WXGA LED			GMA 160G	7200 DVD±RW	✦ Intel 5100	WWAN upg		6 Yes	PC	B32 Feb 09
✧ 6474-R9U	P8600	2.40 2GB	14.1" WXGA LED			GMA 160G	5400 DVD±RW	✦ Intel 5100	WWAN upg		6 Yes	PC	B32 Feb 09
US Govt (TAA) ⁵ Processor	T1U: US Government model (Trade Act Agreement-compliant) Intel® Core™ 2 Duo processor P8400, P8600, or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; P8400/P8600: 3MB L2 cache; T9400: 6MB L2												
Memory	1GB, 2GB, or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available												
SATA Combo SATA DVD±RW Ultrabay Slim SATA disk	<i>Some:</i> CD-RW/DVD-ROM, SATA 1.5Gb/s, 9.5mm Ultrabay Slim, removable (43N3213) <i>Some:</i> DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 80GB⁸ (5400 rpm) or 160GB (5400 or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™												
Widescreen display	<i>Some:</i> 14.1" (358.1mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.1" (358.1mm) WXGA (1280x800) color , anti-glare, LED backlight , high brightness 680 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 250 nits, 16:10 aspect ratio, 300:1 contrast ratio												
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus												
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536@75Hz												
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	6-cell 14.1W" (WxDxH): 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm 6-cell: starting at 5.0 lb (2.3kg); 9-cell: starting at 5.4 lb (2.4kg) Black <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell, supports unique 2nd battery in Ultrabay Slim 6-cell: up to 6.5 hr; 6-cell plus Ultrabay battery: up to 8.0 hr; 9-cell: up to 9.8 hr												
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) <i>Some:</i> One slot (Type I, Type II), CardBus 32-bit <i>Some:</i> Smart Card reader <i>Some:</i> 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)												
ExpressCard/54 PC Card Smart Card reader Multicard reader Ports	65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378												
Mini PCI Express Intel 5100 ²⁸ WWAN upg Verizon ¹⁶	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adptr, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon®												
2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	<i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole												
Security Security chip Fingerprint reader	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant <i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip												
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available lenovo.com/thinkplus/warranty												

See footnotes for important warranty information
✦ Intel Centrino® 2 with vPro™ technology
US models announced Aug 5, Sep 2, Oct 7, Nov 4, or Dec 2, 2008 or February 3, 2009
✧ US models withdrawn effective August 2009 or February 2010

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Inte- grated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery UWB or Turbo	Blue/ Card Fing slot	Pre- load	Whorse (W) Gbl (G) Avail date
6474-56U	P8700	2.53	3GB	14.1" WXGA	LED		GMA	80G SSD	DVD±RW	Intel 5100 ²⁸	WWAN upg	None	6	Yes	PC B32 No Jun 09
6474-57U	P8700	2.53	2GB	14.1" WXGA	LED		GMA	160G 5400	DVD±RW	Intel 5100	WWAN upg	None	6	Yes	PC B32 No Jun 09
6474-58U	P8400	2.26	2GB	14.1" WXGA	LED	Cam	GMA	160G 5400	DVD±RW	Intel 5100	WWAN upg	None	6	Yes	PC B32 No Jul 09
6474-59U	P8700	2.53	2GB	14.1" WXGA	LED	Cam	GMA	160G 5400	DVD±RW	11n ²⁸	WWAN upg	None	6	Yes	PC B32 No Jul 09

• These models have an depot repair service 3-year limited warranty

Processor	Intel® Core™ 2 Duo processor P8400 or P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache	Preloaded operating system ²⁰ - Genuine Windows® Vista® Business 32 - Vista Premium logo
Memory	2GB or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications ¹⁴ (only some listed)
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel <i>Some:</i> 80GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 160GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive	<ul style="list-style-type: none"> Rescue and Recovery™ Access Connections™ Client Security Solution™ ThinkVantage Productivity Center ThinkVantage System Update Fingerprint Software (fingerprint models) McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) Lenovo System Toolbox ThinkPad Utilities (Power Manager and Presentation Director) Adobe® Reader® Windows Live™ Toolbar Microsoft® Office 2007 Trial (60-day) Roxio® Creator® Business Edition (DVD±RW) Roxio MyDVD® (DVD±RW) Corel® WinDVD® (DVD±RW)
Widescreen display Camera	14.1" (358.1mm) WXGA (1280x800) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus	
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536@75Hz	
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	6-cell 14.1W" (WxDxH): 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm 6-cell: starting at 5.0 lb (2.3kg); 9-cell: starting at 5.4 lb (2.4kg) Black <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell, supports unique 2nd battery in Ultrabay Slim 6-cell: up to 6.5 hr; 6-cell plus Ultrabay battery: up to 8.0 hr; 9-cell: up to 9.8 hr	
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit	Supports ThinkVantage® technologies
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	None None Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Mini PCI Express Intel 5100 ²⁸ 11n ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11b/g/n wireless, Mini-PCIe Adapter II Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack	ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available	

See footnotes for important warranty information

Intel Centrino® 2 with vPro™ technology

US models announced July 7, 2009; previous models on June 2, 2009

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ThinkPad® T400 2767 (Switchable)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	Mem- ory	14.1" wide screen or Cam- LED era	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Fing cells	Whorse (W) Gbl (G) Avail date	
2767-11U	P8600 2.40	1GB	WXGA+	GMA, 3470	80G 5400	Combo	Intel 5100 ²⁸	WWAN upg	Yes	6 PC	B32 G Aug08	
2767-12U	T9400 2.53	2GB	WXGA+	GMA, 3470	160G 5400	DVD±RW	Intel 5100	WWAN upg	Yes	9 7-in-1	B32 W G Aug08	
2767-13U	T9400 2.53	2GB	WXGA+	GMA, 3470	160G 7200	DVD±RW	Intel 5100	Verizon ¹⁶	2G Turbo	Yes	9 7-in-1 B32 W Aug08	
2767-14U	T9600 2.80	2GB	WXGA+	Cam GMA, 3470	160G 7200	DVD±RW	Intel 5100	WWAN upg	2G Turbo	Yes	9 7-in-1 B32 W Aug08	
2767-R2U	T9600 2.80	2GB	WXGA+	Cam GMA, 3470	160G 7200	DVD±RW	Intel 5100	WWAN upg	2G Turbo	Yes	9 7-in-1 B64 Aug08	
2767-R9U	T9600 2.80	2GB	WXGA+ LED	Cam GMA, 3470	160G 7200	DVD±RW	Intel 5100	Verizon	2G Turbo	Yes	9 7-in-1 B32 W Aug08	
2767-2GU	P8600 2.40	1GB	WXGA	GMA, 3470	160G 7200	Combo	Intel 5100	WWAN upg		6 Smart	B32 TAA Aug08	
2767-2HU	P8600 2.40	2GB	WXGA+	GMA, 3470	160G 7200	DVD±RW	Intel 5100	WWAN upg		6 Smart	B32 TAA Aug08	
2767-2JU	T9400 2.53	2GB	WXGA	Cam GMA, 3470	250G 5400	DVD±RW	Intel 5100	WWAN upg		Yes	9 7-in-1 B32 W G Aug08	
2767-2NU	T9600 2.80	2GB	WXGA+ LED	Cam GMA, 3470	64G SSD	DVD±RW	Intel 5300 ²⁸	WWAN upg		Yes	9 PC B32 Sep08	
2767-P1U	T9400 2.53	2GB	WXGA+	GMA, 3470	160G 7200	DVD±RW	Intel 5100	WWAN upg	2G Turbo	Yes	9 PC XP G Sep08	
2767-P6U	P8600 2.40	1GB	WXGA+	GMA, 3470	80G 5400	Combo	Intel 5100	WWAN upg		Yes	6 PC XP G Sep08	
2767-P7U	T9400 2.53	2GB	WXGA+	GMA, 3470	160G 5400	DVD±RW	Intel 5100	WWAN upg	2G Turbo	Yes	9 7-in-1 XP G Sep08	
US Govt (TAA) ⁵ Processor	2GU/2HU: US Government model (Trade Act Agreement-compliant) Intel® Core™ 2 Duo processor P8600, T9400, or T9600 with dual-core, Intel HD Boost, 1066MHz system bus; P8600: 3MB L2 cache; T9400/T9600: 6MB L2 cache								Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 - Some: Genuine Windows Vista Business 64 ◇ Vista models: Vista Premium logo			
Memory	1GB or 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available								Preloaded applications ¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (combo, DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (combo, DVD±RW)			
SATA Combo SATA DVD±RW Ultrabay Slim SATA disk	Some: CD-RW/DVD-ROM, SATA 1.5Gb/s, 9.5mm Ultrabay Slim, removable (43N3213) Some: DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel Some: 64GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high; Some: 80GB ⁸ (5400 rpm), 160GB ⁸ (5400 or 7200 rpm), or 250GB ⁸ (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ All: removable, upgradable, supports 2nd disk, shock mounted storage											
Widescreen display	Some: 14.1" (358.1mm) WXGA (1280x800) color, anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio Some: 14.1" (358.1mm) WXGA+ (1440x900) color, anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio Some: 14.1" (358.1mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 250 nits, 16:10 aspect ratio, 300:1 contrast ratio											
Camera	Some: camera on top of screen, 1.3-megapixel, fixed focus											
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, and ATI™ Mobility Radeon™ HD 3470, PCI Express x16, 256MB memory, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; Maximum external resolution: 2048x1536@75Hz (VGA)											
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	6-cell 14.1W" (WxDxH): 13.2" x 10.6" x 1.1-1.3"; 335.5 x 270mm x 28-32mm 6-cell: starting at 5.0 lb (2.3kg); 9-cell: starting at 5.4 lb (2.4kg) Top: Super-Elastic PolyCarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell, supports unique 2nd battery in Ultrabay Slim 6-cell: up to 6.5 hr; 6-cell plus Ultrabay battery: up to 8.0 hr; 9-cell: up to 9.8 hr											
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)								Supports ThinkVantage® technologies			
ExpressCard slot PC Card Std slot Smart Card Read Multicard Reader Ports	One ExpressCard/34 or ExpressCard/54 Some: One Type I or Type II slot, CardBus 32-bit Some: Smart Card Reader Some: 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)								90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating (LED model) EPEAT Silver rating (other models) ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Mini PCI Express Intel 5100 ²⁸ Intel 5300 ²⁸ WWAN upg Verizon ¹⁶	Three Mini PCI Express slots Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel Wi-Fi Link 5100, 1x2 (Shirley Peak) Some: 11a/b/g/n wireless, Mini PCIe adapter, Intel Ultimate N Wi-Fi Link 5300, 3x3 Some: Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) Some: Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adptr, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon								ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021			
2G Turbo UWB	Some: Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None								ThinkPlus 4-year LOR 9x5 NBD 45K6022			
Modem Bluetooth™ Ethernet Intel AMT Audio support	56K V.92 ⁶ modem Some: Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack								ThinkPlus 5-year LOR 9x5 NBD 45K6024			
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Some: Fingerprint reader on palm rest, swipe sensor, supports the security chip								ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025			
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available								Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			

See footnotes for important warranty information

◆ Intel Centrino® 2 with vPro™ technology

☞ US models announced September 2, 2008; previous models on August 5, 2008

☞ US models withdrawn effective August 2009 or February 2010

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(ML3-4) March 2010

ThinkPad® T400 2767 (Switchable) - October 2008

Personal Systems Reference (PSREF)

Proc- Type-model essor	14.1" wide Mem- GHz om- screen display	CCFL or Cam- LED era	Switchable graphics	Disk SATA GB ³ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Card slot	Whorse (W) Pre- load	Avail date
2767-31U P8600 2.40 2GB WXGA	2.40 2GB WXGA		Cam GMA, 3470	160G 7200	DVD±RW	Intel 5300 ²⁸	WWAN upg		Yes 6 7-in-1	Bus32 WG	Oct 08
✖ 2767-R1U T9400 2.53 2GB WXGA	2.53 2GB WXGA		Cam GMA, 3470	160G 7200	DVD±RW	Intel 5100 ²⁸	WWAN upg	UWB Yes 9	7-in-1 Bus32	WG	Oct 08
✖ 2767-R3U T9400 2.53 2GB WXGA+	2.53 2GB WXGA+		Cam GMA, 3470	160G 7200	DVD±RW	Intel 5300	WWAN upg	UWB Yes 9	7-in-1 Bus32	W	Oct 08
2767-T1U P8600 2.40 1GB WXGA	2.40 1GB WXGA		GMA, 3470	160G 7200	Combo	Intel 5100	WWAN upg		6 Smart	Bus32 TAA	Oct 08
2767-T2U P8600 2.40 2GB WXGA+	2.40 2GB WXGA+		GMA, 3470	160G 7200	DVD±RW	Intel 5100	WWAN upg		6 Smart	Bus32 TAA	Oct 08
2767-4AU T9400 2.53 3GB WXGA+	2.53 3GB WXGA+		GMA, 3470	160G 7200	DVD±RW	Intel 5100	WWAN upg	Yes 6 PC	Bus32	WG	Nov 08
2767-P8U P8600 2.40 2GB WXGA+	2.40 2GB WXGA+		GMA, 3470	160G 7200	DVD±RW	Intel 5100	WWAN upg	Yes 9 PC	Bus32	WG	Dec 08
2767-P9U P8600 2.40 2GB WXGA+ LED	2.40 2GB WXGA+ LED		GMA, 3470	160G 7200	DVD±RW	Intel 5100	WWAN upg	Yes 9 PC	Bus32	WG	Dec 08
☞ 2767-H7U P8700 2.53 2GB WXGA LED	2.53 2GB WXGA LED		GMA, 3470	160G 7200	DVD±RW	Intel 5100	WWAN upg	Yes 6 PC	Bus32		Jun 09
☞ 2767-H8U P8700 2.53 3GB WXGA LED	2.53 3GB WXGA LED		GMA, 3470	80G SSD	DVD±RW	Intel 5100	WWAN upg	Yes 6 PC	Bus32		Jun 09
☞ 2767-H9U P8700 2.53 3GB WXGA LED Cam	2.53 3GB WXGA LED	Cam	GMA, 3470	128G SSD	DVD±RW	Intel 5100	WWAN upg	Yes 6 PC	Bus32		Jun 09
US Govt (TAA) ⁵ Processor	T1U/T2U: US Government model (Trade Act Agreement-compliant) Intel® Core™ 2 Duo processor P8600, P8700, or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; P8600/P8700: 3MB L2 cache; T9400: 6MB L2										
Memory	1GB, 2GB, or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available										
SATA Combo SATA DVD±RW Ultrabay Slim SATA disk	Some: CD-RW/DVD-ROM, SATA 1.5Gb/s, 9.5mm Ultrabay Slim, removable (43N3213) Some: DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel Some: 80GB ⁸ or 128GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high Some: 160GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ All: removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive										
Widescreen display	Some: 14.1" (358.1mm) WXGA (1280x800) color, anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio Some: 14.1" (358.1mm) WXGA (1280x800) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio Some: 14.1" (358.1mm) WXGA+ (1440x900) color, anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio Some: 14.1" (358.1mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 250 nits, 16:10 aspect ratio, 300:1 contrast ratio										
Camera	Some: camera on top of screen, 1.3-megapixel, fixed focus										
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, and ATI™ Mobility Radeon™ HD 3470, PCI Express x16, 256MB memory, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; Maximum external resolution: 2048x1536@75Hz										
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions										
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	6-cell 14.1W" (WxDxH): 13.2" x 10.6" x 1.1-1.3"; 335.5 x 270mm x 28-32mm 6-cell: starting at 5.0 lb (2.3kg); 9-cell: starting at 5.4 lb (2.4kg) Black Top: Super-Elastic PolyCarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell, supports unique 2nd battery in Ultrabay Slim 6-cell: up to 6.5 hr; 6-cell plus Ultrabay battery: up to 8.0 hr; 9-cell: up to 9.8 hr										
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) Some: One slot (Type I, Type II), CardBus 32-bit Some: Smart Card reader Some: 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	One slot (ExpressCard/34, ExpressCard/54) Some: One slot (Type I, Type II), CardBus 32-bit Some: Smart Card reader Some: 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										
Mini PCI Express Intel 5100 ²⁸ Intel 5300 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Some: 11a/b/g/n wireless, Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3 Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None Some: Wireless USB based on Ultra-Wideband (UWB), Half-Mini PCIe adapter 56K V.92 ⁶ modem Some: Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Some: Fingerprint reader on palm rest, swipe sensor, supports the security chip										
Security Security chip Fingerprint reader	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Some: Fingerprint reader on palm rest, swipe sensor, supports the security chip										
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available										
Other accessories on O-T400 sheet	Other accessories at lenovo.com/accessories										
Preloaded operating system ²⁰ - Genuine Windows® Vista® Business 32 ↳ Vista Premium logo Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (combo, DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (combo, DVD±RW)											
Supports ThinkVantage® technologies											
90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver rating (other models) ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378											
ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025											
Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty											

See footnotes for important warranty information

✦ Intel Centrino® 2 with vPro™ technology

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☞ US models announced June 2, 2009; previous models on October 7, November 4, or December 2, 2008

(ML3-10) June 2009

✖ US models withdrawn effective August 2009

ThinkPad® T400 2767 (Switchable) - July 2009

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Wide-screen display	CCFL or LED	Switchable graphics	Disk SATA GB ³ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat-tery Card	Pre-load	Avail date
2767-HAU	P8400	2.26	2GB	14.1"	WXGA LED	Cam	GMA, 3470 160G 7200	DVD±RW	Intel 5100 ²⁸	WWAN	upg	None	Yes	6 PC Bus32 Jul 09
2767-HBU	P8700	2.53	2GB	14.1"	WXGA LED		GMA, 3470 160G 7200	DVD±RW	11n ²⁸	WWAN	upg	None	Yes	6 PC Bus32 Jul 09
2767-HCU	T9400	2.53	2GB	14.1"	WXGA LED	Cam	GMA, 3470 160G 7200	DVD±RW	Intel 5100	WWAN	upg	None	Yes	6 7-in-1 Bus32 Jul 09

• These models have an depot repair service 3-year limited warranty

Processor	Intel® Core™ 2 Duo processor P8400, P8700, or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; P8400/P8700: 3MB L2 cache; T9400: 6MB L2	Preloaded operating system²⁰ - Genuine Windows® Vista® Business 32 ↳ Vista Premium logo												
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)												
SATA DVD±RW	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214)													
Ultrabay Slim	One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel													
SATA disk	160GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive													
Widescreen display	14.1" (358.1mm) WXGA (1280x800) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio													
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus													
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, and ATI™ Mobility Radeon™ HD 3470, PCI Express x16, 256MB memory, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536@75Hz													
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys													
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label													
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	6-cell 14.1W" (WxDxH): 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm													
Weight ²	6-cell: starting at 5.0 lb (2.3kg); 9-cell: starting at 5.4 lb (2.4kg)													
Case color	Black													
Case material	<i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic													
Battery - type	Lithium Ion 6-cell, supports unique 2nd battery in Ultrabay Slim													
Battery - life ¹⁰	6-cell: up to 6.5 hr; 6-cell plus Ultrabay battery: up to 8.0 hr; 9-cell: up to 9.8 hr													
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) <i>Some:</i> One slot (Type I, Type II), CardBus 32-bit	Supports ThinkVantage® technologies												
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)	90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378												
PC Card	None													
Smart Card read	None													
Multicard reader	<i>Some:</i> 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)													
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)													
Mini PCI Express	Three Mini PCI Express slots													
Intel 5100 ²⁸	<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)													
11n ²⁸	<i>Some:</i> 11b/g/n wireless, Mini-PCIe Adapter II													
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)													
2G Turbo	None													
UWB	None													
Modem	56K V.92 ⁶ modem													
Bluetooth™	Bluetooth 2.1 wireless, LED indicator													
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1													
Intel AMT	Intel Active Management Technology (iAMT)													
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack													
Security	Power-on password, hard disk password, supervisor password, security keyhole													
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant													
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip													
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available	ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty												

See footnotes for important warranty information
US models announced July 7, 2009

❖ Intel Centrino® 2 with vPro™ technology

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(ML3-15) July 2009

ThinkPad® T400 6475 (GMA) - Onsite

Personal Systems Reference (PSREF)

Type-model	Proc- essor GHz	Memory	Wide- screen display	CCFL or Cam- LED era	Integrated graphics	Disk SATA GB ³	SATA rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Blue/ Card Fing slot	Whorse (W) Pre- Gbl (G) Avail load GMP (P) date
6475-11U	P8400	2.26 1GB	14.1" WXGA		GMA 80G	5400	Combo	❖ Intel 5100 ²⁸	WWAN upg			6 Yes PC	B32 GP Aug08
6475-R1U	P8400	2.26 2GB	14.1" WXGA		Cam GMA 160G	5400	Combo	❖ Intel 5100	WWAN upg			6 Yes 7-in-1	B32 WGP Aug08
6475-R2U	T9400	2.53 2GB	14.1" WXGA		Cam GMA 160G	7200	DVD±RW	❖ Intel 5100	WWAN upg	2G Turbo		9 Yes PC	B32 WGP Aug08
6475-P1U	T9400	2.53 2GB	14.1" WXGA		GMA 160G	5400	DVD±RW	❖ Intel 5100	WWAN upg			6 Yes PC	XP GP Sep08
6475-44U	P8400	2.26 3GB	14.1" WXGA		Cam GMA 160G	5400	Combo	❖ Intel 5100	WWAN upg			6 Yes 7-in-1	B32 WGP Nov08
6475-45U	T9400	2.53 3GB	14.1" WXGA		Cam GMA 160G	5400	DVD±RW	❖ Intel 5100	WWAN upg			6 Yes PC	B32 WGP Nov08
6475-P8U	P8600	2.40 2GB	14.1" WXGA		GMA 160G	5400	DVD±RW	❖ Intel 5100	WWAN upg			6 Yes PC	B32 WGP Dec08
6475-P9U	P8600	2.40 2GB	14.1" WXGA+ LED		GMA 160G	7200	DVD±RW	❖ Intel 5100	WWAN upg			9 Yes PC	B32 WGP Dec08

• These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor P8400 or T9400 with dual-core , Intel HD Boost, 1066MHz system bus; <i>P8400</i> : 3MB L2 cache; <i>T9400</i> : 6MB L2 cache	Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ❖ <i>Vista models</i> : Vista Premium logo Preloaded applications¹⁴ (all OSes, only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (combo, DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (combo, DVD±RW)
Memory	1GB, 2GB, or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics</i> : standard memory in both sockets; no sockets available; <i>Non-italics</i> : standard memory in one socket; one socket available	
SATA Combo SATA DVD±RW Ultrabay Slim SATA disk	<i>Some</i> : CD-RW/DVD-ROM, SATA 1.5Gb/s, 9.5mm Ultrabay Slim, removable (43N3213) <i>Some</i> : DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 80GB⁸ (5400 rpm), 160GB (5400 rpm or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	
Widescreen display	<i>Some</i> : 14.1" (358.1mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some</i> : 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 250 nits, 16:10 aspect ratio, 300:1 contrast ratio	
Camera	<i>Some</i> : camera on top of screen, 1.3-megapixel, fixed focus	
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock	
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 14.1W" (WxDxH)</i> : 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm <i>6-cell</i> : starting at 5.0 lb (2.3kg); <i>9-cell</i> : starting at 5.4 lb (2.4kg) Black <i>Top</i> : Super-Elastic PolyCarbonate (SEPC); <i>Bottom</i> : Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell</i> : up to 6.5 hr; <i>6-cell plus Ultrabay battery</i> : up to 8.0 hr; <i>9-cell</i> : up to 9.8 hr	
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) <i>Some</i> : One slot (Type I, Type II), CardBus 32-bit	
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	<i>Some</i> : 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some</i> : Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some</i> : Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip	
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available	

See footnotes for important warranty information

❖ Intel Centrino® 2 with vPro™ technology

Ⓜ US models announced December 2, 2008; previous models on Aug 5, Sep 2, or November 4, 2008

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(ML3-5) January 2009

ThinkPad® T400 2768 (Switchable) - Onsite

Personal Systems Reference (PSREF)

Type-model	Proc- essor	Mem- ory	14.1" wide- screen display	CCFL or LED	Cam- era	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Card slot	Pre- load	Whorse (W) GMP (P) Gbl (G)	Avail date
2768-11U	P8600	2.40	1GB	WXGA+		GMA, 3470	80G 5400	Combo	❖ Intel 5100 ²⁸	WWAN upg		6 PC	Bus32	GP	Aug 08
2768-12U	T9400	2.53	2GB	WXGA+		GMA, 3470	160G 5400	DVD±RW	❖ Intel 5100	WWAN upg	Turbo	9 7-in-1	Bus32	WGP	Aug 08
2768-2JU	T9400	2.53	2GB	WXGA	Cam	GMA, 3470	250G 5400	DVD±RW	❖ Intel 5100	WWAN upg		9 7-in-1	Bus32	WGP	Aug 08
2768-P1U	T9400	2.53	2GB	WXGA+		GMA, 3470	160G 7200	DVD±RW	❖ Intel 5100	WWAN upg	Turbo	9 PC	XP Pro	GP	Aug 08
2768-31U	P8600	2.40	2GB	WXGA	Cam	GMA, 3470	160G 7200	DVD±RW	❖ Intel 5300 ²⁸	WWAN upg		6 7-in-1	Bus32	WGP	Oct 08
2768-4AU	T9400	2.53	3GB	WXGA+		GMA, 3470	160G 7200	DVD±RW	❖ Intel 5100	WWAN upg		6 PC	Bus32	WGP	Nov 08
2768-P8U	P8600	2.40	2GB	WXGA+		GMA, 3470	160G 7200	DVD±RW	❖ Intel 5100	WWAN upg		9 PC	Bus32	WGP	Dec 08
2768-P9U	P8600	2.40	2GB	WXGA+ LED		GMA, 3470	160G 7200	DVD±RW	❖ Intel 5100	WWAN upg		9 PC	Bus32	WGP	Dec 08

• These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor P8600 or T9400 with dual-core , Intel HD Boost, 1066MHz system bus; <i>P8600</i> : 3MB L2 cache; <i>T9400</i> : 6MB L2 cache	Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ❖ <i>Vista models</i> : Vista Premium logo Preloaded applications¹⁴ (all OSes, only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (combo, DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (combo, DVD±RW)
Memory	1GB, 2GB, or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics</i> : standard memory in both sockets; no sockets available; <i>Non-italics</i> : standard memory in one socket; one socket available	
SATA Combo SATA DVD±RW Ultrabay Slim SATA disk	<i>Some</i> : CD-RW/DVD-ROM, SATA 1.5Gb/s, 9.5mm Ultrabay Slim, removable (43N3213) <i>Some</i> : DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 80GB⁸ (5400 rpm), 160GB⁸ (5400 or 7200 rpm), or 250GB⁸ (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradeable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	
Widescreen display	<i>Some</i> : 14.1" (358.1mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some</i> : 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some</i> : 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 250 nits, 16:10 aspect ratio, 300:1 contrast ratio	
Camera	<i>Some</i> : camera on top of screen, 1.3-megapixel, fixed focus	
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility Radeon™ HD 3470 , PCI Express x16, 256MB memory, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution</i> : 2048x1536 @ 75Hz (VGA)	
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 14.1W" (WxDxH)</i> : 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm <i>6-cell</i> : starting at 5.0 lb (2.3kg); <i>9-cell</i> : starting at 5.4 lb (2.4kg) Black <i>Top</i> : Super-Elastic PolyCarbonate (SEPC); <i>Bottom</i> : Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell</i> : up to 6.5 hr; <i>6-cell plus Ultrabay battery</i> : up to 8.0 hr; <i>9-cell</i> : up to 9.8 hr	
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) <i>Some</i> : One slot (Type I, Type II), CardBus 32-bit	
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	One slot (ExpressCard/34, ExpressCard/54) <i>Some</i> : One slot (Type I, Type II), CardBus 32-bit None <i>Some</i> : 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	
Mini PCI Express Intel 5100 ²⁸ Intel 5300 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots <i>Some</i> : 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some</i> : 11a/b/g/n wireless, Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3 <i>Some</i> : Wireless WAN upgradeable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some</i> : Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip	
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available	
	Supports ThinkVantage® technologies	
	90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378	
	ThinkPlus™. ²² 4-year LOR 9x5 NBD 45K6038 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty	

See footnotes for important warranty information

❖ Intel Centrino® 2 with vPro™ technology

Ⓜ US models announced December 2, 2008; previous models on Aug 5, Sep 2, Oct 7, or November 4, 2008

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(ML3-6) January 2009

ThinkPad® T400 6474 (GMA) - Education

Personal Systems Reference (PSREF)

Type-model	Proc- essor GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery UWB or Turbo	Blue/ Fing	Card slot	Workhorse (W) Global (G) Avail date
⊗ 6474-E1U	P8400	2.26	1GB	14.1" WXGA	Cam	GMA 80G 5400	Combo	Intel 5100	WWAN upg	2G Turbo	6	Yes PC Card	W Aug 08
6474-E2U	T9400	2.53	2GB	14.1" WXGA	Cam	GMA 160G 7200	DVD±RW	Intel 5100	WWAN upg	2G Turbo	9	Yes 7-in-1	W Aug 08
6474-E3U	T9400	2.53	2GB	14.1" WXGA	Cam	GMA 250G 5400	DVD±RW	Intel 5100	WWAN upg	2G Turbo	9	Yes 7-in-1	W Aug 08
⊗ 6474-E8U	P8700	2.53	2GB	14.1" WXGA	Cam	GMA 250G 5400	DVD±RW	Intel 5100	WWAN upg		6	Yes 7-in-1	Mar 09
⊗ 6474-E9U	T9600	2.80	3GB	14.1" WXGA+	Cam	GMA 160G 7200	DVD±RW	Intel 5100	WWAN upg		9	Yes 7-in-1	Mar 09

• **These models have an depot repair service 3-year limited warranty**

Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor P8400, P8700, T9400, or T9600 with dual-core, 1066MHz system bus; <i>P8400/P8700:</i> 3MB L2 cache; <i>T9400/T9600:</i> 6MB L2 cache	Preloaded operating system²⁰ - Genuine Windows® Vista® Business 32 ◆ Vista Premium logo
Memory	1GB, 2GB, or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models)
SATA Combo SATA DVD±RW Ultrabay Slim SATA disk	<i>Some:</i> CD-RW/DVD-ROM, SATA 1.5Gb/s, 9.5mm Ultrabay Slim, removable (43N3213) <i>Some:</i> DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 80GB⁸ (5400 rpm), 160GB (7200 rpm), or 250GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	• McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (combo, DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (combo, DVD±RW)
Widescreen display	<i>Some:</i> 14.1" (358.1mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 185 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio	
Camera	Camera on top of screen, 1.3-megapixel, fixed focus	
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution:</i> 2048x1536 @75Hz	
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>6-cell 14.1W" (WxDxH):</i> 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm <i>6-cell:</i> starting at 5.0 lb (2.3kg); <i>9-cell:</i> starting at 5.4 lb (2.4kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 8.0 hr; <i>9-cell:</i> up to 9.8 hr	
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One ExpressCard/34 or ExpressCard/54	Supports ThinkVantage® technologies
ExpressCard slot PC Card Std slot Smart Card Read Multicard Reader Ports	<i>Some:</i> One Type I or Type II slot, CardBus 32-bit <i>Some:</i> 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack	ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades²² available	

See footnotes for important warranty information

◆ Intel Centrino® 2 with vPro™ technology

⊗ US models announced March 24, 2009; previous models on August 5, 2008

⊗ US model withdrawn effective August 2009

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(ML3-7) April 2009

ThinkPad® T400 2767 (Switchable) - Education

Personal Systems Reference (PSREF)

Type-model	Proc-essor	Mem-ory	Wide-screen display	Cam-era	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat-tery Card cells slot	Whorse (W) Global (G) Avail date
2767-E1U T9400	2.53	2GB	14.1" WXGA+Cam	GMA, HD 3470	160G 5400 DVD±RW	✦ Intel 5100 ²⁸	WWAN upg	2G Turbo	9	7-in-1	B32	W Aug 08
2767-E2U T9400	2.53	2GB	14.1" WXGA+Cam	GMA, HD 3470	160G 7200 DVD±RW	✦ Intel 5100	WWAN upg	2G Turbo	9	7-in-1	B32	W Aug 08
✦ 2767-E7U T9400	2.53	2GB	14.1" WXGA+Cam	GMA, HD 3470	160G 7200 DVD±RW	✦ Intel 5100	WWAN upg	2G Turbo	6	7-in-1	U32	W Feb 09
✦ 2767-E8U T9600	2.80	3GB	14.1" WXGA+Cam	GMA, HD 3470	160G 7200 DVD±RW	✦ Intel 5100	WWAN upg		9	7-in-1	B32	Mar 09

- **These models have an depot repair service 3-year limited warranty**
- Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.
- Microsoft® Office Ultimate 2007 Academic Edition: Only valid for sale to students, faculty and staff of accredited educational institutions in the United States.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor T9400 or T9600 with dual-core, Intel HD Boost, and 6MB L2 cache	Preloaded operating system²⁰ - <i>Some:</i> Genuine Windows® Vista® Business 32 - <i>Some:</i> Genuine Windows Vista Ultimate 32 ✦ Vista Premium logo Preloaded applications¹⁴ (all OSes, only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
Memory	2GB or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 160GB⁸ (5400 or 7200rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	
Widescreen display	14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio	
Camera	Camera on top of screen, 1.3-megapixel, fixed focus	
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility Radeon™ HD 3470 , PCI Express x16, 256MB memory, DVI pass-through support to optional Advanced Mini Dock or Advanced Dock; <i>Maximum external resolution: 2048x1536@75Hz</i>	
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>6-cell 14.1W"</i> (WxDxH): 13.2" x 10.6" x 1.1–1.3"; 335.5 x 270mm x 28–32mm <i>9-cell:</i> starting at 5.4 lb (2.4kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell: up to 6.5 hr; 6-cell plus Ultrabay battery: up to 8.0 hr;</i> <i>9-cell: up to 9.8 hr; 9-cell plus Ultrabay battery: up to 11.3 hr</i>	
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)	Supports ThinkVantage® technologies
ExpressCard slot PC Card Std slot Smart Card Read Multicard Reader Ports	One ExpressCard/34 or ExpressCard/54 None None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader Limited warranty ¹²	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip 3-years/1-yr battery - depot repair service / service upgrades²² available	ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

See footnotes for important warranty information ✦ Intel Centrino® 2 with vPro™ technology

✦ US model announced March 24, 2009; previous models on August 5, 2008 or February 17, 2009

✦ US model withdrawn effective February 2010

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Memory

1GB PC3-8500 DDR3 SODIMM	43R1987	ann	08/05/08
1GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0551	ann	03/17/09
2GB PC3-8500 DDR3 SODIMM	43R1988	ann	08/05/08
2GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0552	ann	03/17/09
4GB PC3-8500 DDR3 SODIMM	51J0493	ann	03/03/09
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann	06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann	06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann	06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann	06/23/09
4GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3708	ann	06/23/09

Ultrabay Slim 9.5mm

Serial ATA Hard Drive Bay Adapter III	43N3412	ann	06/23/09
DVD-ROM Ultrabay Slim SATA 1.5Gb/s	43N3212	ann	08/05/08
CD-RW/DVD-ROM Ultrabay Slim SATA	43N3213	ann	08/05/08
DVD Burner Ultrabay Slim SATA 1.5Gb/s	43N3214	ann	08/05/08

Storage and removable storage

160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	41N5692	ann	03/20/07
160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	41N5737	ann	10/16/07
250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43R8152	ann	01/15/08
250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3410	ann	01/20/09
320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3403	ann	08/05/08
320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3411	ann	01/20/09
500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3420	ann	06/23/09
500GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3423	ann	01/07/10

⁴¹ Can be used as the main HDD or with *Serial ATA Hard Drive Bay Adapter III 43N3412* in the Ultrabay

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	ann	08/26/08
256GB FDE SSD SATA 3Gb/s 1.8" (2.5" cover)	43N3417	ann	06/23/09
USB 2.0 Essential Memory Key 4GB	45J7904	ann	06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann	07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann	10/28/08
USB 2.0 Ultra Secure Memory Key 1GB	45J5915	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann	08/26/08
USB 2.0 Portable 320GB Hard Disk	45K1689	ann	03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	ann	11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann	01/07/10
USB 2.0 Super Multi-Burner Drive	41N5565	ann	01/23/07
USB 2.0 Portable DVD Burner	43N3264	ann	01/05/10

Wireless WAN (Mini PCI Express)

Only WWAN upgradable models:

Verizon® WWAN UNDP Broadband Mini PCIe	43R9151	ann	08/05/08
AT&T® WWAN HSPA Broadband Mini PCIe	43R9152	ann	08/26/08

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann	05/12/09
USB Port Replicator with Digital Video	45K1610	ann	07/28/09
ThinkPad Essential Port Replicator	250510W	ann	09/20/05
ThinkPad Advanced Mini Dock	250410U	ann	09/20/05

Keyboard

TrackPoint Cap Collection	73P2698	ann	12/16/03
USB Numeric Keypad	33L3225	ann	05/01/00
Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
Ultralim Wireless Keyboard and Mouse ⁵²	57Y4700	ann	09/15/09
⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.			
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann	08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann	02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann	03/24/09

Mouse

Lenovo Mini Optical Mouse - Black (USB)	55Y9308	ann	05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann	05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann	01/22/08

Multimedia

USB 2.0 Lenovo Webcam	40Y8519	ann	08/29/06
ThinkPad In-Ear Headphones	57Y4488	ann	01/07/10

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06
ThinkPad T400/T410/R400 Privacy Filter	43R2472	ann	08/05/08
Note: ThinkPad T400/T410/R400 Privacy Filter (43R2472) is not supported on T400s or T410s.			
PC Card Gemplus Smart Card Reader	41N3004	ann	12/13/05
ExpressCard Gemplus Smart Card Reader	41N3043	ann	06/27/06

Batteries

ThinkPad Battery 33 (4-cell)	41U3196	ann	05/09/07
ThinkPad Battery 33+ (6-cell)	41U3198	ann	05/09/07
ThinkPad Battery 33++ (9-cell)	43R2499	ann	03/04/08
ThinkPad Battery 42 (3-cell) ⁴³	57Y4536	ann	08/25/09
⁴³ Used in Ultrabay Slim bay.			
ThinkPad External Battery Charger ⁴⁴	40Y7625	ann	09/20/05
⁴⁴ Requires the <i>ThinkPad 90W AC Adapter 40Y7659</i> or the adapter provided with the system.			

More information at www.lenovo.com/alldaycomputing

ThinkPad 65W AC Adapter ⁴⁵	40Y7696	ann	01/05/06
⁴⁵ Only compatible with the integrated graphics models.			
ThinkPad 90W AC Adapter	40Y7659	ann	09/20/05
90W Ultralim AC/DC Combo Adapter	41R4493	ann	09/22/09

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

•BlackBerry charge tip (L8a)	41R4478	ann	12/18/07
•iPod and iPhone Charge Tip (L10a)	41R4481	ann	12/18/07
•Generic Micro USB charge tip (L18)	41R4490	ann	01/06/09

More information at www.lenovopowertips.com

Carrying Cases

Up to 14.1" widescreen models:

ThinkPad Women's Microfiber Tote	22P8855	ann	06/24/08
ThinkPad Women's Leather Trim Tote	22P8856		
ThinkPad Women's Executive Leather Tote	22P8857		
Women's Executive Red Leather Tote	22P8858		

Up to 15.4" widescreen models:

ThinkPad 15W Case Sleeve	51J0477	ann	08/18/09
Lenovo Business Messenger Case	51J0475	ann	08/18/09
Lenovo Messenger Max	41U5253	ann	05/01/07
Lenovo Performance Backpack	41U5254	ann	05/01/07
Checkpoint Friendly Business Topload Case	51J0418	ann	05/05/09
ThinkPad Business Topload Case	43R2476	ann	05/13/08
ThinkPad Business Backpack	43R2482	ann	05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann	05/13/08
ThinkPad Executive Leather Case	43R2480	ann	05/13/08

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann	10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann	11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann	10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann	10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann	10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann	10/20/09
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann	09/17/08

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann	05/12/09
ThinkVision USB Soundbar	40Y7616	ann	08/23/05
ThinkVision Soundbar	45K1263	ann	09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
Lenovo Easy Reach Monitor Stand	55Y9258	ann	09/22/09
Radial Arm	19K4464	ann	05/05/00
⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.			

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

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad T410



Lenovo ThinkPad T410



Lenovo ThinkPad T410



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Lenovo ThinkPad T410



ThinkPad Mini Dock Series 3
433710U

ThinkPad® T410 2516 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base turbo (GHz)	Memory (GHz)	Wide-screen display	CCFL or LED	Cam-era	Disk SATA GB ⁸	SATA rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Avail date
2516-ADU	i5-520M	2.40	2.93	2GB	14.1" WXGA	LED	2.0M	250G 5400	DVD±RW	11b/g/n	None	None	None	6	Pro 32	Jan 10

- *This small and medium business (SMB) model is part of the US TopSeller™ Program*

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache											Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32				
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available											Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)				
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 250GB⁸ (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™															
Widescreen display Camera	14.1" (358mm) WXGA (1280x800) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus															
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)															
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions											Supports ThinkVantage® technologies				
Dimensions ³ Weight ² Case color Case material	14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm <i>6-cell:</i> starting at 5.0 lb (2.27kg); <i>9-cell:</i> starting at 5.35 lb (2.43kg) Black <i>Top:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic											65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378				
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 6.6 hr; <i>9-cell:</i> up to 11 hr; <i>9-cell plus Slice battery:</i> up to 22 hr															
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)											ThinkPlus™.22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976				
PCIe Mini Card 11b/g/n WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card None 56K V.92 ⁶ modem None Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack															
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available															

See footnotes for important warranty information
US model announced January 7, 2010

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ThinkPad® T410 2518 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	CCFL or LED	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Bat-tery Intel vPro	Preload	Avail date
2518-C3U	i5-540M	2.53	3.06	2GB	14.1" WXGA	LED	2.0M	320G 7200	11b/g/n	WWAN upg	Finger	Blue	6	XP Pro	Jan 10
2518-F4U	i5-540M	2.53	3.06	3GB	14.1" WXGA+	LED	2.0M	320G 7200	Intel 6200 ²⁸	WWAN upg	Finger	Blue	6 vPro	XP Pro	Jan 10

- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have an depot repair service 3-year limited warranty**

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-540M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Presentation Director • ThinkVantage Productivity Center • Lenovo System Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
Memory	2GB or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 320GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	
Widescreen display	<i>Some:</i> 14.1" (358mm) WXGA (1280x800) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus	
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case color Case material	14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm <i>6-cell:</i> starting at 5.0 lb (2.27kg); <i>9-cell:</i> starting at 5.35 lb (2.43kg) Black <i>Top:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic	
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 6.6 hr; <i>9-cell:</i> up to 11 hr; <i>9-cell plus Slice battery:</i> up to 22 hr	
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	
PCIe Mini Card 11b/g/n Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available	
	65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty	

See footnotes for important warranty information
US models announced January 7, 2010

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ThinkPad® T410 2518 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base turbo (GHz)	Memory	Wide-screen display	CCFL or LED	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Finger reader	Battery cells	Intel vPro	Preload	Avail date
2518-C2U	i5-520M	2.40	2.93	2GB	14.1" WXGA	LED	2.0M	250G 5400	Intel 6200 ²⁸	Gobi 2000	AT&T ²³	Finger 6	vPro	Pro 32	Jan 10
2518-F3U	i5-520M	2.40	2.93	2GB	14.1" WXGA	LED	2.0M	250G 5400	11b/g/n	WWAN upg		6	Pro 32	Jan 10	
2518-F6U	i5-520M	2.40	2.93	4GB	14.1" WXGA+	LED	2.0M	80G SSD	Intel 6200	WWAN upg		Finger 9	vPro	Pro 32	Jan 10
2518-4HU	i5-520M	2.40	2.93	2GB	14.1" WXGA	LED	2.0M	320G 7200	Intel 6200	WWAN upg		Finger 6	vPro	Pro 32	Mar 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have an depot repair service 3-year limited warranty

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache										Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32				
Memory	2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available										Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)				
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> 80GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 250GB (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive														
Widescreen display	<i>Some:</i> 14.1" (358mm) WXGA (1280x800) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus														
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)														
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³ Weight ² Case color Case material	14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm <i>6-cell:</i> starting at 5.0 lb (2.27kg); <i>9-cell:</i> starting at 5.35 lb (2.43kg) Black <i>Top:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic														
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell or 9-cell , supports optional Slice battery (57Y4545) as 2nd battery <i>6-cell:</i> up to 6.6 hr; <i>9-cell:</i> up to 11 hr; <i>9-cell plus Slice battery:</i> up to 22 hr														
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										Supports ThinkVantage® technologies				
PCIe Mini Card 11b/g/n Intel 6200 ²⁸ WWAN upg Gobi™ 2000	Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider										65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378				
Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support	<i>Some:</i> AT&T®, contract required with service provider 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack										ThinkPlus™, 22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025				
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Limited warranty ¹² 3-years/1-yr battery - depot repair service / service upgrades ²² available															

See footnotes for important warranty information

US model announced March 2, 2010; previous models on January 7, 2010

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ThinkPad® T410 2516 (Discrete) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base turbo (GHz)	Memory (GHz)	Wide-screen display	CCFL or LED	Camera	Disk SATA GB ⁸ rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Avail date
2516-AEU	i5-520M	2.40	2.93	2GB	14.1" WXGA	LED	2.0M	320G 7200	DVD±RW	11b/g/n	None	None	Blue	9	Pro 32 Jan 10

- This small and medium business (SMB) model is part of the US TopSeller™ Program

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 320GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	
Widescreen display Camera	14.1" (358mm) WXGA (1280x800) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	
Discrete graphics	NVIDIA® Quadro® NVS3100M , PCI Express® x16, 256MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)	
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	Supports ThinkVantage® technologies
Dimensions ³ Weight ² Case color Case material	14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm <i>6-cell:</i> starting at 5.0 lb (2.27kg); <i>9-cell:</i> starting at 5.35 lb (2.43kg) Black <i>Top:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic	90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Battery - type Battery - life ¹⁰	Lithium Ion 9-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 5.0 hr; <i>9-cell:</i> up to 8.3 hr; <i>9-cell plus Slice battery:</i> up to 16.6 hr	
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	ThinkPlus™.22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976
PCIe Mini Card 11b/g/n WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available	

See footnotes for important warranty information
US model announced January 7, 2010

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(NZ1-4) January 2010

ThinkPad® T410 2518 (Discrete) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base turbo (GHz)	Memory	Wide-screen display	CCFL or LED	Camera	Disk SATA GB ⁸ rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Bat-tery Intel vPro	Preload	Avail date
2518-C5U	i5-540M	2.53	3.06	2GB	14.1" WXGA+	LED	2.0M	128G SSD DVD±RW	Intel 6200 ²⁸	WWAN upg	Fing 9	vPro	XP Pro	Jan 10
2518-4JU	i5-520M	2.40	2.93	2GB	14.1" WXGA+	LED	2.0M	320G 7200 DVD±RW	Intel 6200	WWAN upg	9	vPro	XP Pro	Mar 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have an depot repair service 3-year limited warranty

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M or i5-540M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Presentation Director • ThinkVantage Productivity Center • Lenovo System Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive	
Widescreen display	14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus	
Discrete graphics	NVIDIA® Quadro® NVS3100M , PCI Express® x16, 256MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)	
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys	
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass	
Touchpad	UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch	
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³	14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm	
Weight ²	6-cell: starting at 5.0 lb (2.27kg); 9-cell: starting at 5.35 lb (2.43kg)	
Case color	Black	
Case material	<i>Top:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic	
Battery - type	Lithium Ion 9-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom	Supports ThinkVantage® technologies
Battery - life ¹⁰	6-cell: up to 5.0 hr; 9-cell: up to 8.3 hr; 9-cell plus Slice battery: up to 16.6 hr	
Chipset	Mobile Intel QM57 Express Chipset	90-watt AC adapter
ExpressCard/34	One slot (ExpressCard/34)	ThinkPad Roll Cage (one-piece magnesium frame)
Smart Card reader	None	EPEAT™ Gold rating
Multicard reader	5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC)	ENERGY STAR® 5.0-compliant
Ports	Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	RoHS-compliant
PCIe Mini Card	Two PCI Express Mini Card slots	International Warranty Service ¹⁷
Intel 6200 ²⁸	11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2	24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
WWAN upg	Wireless WAN upgradable	ThinkPlus™, 22 3-year LOR ²⁴ 9x5 NBD 45K6021
Modem	56K V.92 ⁶ modem	ThinkPlus 4-year LOR 9x5 NBD 45K6022
Bluetooth™	Bluetooth 2.1 wireless, LED indicator	ThinkPlus 5-year LOR 9x5 NBD 45K6024
Ethernet	Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1	ThinkPlus 4-year P&L P/U Depot 45K6023
Intel AMT	Intel Active Management Technology (iAMT)	ThinkPlus 5-year P&L P/U Depot 45K6025
Audio support	High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Security	Power-on password, hard disk password, supervisor password, security keyhole	
Security chip	Trusted Platform Module, TCG 1.2-compliant	
Fingerprint reader	<i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available	

See footnotes for important warranty information

US model announced March 2, 2010; previous model on January 7, 2010

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ThinkPad® T410 2518 (Discrete) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base (GHz)	turbo (GHz)	Memory	Wide-screen display	CCFL or LED	Camera	Disk SATA GB ⁸	rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Blue/Fing	Intel vPro	Preload	Avail date
2518-C4U	i5-520M	2.40	2.93	2GB	14.1" WXGA+	LED	2.0M	320G	7200	11b/g/n	Gobi 2000	Verizon ¹⁶	Yes		Pro 32	Jan 10
2518-F5U	i5-540M	2.53	3.06	4GB	14.1" WXGA+	LED	2.0M	500G	7200	WiMAX	WWAN upg		Yes	vPro	Pro 32	Jan 10
2518-4KU	i5-520M	2.40	2.93	4GB	14.1" WXGA+	LED	2.0M	320G	7200	Intel 6200 ²⁸	Gobi 2000	Verizon	Yes	vPro	Pro 64	Mar 10
2518-4LU	i5-540M	2.53	3.06	4GB	14.1" WXGA+	LED	2.0M	320G	7200	WiMAX	WWAN upg		Yes	vPro	Pro 64	Mar 10

- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have an depot repair service 3-year limited warranty**

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M or i5-540M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system²⁰ - <i>Some:</i> Genuine Windows® 7 Professional 32 - <i>Some:</i> Genuine Windows 7 Professional 64
Memory	2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 320GB⁸ (7200 rpm) or 500GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	
Widescreen display Camera	14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	
Discrete graphics	NVIDIA® Quadro® NVS3100M , PCI Express® x16, 256MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)	
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case color Case material	14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm <i>6-cell:</i> starting at 5.0 lb (2.27kg); <i>9-cell:</i> starting at 5.35 lb (2.43kg) Black <i>Top:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic	
Battery - type Battery - life ¹⁰	Lithium Ion 9-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 5.0 hr; <i>9-cell:</i> up to 8.3 hr; <i>9-cell plus Slice battery:</i> up to 16.6 hr	
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	Supports ThinkVantage® technologies
PCIe Mini Card 11b/g/n Intel 6200 ²⁸ WiMAX WWAN upg Gobi™ 2000 Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 <i>Some:</i> 11a/b/g/n and WiMAX wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N + WiMAX 6250, 2x2 AGN + 1x2 WiMAX <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider <i>Some:</i> Verizon®, contract required with service provider 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹² 3-years/1-yr battery - depot repair service / service upgrades ²² available		

See footnotes for important warranty information

US models announced March 2, 2010; previous models on January 7, 2010

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ThinkPad® T410 2519 (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base turbo (GHz)	Memory (GHz)	Wide-screen display	CCFL or LED	Camera	Disk SATA GB ⁸ rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Blue-tooth	Intel vPro	Preload	Avail date
2519-8AU	i5-520M	2.40	2.93	2GB	14.1" WXGA	LED	250G 5400	DVD±RW	Intel 6200 ²⁸	WWAN upg	Blue	vPro	Pro 32	Jan 10
Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache										Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32			
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available										Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)			
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 250GB⁸ (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™													
Widescreen display Camera	14.1" (358mm) WXGA (1280x800) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus													
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)													
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions										Supports ThinkVantage® technologies			
Dimensions ³ Weight ² Case color Case material	14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm 6-cell: starting at 5.0 lb (2.27kg); 9-cell: starting at 5.35 lb (2.43kg) Black <i>Top:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic										65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom 6-cell: up to 6.6 hr; 9-cell: up to 11 hr; 9-cell plus Slice battery: up to 22 hr													
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										ThinkPlus™.22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976			
PCIe Mini Card Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack													
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Limited warranty ¹² 1-year - depot repair service / service upgrades ²² available														

See footnotes for important warranty information
US model announced January 7, 2010

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Type-model	Processor	Max Base turbo (GHz)	Max (GHz)	Memory (MHz)	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger-print carrier	Blue-tooth reader	Battery cells	Intel vPro	Workhorse (W) Global (G) Avail date
2522-60U	i5-540M	2.53	3.06	2GBx1 1066	14.1" WXGA+	2.0M	320G 7200	Intel 6200 ²⁸	Gobi AT&T ²³	Fing	Blue	6 vPro	Pro 32	Jan 10
2522-22U	i5-520M	2.40	2.93	2GBx1 1066	14.1" WXGA		320G 7200	Intel 6200 upg		Fing	Blue	6 vPro	Pro 32	G Jan 10
2522-2AU	i5-520M	2.40	2.93	2GBx1 1066	14.1" WXGA	2.0M	250G 5400	Intel 6200 upg		Fing	Blue	6 vPro	Pro 32	Jan 10
2522-25U	i5-540M	2.53	3.06	2GBx2 1066	14.1" WXGA+		320G 7200	Intel 6200 upg		Fing	Blue	6 vPro	Pro 32	W G Jan 10
2522-48U	i5-520M	2.40	2.93	2GB 1066	14.1" WXGA	2.0M	320G 7200	Intel 6200 upg	Gobi AT&T	Fing	Blue	6 vPro	Pro 32	Jan 10
2522-49U	i5-520M	2.40	2.93	2+1GB 1066	14.1" WXGA	2.0M	80G SSD	Intel 6300 ²⁸ upg		Fing	Blue	6 vPro	Pro 32	Jan 10
2522-27U	i5-540M	2.53	3.06	4GBx1 1333	14.1" WXGA		250G FDE	Intel 6200 upg		Fing	Blue	6 vPro	Pro 64	G Mar 10
2522-28U	i5-520M	2.40	2.93	2GBx1 1066	14.1" WXGA		250G 5400	Intel 6200 upg		Blue	9 vPro	Pro 64	Pro 64	G Mar 10
2522-4CU	i5-540M	2.53	3.06	2GBx1 1066	14.1" WXGA	2.0M	320G 7200	WiMAX upg		Blue	6 vPro	Pro 32	Pro 32	Mar 10
2522-4DU	i5-540M	2.53	3.06	2GBx2 1066	14.1" WXGA	2.0M	320G 7200	Intel 6200 upg		Blue	6 vPro	Pro 64	Pro 64	Mar 10

• These models have an depot repair service 3-year limited warranty

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M or i5-540M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system²⁰ - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64
Memory	2GB, 3GB, or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz or PC3-10600 1333MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> 80GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 250GB (5400 rpm), 320GB (7200 rpm) or 250GB (7200 rpm) Full Disk Encryption [FDE] / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive	
Widescreen display	<i>Some:</i> 14.1" (358mm) WXGA (1280x800) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio	
Camera	<i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus	
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)	
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case color Case material	14.1W" (WxDxH): 13.2" x 9.4" x 1.1-1.3"; 335.5 x 239mm x 27.6-31.9mm <i>6-cell:</i> starting at 5.0 lb (2.27kg); <i>9-cell:</i> starting at 5.35 lb (2.43kg) Black <i>Top:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic	
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell or 9-cell , supports optional Slice battery (57Y4545) as 2nd battery <i>6-cell:</i> up to 6.6 hr; <i>9-cell:</i> up to 11 hr; <i>9-cell plus Slice battery:</i> up to 22 hr	
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	Supports ThinkVantage® technologies
PCIe Mini Card Intel 6200 ²⁸ WiMAX Intel 6300 ²⁸ WWAN upg Gobi 2000 Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots <i>Some:</i> 11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 <i>Some:</i> 11a/b/g/n and WiMAX wireless, PCIe Half Mini Card, Intel Centrino Advanced-N + WiMAX 6250, 2x2 AGN + 1x2 WiMAX <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Ultimate-N 6300, 3x3 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider <i>Some:</i> AT&T®, contract required with service provider 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹² 3-years/1-yr battery - depot repair service / service upgrades ²² available		

See footnotes for important warranty information

Ⓜ US models announced March 2, 2010; previous models on January 7, 2010

ThinkPad® T410 2519 (Discrete) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base turbo (GHz)	Memory	Wide-screen display	CCFL or LED Camera	Disk SATA GB ⁸ rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Bat-tery Intel vPro	Preload	Avail date
2519-8BU	i5-520M	2.40 2.93	2GB	14.1" WXGA+	LED 2.0M	320G 7200	DVD±RW	Intel 6200 ²⁸	None	Yes 6 vPro	Pro 32	Jan 10
Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache											
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available											
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 320GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System TM											
Widescreen display Camera	14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus											
Discrete graphics	NVIDIA® Quadro® NVS3100M , PCI Express® x16, 256MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)											
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³ Weight ² Case color Case material	14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm 6-cell: starting at 5.0 lb (2.27kg); 9-cell: starting at 5.35 lb (2.43kg) Black <i>Top:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic											
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom 6-cell: up to 5.0 hr; 9-cell: up to 8.3 hr; 9-cell plus Slice battery: up to 16.6 hr											
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)											
PCIe Mini Card Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack											
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip											
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available											
	Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32 Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) Supports ThinkVantage® technologies 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™. ²² 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty											

See footnotes for important warranty information
 US model announced January 7, 2010

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ThinkPad® T410 2522 (Discrete) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Finger print reader	Battery Intel vPro	Workhorse (W) Global (G) Preload	Availability date
2522-23U	i5-520M	2.40	2.93 2GB	14.1" WXGA		320G 7200	Intel 6200 ²⁸	WWAN upg		Finger 9	vPro Pro 32	G Jan 10	
2522-24U	i5-540M	2.53	3.06 2GB	14.1" WXGA+	2.0M	128G SSD	Intel 6200	WWAN upg		Finger 9	vPro Pro 32	G Jan 10	
2522-2BU	i5-520M	2.40	2.93 2GB	14.1" WXGA+	2.0M	320G 7200	Intel 6200	Gobi 2000	Verizon ¹⁶	Finger 9	vPro Pro 32	Jan 10	
2522-26U	i5-520M	2.40	2.93 2GB	14.1" WXGA+	2.0M	80G SSD	Intel 6200	WWAN upg		Finger 6	vPro Pro 32	G Jan 10	
2522-4AU	i5-520M	2.40	2.93 2GB	14.1" WXGA		250G 5400	Intel 6200	WWAN upg		Finger 9	vPro Pro 32	Jan 10	
2522-4BU	i5-520M	2.40	2.93 2GB	14.1" WXGA+	2.0M	320G 7200	Intel 6200	WWAN upg		Finger 6	vPro Pro 32	Jan 10	
2522-4EU	i5-540M	2.53	3.06 4GB	14.1" WXGA		320G 7200	Intel 6200	WWAN upg		Finger 6	vPro Pro 64	Mar 10	
2522-4FU	i5-540M	2.53	3.06 2GB	14.1" WXGA+	2.0M	320G 7200	Intel 6200	Gobi 2000	AT&T ²³	Finger 6	vPro Pro 32	Mar 10	

• These models have an depot repair service 3-year limited warranty

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M or i5-540M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system ²⁰ - <i>Some:</i> Genuine Windows® 7 Professional 32 - <i>Some:</i> Genuine Windows 7 Professional 64
Memory	2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> 80GB ⁸ or 128GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 250GB (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive	
Widescreen display	<i>Some:</i> 14.1" (358mm) WXGA (1280x800) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio	
Camera	<i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus	
Discrete graphics	NVIDIA® Quadro® NVS3100M , PCI Express® x16, 256MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)	
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case color Case material	14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm <i>6-cell:</i> starting at 5.0 lb (2.27kg); <i>9-cell:</i> starting at 5.35 lb (2.43kg) Black <i>Top:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic	
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell or 9-cell , supports optional Slice battery (57Y4545) as 2nd battery <i>6-cell:</i> up to 5.0 hr; <i>9-cell:</i> up to 8.3 hr; <i>9-cell plus Slice battery:</i> up to 16.6 hr	
Chipset ExpressCard/34 Smart Card reader Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	Supports ThinkVantage® technologies
PCIe Mini Card Intel 6200 ²⁸ WWAN upg Gobi™ 2000	Two PCI Express Mini Card slots 11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider	90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support	<i>Some:</i> AT&T® or Verizon®, contract required with service provider 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	ThinkPlus™, 22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹² 3-years/1-yr battery - depot repair service / service upgrades ²² available		

See footnotes for important warranty information

US models announced March 2, 2010; previous models on January 7, 2010

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(NZ1-10) March 2010

ThinkPad® T410 2537 (Onsite) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base (GHz)	turbo (GHz)	Memory (MHz)	Wide-screen display	Camera	Disk SATA GB ⁸	rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Battery cells	Intel vPro	Workhorse (W) Global (G) Preload GMP (P)	Avail date
2537-22U	i5-520M	2.40	2.93	2GBx1 1066	14.1" WXGA	None	320G	7200	Intel 6200 ²⁸	WWAN upg	Finger 6	vPro Pro 32	G P	Jan 10	
2537-25U	i5-540M	2.53	3.06	2GBx2 1066	14.1" WXGA+	None	320G	7200	Intel 6200	WWAN upg	Finger 6	vPro Pro 32	W G P	Jan 10	
2537-27U	i5-540M	2.53	3.06	4GBx1 1333	14.1" WXGA	None	250G	FDE	Intel 6200	WWAN upg	Finger 6	vPro Pro 64	G P	Mar 10	
2537-28U	i5-520M	2.40	2.93	2GBx1 1066	14.1" WXGA	None	250G	5400	Intel 6200	WWAN upg	9	vPro Pro 64	G P	Mar 10	

• These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M or i5-540M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system²⁰ - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64 Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
Memory	2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz or PC3-10600 1333MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 250GB⁸ (5400 rpm), 320GB (7200 rpm) or 250GB (7200 rpm) Full Disk Encryption [FDE] / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	
Widescreen display	<i>Some:</i> 14.1" (358mm) WXGA (1280x800) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio	
Camera	None	
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @ 60Hz; 2048x1536 (VGA) @ 75Hz; 1920x1200 @ 60Hz (single-link DVI-D via cable 45J7915)	
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case color Case material	14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm <i>6-cell:</i> starting at 5.0 lb (2.27kg); <i>9-cell:</i> starting at 5.35 lb (2.43kg) Black <i>Top:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic	
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell or 9-cell , supports optional Slice battery (57Y4545) as 2nd battery <i>6-cell:</i> up to 6.6 hr; <i>9-cell:</i> up to 11 hr; <i>9-cell plus Slice battery:</i> up to 22 hr	
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	
PCIe Mini Card Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available	
		Supports ThinkVantage® technologies 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™.22 4-year LOR ²⁴ 9x5 NBD 45K6038 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

See footnotes for important warranty information

28 US models announced March 2, 2010; previous models on January 7, 2010

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ThinkPad® T410 2537 (Discrete) - Onsite (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	CCFL or LED Camera	Disk SATA GB ³ rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Battery cells	Intel vPro	Pre-load	Workhorse (W) Global (G) GMP (P)	Avail date
2537-23U	i5-520M	2.40	2.93	2GB	14.1" WXGA	LED	320G 7200	Intel 6200 ²⁸	WWAN upg	9	vPro	Pro 32	G P	Jan 10
2537-24U	i5-540M	2.53	3.06	2GB	14.1" WXGA+	LED 2.0M	128G SSD	Intel 6200	WWAN upg	9	vPro	Pro 32	G P	Jan 10
2537-26U	i5-520M	2.40	2.93	2GB	14.1" WXGA+	LED 2.0M	80G SSD	Intel 6200	WWAN upg	6	vPro	Pro 32	G P	Jan 10

• These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M or i5-540M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32 Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> 80GB⁸ or 128GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive	
Widescreen display	<i>Some:</i> 14.1" (358mm) WXGA (1280x800) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio	
Camera	<i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus	
Discrete graphics	NVIDIA® Quadro® NVS3100M , PCI Express® x16, 256MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)	
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case color Case material	14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm <i>6-cell:</i> starting at 5.0 lb (2.27kg); <i>9-cell:</i> starting at 5.35 lb (2.43kg) Black <i>Top:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic	
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell or 9-cell , supports optional Slice battery (57Y4545) as 2nd battery <i>6-cell:</i> up to 5.0 hr; <i>9-cell:</i> up to 8.3 hr; <i>9-cell plus Slice battery:</i> up to 16.6 hr	
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	
PCIe Mini Card Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.92 ⁵ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available	
	Supports ThinkVantage® technologies	
	90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378	
	ThinkPlus™.22 4-year LOR ²⁴ 9x5 NBD 45K6038 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty	

See footnotes for important warranty information
US models announced January 7, 2010

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ThinkPad® T410 2522 (Education) - Windows 7

Type-model	Processor	Max Base turbo (GHz)	Memory	Wide-screen display	CCFL or LED Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Bat- tery Intel vPro Preload	Avail date
2522-52U	i5-520M	2.40	2.93 2GB	14.1" WXGA	LED 2.0M	250G 5400	Intel 6200 ²⁸			6 vPro Pro 32	Jan 10
2522-53U	i5-520M	2.40	2.93 2GB	14.1" WXGA	LED 2.0M	320G 5400	Intel 6200		Finger Blue	6 vPro Pro 32	Jan 10
2522-54U	i5-520M	2.40	2.93 3GB	14.1" WXGA+	LED 2.0M	320G 7200	Intel 6200	WWAN upg	Finger Blue	6 vPro Pro 32	Jan 10

- **These models have an depot repair service 3-year limited warranty**
- Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.
- Microsoft® Office Ultimate 2007 Academic Edition: Only valid for sale to students, faculty and staff of accredited educational institutions in the United States.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 32
Memory	2GB or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications ¹⁴ (only some listed) • <i>54U model:</i> Education software - Microsoft® Office Ultimate 2007 Academic Edition (and CD) • Education software - Microsoft® Office OneNote® 2007 (and CD) - Adobe Digital School Collection - Instructor Resources (and DVD) - Learning Creative Suite 4 (DVD) - Photoshop Elements 7 (DVD) - Premiere Elements 7 (and DVD) - Acrobat 9 Professional (DVD) - Contribute CS4 (and DVD) - Soundbooth CS4 (and DVD)
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 250GB ⁸ (5400 rpm) or 320GB (5400 or 7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	• Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Adobe® Reader® • Skype™ for Windows • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
Widescreen display	<i>Some:</i> 14.1" (358mm) WXGA (1280x800) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio	• ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Adobe® Reader® • Skype™ for Windows • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
Camera	Camera on top of screen, 2.0-megapixel, fixed focus	Supports ThinkVantage® technologies
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Dimensions ³ Weight ² Case color Case material	<i>14.1W" (WxDxH):</i> 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm <i>6-cell:</i> starting at 5.0 lb (2.27kg); <i>9-cell:</i> starting at 5.35 lb (2.43kg) Black <i>Top:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic	
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 6.6 hr; <i>9-cell:</i> up to 11 hr; <i>9-cell plus Slice battery:</i> up to 22 hr	
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	
PCIe Mini Card Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 <i>Some:</i> Wireless WAN upgradable 56K V.92 ⁵ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	
Limited warranty ¹² 3-years/1-yr battery - depot repair service / service upgrades ²² available		

See footnotes for important warranty information
US models announced January 7, 2010

ThinkPad® T410 2522 (Discrete) - Education (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base turbo (GHz)	Memory	Wide-screen display	CCFL or LED	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Bat- tery Intel vPro	Preload	Avail date
2522-55U	i5-520M	2.40	2.93	2GB	14.1" WXGA	LED	2.0M	320G 5400	Intel 6200 ²⁸	Finger	Blue	6	vPro Pro 32 Jan 10
2522-56U	i5-520M	2.40	2.93	3GB	14.1" WXGA+	LED	2.0M	320G 7200	Intel 6200 WWAN upg	Finger	Blue	9	vPro Pro 32 Jan 10

- **These models have an depot repair service 3-year limited warranty**
- Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.
- Microsoft® Office Ultimate 2007 Academic Edition: Only valid for sale to students, faculty and staff of accredited educational institutions in the United States.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache										Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32		
Memory	2GB or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available										Preloaded applications¹⁴ (only some listed) • <i>56U model:</i> Education software - Microsoft® Office Ultimate 2007 Academic Edition (and CD) • Education software - Microsoft® Office OneNote® 2007 (and CD) - Adobe Digital School Collection - Instructor Resources (and DVD) - Learning Creative Suite 4 (DVD) - Photoshop Elements 7 (DVD) - Premiere Elements 7 (and DVD) - Acrobat 9 Professional (DVD) - Contribute CS4 (and DVD) - Soundbooth CS4 (and DVD) • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Adobe® Reader® • Skype™ for Windows • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)		
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 320GB⁸ (5400 or 7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™												
Widescreen display	<i>Some:</i> 14.1" (358mm) WXGA (1280x800) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio												
Camera	Camera on top of screen, 2.0-megapixel, fixed focus												
Discrete graphics	NVIDIA® Quadro® NVS3100M , PCI Express® x16, 256MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @ 60Hz; 2048x1536 (VGA) @ 85Hz; 1920x1200 @ 60Hz (single-link DVI-D via cable 45J7915)												
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³ Weight ² Case color Case material	14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm <i>6-cell:</i> starting at 5.0 lb (2.27kg); <i>9-cell:</i> starting at 5.35 lb (2.43kg) Black <i>Top:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic												
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell or 9-cell , supports optional Slice battery (57Y4545) as 2nd battery <i>6-cell:</i> up to 6.6 hr; <i>9-cell:</i> up to 11 hr; <i>9-cell plus Slice battery:</i> up to 22 hr												
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378		
PCIe Mini Card Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 <i>Some:</i> Wireless WAN upgradable 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack										ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025		
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
Limited warranty ¹² 3-years/1-yr battery - depot repair service / service upgrades ²² available													

See footnotes for important warranty information
US models announced January 7, 2010

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ThinkPad® T410i 2516 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Wide-screen display	CCFL or LED	Camera	Disk SATA GB ⁸	rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Battery cells	Preload	Avail date
2516-APU	i3-330M	2.13	2GB	14.1" WXGA	LED	2.0M	250G	5400	DVD±RW	Intel 1000	None	Finger	Blue	6	XP Pro	Feb 10
2516-ARU	i3-330M	2.13	2GB	14.1" WXGA	LED	2.0M	320G	7200	DVD±RW	Intel 1000	None	Finger	Blue	6	XP Pro	Feb 10

• *These small and medium business (SMB) models are part of the US TopSeller™ Program*

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i3 processor i3-330M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache	Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications¹⁴ (only some listed)
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 250GB⁸ (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	<ul style="list-style-type: none"> Rescue and Recovery™ Access Connections™ Client Security Solution™ Fingerprint Software (fingerprint models) ThinkVantage System Update ThinkVantage Power Manager ThinkVantage Presentation Director ThinkVantage Productivity Center Lenovo System Toolbox Adobe® Reader® Skype™ for Windows Roxio® Creator® Business Edition (DVD±RW) Roxio MyDVD® (DVD±RW) Corel® WinDVD® (DVD±RW)
Widescreen display Camera	14.1" (358mm) WXGA (1280x800) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	<ul style="list-style-type: none"> Skype™ for Windows Roxio® Creator® Business Edition (DVD±RW) Roxio MyDVD® (DVD±RW) Corel® WinDVD® (DVD±RW)
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)	Supports ThinkVantage® technologies
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Dimensions ³ Weight ² Case color Case material	14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm <i>6-cell:</i> starting at 5.0 lb (2.27kg); <i>9-cell:</i> starting at 5.35 lb (2.43kg) Black <i>Top:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic	
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 6.6 hr; <i>9-cell:</i> up to 11 hr; <i>9-cell plus Slice battery:</i> up to 22 hr	
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	ThinkPlus™, 22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976
PCIe Mini Card Intel 1000 WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 None 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available	

See footnotes for important warranty information
US models announced February 2, 2010

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ThinkPad® T410i 2516 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Wide-screen display	CCFL or LED	Camera	Disk SATA GB ⁸	rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Battery cells	Preload	Avail date
2516-AQU	i3-330M	2.13	2GB	14.1" WXGA	LED	2.0M	250G	5400	DVD±RW	Intel 1000	None	None	None	6	Pro 32	Feb 10

• This small and medium business (SMB) model is part of the US TopSeller™ Program

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i3 processor i3-330M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache											Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32				
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available											Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)				
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 250GB⁸ (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™															
Widescreen display Camera	14.1" (358mm) WXGA (1280x800) color , anti-glare, LED backlight , 220 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus															
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)															
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions											Supports ThinkVantage® technologies				
Dimensions ³ Weight ² Case color Case material	14.1W" (WxDxH): 13.2" x 9.4" x 1.1–1.3"; 335.5 x 239mm x 27.6–31.9mm <i>6-cell:</i> starting at 5.0 lb (2.27kg); <i>9-cell:</i> starting at 5.35 lb (2.43kg) Black <i>Top:</i> Acrylonitrile-Butadiene-Styrene (ABS) plastic; <i>Bottom:</i> Carbon-Fiber Reinforced Plastic											65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378				
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 6.6 hr; <i>9-cell:</i> up to 11 hr; <i>9-cell plus Slice battery:</i> up to 22 hr															
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), eSATA port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)											ThinkPlus™.22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976				
PCIe Mini Card Intel 1000 WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 None 56K V.92 ⁶ modem None Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack															
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available															

See footnotes for important warranty information
US model announced February 2, 2010

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(NZ11-2) February 2010

Memory

1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann 06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann 06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann 06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann 06/23/09
4GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3708	ann 06/23/09

Ultrabay Slim 9.5mm

Serial ATA Hard Drive Bay Adapter III	43N3412	ann 06/23/09
DVD Burner Ultrabay Slim Drive II SATA 1.5Gb/s	43N3229	ann 06/23/09
Ultrabay Slim Blu-ray Burner II (SATA)	43N3230	ann 06/23/09

Storage and removable storage

160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	41N5692	ann 03/20/07
160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	41N5737	ann 10/16/07
250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43R8152	ann 01/15/08
250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3410	ann 01/20/09
320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3403	ann 08/05/08
320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3411	ann 01/20/09
500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3420	ann 06/23/09
500GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3423	ann 01/07/10

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in the Ultrabay

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	ann 08/26/08
256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover)	43N3417	ann 06/23/09

USB 2.0 Essential Memory Key 4GB	45J7904	ann 06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann 07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann 10/28/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann 08/26/08

USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	ann 11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann 01/07/10
USB 2.0 Super Multi-Driver Drive	41N5565	ann 01/23/07
USB 2.0 Portable DVD Burner	43N3264	ann 01/05/10

Wireless WAN (Mini PCI Express)

Only WWAN upgradable models:

ThinkPad Gobi™ 2000 Broadband Option	78Y1399	ann 01/07/10
ThinkPad AT&T® Gobi 2000 Broadband Option	78Y1398	ann 01/07/10

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann 05/12/09
USB Port Replicator with Digital Video	45K1610	ann 07/28/09
ThinkPad Port Replicator Series 3	433610W	ann 06/23/09
ThinkPad Mini Dock Series 3	433710U	ann 06/23/09
ThinkPad Mini Dock Plus Series 3	433810U	ann 06/23/09
ThinkPad Mini Dock Plus Series 3 - Mobile WS	433820U	ann 01/07/10

Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Ultralim Wireless Keyboard and Mouse ⁵²	57Y4700	ann 09/15/09
⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.		
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

Mouse

Lenovo Mini Optical Mouse - Black (USB)	55Y9308	ann 05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann 05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann 01/22/08

Multimedia

USB 2.0 Lenovo Webcam	40Y8519	ann 08/29/06
ThinkPad In-Ear Headphones	57Y4488	ann 01/07/10

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06
ThinkPad T400/T410/R400 Privacy Filter	43R2472	ann 08/05/08

Note: ThinkPad T400/T410/R400 Privacy Filter (43R2472) is not supported on T400s or T410s.

Batteries

ThinkPad Battery 25 (4-cell)	51J0498	ann 10/22/09
ThinkPad Battery 25+ (6-cell)	51J0499	ann 10/22/09
ThinkPad Battery 25++ (9-cell)	51J0500	ann 10/22/09
ThinkPad Battery 27++ (9-cell, slice) ⁴³	57Y4545	ann 01/07/10

⁴³To be used along with system battery for all-day computing; attaches under ThinkPad using docking connector (not supported when using Series 3 Port Replicator or Docks).

ThinkPad External Battery Charger	40Y7625	ann 09/20/05
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More information at www.lenovo.com/alldaycomputing

ThinkPad 65W AC Adapter ⁴⁵	40Y7696	ann 01/05/06
⁴⁵ Only compatible with the integrated graphics models.		
ThinkPad 90W AC Adapter	40Y7659	ann 09/20/05

90W Ultralim AC/DC Combo Adapter	41R4493	ann 09/22/09
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More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

•BlackBerry charge tip (L8a)	41R4478	ann 12/18/07
•iPod and iPhone Charge Tip (L10a)	41R4481	ann 12/18/07

More information at www.lenovopowertips.com

Carrying Cases

Up to 14.1" widescreen models:

ThinkPad Women's Microfiber Tote	22P8855	ann 06/24/08
ThinkPad Women's Leather Trim Tote	22P8856	
ThinkPad Women's Executive Leather Tote	22P8857	
Women's Executive Red Leather Tote	22P8858	

Up to 15.4" widescreen models:

ThinkPad 15W Case Sleeve	51J0477	ann 08/18/09
Lenovo Business Messenger Case	51J0475	ann 08/18/09
Lenovo Messenger Max	41U5253	ann 05/01/07
Lenovo Performance Backpack	41U5254	ann 05/01/07
Checkpoint Friendly Business Topload Case	51J0418	ann 05/05/09
ThinkPad Business Topload Case	43R2476	ann 05/13/08
ThinkPad Business Backpack	43R2482	ann 05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann 05/13/08
ThinkPad Executive Leather Case	43R2480	ann 05/13/08

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann 11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann 10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann 10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann 10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann 10/20/09

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
Lenovo DisplayPort to VGA Monitor Cable	57Y4393	ann 08/04/09
DisplayPort to Single-link DVI-D Cable	45J7915	ann 08/05/08
ThinkVision USB Soundbar	40Y7616	ann 08/23/05
ThinkVision Soundbar	45K1263	ann 09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
Lenovo Easy Reach Monitor Stand	55Y9258	ann 09/22/09
Radial Arm	19K4464	ann 05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:

- www.lenovo.com/support/accessories
- www.lenovo.com/support/notebookaccessories
- www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide



Lenovo® ThinkPad T400s



Lenovo ThinkPad T400s with
ThinkPad Mini Dock Series 3
433710U



ThinkPad Mini Dock Plus Series 3
433810U



ThinkPad Battery 59+ (6-cell)
51J0497



Lenovo ThinkPad T400s



Lenovo ThinkPad T400s

ThinkPad® T400s 2808 (GMA) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ³	SATA rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print Blue- tooth	Card slot	Preload	Avail date
2808-DHUSP9400	2.40	2GB	14.1"	WXGA+		GMA	120G	5400	DVD±RW	❖Intel 5100 ²⁸	WWAN upg	None	Fing	Express	XPP	Oct 09
2808-DJU SP9400	2.40	2GB	14.1"	WXGA+		GMA	250G	5400	DVD±RW	❖Intel 5100	WWAN upg	None	Fing	Express	XPP	Oct 09
2808-DKUSP9400	2.40	2GB	14.1"	WXGA+	Cam	GMA	128G	SSD	DVD±RW	❖Intel 5100	WWAN upg	None	Fing	Express	XPP	Nov 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning Processor	<i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ 2 Duo processor SP9400 with dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache											Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32			
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available											Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)			
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high <i>Some:</i> 120GB (5400 rpm) or 250GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 8mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive														
Widescreen display Camera	14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus														
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @ 60Hz; 2048x1536 (VGA) @ 75Hz; 1920x1200 @ 60Hz (single-link DVI-D via cable 45J7915)														
Keyboard TrackPoint® Touch pad	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch														
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³ Weight ² Case material	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241mm x 21.1–25.9mm <i>6-cell:</i> starting at 3.9 lb (1.77kg) <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy														
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 5.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 8.5 hr														
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)											Supports ThinkVantage® technologies			
ExpressCard/34 Smart Card Read Multicard Reader Ports	One slot (ExpressCard/34) None None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)											65-watt (GMA graphics) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None None <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20585 codec / stereo speakers, 1 watt / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack											ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025			
Security Security chip Fingerprint reader	Hardware Password Manager (HPM), Intel AntiTheft (AT), Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available														

See footnotes for important warranty information ❖ Intel Centrino® 2 with vPro™ technology
 28 US model announced November 3, 2009; previous models on October 22, 2009

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 (SN1-5) December 2009

ThinkPad® T400s 2808 (GMA) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue- tooth	Card slot	Preload	Avail date
2808-DLU SP9600	2.53	4GB	14.1"	WXGA+	Cam	GMA	128G SSD	DVD±RW	Intel 5100 ²⁸	AT&T ²³	None	Fing	Blue	Express	Pro 64	Nov 09

• This small and medium business (SMB) model is part of the US TopSeller™ Program

Positioning	<i>Premiere performance and ultraportability; two spindles</i>											Preloaded operating system²⁰	
Processor	Intel® Core™ 2 Duo processor SP9600 with dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache											- Genuine Windows® 7 Professional 64	
Memory	4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available											Preloaded applications¹⁴ (only some listed)	
SATA DVD±RW	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable											<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) 	
Ultrabay Slim	One modular bay for interchangeable devices (right side), 9.5mm high, bottom access												
SATA disk	128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high, removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive												
Widescreen display	14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio												
Camera	Camera on top of screen, 2.0-megapixel, fixed focus												
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)											Supports ThinkVantage® technologies 65-watt (GMA graphics) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty	
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys												
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass												
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch												
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241mm x 21.1–25.9mm												
Weight ²	6-cell: starting at 3.9 lb (1.77kg)												
Case material	<i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy												
Battery - type	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim												
Battery - life ¹⁰	6-cell: up to 5.5 hr; 6-cell plus Ultrabay battery: up to 8.5 hr												
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)											Supports ThinkVantage® technologies	
ExpressCard/34	One slot (ExpressCard/34)											65-watt (GMA graphics) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty	
Smart Card Read	None												
Multicard Reader	None												
Ports	Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)												
Mini PCI Express	Three Mini PCI Express slots												
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)												
AT&T ²³	Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T®												
2G Turbo	None												
UWB	None												
Modem	None												
Bluetooth™	Bluetooth 2.1 wireless, LED indicator												
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1												
Intel AMT	Intel Active Management Technology (iAMT)												
Audio support	High Definition (HD) Audio, Conexant CX20585 codec / stereo speakers, 1 watt / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack												
Security	Hardware Password Manager (HPM), Intel AntiTheft (AT), Power-on password, hard disk password, supervisor password, security keyhole												
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant												
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip												
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available												

See footnotes for important warranty information
US model announced November 3, 2009

Intel Centrino® 2 with vPro™ technology

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(SN1-6) March 2010

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print Blue- tooth	Whorse (W) Gbl (G) Avail date
2815-22U	SP9400	2.40	2GB	14.1" WXGA+		GMA 120G	5400	DVD±RW	Intel 5100 ²⁸	WWAN upg	None	Fing	Blue Express XP G Jun 09
2815-23U	SP9600	2.53	3GB	14.1" WXGA+	Cam	GMA 250G	5400	DVD±RW	Intel 5100	WWAN upg	None	Fing	Blue Express B32 G Jun 09
2815-24U	SP9600	2.53	4GB	14.1" WXGA+	Cam	GMA 128G	SSD	DVD±RW	Intel 5300 ²⁸	WWAN upg	None	Fing	Blue Express B32 G Jun 09
2815-25U	SP9600	2.53	2GB	14.1" WXGA+	Cam	GMA 80G	SSD	DVD±RW	Intel 5100	WWAN upg	None	Fing	Blue Express B32 G Jul 09
2815-2YU	SP9400	2.40	3GB	14.1" WXGA+	Cam	GMA 120G	5400	DVD±RW	Intel 5100	Verizon ¹⁶	None	Fing	Blue Express B32 Jun 09
2815-2ZU	SP9400	2.40	3GB	14.1" WXGA+	Cam	GMA 128G	SSD	DVD±RW	Intel 5100	AT&T ²³	None	Fing	Blue Express B32 Jun 09
2815-30U	SP9600	2.53	3GB	14.1" WXGA+	Cam	GMA 128G	SSD	DVD±RW	Intel 5300	Verizon	None	Fing	Blue Express B32 Jun 09
2815-3YU	SP9400	2.40	3GB	14.1" WXGA+	Cam	GMA 120G	5400	DVD±RW	Intel 5100	WWAN upg	None	Fing	Blue Express B32 Jun 09
2815-62U	SP9400	2.40	2GB	14.1" WXGA+		GMA 120G	5400	DVD±RW	Intel 5100	WWAN upg	None		Express B32 TAA Jun 09
2815-63U	SP9400	2.40	3GB	14.1" WXGA+		GMA 128G	SSD	DVD±RW	Intel 5100	WWAN upg	None		Express B32 Jun 09
2815-64U	SP9600	2.53	3GB	14.1" WXGA+		GMA 128G	SSD	DVD±RW	Intel 5100	WWAN upg	None		Express B32 TAA Jun 09
US Govt (TAA) ⁵ Processor	62U/63U/64U: US Government model (Trade Act Agreement-compliant) Intel® Core™ 2 Duo processor SP9400 or SP9600 with dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache											Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ♦ Vista models: Vista Premium logo Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)	
Memory	2GB, 3GB, or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available												
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access Some: 80GB⁸ or 128GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high Some: 120GB (5400 rpm) or 250GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 8mm high, Active Protection System™ All: removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive												
Widescreen display Camera	14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio Some: camera on top of screen, 2.0-megapixel, fixed focus												
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; Maximum external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)												
Keyboard TrackPoint® Touch pad	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch												
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³ Weight ² Case material	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241mm x 21.1–25.9mm 6-cell: starting at 3.9 lb (1.77kg) Display cover: Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); Base: Magnesium alloy												
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim 6-cell: up to 5.5 hr; 6-cell plus Ultrabay battery: up to 8.5 hr												
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)												
ExpressCard/34 Smart Card Read Multicard Reader Ports	One slot (ExpressCard/34) None None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)												
Mini PCI Express	Three Mini PCI Express slots Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Some: 11a/b/g/n wireless, Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3 Some: Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) Some: Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adptr, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon Some: Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T												
2G Turbo UWB Modem	None None None												
Bluetooth™ Ethernet Intel AMT Audio support	Some: Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20585 codec / stereo speakers, 1 watt / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack												
Security	Hardware Password Manager (HPM), Intel AntiTheft (AT), Power-on password, hard disk password, supervisor password, security keyhole												
Security chip Fingerprint reader	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Some: Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip												
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available												

See footnotes for important warranty information
US models announced June 23, 2009

♦ Intel Centrino® 2 with vPro™ technology

ThinkPad® T400s 2815 (GMA) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Inte- grated era graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Blue/ Card Fing slot	Preload	Avail date
2815-5XU	SP9400	2.40	2GB	14.1" WXGA+	MultiTouch Cam	GMA 120G	5400 DVD±RW	Intel 5100 ²⁸	WWAN	upg	No	Yes	Express Pro 32 Dec 09
2815-5YU	SP9400	2.40	4GB	14.1" WXGA+	MultiTouch Cam	GMA 128G	SSD DVD±RW	Intel 5100	WWAN	upg	No	Yes	Express Pro 64 Dec 09

• These models have an depot repair service 3-year limited warranty

Processor	Intel® Core™ 2 Duo processor SP9400 with dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache											Preloaded operating system²⁰ - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64 Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
Memory	2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available											
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> 128GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high <i>Some:</i> 120GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 8mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive											
Widescreen display	14.1" (358.1mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 300 nits, 16:10 aspect ratio, 300:1 contrast ratio, MultiTouch (touchscreen support two-finger touch)											
Camera	Camera on top of screen, 2.0-megapixel, fixed focus											
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)											
Keyboard TrackPoint® Touch pad	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³ Weight ² Case material	14.1W" (WxDxH): 13.3" x 9.5" x 0.95–1.14"; 337 x 241.5mm x 24.2mm–29.0mm <i>6-cell:</i> starting at 4.51 lb (2.05kg) <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy											
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell, supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 5.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 8.5 hr											
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)											
ExpressCard/34 Smart Card Read Multicard Reader Ports	One slot (ExpressCard/34) None None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)											
Mini PCI Express	Three Mini PCI Express slots											
Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None None None											
Bluetooth™ Ethernet Intel AMT Audio support	Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20585 codec / stereo speakers, 1 watt / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack											
Security	Hardware Password Manager (HPM), Intel AntiTheft (AT), Power-on password, hard disk password, supervisor password, security keyhole											
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant											
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip											
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available											

See footnotes for important warranty information
US models announced December 1, 2009

❖ Intel Centrino® 2 with vPro™ technology

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(SN1-7) December 2009

ThinkPad® T400s 2823 (GMA) - Onsite

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ³ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Mini PCIe Finger print reader	Blue- tooth	Card slot	Whorse (W) Pre-GMP (P) load Gbl (G)	Avail date
2823-22U	SP9400	2.40	2GB	14.1" WXGA+		GMA	120G 5400	DVD±RW	Intel 5100 ²⁸	WWAN upg	None	Fing	Blue	Express	XP	G P Jun 09
2823-23U	SP9600	2.53	3GB	14.1" WXGA+	Cam	GMA	250G 5400	DVD±RW	Intel 5100	WWAN upg	None	Fing	Blue	Express	B32	G P Jun 09
2823-24U	SP9600	2.53	4GB	14.1" WXGA+	Cam	GMA	128G SSD	DVD±RW	Intel 5300 ²⁸	WWAN upg	None	Fing	Blue	Express	B32	G P Jun 09
2823-25U	SP9600	2.53	2GB	14.1" WXGA+	Cam	GMA	80G SSD	DVD±RW	Intel 5100	WWAN upg	None	Fing	Blue	Express	B32	G P Jul 09

• These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

Positioning Processor	<i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ 2 Duo processor SP9400 or SP9600 with dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache											Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ◇ <i>Vista models:</i> Vista Premium logo				
Memory	2GB, 3GB, or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available											Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)				
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> 80GB⁸ or 128GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high <i>Some:</i> 120GB (5400 rpm) or 250GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 8mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive															
Widescreen display Camera	14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus															
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)															
Keyboard TrackPoint® Touch pad	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch															
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions															
Dimensions ³ Weight ² Case material	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241mm x 21.1–25.9mm <i>6-cell:</i> starting at 3.9 lb (1.77kg) <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy															
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 5.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 8.5 hr															
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)															
ExpressCard/34 Smart Card Read Multicard Reader Ports	One slot (ExpressCard/34) None None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)															
Mini PCI Express	Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3 Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)											Supports ThinkVantage® technologies				
2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	None None None Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20585 codec / stereo speakers, 1 watt / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack											65-watt (GMA graphics) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378				
Security Security chip Fingerprint reader	Hardware Password Manager (HPM), Intel AntiTheft (AT), Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip											ThinkPlus™. ²² 4-year LOR 9x5 NBD 45K6038 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available															

See footnotes for important warranty information
US models announced June 23, 2009

◇ Intel Centrino® 2 with vPro™ technology

ThinkPad® T400s 2815 (GMA) - Education

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Integrated graphics	Disk SATA GB ³ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue- tooth	Card slot	Preload	Avail date
2815-52U	SP9400	2.40	2GB	14.1" WXGA+	Cam	GMA	120G 5400	DVD±RW	Intel 5100 ²⁸	WWAN upg	None	Fing	Blue	Express	Bus 32	Jun 09
2815-53U	SP9400	2.40	2GB	14.1" WXGA+	Cam	GMA	128G SSD	DVD±RW	Intel 5100	WWAN upg	None	Fing	Blue	Express	Bus 32	Jun 09

• **These models have an depot repair service 3-year limited warranty**

Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ 2 Duo processor SP9400 with dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache											Preloaded operating system²⁰ - Genuine Windows® Vista® Business 32 ◇ Vista Premium logo			
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available											Preloaded applications¹⁴ (only some listed)			
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high <i>Some:</i> 120GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 8mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive											<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) 			
Widescreen display Camera	14.1" (358.1mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus														
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)														
Keyboard TrackPoint® Touch pad	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions														
ThinkLight™															
Dimensions ³ Weight ² Case material	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241mm x 21.1–25.9mm <i>6-cell:</i> starting at 3.9 lb (1.77kg) <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy														
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 5.5 hr; <i>6-cell plus Ultrabay battery:</i> up to 8.5 hr														
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)											Supports ThinkVantage® technologies			
ExpressCard/34 Smart Card Read Multicard Reader Ports	One slot (ExpressCard/34) None None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)											65-watt (GMA graphics) AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None None Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20585 codec / stereo speakers, 1 watt / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack														
Security Security chip Fingerprint reader	Hardware Password Manager (HPM), Intel AntiTheft (AT), Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip											ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available														

See footnotes for important warranty information
US models announced June 23, 2009

◆ Intel Centrino® 2 with vPro™ technology

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(SN1-3) December 2009

Memory

1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann 06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann 06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann 06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann 06/23/09
4GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3708	ann 06/23/09

Ultrabay Slim 9.5mm

Serial ATA Hard Drive Bay Adapter III	43N3412	ann 06/23/09
DVD Burner Ultrabay Slim Drive II SATA 1.5G/s	43N3229	ann 06/23/09
Ultrabay Slim Blu-ray Burner II (SATA)	43N3230	ann 06/23/09

Storage and removable storage

1.8" 250GB Disk SATA 3.0Gb/s (5400 rpm)	43N3418	ann 06/23/09
500GB Disk SATA 3.0Gb/s (5400 rpm) ⁵¹	43N3420	ann 06/23/09
500GB Disk SATA 1.5Gb/s (7200 rpm) ⁵¹	43N3423	ann 01/07/10

⁵¹ Can be used with *Serial ATA Hard Drive Bay Adapter III* 43N3412 in the Ultrabay

128GB SSD SATA 3.0Gb/s 1.8"(2.5" cover) ⁴⁹	43N3406	ann 08/26/08
256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover) ⁴⁹	43N3417	ann 06/23/09

⁴⁹ Can be used as the main HDD or with *Serial ATA Hard Drive Bay Adapter III* 43N3412 in Ultrabay via the removable adaptive cover provided with the drive

USB 2.0 Essential Memory Key 4GB	45J7904	ann 06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann 07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann 10/28/08
USB 2.0 Ultra Secure Memory Key 1GB	45J5915	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann 08/26/08

USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	ann 11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann 01/07/10
USB 2.0 Super Multi-Burner Drive	41N5565	ann 01/23/07
USB 2.0 Portable DVD Burner	43N3264	ann 01/05/10

Wireless WAN (Mini PCI Express)

Verizon® WWAN UNDP Broadband Mini PCIe	43R9151	ann 08/05/08
AT&T® WWAN HSPA Broadband Mini PCIe	43R9152	ann 08/26/08

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann 05/12/09
USB Port Replicator with Digital Video	45K1610	ann 07/28/09
ThinkPad Port Replicator Series 3	433610W	ann 06/23/09
ThinkPad Mini Dock Series 3	433710U	ann 06/23/09
ThinkPad Mini Dock Plus Series 3	433810U	ann 06/23/09
ThinkPad Mini Dock Plus Series 3 (Mobile WS)	433820U	ann 01/07/10

Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Ultralim Wireless Keyboard and Mouse ⁵²	57Y4700	ann 09/15/09
⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.		
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

Mouse

Lenovo Mini Optical Mouse - Black (USB)	55Y9308	ann 05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann 05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann 01/22/08

Security

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

Multimedia

USB 2.0 Lenovo Webcam	40Y8519	ann 08/29/06
ThinkPad In-Ear Headphones	57Y4488	ann 01/07/10

Batteries

ThinkPad Battery 59+ (6-cell)	51J0497	ann 06/23/09
ThinkPad Battery 42 (3-cell) ⁴³	57Y4536	ann 08/25/09
⁴³ Used in Ultrabay Slim bay.		
ThinkPad External Battery Charger ⁴⁴	40Y7625	ann 09/20/05
⁴⁴ Requires the <i>ThinkPad 90W AC Adapter</i> 40Y7659 or the adapter provided with the system.		

More information at www.lenovo.com/alldaycomputing

ThinkPad 65W AC Adapter ⁴⁵	40Y7696	ann 01/05/06
⁴⁵ Only compatible with the integrated graphics models.		

ThinkPad 90W AC Adapter	40Y7659	ann 09/20/05
90W Ultralim AC/DC Combo Adapter	41R4493	ann 09/22/09

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

• BlackBerry charge tip (L8a)	41R4478	ann 12/18/07
• iPod and iPhone Charge Tip (L10a)	41R4481	ann 12/18/07
• Generic Micro USB charge tip (L18)	41R4490	ann 01/06/09

More information at www.lenovopowertips.com

Carrying Cases

Up to 14.1" widescreen models:

ThinkPad Women's Microfiber Tote	22P8855	ann 06/24/08
ThinkPad Women's Leather Trim Tote	22P8856	
ThinkPad Women's Executive Leather Tote	22P8857	
Women's Executive Red Leather Tote	22P8858	

Up to 15.4" widescreen models:

ThinkPad 15W Case Sleeve	51J0477	ann 08/18/09
Lenovo Business Messenger Case	51J0475	ann 08/18/09
Lenovo Messenger Max	41U5253	ann 05/01/07
Lenovo Performance Backpack	41U5254	ann 05/01/07
Checkpoint Friendly Business Topload Case	51J0418	ann 05/05/09
ThinkPad Business Topload Case	43R2476	ann 05/13/08
ThinkPad Business Backpack	43R2482	ann 05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann 05/13/08
ThinkPad Executive Leather Case	43R2480	ann 05/13/08

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann 11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann 10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann 10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann 10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann 10/20/09
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann 09/17/08

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
Lenovo DisplayPort to VGA Monitor Cable	57Y4393	ann 08/04/09
DisplayPort to Single-link DVI-D Cable	45J7915	ann 08/05/08
ThinkVision USB Soundbar	40Y7616	ann 08/23/05
ThinkVision Soundbar	45K1263	ann 09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
Lenovo Easy Reach Monitor Stand	55Y9258	ann 09/22/09
Radial Arm	19K4464	ann 05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad T410s



Lenovo ThinkPad T410s



ThinkPad Battery 42 (3-cell)
57Y4536



ThinkPad Battery 59+ (6-cell)
51J0497



Lenovo ThinkPad T410s



Lenovo ThinkPad T410s

ThinkPad® T410s 2901 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Fing/Blue	Card slot	Intel vPro	Preload	Avail date
2901-A3U	i5-520M	2.40	2.93	2GB	14.1" WXGA+	2.0M	250G 5400	DVD±RW	11b/g/n	Yes	Express	XP Pro	Feb 10	
2901-A4U	i5-520M	2.40	2.93	2GB	14.1" WXGA+	2.0M	80G SSD	DVD±RW	Intel 6200 ²⁸	Yes	Express	vPro	XP Pro	Feb 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*

Positioning Processor	<i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • Fingerprint Software • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Presentation Director • ThinkVantage Productivity Center • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> 80GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high <i>Some:</i> 250GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive	
Widescreen display Camera	14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)	Supports ThinkVantage® technologies
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Dimensions ³ Weight ² Case material	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm <i>6-cell:</i> starting at 3.94 lb (1.79kg) <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy	
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 4.8 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.9 hr	
Chipset ExpressCard/34 Multicard Reader Ports	Mobile Intel QS57 Express Chipset One slot (ExpressCard/34) None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)	ThinkPlus™, ²² 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976
PCIe Mini Card 11b/g/n Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable None Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹² 1-year - depot repair service / service upgrades ²² available		

See footnotes for important warranty information
US models announced January 7, 2010

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(SN2-1) January 2010

ThinkPad® T410s 2904 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Finger print reader	Blue-tooth	Card slot	Intel vPro	Preload	Avail date
2904-CFU	i5-520M	2.40	2.93	2GB	14.1" WXGA+	2.0M	250G 5400	11b/g/n	WWAN upg	Finger		Exp	XP Pro	Feb 10	
2904-CGU	i5-520M	2.40	2.93	2GB	14.1" WXGA+	2.0M	128G SSD	11b/g/n	WWAN upg	Finger	Blue	Exp	XP Pro	Feb 10	
2904-FPU	i5-520M	2.40	2.93	4GB	14.1" WXGA+	2.0M	128G SSD	Intel 6200 ²⁸	Gobi 2000	AT&T ²³	Finger	Blue	Exp	vPro XP Pro	Feb 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have an depot repair service 3-year limited warranty

Positioning Processor	<i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache										Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32				
Memory	2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available										Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Presentation Director • ThinkVantage Productivity Center • Lenovo System Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)				
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high <i>Some:</i> 250GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive														
Widescreen display	14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus														
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)														
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys														
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass														
Touchpad	UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch														
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm														
Weight ²	6-cell: starting at 3.94 lb (1.79kg)														
Case material	<i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy														
Battery - type	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim										Supports ThinkVantage® technologies				
Battery - life ¹⁰	6-cell: up to 4.8 hr; 6-cell plus Ultrabay battery: up to 7.9 hr														
Chipset	Mobile Intel QS57 Express Chipset										65-watt AC adapter				
ExpressCard/34	One slot (ExpressCard/34)										ThinkPad Roll Cage (one-piece magnesium frame)				
Multicard Reader	None										Next Generation ThinkPad Roll Cage (in display cover)				
Ports	Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)										EPEAT™ Gold rating				
PCIe Mini Card	Two PCI Express Mini Card slots										ENERGY STAR® 5.0-compliant				
11b/g/n	<i>Some:</i> 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card										RoHS-compliant				
Intel 6200 ²⁸	<i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2										International Warranty Service ¹⁷				
WWAN upg	<i>Some:</i> Wireless WAN upgradable										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378				
Gobi™ 2000	<i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider														
Carrier	<i>Some:</i> AT&T®, contract required with service provider										ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021				
Modem	None										ThinkPlus 4-year LOR 9x5 NBD 45K6022				
Bluetooth™	<i>Some:</i> Bluetooth 2.1 wireless, LED indicator										ThinkPlus 5-year LOR 9x5 NBD 45K6024				
Ethernet	Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1										ThinkPlus 4-year P&L P/U Depot 45K6023				
Intel AMT	Intel Active Management Technology (iAMT)										ThinkPlus 5-year P&L P/U Depot 45K6025				
Audio support	High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Security	Power-on password, hard disk password, supervisor password, security keyhole														
Security chip	Trusted Platform Module, TCG 1.2-compliant														
Fingerprint reader	UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip														
Limited warranty ¹² 3-years/1-yr battery - depot repair service / service upgrades ²² available															

See footnotes for important warranty information

US model announced February 2, 2010; previous models on January 7, 2010

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ThinkPad® T410s 2904 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base (GHz)	turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Card slot	Intel vPro Preload	Avail date
2904-FZU	i5-520M	2.40	2.93	4GB	14.1" WXGA+	2.0M	128G SSD	Intel 6200 ²⁸	WWAN upg	Finger	Blue	Express	vPro Pro 64	Mar 10

- This small and medium business (SMB) model is part of the US TopSeller™ Program
- This model has an depot repair service 3-year limited warranty

Positioning Processor	<i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache										Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 64
Memory	4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available										Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high, removable, upgradable, supports 2nd disk, Shock mounted storage										
Widescreen display Camera	14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio, Camera on top of screen, 2.0-megapixel, fixed focus										
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)										
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions										
Dimensions ³ Weight ² Case material	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm <i>6-cell:</i> starting at 3.94 lb (1.79kg) <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy										Supports ThinkVantage® technologies
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 4.8 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.9 hr										65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Chipset ExpressCard/34 Multicard Reader Ports	Mobile Intel QS57 Express Chipset One slot (ExpressCard/34) None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)										
PCIe Mini Card Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable None Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack										ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹² 3-years/1-yr battery - depot repair service / service upgrades ²² available											

See footnotes for important warranty information
US model announced March 2, 2010

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ThinkPad® T410s 2912 (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Card slot	Preload	Avail date
2912-2AU	i5-520M	2.40	2.93	3GB	14.1" WXGA+		120G 5400	DVD±RW	11b/g/n	WWAN upg	Finger		Express	XP Pro	Feb 10
2912-2BU	i5-520M	2.40	2.93	3GB	14.1" WXGA+	2.0M	250G 5400	DVD±RW	11b/g/n	WWAN upg	Finger	Blue	Express	XP Pro	Feb 10

• *These models have an depot repair service 3-year limited warranty*

Positioning Processor	<i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache										Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32				
Memory	3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available										Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Presentation Director • ThinkVantage Productivity Center • Lenovo System Toolbox • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)				
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 120GB⁸ (5400 rpm) or 250GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 9.5mm high, removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive, Active Protection System™														
Widescreen display Camera	14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus														
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)														
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³ Weight ² Case material	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm <i>6-cell:</i> starting at 3.94 lb (1.79kg) <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy										Supports ThinkVantage® technologies				
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 4.8 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.9 hr										65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378				
Chipset ExpressCard/34 Multicard Reader Ports	Mobile Intel QS57 Express Chipset One slot (ExpressCard/34) None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)														
PCIe Mini Card 11b/g/n WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card Wireless WAN upgradable None <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack										ThinkPlus™, 22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025				
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available														

See footnotes for important warranty information
US models announced January 7, 2010

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(SN2-3) January 2010

Type-model	Processor	Max Base (GHz)	turbo (GHz)	Memory	Wide-screen display	Multi-Touch Screen era	Cam	Disk SATA GB ⁸ rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Blue/ Card slot	Fing Intel vPro	Pre-load	Whorse (W) Gbl (G) Avail date	
2912-A0U	i5-520M	2.40	2.93	2GB	14.1" WXGA+			120G 5400	11b/g/n	WWAN upg		Exp		Pro 32	Feb 10	
2912-21U	i5-520M	2.40	2.93	2GB	14.1" WXGA+		2.0M	128G SSD	WiMAX	Gobi 2000	Verizon ¹⁶	Yes	5-in-1 vPro	Pro 32	Feb 10	
2912-22U	i5-520M	2.40	2.93	2GB	14.1" WXGA+	Multi	2.0M	128G SSD	Intel 6200 ²⁸	WWAN upg		Yes	Exp	vPro	Pro 32 G	Feb 10
2912-23U	i5-520M	2.40	2.93	2GB	14.1" WXGA+			120G 5400	11b/g/n	WWAN upg		Yes	Exp	Pro 32	G	Feb 10
2912-25U	i5-520M	2.40	2.93	3GB	14.1" WXGA+			128G SSD	Intel 6200	WWAN upg		Yes	Exp	vPro	Pro 32 G	Feb 10
2912-2DU	i5-520M	2.40	2.93	2GB	14.1" WXGA+		2.0M	128G SSD	Intel 6200	Gobi 2000	Verizon	Yes	Exp	vPro	Pro 32	Feb 10
2912-3PU	i5-520M	2.40	2.93	2GB	14.1" WXGA+		2.0M	250G 5400	Intel 6200	WWAN upg		Yes	Exp	vPro	Pro 32	Mar 10

• These models have an depot repair service 3-year limited warranty

Positioning Processor	<i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system²⁰ - Genuine Windows [®] 7 Professional 32
Memory	2GB or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high <i>Some:</i> 120GB (5400 rpm) or 250GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive	
Widescreen display	14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio, <i>Some:</i> MultiTouch (touchscreen supports two-finger touch) <i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus	
Camera	<i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus	
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case material	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm <i>6-cell:</i> starting at 3.94 lb (1.79kg) <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy	
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 4.8 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.9 hr	
Chipset ExpressCard/34 Multicard Reader Ports	Mobile Intel QS57 Express Chipset <i>Some:</i> One slot (ExpressCard/34) <i>Some:</i> 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)	Supports ThinkVantage® technologies
PCIe Mini Card 11b/g/n Intel 6200 ²⁸ WiMAX WWAN upg Gobi™ 2000	Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 <i>Some:</i> 11a/b/g/n and WiMAX wireless, PCIe Half Mini Card, Intel Centrino Advanced-N + WiMAX 6250, 2x2 AGN + 1x2 WiMAX <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider	65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support	<i>Some:</i> Verizon®, contract required with service provider None <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025
Security Security chip Fingerprint reader	Hardware Password Manager (HPM), Intel AntiTheft (AT), Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹² 3-years/1-yr battery - depot repair service / service upgrades ²² available		

See footnotes for important warranty information

US model announced March 2, 2010; previous models on January 7, 2010

Type-model	Processor	Max Base turbo (GHz)	Memory	Wide-screen display	Multi-Touch Screen	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Blue/ Card Fing slot	Intel vPro	Whorse (W) Gbl (G) Avail date
2924-22U	i5-520M	2.40	2.93	2GB	14.1" WXGA+	Multi	2.0M	128G SSD	Intel 6200 ²⁸	WWAN upg	Yes	Exp vPro Pro 32 G P Feb 10
2924-23U	i5-520M	2.40	2.93	2GB	14.1" WXGA+			120G 5400	11b/g/n	WWAN upg	Yes	Exp Pro 32 G P Feb 10
2924-25U	i5-520M	2.40	2.93	3GB	14.1" WXGA+			128G SSD	Intel 6200	WWAN upg	Yes	Exp vPro Pro 32 G P Feb 10

- These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

Positioning Processor	<i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache										Preloaded operating system²⁰ - Genuine Windows [®] 7 Professional 32
Memory	2GB or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available										Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high <i>Some:</i> 120GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive										
Widescreen display	14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio, <i>Some:</i> MultiTouch (touchscreen supports two-finger touch) <i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus										
Camera	<i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus										
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)										
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions										
Dimensions ³ Weight ² Case material	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm <i>6-cell:</i> starting at 3.94 lb (1.79kg) <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy										
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 4.8 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.9 hr										
Chipset ExpressCard/34 Multicard Reader Ports	Mobile Intel QS57 Express Chipset One slot (ExpressCard/34) None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)										Supports ThinkVantage® technologies
PCIe Mini Card 11b/g/n Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable None Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack										65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip										ThinkPlus™.22 4-year LOR ²⁴ 9x5 NBD 45K6038
Limited warranty ¹²	3-years /1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time/ service upgrades ²² available										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US models announced January 7, 2010

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Type-model	Processor	Max Base turbo (GHz)	Processor (GHz)	Memory	Wide-screen display	Multi-Touch Screen	Cam-era	Disk SATA GB ⁸ rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Card slot	Intel vPro	Preload	Avail date
2912-52U	i5-520M	2.40	2.93	2GB	14.1" WXGA+		2.0M	250G 5400	Intel 6200 ²⁸	WWAN upg	Finger	None	Exp vPro	Pro 32	Feb 10	
2912-53U	i5-520M	2.40	2.93	3GB	14.1" WXGA+	<i>Multi</i>	2.0M	128G SSD	Intel 6200	WWAN upg	Finger	None	Exp vPro	Pro 32	Feb 10	

- **These models have an depot repair service 3-year limited warranty**
- Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.
- Microsoft® Office Ultimate 2007 Academic Edition: Only valid for sale to students, faculty and staff of accredited educational institutions in the United States.

Positioning Processor	<i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache										Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32				
Memory	2GB or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available										Preloaded applications¹⁴ (only some listed) • Education software - Microsoft® Office Ultimate 2007 Academic Edition (and CD) - Microsoft® Office OneNote® 2007 (and CD) - Adobe Digital School Collection - Instructor Resources (and DVD) - Learning Creative Suite 4 (DVD) - Photoshop Elements 7 (DVD) - Premiere Elements 7 (and DVD) - Acrobat 9 Professional (DVD) - Contribute CS4 (and DVD) - Soundbooth CS4 (and DVD) • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software • ThinkVantage Power Manager • ThinkVantage Toolbox • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)				
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high <i>Some:</i> 250GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive														
Widescreen display	14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio, <i>Some:</i> MultiTouch (touchscreen supports two-finger touch)														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus														
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)														
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³ Weight ² Case material	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm <i>6-cell:</i> starting at 3.94 lb (1.79kg) <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy										Supports ThinkVantage® technologies				
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 4.8 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.9 hr										65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378				
Chipset ExpressCard/34 Multicard Reader Ports	Mobile Intel QS57 Express Chipset One slot (ExpressCard/34) None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)														
PCIe Mini Card Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable None None Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack										ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025				
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available														

See footnotes for important warranty information
US models announced January 7, 2010

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ThinkPad® T410si 2901 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Wide-screen display	Camera	Disk SATA GB ⁸	rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Card slot	Intel vPro	Preload	Avail date
2901-AKU	i3-330M	2.13	2GB	14.1" WXGA+	2.0M	250G	5400	DVD±RW	Intel 1000	WWAN upg	None	Blue	Express	No	Pro 32	Mar 10

- *This small and medium business (SMB) model is part of the US TopSeller™ Program*

Positioning Processor	<i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i3 processor i3-330M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache	Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access 250GB⁸ (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 9.5mm high, removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive, Active Protection System™	
Widescreen display Camera	14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	Supports ThinkVantage® technologies
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Dimensions ³ Weight ² Case material	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm <i>6-cell:</i> starting at 3.94 lb (1.79kg) <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy	
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 4.8 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.9 hr	ThinkPlus™, 22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976
Chipset ExpressCard/34 Multicard Reader Ports	Mobile Intel QS57 Express Chipset One slot (ExpressCard/34) None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)	
PCIe Mini Card Intel 1000 WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 Wireless WAN upgradable None Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None	ThinkPlus 3-year P&L P/U Depot 45K5971 ThinkPlus 4-year P&L P/U Depot 45K5972 ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹² 1-year - depot repair service / service upgrades ²² available		

See footnotes for important warranty information
US model announced March 2, 2010

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(SN2i-2) March 2010

ThinkPad® T410si 2904 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Wide-screen display	Multi-Touch Screen	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Blue/Fing	Card slot	Preload	Avail date
2904-CUU	i3-330M	2.13	2GB	14.1" WXGA+	Multi	2.0M	250G 5400	Intel 1000	WWAN upg	Verizon ¹⁶	Yes	Express	Pro 32	Feb 10
2904-CVU	i3-330M	2.13	2GB	14.1" WXGA+		2.0M	250G 5400	Intel 1000	Gobi 2000		Yes	Express	Pro 32	Feb 10
2904-CWU	i3-330M	2.13	3GB	14.1" WXGA+		2.0M	80G SSD	Intel 1000	WWAN upg		Yes	Express	Pro 32	Feb 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have an depot repair service 3-year limited warranty

Positioning Processor	<i>Premiere performance and ultraportability; two spindles</i> Intel® Core™ i3 processor i3-330M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache										Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32			
Memory	2GB or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available										Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) 			
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable One modular bay for interchangeable devices (right side), 9.5mm high, bottom access <i>Some:</i> 80GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 5mm high <i>Some:</i> 250GB (5400 rpm) / SATA 3.0Gb/s, 1.8" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive													
Widescreen display	14.1" (358mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 300:1 contrast ratio, <i>Some:</i> MultiTouch (touchscreen supports two-finger touch)													
Camera	Camera on top of screen, 2.0-megapixel, fixed focus													
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)													
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³ Weight ² Case material	14.1W" (WxDxH): 13.3" x 9.5" x 0.83–1.02"; 337 x 241.5mm x 21.1–25.9mm <i>6-cell:</i> starting at 3.94 lb (1.79kg) <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy													
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 4.8 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.9 hr										Supports ThinkVantage® technologies			
Chipset ExpressCard/34 Multicard Reader Ports	Mobile Intel QS57 Express Chipset One slot (ExpressCard/34) None Two USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)										65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
PCIe Mini Card Intel 1000 WWAN upg Gobi™ 2000	Two PCI Express Mini Card slots 11b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider													
Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support	<i>Some:</i> Verizon®, contract required with service provider None Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack													
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip										ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades²² available													

See footnotes for important warranty information
US models announced February 2, 2010

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Memory

1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann 06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann 06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann 06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann 06/23/09
4GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3708	ann 06/23/09

Ultrabay Slim 9.5mm

Serial ATA Hard Drive Bay Adapter III	43N3412	ann 06/23/09
DVD Burner Ultrabay Slim Drive II SATA 1.5Gb/s	43N3229	ann 06/23/09
Ultrabay Slim Blu-ray Burner II (SATA)	43N3230	ann 06/23/09

Storage and removable storage

1.8" 250GB Disk SATA 3.0Gb/s (5400 rpm)	43N3418	ann 06/23/09
500GB Disk SATA 3.0Gb/s (5400 rpm) ⁵¹	43N3420	ann 06/23/09
500GB Disk SATA 1.5Gb/s (7200 rpm) ⁵¹	43N3423	ann 01/07/10

⁵¹ Can be used with *Serial ATA Hard Drive Bay Adapter III* 43N3412 in the Ultrabay

128GB SSD SATA 3.0Gb/s 1.8"(2.5" cover) ⁴⁹	43N3406	ann 08/26/08
256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover) ⁴⁹	43N3417	ann 06/23/09

⁴⁹ Can be used as the main HDD or with *Serial ATA Hard Drive Bay Adapter III* 43N3412 in Ultrabay via the removable adaptive cover provided with the drive

USB 2.0 Essential Memory Key 4GB	45J7904	ann 06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann 07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann 10/28/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann 08/26/08

USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	ann 11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann 01/07/10
USB 2.0 Super Multi-Burner Drive	41N5565	ann 01/23/07
USB 2.0 Portable DVD Burner	43N3264	ann 01/05/10

Wireless WAN (Mini PCI Express)

ThinkPad Gobi™ 2000 Broadband Option	78Y1399	ann 01/07/10
ThinkPad AT&T® Gobi 2000 Broadband Option	78Y1398	ann 01/07/10

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann 05/12/09
USB Port Replicator with Digital Video	45K1610	ann 07/28/09
ThinkPad Port Replicator Series 3	433610W	ann 06/23/09
ThinkPad Mini Dock Series 3	433710U	ann 06/23/09
ThinkPad Mini Dock Plus Series 3	433810U	ann 06/23/09
ThinkPad Mini Dock Plus Series 3 - Mobile WS	433820U	ann 01/07/10

Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Ultralim Wireless Keyboard and Mouse ⁵²	57Y4700	ann 09/15/09

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

ThinkPad USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

Mouse

Lenovo Mini Optical Mouse - Black (USB)	55Y9308	ann 05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann 05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann 01/22/08

Multimedia

USB 2.0 Lenovo Webcam	40Y8519	ann 08/29/06
ThinkPad In-Ear Headphones	57Y4488	ann 01/07/10

Security

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

Batteries

ThinkPad Battery 59+ (6-cell)	51J0497	ann 06/23/09
ThinkPad Battery 42 (3-cell) ⁴³	57Y4536	ann 08/25/09

⁴³ Used in Ultrabay Slim bay.

ThinkPad External Battery Charger	40Y7625	ann 09/20/05
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More information at www.lenovo.com/alldaycomputing

ThinkPad 65W AC Adapter ⁴⁵	40Y7696	ann 01/05/06
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⁴⁵ Only compatible with the integrated graphics models.

ThinkPad 90W AC Adapter	40Y7659	ann 09/20/05
90W Ultralim AC/DC Combo Adapter	41R4493	ann 09/22/09

More info at www.lenovo.com/support/poweradapters

<i>Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493</i>		
•BlackBerry charge tip (L8a)	41R4478	ann 12/18/07
•iPod and iPhone Charge Tip (L10a)	41R4481	ann 12/18/07

More information at www.lenovopowertips.com

Carrying Cases

Up to 14.1" widescreen models:

ThinkPad Women's Microfiber Tote	22P8855	ann 06/24/08
ThinkPad Women's Leather Trim Tote	22P8856	
ThinkPad Women's Executive Leather Tote	22P8857	
Women's Executive Red Leather Tote	22P8858	

Up to 15.4" widescreen models:

ThinkPad 15W Case Sleeve	51J0477	ann 08/18/09
Lenovo Business Messenger Case	51J0475	ann 08/18/09
Lenovo Messenger Max	41U5253	ann 05/01/07
Lenovo Performance Backpack	41U5254	ann 05/01/07
Checkpoint Friendly Business Topload Case	51J0418	ann 05/05/09
ThinkPad Business Topload Case	43R2476	ann 05/13/08
ThinkPad Business Backpack	43R2482	ann 05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann 05/13/08
ThinkPad Executive Leather Case	43R2480	ann 05/13/08

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann 11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann 10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann 10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann 10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann 10/20/09

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
Lenovo DisplayPort to VGA Monitor Cable	57Y4393	ann 08/04/09
DisplayPort to Single-link DVI-D Cable	45J7915	ann 08/05/08
ThinkVision USB Soundbar	40Y7616	ann 08/23/05
ThinkVision Soundbar	45K1263	ann 09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
Lenovo Easy Reach Monitor Stand	55Y9258	ann 09/22/09
Radial Arm	19K4464	ann 05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:

- www.lenovo.com/support/accessories
- www.lenovo.com/support/notebookaccessories
- www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad T500



ThinkPad Business Topload Case
43R2476



Lenovo ThinkPad T500 with
T500/R500/W500 Series 15W Privacy Filter
43R2474



Lenovo ThinkPad T500



Lenovo ThinkPad T500



ThinkPad Battery 42 (3-cell)
57Y4536

ThinkPad® T500 2242 (GMA) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Wide-screen display	CCFL or LED	Cam era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue-tooth	Pre-load	Avail date
2242-8QU	P8600	2.40	2GB	15.4" WXGA	LED		GMA	250G 5400	DVD±RW	Intel 5100 ²⁸	None	None	Fing	Blue	XP Pro	Oct 09
2242-8RU	P8600	2.40	2GB	15.4" WXGA	LED	Cam	GMA	320G 5400	DVD±RW	Intel 5100	None	None	Fing	Blue	XP Pro	Oct 09

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have an depot repair service 1-year limited warranty

Processor	Intel® Core™ 2 Duo processor P8600 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache										Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32				
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available														
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 250GB⁸ (5400 rpm) or 320GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™										Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • Fingerprint Software • Lenovo System Toolbox • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)				
Widescreen display	15.4" (391mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 400:1 contrast ratio														
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus														
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz														
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions										Supports ThinkVantage® technologies				
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W" (WxDxH):</i> 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm <i>6-cell:</i> starting at 5.9 lb (2.7kg) Black <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.3 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.8 hr; <i>9-cell:</i> up to 9.4 hr										65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378				
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54)										ThinkPlus™.22 1-year LOR ²⁴ 9x5 NBD 45K5968				
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	One slot (Type I, Type II), CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										ThinkPlus 2-year LOR 9x5 NBD 45K5969				
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None None None 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack										ThinkPlus 3-year LOR 9x5 NBD 45K5970				
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip										ThinkPlus 4-year LOR 9x5 NBD 45K5971				
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available										ThinkPlus 5-year LOR 9x5 NBD 45K5972				
											ThinkPlus 2-year P&L P/U Depot 45K5973				
											ThinkPlus 3-year P&L P/U Depot 45K5974				
											ThinkPlus 4-year P&L P/U Depot 45K5975				
											ThinkPlus 5-year P&L P/U Depot 45K5976				
											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				

See footnotes for important warranty information
US models announced October 22, 2009

✦ Intel Centrino® 2 processor technology

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(CR5-15) October 2009

ThinkPad® T500 2242 (GMA) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Wide-screen display	CCFL or LED	Cam era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue-tooth	Pre-load	Avail date
2242-8SU	P8600	2.40	2GB	15.4" WXGA	LED	Cam	GMA	320G 5400	DVD±RW	Intel 5100 ²⁸	None	None	Fing	Blue	Pro 32	Oct 09

• **This small and medium business (SMB) model is part of the US TopSeller™ Program**

Processor	Intel® Core™ 2 Duo processor P8600 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache											Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32			
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available											Preloaded applications¹⁴ (only some listed)			
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 320GB⁸ (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™											<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software • ThinkVantage Toolbox • Skype™ for Windows • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) 			
Widescreen display Camera	15.4" (391mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 400:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus											Supports ThinkVantage® technologies			
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz														
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions											65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W" (WxDxH):</i> 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm <i>6-cell:</i> starting at 5.9 lb (2.7kg) Black <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.3 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.8 hr; <i>9-cell:</i> up to 9.4 hr											ThinkPlus™.22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976			
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54)											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	One slot (Type I, Type II), CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)														
Mini PCI Express	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)											Limited warranty ¹² 1-year - depot repair service / service upgrades ²² available			
Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	None None None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack														
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip														

See footnotes for important warranty information
US model announced October 22, 2009

• Intel Centrino® 2 processor technology

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(CR5-16) October 2009

ThinkPad® T500 2243 (GMA) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue- tooth	Preload	Avail date	
2243-93U	P8700	2.53	2GB	15.4"	WXGA	LED	Cam	GMA	320G 7200	DVD±RW	Intel 5100 ²⁸	None	None	Finger	Blue	XP Pro	Oct 09
2243-95U	P8700	2.53	2GB	15.4"	WXGA	LED	Cam	GMA	80G SSD	DVD±RW	Intel 5100	None	None	Finger	Blue	XP Pro	Oct 09

- These small and medium business (SMB) models are part of the US TopSeller™ Program

Processor	Intel® Core™ 2 Duo processor P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache											Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32				
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available															
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel <i>Some:</i> 80GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 320GB⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive,											Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)				
Widescreen display Camera	15.4" (391mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 400:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus															
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz															
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions															
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W"</i> (WxDxH): 14.1" x 10" x 1.2-1.3"; 357.5mm x 255mm x 30-34mm <i>6-cell:</i> starting at 5.9 lb (2.7kg) Black <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.3 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.8 hr; <i>9-cell:</i> up to 9.4 hr															
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)											Supports ThinkVantage® technologies				
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)											65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378				
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack											ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025				
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available															

See footnotes for important warranty information
US models announced October 22, 2009

Intel Centrino® 2 processor technology

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(CR5-17) October 2009

ThinkPad® T500 2243 (GMA) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Wide-screen display	CCFL or LED	Camera	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Blue-tooth	Preload	Avail date
2243-94U	P8700	2.53	2GB	15.4" WXGA	LED	Cam	GMA	320G 7200	DVD±RW	❖ Intel 5100 ²⁸		None	Finger	Blue	Pro 32	Oct 09
2243-9MU	P8700	2.53	2GB	15.4" WXGA	LED	Cam	GMA	320G 7200	DVD±RW	❖ Intel 5100	Verizon ¹⁶	None	Finger	Blue	Pro 32	Nov 09
2243-9PU	P8700	2.53	2GB	15.4" WXGA	LED	Cam	GMA	128G SSD	DVD±RW	❖ Intel 5100		None	Finger	Blue	Pro 32	Nov 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Processor	Intel® Core™ 2 Duo processor P8700 with dual-core, Intel HD Boost, 1066MHz system bus, and 3MB L2 cache	Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 32
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications ¹⁴ (only some listed)
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, 9.5mm Ultrabay slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel <i>Some:</i> 128GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 320GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive	<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
Widescreen display Camera	15.4" (391mm) WXGA (1280x800) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 400:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus	Supports ThinkVantage® technologies
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz	65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions	ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	6-cell 15.4W" (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm 6-cell: starting at 5.9 lb (2.7kg) Black <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell, supports unique 2nd battery in Ultrabay Slim 6-cell: up to 6.3 hr; 6-cell plus Ultrabay battery: up to 7.8 hr; 9-cell: up to 9.4 hr	ThinkPlus 4-year LOR 9x5 NBD 45K6022
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit	ThinkPlus 5-year LOR 9x5 NBD 45K6024
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	ThinkPlus 4-year P&L P/U Depot 45K6023
Mini PCI Express Intel 5100 ²⁸ Verizon ¹⁶	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adptr, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon®	ThinkPlus 5-year P&L P/U Depot 45K6025
2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip	
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available	

See footnotes for important warranty information

❖ Intel Centrino® 2 processor technology

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US models announced November 3, 2009; previous model on October 22, 2009

(CR5-18) March 2010

ThinkPad® T500 2082 (Switchable) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery cells	Preload	Avail date
2082-BKU	P8700	2.53	3GB	15.4" WSXGA+	Cam	GMA, HD 3650	320G 7200	DVD±RW	Intel 5100 ²⁸		None	9	XP Pro	Oct 09
2082-BMU	P8700	2.53	3GB	15.4" WSXGA+	Cam	GMA, HD 3650	320G 7200	DVD±RW	Intel 5100	AT&T ²³	None	9	XP Pro	Oct 09
2082-BNU	T9600	2.80	4GB	15.4" WSXGA+	Cam	GMA, HD 3650	320G 7200	DVD±RW	Intel 5100		None	9	XP Pro	Oct 09

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have an EasyServ™¹⁹ depot repair service 3-year limited warranty

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor P8700 or T9600 with dual-core , Intel HD Boost, 1066MHz system bus; <i>P8700</i> : 3MB L2 cache; <i>T9600</i> : 6MB L2 cache										Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32			
Memory	3GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available										Preloaded applications¹⁴ (only some listed)			
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 320GB⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™										<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) 			
Widescreen display	15.4" (391mm) WSXGA+ (1680x1050) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio													
Camera	Camera on top of screen, 1.3-megapixel, fixed focus													
Switchable graphics	Switches between discrete and integrated graphics (Windows 7 only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility Radeon™ HD 3650 , PCI Express x16, 256MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution: 2048x1536@75Hz</i>													
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys													
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label													
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	<i>6-cell 15.4W"</i> (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm													
Weight ²	<i>9-cell:</i> starting at 6.2 lb (2.8kg)													
Case color	Black													
Case material	<i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic													
Battery - type	Lithium Ion 9-cell , supports unique 2nd battery in Ultrabay Slim													
Battery - life ¹⁰	<i>9-cell:</i> up to 9.4 hr; <i>9-cell plus Ultrabay battery:</i> up to 10.9 hr													
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)										Supports ThinkVantage® technologies			
ExpressCard/54	One slot (ExpressCard/34 or ExpressCard/54)										90-watt (ATI graphics) AC adapter			
PC Card	One slot (Type I, Type II), CardBus 32-bit										ThinkPad Roll Cage and Top Cover			
Smart Card read	None										Roll Cage (one-piece magnesium)			
Multicard reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)										Climate Savers® certified			
Ports	Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										EPEAT™ Silver rating			
Mini PCI Express	Three Mini PCI Express slots										ENERGY STAR® 5.0-compliant			
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)										RoHS-compliant			
WWAN upg	None										International Warranty Service ¹⁷			
AT&T ²³	<i>Some:</i> Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adapter, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T®										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
2G Turbo	None										ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD			
UWB	None										45K6021			
Modem	56K V.92 ⁶ modem										ThinkPlus 4-year LOR 9x5 NBD			
Bluetooth™	Bluetooth 2.1 wireless, LED indicator										45K6022			
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1										ThinkPlus 5-year LOR 9x5 NBD			
Intel AMT	None										45K6024			
Audio support	High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack										ThinkPlus 4-year P&L P/U Depot			
Security	Power-on password, hard disk password, supervisor password, security keyhole										45K6023			
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant										ThinkPlus 5-year P&L P/U Depot			
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip										45K6025			
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			

See footnotes for important warranty information
US models announced October 22, 2009

• Intel Centrino® 2 processor technology

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(CR5-14) March 2010

Type-model	Proc- essor GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ³ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery UWB or Turbo	Blue/Card Fing slot	Whorse (W) Gbl (G) Avail date
2089-2JU	P8400	2.26	1GB	15.4"	WXGA		GMA 80G 5400 Combo	Intel 5100 ²⁸	WWAN upg		6	Yes PC	B32 G Aug 08
2089-2KU	T9400	2.53	2GB	15.4"	WXGA	Cam	GMA 160G 5400 DVD±RW	Intel 5100	WWAN upg	2G Turbo	6	Yes PC	B32 WG Aug 08
2089-2LU	T9400	2.53	2GB	15.4"	WXGA		GMA 160G 5400 DVD±RW	Intel 5100	Verizon ¹⁶	2G Turbo	9	Yes PC	B32 W Aug 08
2089-2MU	T9400	2.53	2GB	15.4"	WXGA	Cam	GMA 160G 7200 DVD±RW	Intel 5100	WWAN upg		6	Yes PC	B32 W Aug 08
2089-3HU	T9400	2.53	2GB	15.4"	WXGA	Cam	GMA 160G 5400 DVD±RW	Intel 5100	WWAN upg		6	Yes PC	B32 G Aug 08
2089-3JU	T9400	2.53	2GB	15.4"	WXGA		GMA 160G 5400 DVD±RW	Intel 5100	AT&T ²³	2G Turbo	9	Yes PC	B32 W Aug 08
2089-4XU	T9400	2.53	2GB	15.4"	WXGA	LED Cam	GMA 160G 5400 DVD±RW	Intel 5100	WWAN upg		6	Yes PC	B32 WG Sep 08
2089-58U	T9400	2.53	2GB	15.4"	WXGA		GMA 160G 5400 DVD±RW	Intel 5100	WWAN upg		6	Yes PC	XP G Sep 08
2089-59U	P8400	2.26	1GB	15.4"	WXGA		GMA 80G 5400 Combo	Intel 5100	WWAN upg		6	Yes PC	XP Sep 08
2089-5WU	P8600	2.40	2GB	15.4"	WSXGA+		GMA 160G 5400 DVD±RW	Intel 5100	WWAN upg		6	Smart	B32 TAA Oct 08
2089-5ZU	P8600	2.40	2GB	15.4"	WXGA	LED	GMA 160G 5400 DVD±RW	Intel 5100	WWAN upg		6	Yes PC	B32 WG Dec 08
2089-7QU	P8700	2.53	2GB	15.4"	WXGA	LED	GMA 160G 5400 DVD±RW	Intel 5100	WWAN upg		6	Yes PC	B32 Jun 09
2089-82U	P8400	2.26	2GB	15.4"	WXGA	LED	GMA 160G 5400 DVD±RW	Intel 5100	WWAN upg		6	Yes PC	B32 Jul 09
2089-83U	P8700	2.53	3GB	15.4"	WXGA	LED Cam	GMA 250G 5400 DVD±RW	11n ²⁸	WWAN upg		6	Yes PC	B32 Jul 09
US Govt (TAA) ⁵ Processor	5WU: US Government model (Trade Act Agreement-compliant) Intel® Core™ 2 Duo processor P8400, P8600, P8700 or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; P8400/P8600/P8700: 3MB L2 cache; T9400: 6MB L2												
Memory	1GB, 2GB or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available												
SATA Combo SATA DVD±RW Ultrabay Slim SATA disk	<i>Some:</i> CD-RW/DVD-ROM, SATA 1.5Gb/s, 9.5mm Ultrabay Slim, removable (43N3213) <i>Some:</i> DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 80GB⁸ (5400 rpm), 160GB (5400 or 7200 rpm) or 250GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System TM												
Widescreen display	<i>Some:</i> 15.4" (391mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 15.4" (391mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 400:1 contrast ratio <i>Some:</i> 15.4" (391mm) WSXGA+ (1680x1050) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio												
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus												
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536 @75Hz (VGA, DisplayPort)												
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	6-cell 15.4W" (WxDxH): 14.1" x 10" x 1.2-1.3"; 357.5mm x 255mm x 30-34mm 6-cell: starting at 5.9 lb (2.7kg); 9-cell: starting at 6.2 lbs (2.8kg) Black Top: Super-Elastic PolyCarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell, supports unique 2nd battery in Ultrabay Slim 6-cell: up to 6.3 hr; 6-cell plus Ultrabay battery: up to 7.8 hr; 9-cell: up to 9.4 hr												
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)												
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	One slot (ExpressCard/34, ExpressCard/54) <i>Some:</i> One slot (Type I, Type II), CardBus 32-bit <i>Some:</i> Smart Card reader 7-in-1 reader (MMC, Memory Stick, Mem Stick PRO™, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)												
Mini PCI Express Intel 5100 ²⁸ 11n ²⁸ WWAN upg Verizon ¹⁶ AT&T ²³ 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11b/g/n wireless, Mini-PCIe Adapter II <i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adptr, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon <i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T <i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack												
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant <i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip												
Limited warranty ¹²	3-years/1-yr battery - EasyServ™¹⁹ depot repair service / service upgrades²² available												
											Preloaded operating system²⁰ - <i>Some:</i> Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - <i>Some:</i> Genuine Windows Vista Business 32 ◇ <i>Vista models:</i> Vista Premium logo		
											Preloaded applications¹⁴ (all OSes, only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (combo, DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (combo, DVD±RW)		
											Supports ThinkVantage® technologies		
											65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver rating (other models) ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378		
											ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		

See footnotes for important warranty information

✦ Intel Centrino® 2 with vPro™ technology

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Ⓜ US models announced July 7, 2009; previous models on Aug 5, Sep 23, October 7, December 2, 2008 or June 2, 2009

(CR5-3) March 2010

 US models withdrawn effective August 2009 or March 2010

Type-model	Proc- essor GHz	Mem- ory	Wide- screen display	CCFL or LED	Cam- era	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Blue/ Fing	Workhorse (W) Global (G) Avail date
✗ 2055-2BU T9400	2.53	2GB	15.4"	WSXGA+		GMA, 3650	80G 5400	Combo	✦ Intel 5100 ²⁸	WWAN upg	PC	6 Yes	B32 G Aug 08
2055-2CU T9400	2.53	2GB	15.4"	WSXGA+		GMA, 3650	160G 5400	DVD±RW	✦ Intel 5100	WWAN upg	PC	6 Yes	B32 W G Aug 08
2055-2EU T9400	2.53	2GB	15.4"	WSXGA+		GMA, 3650	160G 7200	DVD±RW	✦ Intel 5100	Verizon ¹⁶	2G PC	9 Yes	B32 W Aug 08
2055-3AU T9600	2.80	4GB	15.4"	WSXGA+	Cam	GMA, 3650	160G 7200	DVD±RW	✦ Intel 5100	WWAN upg	2G PC	9 Yes	B32 W G Aug 08
2055-45U T9400	2.53	2GB	15.4"	WSXGA+		GMA, 3650	160G 7200	DVD±RW	✦ Intel 5100	WWAN upg	PC	9 Yes	B32 G Aug 08
✗ 2055-2DU T9400	2.53	2GB	15.4"	WSXGA+	Cam	GMA, 3650	160G 7200	DVD±RW	✦ Intel 5100	WWAN upg	UWB PC	6 Yes	B32 W Sep 08
✗ 2055-2VU T9400	2.53	2GB	15.4"	WSXGA+	Cam	GMA, 3650	160G 7200	DVD±RW	✦ Intel 5300 ²⁸	WWAN upg	UWB Smart 9	9	B32 Sep 08
2055-5TU T9400	2.53	2GB	15.4"	WXGA	LED Cam	GMA, 3650	160G 7200	DVD±RW	✦ Intel 5300	WWAN upg	PC	9 Yes	B32 W G Sep 08
2055-5UU T9400	2.53	2GB	15.4"	WXGA	LED Cam	GMA, 3650	64G SSD	DVD±RW	✦ Intel 5300	WWAN upg	PC	9 Yes	B32 Sep 08
2055-63U T9400	2.53	2GB	15.4"	WSXGA+		GMA, 3650	160G 7200	DVD±RW	✦ Intel 5100	WWAN upg	PC	9 Yes	XP G Sep 08
✗ 2055-7GU T9400	2.53	2GB	15.4"	WSXGA+		GMA, 3650	160G 7200	DVD±RW	✦ Intel 5300	WWAN upg	Smart 9	9	B32 TAA Oct 08
2055-7LU P8600	2.40	2GB	15.4"	WSXGA+		GMA, 3650	160G 7200	DVD±RW	✦ Intel 5100	WWAN upg	PC	9 Yes	B32 W G Dec 08
2055-9KU P8700	2.53	3GB	15.4"	WXGA	LED Cam	GMA, 3650	80G SSD	DVD±RW	✦ Intel 5100	WWAN upg	PC	6 Yes	B32 Jun 09
2055-9LU P8700	2.53	3GB	15.4"	WXGA	LED	GMA, 3650	160G 7200	DVD±RW	✦ Intel 5100	WWAN upg	PC	6 Yes	B32 Jun 09
US Govt (TAA) ⁵ Processor	7GU: US Government model (Trade Act Agreement-compliant) Intel® Core™ 2 Duo processor P8600, P8700, T9400, or T9600 with dual-core, Intel HD Boost, 1066MHz system bus; P8600/P8700: 3MB L2 cache; T9400/T9600: 6MB L2												
Memory	2GB, 3GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available												
SATA Combo SATA DVD±RW Ultrabay Slim SATA disk	<i>Some:</i> CD-RW/DVD-ROM, SATA 1.5Gb/s, 9.5mm Ultrabay Slim, removable (43N3213) <i>Some:</i> DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel <i>Some:</i> 64GB ⁸ or 80GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 80GB (5400 rpm), 160GB (5400 or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, shock mounted storage												
Widescreen display	<i>Some:</i> 15.4" (391mm) WXGA (1280x800) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 400:1 contrast ratio <i>Some:</i> 15.4" (391mm) WSXGA+ (1680x1050) color, anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus												
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus												
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, and ATI™ Mobility Radeon™ HD 3650, PCI Express x16, 256MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); Maximum external resolution: 2048x1536 @75Hz (VGA, DisplayPort)												
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	6-cell 15.4W" (WxDxH): 14.1" x 10" x 1.2-1.3"; 357.5mm x 255mm x 30-34mm 6-cell: starting at 5.9 lb (2.7kg); 9-cell: starting at 6.2 lbs (2.8kg) Black Top: Super-Elastic PolyCarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell, supports unique 2nd battery in Ultrabay Slim 6-cell: up to 6.3 hr; 6-cell plus Ultrabay battery: up to 7.8 hr; 9-cell: up to 9.4 hr												
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) <i>Some:</i> One slot (Type I, Type II), CardBus 32-bit <i>Some:</i> Smart Card reader												
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	7-in-1 reader (MMC, Memory Stick, Mem Stick PRO™, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)												
Mini PCI Express	Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3 <i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adpdr, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon												
2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	<i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator <i>Some:</i> Wireless USB based on Ultra-Wideband (UWB), Half-Mini PCIe adapter 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack												
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant <i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports security chip												
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available												
											Preloaded operating system ²⁰ - <i>Some:</i> Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - <i>Some:</i> Genuine Windows Vista Business 32 ✦ <i>Vista models:</i> Vista Premium logo Preloaded applications ¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (combo, DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (combo, DVD±RW)		
											Supports ThinkVantage® technologies		
											90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver rating (other models) ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378		
											ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		

See footnotes for important warranty information

✦ Intel Centrino® 2 with vPro™ technology

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✦ US models announced June 2, 2009; previous models on Aug 5, Sep 23, October 7, or December 2, 2008

(CR5-4) March 2010

✗ US models withdrawn effective August 2009

ThinkPad® T500 2055 (Switchable) - July 2009

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo slot	Bat- tery Blue/ FingPreload	Avail date
2055-9RU	P8400	2.26	2GB	15.4"	WXGA	LED Cam	GMA, 3650	160G 7200	DVD±RW	❖Intel 5100 ²⁸	WWAN upg	None	PC 6	Yes B32 Jul 09
2055-9SU	P8700	2.53	2GB	15.4"	WXGA	LED Cam	GMA, 3650	250G FDE	DVD±RW	11n ²⁸	WWAN upg	None	PC 6	Yes B32 Jul 09
2055-9TU	T9400	2.53	2GB	15.4"	WSXGA+	Cam	GMA, 3650	250G FDE	DVD±RW	❖Intel 5100	WWAN upg	None	PC 6	Yes B32 Jul 09

Processor	Intel® Core™ 2 Duo processor P8400, P8700, or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; <i>P8400/P8700:</i> 3MB L2 cache; <i>T9400:</i> 6MB L2	Preloaded operating system²⁰ - Genuine Windows® Vista® Business 32 ⇨ Vista Premium logo Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 160GB⁸ (7200 rpm) or 250GB⁸ (7200 rpm) Full Disk Encryption [FDE] / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	
Widescreen display	<i>Some:</i> 15.4" (391mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 400:1 contrast ratio <i>Some:</i> 15.4" (391mm) WSXGA+ (1680x1050) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio	
Camera	Camera on top of screen, 1.3-megapixel, fixed focus	
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility Radeon™ HD 3650 , PCI Express x16, 256MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA, DisplayPort)	
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W" (WxDxH):</i> 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm <i>6-cell:</i> starting at 5.9 lb (2.7kg); <i>9-cell:</i> starting at 6.2 lbs (2.8kg) Black <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.3 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.8 hr; <i>9-cell:</i> up to 9.4 hr	
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)	
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick PRO™, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	
Mini PCI Express Intel 5100 ²⁸ 11n ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11b/g/n wireless, Mini-PCIe Adapter II Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports security chip	
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available	

See footnotes for important warranty information
US models announced July 7, 2009

❖ Intel Centrino® 2 with vPro™ technology

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(CR5-13) July 2009

ThinkPad® T500 2241 (GMA) - Onsite

Personal Systems Reference (PSREF)

Type-model	Proc- essor GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Blue- tooth	Whorse (W) GMP (P) Avail Gbl (G) date
2241-3WUP	P8400	2.26 1GB	15.4" WXGA			GMA 80G	5400 Combo		Intel 5100 ²⁸	WWAN upg		6 Blue Bus 32	GP Aug 08
2241-3XU	T9400	2.53 2GB	15.4" WXGA		Cam	GMA 160G	5400 DVD±RW		Intel 5100	WWAN upg	2G Turbo	6 Blue Bus 32	WGP Aug 08
2241-3YU	T9400	2.53 2GB	15.4" WXGA		Cam	GMA 160G	5400 DVD±RW		Intel 5100	WWAN upg		6 Blue Bus 32	GP Aug 08
2241-4XU	T9400	2.53 2GB	15.4" WXGA	LED	Cam	GMA 160G	5400 DVD±RW		Intel 5100	WWAN upg		6 Blue Bus 32	WGP Sep 08
2241-58U	T9400	2.53 2GB	15.4" WXGA			GMA 160G	5400 DVD±RW		Intel 5100	WWAN upg		6 Blue XP Pro	GP Sep 08
2241-5ZU	P8600	2.40 2GB	15.4" WXGA	LED		GMA 160G	5400 DVD±RW		Intel 5100	WWAN upg		6 Blue Bus 32	WGP Dec 08

• These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor P8400, P8600, or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; <i>P8400/P8600</i> : 3MB L2 cache; <i>T9400</i> : 6MB L2 cache	Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ◇ <i>Vista models</i> : Vista Premium logo
Memory	1GB or 2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics</i> : standard memory in both sockets; no sockets available; <i>Non-italics</i> : standard memory in one socket; one socket available	
SATA Combo SATA DVD±RW Ultrabay Slim SATA disk	<i>Some</i> : CD-RW/DVD-ROM, SATA 1.5Gb/s, 9.5mm Ultrabay Slim, removable (43N3213) <i>Some</i> : DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 80GB⁸ (5400 rpm), 160GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	Preloaded applications¹⁴ (all OSes, only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (combo, DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (combo, DVD±RW)
Widescreen display	<i>Some</i> : 15.4" (391mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some</i> : 15.4" (391mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 400:1 contrast ratio	
Camera	<i>Some</i> : camera on top of screen, 1.3-megapixel, fixed focus	
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution</i> : 2048x1536@75Hz	
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W" (WxDxH)</i> : 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm <i>6-cell</i> : starting at 5.9 lb (2.7kg) Black <i>Top</i> : Super-Elastic PolyCarbonate (SEPC); <i>Bottom</i> : Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell</i> : up to 6.3 hr; <i>6-cell plus Ultrabay battery</i> : up to 7.8 hr; <i>9-cell</i> : up to 9.4 hr	
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit	
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	7-in-1 reader (MMC, Memory Stick, Mem Stick PRO™, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	Supports ThinkVantage® technologies
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some</i> : Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack	65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip	ThinkPlus™.22 4-year LOR 9x5 NBD 45K6038
Limited warranty ¹²	3-years /1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

See footnotes for important warranty information

◆ Intel Centrino® 2 with vPro™ technology

Ⓜ US model announced December 2, 2008; previous models on August 5 or September 23, 2008

Ⓜ US model withdrawn effective March 2010

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(CR5-5) December 2008

ThinkPad® T500 2056 (Switchable) - Onsite

Personal Systems Reference (PSREF)

Type-model	Proc-essor	Mem-ory	Wide-screen display	CCFL or LED	Cam-era	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat-tery cells	Whorse (W) GMP (P) Avail date
⊗ 2056-4PU	T9400	2.53 2GB	15.4" WSXGA+			GMA, 3650 80G	5400 Combo	⊕ Intel 5100 ²⁸	WWAN upg			6 B32	GP Aug 08
2056-4QU	T9400	2.53 2GB	15.4" WSXGA+			GMA, 3650 160G	5400 DVD±RW	⊕ Intel 5100	WWAN upg			6 B32	WGP Aug 08
2056-4RU	T9400	2.53 2GB	15.4" WSXGA+			GMA, 3650 160G	7200 DVD±RW	⊕ Intel 5100	WWAN upg			9 B32	GP Aug 08
2056-4SU	T9600	2.80 4GB	15.4" WSXGA+		Cam	GMA, 3650 160G	7200 DVD±RW	⊕ Intel 5100	WWAN upg	2G Turbo		9 B32	WGP Aug 08
2056-5TU	T9400	2.53 2GB	15.4" WXGA	LED	Cam	GMA, 3650 160G	7200 DVD±RW	⊕ Intel 5300 ²⁸	WWAN upg			9 B32	WGP Sep 08
2056-63U	T9400	2.53 2GB	15.4" WSXGA+			GMA, 3650 160G	7200 DVD±RW	⊕ Intel 5100	WWAN upg			9 XP	GP Sep 08
⊗ 2056-7LU	P8600	2.40 2GB	15.4" WSXGA+			GMA, 3650 160G	7200 DVD±RW	⊕ Intel 5100	WWAN upg			9 B32	WGP Dec 08

• These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

Processor	Intel® Core™ 2 Duo processor P8600, T9400, or T9600 with dual-core, Intel HD Boost, 1066MHz system bus; P8600: 3MB L2 cache; T9400/T9600: 6MB L2 cache	Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ⊕ Vista models: Vista Premium logo Preloaded applications¹⁴ (all OSes, only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (combo, DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (combo, DVD±RW)
Memory	2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	
SATA Combo SATA DVD±RW Ultrabay Slim SATA disk	Some: CD-RW/DVD-ROM, SATA 1.5Gb/s, 9.5mm Ultrabay Slim, removable (43N3213) Some: DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 80GB ⁸ (5400 rpm), 160GB (5400 or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	
Widescreen display	Some: 15.4" (391mm) WXGA (1280x800) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 400:1 contrast ratio Some: 15.4" (391mm) WSXGA+ (1680x1050) color, anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio	
Camera	Some: camera on top of screen, 1.3-megapixel, fixed focus	
Switchable graphics	Dynamic switching between discrete and integrated graphics (user selectable), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, and ATI™ Mobility Radeon™ HD 3650, PCI Express x16, 256MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); Maximum external resolution: 2048x1536@75Hz	
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	6-cell 15.4W" (WxDxH): 14.1" x 10" x 1.2-1.3"; 357.5mm x 255mm x 30-34mm 6-cell: starting at 5.9 lb (2.7kg); 9-cell: starting at 6.2 lbs (2.8kg) Black Top: Super-Elastic PolyCarbonate (SEPC); Bottom: Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell, supports unique 2nd battery in Ultrabay Slim 6-cell: up to 6.3 hr; 6-cell plus Ultrabay battery: up to 7.8 hr; 9-cell: up to 9.4 hr	
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)	
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick PRO™, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	
Mini PCI Express Intel 5100 ²⁸ Intel 5300 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3 Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) Some: Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip	
Limited warranty ¹²	3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available	
	Supports ThinkVantage® technologies	
	90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378	
	ThinkPlus™.22 4-year LOR 9x5 NBD 45K6038 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty	

See footnotes for important warranty information

⊕ Intel Centrino® 2 with vPro™ technology

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⊗ US model announced December 2, 2008; previous models on August 5 or September 23, 2008

(CR5-6) December 2008

⊗ US model withdrawn effective August 2009

ThinkPad® T500 2089 (GMA) - Education

Personal Systems Reference (PSREF)

Type-model	Proc- essor GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery UWB or Turbo	Blue- tooth	Workhorse (W) Global (G) Avail date
2089-E1U	P8400	2.26 2GB	15.4" WXGA		Cam	GMA	160G 5400	DVD±RW	Intel 5100 ²⁸	WWAN upg	None	6 Blue	Bus 32 No Aug 08
2089-E2U	T9400	2.53 2GB	15.4" WXGA		Cam	GMA	250G 5400	DVD±RW	Intel 5100	WWAN upg	None	6 Blue	Bus 32 No Aug 08
2089-E3U	T9400	2.53 2GB	15.4" WXGA		Cam	GMA	160G 7200	DVD±RW	Intel 5100	WWAN upg	None	9 Blue	Bus 32 No Aug 08
2089-E4U	P8600	2.40 2GB	15.4" WXGA	LED	Cam	GMA	160G 7200	DVD±RW	Intel 5100	WWAN upg	None	6 Blue	Bus 32 No Dec 08
2089-E5U	P8700	2.53 2GB	15.4" WXGA	LED	Cam	GMA	160G 5400	DVD±RW	Intel 5100	WWAN upg	None	6 Blue	Bus 32 No Mar 09

• **These models have an depot repair service 3-year limited warranty**

These educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor P8400, P8600, P8700, or T9400 with dual-core, Intel HD Boost, 1066MHz system bus; <i>P8400/P8600/8700: 3MB L2 cache; T9400: 6MB L2 cache</i>	Preloaded operating system²⁰ - Genuine Windows® Vista® Business 32 ◇ Vista Premium logo
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 160GB⁸ (5400 or 7200 rpm), or 250GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	
Widescreen display	<i>Some:</i> 15.4" (391mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 15.4" (391mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 400:1 contrast ratio	
Camera	Camera on top of screen, 1.3-megapixel, fixed focus	
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution: 2048x1536 @75Hz</i>	
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W" (WxDxH):</i> 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm <i>6-cell:</i> starting at 5.9 lb (2.7kg); <i>9-cell:</i> starting at 6.2 lbs (2.8kg) Black <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.3 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.8 hr; <i>9-cell:</i> up to 9.4 hr	Supports ThinkVantage® technologies
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54)	65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver rating (other models) ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
ExpressCard/54 PC Card Smart Card read Multicard reader Ports	None 7-in-1 reader (MMC, Memory Stick, Mem Stick PRO™, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack	ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available	

See footnotes for important warranty information

◇ Intel Centrino® 2 with vPro™ technology

© Lenovo (CR5-7) April 2009

ES* US model announced March 24, 2009; previous models on August 5 or December 2, 2008

ThinkPad® T500 2055 (Switchable) - Education

Personal Systems Reference (PSREF)

Type-model	Processor	Mem-ory	Wide-screen display	Cam-era	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat-tery	Workhorse (W) Global (G) Avail date
2055-E1U	T9400	2.53 2GB	15.4" WSXGA+	Cam GMA, HD	3650 160G 7200	DVD±RW	❖Intel 5100 ²⁸	WWAN upg	None	9	Bus32	No Aug 08
2055-E2U	T9400	2.53 2GB	15.4" WSXGA+	Cam GMA, HD	3650 250G 5400	DVD±RW	❖Intel 5100	WWAN upg	None	9	Bus32	No Aug 08
2055-E3U	T9600	2.80 3GB	15.4" WSXGA+	Cam GMA, HD	3650 160G 7200	DVD±RW	❖Intel 5100	WWAN upg	None	9	Bus32	No Mar 09

• **These models have an depot repair service 3-year limited warranty**

Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor T9400 or T9600 with dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache	Preloaded operating system ²⁰ - Genuine Windows® Vista® Business 32 ❖ Vista Premium logo
Memory	2GB or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 160GB ⁸ (7200 rpm) or 250GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	
Widescreen display	15.4" (391mm) WSXGA+ (1680x1050) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio	
Camera	Camera on top of screen, 1.3-megapixel, fixed focus	
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility Radeon™ HD 3650 , PCI Express x16, 256MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution: 2048x1536@75Hz</i>	
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W" (WxDxH):</i> 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm <i>9-cell:</i> starting at 6.2 lb (2.8kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 9-cell , supports unique 2nd battery in Ultrabay Slim <i>9-cell:</i> up to 9.4 hr; <i>9-cell plus Ultrabay battery:</i> up to 10.9 hr	
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)	Supports ThinkVantage® technologies
ExpressCard slot PC Card Std slot Smart Card Reader Multicard Reader Ports	One ExpressCard/34 or ExpressCard/54 One Type I or Type II slot, CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Mini PCI Express	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)	ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025
Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available	

See footnotes for important warranty information

❖ Intel Centrino® 2 with vPro™ technology

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Ⓢ US model announced March 24, 2009; previous models on August 5, 2008

(CR-5) April 2009

ThinkPad® T500 2241 (GMA) - Education (Onsite)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery	Blue- tooth	Workhorse (W) Global (G) Avail date
2241-E1U	P8400	2.26	2GB	15.4" WXGA		Cam	GMA	160G 5400	DVD±RW	Intel 5100 ²⁸	WWAN upg	None	6	Blue	Bus 32 No Aug 08
2241-E2U	T9400	2.53	2GB	15.4" WXGA		Cam	GMA	250G 5400	DVD±RW	Intel 5100	WWAN upg	None	6	Blue	Bus 32 No Aug 08
2241-E3U	T9400	2.53	2GB	15.4" WXGA		Cam	GMA	160G 7200	DVD±RW	Intel 5100	WWAN upg	None	9	Blue	Bus 32 No Aug 08
2241-E4U	P8600	2.40	2GB	15.4" WXGA	LED	Cam	GMA	160G 7200	DVD±RW	Intel 5100	WWAN upg	None	6	Blue	Bus 32 No Dec 08
2241-E5U	P8700	2.53	2GB	15.4" WXGA	LED	Cam	GMA	160G 5400	DVD±RW	Intel 5100	WWAN upg	None	6	Blue	Bus 32 No Mar 09

• **These models have a limited onsite service²⁴ 3-year limited warranty**

These educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor P8400, P8600, P8700, or T9400 with dual-core , Intel HD Boost, 1066MHz system bus; <i>P8400/P8600/P8700</i> : 3MB L2 cache; <i>T9400</i> : 6MB L2 cache	Preloaded operating system²⁰ - Genuine Windows® Vista® Business 32 ⇨ Vista Premium logo Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 160GB⁸ (5400 or 7200 rpm) or 250GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	
Widescreen display	<i>Some:</i> 15.4" (391mm) WXGA (1280x800) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio <i>Some:</i> 15.4" (391mm) WXGA (1280x800) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 400:1 contrast ratio	
Camera	Camera on top of screen, 1.3-megapixel, fixed focus	
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution: 2048x1536@75Hz</i>	
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W"</i> (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm <i>6-cell:</i> starting at 5.9 lb (2.7kg); <i>9-cell:</i> starting at 6.2 lbs (2.8kg) Black <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Slim <i>6-cell:</i> up to 6.3 hr; <i>6-cell plus Ultrabay battery:</i> up to 7.8 hr; <i>9-cell:</i> up to 9.4 hr	
Chipset ExpressCard/54 PC Card Smart Card read Multicard reader Ports	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One slot (ExpressCard/34, ExpressCard/54) One slot (Type I, Type II), CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick PRO™, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, Displayport), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader Limited warranty ¹²	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip 3-years/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available	
		Supports ThinkVantage® technologies 65-watt (GMA graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™. ²² 4-year LOR 9x5 NBD 45K6038 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

See footnotes for important warranty information

✦ Intel Centrino® 2 with vPro™ technology

Ⓢ US model announced March 24, 2009; previous models on August 5 or December 2, 2008

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ThinkPad® T500 2056 (Switchable) - Education (Onsite)

Personal Systems Reference (PSREF)

Type-model	Proc-essor	GHz	Mem-ory	Wide-screen display	Cam-era	Switchable graphics	Disk SATA GB ³ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo cells	Bat-tery	Workhorse (W) Global (G) Avail date
2056-E1U	T9400	2.53	2GB	15.4" WSXGA+	Cam	GMA, HD 3650	160G 7200	DVD±RW	❖ Intel 5100 ²⁸	WWAN upg	None	9	No Aug 08
2056-E2U	T9400	2.53	2GB	15.4" WSXGA+	Cam	GMA, HD 3650	250G 5400	DVD±RW	❖ Intel 5100	WWAN upg	None	9	No Aug 08
2056-E3U	T9600	2.80	3GB	15.4" WSXGA+	Cam	GMA, HD 3650	160G 7200	DVD±RW	❖ Intel 5100	WWAN upg	None	9	No Mar 09

• **These models have a limited onsite service²⁴ 3-year limited warranty**

Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ 2 Duo processor T9400 or T9600 with dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache										Preloaded operating system²⁰ - Genuine Windows® Vista® Business 32 ❖ Vista Premium logo		
Memory	2GB or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available										Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)		
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 160GB⁸ (7200 rpm) or 250GB (5400 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™												
Widescreen display	15.4" (391mm) WSXGA+ (1680x1050) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus												
Camera	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility Radeon™ HD 3650 , PCI Express x16, 256MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution: 2048x1536@75Hz</i>												
Switchable graphics	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions												
Keyboard	6-cell 15.4W" (WxDxH): 14.1" x 10" x 1.2-1.3"; 357.5mm x 255mm x 30-34mm 9-cell: starting at 6.2 lb (2.8kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Slim <i>9-cell:</i> up to 9.4 hr; <i>9-cell plus Ultrabay battery:</i> up to 10.9 hr												
TrackPoint®	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O) One ExpressCard/34 or ExpressCard/54 One Type I or Type II slot, CardBus 32-bit												
Touch pad	One ExpressCard/34 or ExpressCard/54 One Type I or Type II slot, CardBus 32-bit												
ThinkLight™	None												
Dimensions ³	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										Supports ThinkVantage® technologies		
Weight ²	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth™ 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip										90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378		
Case material	None												
Battery - type	None												
Battery - life ¹⁰	None												
Chipset	None												
ExpressCard slot	None												
PC Card Std slot	None												
Smart Card Read	None												
Multicard Reader	None												
Ports	None												
Mini PCI Express	None												
Intel 5100 ²⁸	None												
WWAN upg	None												
2G Turbo	None												
UWB	None												
Modem	None												
Bluetooth™	None												
Ethernet	None												
Intel AMT	None												
Audio support	None												
Security	None												
Security chip	None												
Fingerprint reader	None												
Limited warranty ¹²	3-years /1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available										ThinkPlus™.22 4-year LOR 9x5 NBD 45K6038 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		

See footnotes for important warranty information

❖ Intel Centrino® 2 with vPro™ technology

Ⓜ US model announced March 24, 2009; previous models on August 5, 2008

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(CR5-10) April 2009



Lenovo® ThinkPad W500



ThinkPad Advanced Mini Dock
250410U



Lenovo ThinkPad W500



Lenovo ThinkPad W500



Lenovo ThinkPad W500



Lenovo ThinkPad W500

ThinkPad® W500 4062 (Switchable) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo cells	Bat- tery Preload	Avail date
4062-5DU	T9600	2.80	3GB	15.4" WSXGA+	GMA, V5700	320G 7200	DVD±RW	Intel 5100 ²⁸	WWAN upg	None	9	Oct 09
4062-5EU	T9900	3.06	3GB	15.4" WUXGA	GMA, V5700	320G 7200	DVD±RW	Intel 5100	WWAN upg	None	9	Oct 09

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- Power-packed engineering with Open GL graphics and ISV certifications

Positioning Processor	<i>Mobile workstation; two spindles</i> Intel® Core™ 2 Duo processor T9600 or T9900 with dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache										Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
Memory	3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available;										
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 320GB⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™										
Widescreen display	<i>Some:</i> 15.4" (391mm) WSXGA+ (1680x1050) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.4" (391mm) WUXGA (1920x1200) color , anti-glare, CCFL backlight, 175 nits, 16:10 aspect ratio, 500:1 contrast ratio										
Camera	Camera on top of screen, 1.3-megapixel, fixed focus										
Switchable graphics	Switches between discrete and integrated graphics (Windows 7 only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility FireGL™ V5700 , PCI Express x16, 512MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution: 2048x1536@75Hz</i>										
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions										
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>6-cell 15.4W" (WxDxH):</i> 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm <i>9-cell:</i> starting at 6.2 lb (2.8kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 9-cell , supports unique 2nd battery in Ultrabay Slim <i>9-cell:</i> up to 9.4 hr; <i>9-cell plus Ultrabay battery:</i> up to 10.9 hr										
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)										
ExpressCard/54 PC Card Smart Card Reader Multicard Reader Ports	One slot (ExpressCard/34, ExpressCard/54) One (Type I, Type II), CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 None High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack										
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip										
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available										
										90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty	

See footnotes for important warranty information
US models announced October 22, 2009

• Intel Centrino® 2 processor technology

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(CR5W-4) October 2009

ThinkPad® W500 4062 (Switchable) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo cells	Bat- tery Preload	Avail date
4062-5FU	T9900	3.06	4GB	15.4" WUXGA	GMA, V5700	320G 7200	DVD±RW	Intel 5100 ²⁸	AT&T ²³	None	9	Pro 64 Oct 09
4062-5GU	T9900	3.06	4GB	15.4" WUXGA	GMA, V5700	250G FDE	DVD±RW	Intel 5100	WWAN upg	None	9	Pro 64 Oct 09

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- Power-packed engineering with Open GL graphics and ISV certifications

Positioning	<i>Mobile workstation; two spindles</i>									
Processor	Intel® Core™ 2 Duo processor T9900 with dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache									
Memory	4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available;									
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 320GB⁸ (7200 rpm) or 250GB (7200 rpm) Full Disk Encryption [FDE] / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, Shock Mounted Hard Drive, Active Protection System™									
Widescreen display	15.4" (391mm) WUXGA (1920x1200) color , anti-glare, CCFL backlight, 175 nits, 16:10 aspect ratio, 500:1 contrast ratio									
Camera	Camera on top of screen, 1.3-megapixel, fixed focus									
Switchable graphics	Switches between discrete and integrated graphics (Windows 7 only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility FireGL™ V5700 , PCI Express x16, 512MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution: 2048x1536 @ 75Hz</i>									
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys									
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass									
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label									
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions									
Dimensions ³	<i>6-cell 15.4W"</i> (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm									
Weight ²	<i>9-cell:</i> starting at 6.2 lb (2.8kg)									
Case material	<i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic									
Battery - type	Lithium Ion 9-cell , supports unique 2nd battery in Ultrabay Slim									
Battery - life ¹⁰	<i>9-cell:</i> up to 9.4 hr; <i>9-cell plus Ultrabay battery:</i> up to 10.9 hr									
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)									
ExpressCard/54 PC Card	One slot (ExpressCard/34, ExpressCard/54) One (Type I, Type II), CardBus 32-bit									
Smart Card Read	None									
Multicard Reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)									
Ports	Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)									
Mini PCI Express	Three Mini PCI Express slots									
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)									
WWAN upg	<i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)									
AT&T ²³	<i>Some:</i> Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adapter, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T									
2G Turbo	None									
UWB	None									
Modem	56K V.92 ⁶ modem									
Bluetooth™	Bluetooth 2.1 wireless, LED indicator									
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1									
Intel AMT	None									
Audio support	High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack									
Security	Power-on password, hard disk password, supervisor password, security keyhole									
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant									
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip									
Limited warranty ¹²	3-years/1-yr battery - EasyServ™¹⁹ depot repair service / service upgrades²² available									
	Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64									
	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)									
	Supports ThinkVantage® technologies									
	90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378									
	ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 41C9176									
	ThinkPlus 4-year LOR 9x5 NBD 41C9177									
	ThinkPlus 5-year LOR 9x5 NBD 41C9179									
	ThinkPlus 4-year P&L P/U Depot 41C9178									
	ThinkPlus 5-year P&L P/U Depot 41C9180									
	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty									

See footnotes for important warranty information
US models announced October 22, 2009

✦ Intel Centrino® 2 processor technology

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(CR5W-5) March 2010

ThinkPad® W500 4061 (Switchable)

Personal Systems Reference (PSREF)

Type-model	Proc-essor	GHz	Memory	Wide-screen display	Cam-era	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat-tery cells	Whorse (W) Gbl (G)	Avail date
4061-2HU	T9400	2.53	4GB	15.4" WSXGA+		GMA, V5700	160G 7200	DVD±RW	Intel 5300 ²⁸	WWAN upg		9	Bus 32	Aug 08
✗ 4061-2KU	T9600	2.80	4GB	15.4" WUXGA	Cam	GMA, V5700	200G FDE	DVD±RW	Intel 5300	WWAN upg		9	Bus 32	Aug 08
4061-2ZU	T9400	2.53	4GB	15.4" WSXGA+		GMA, V5700	160G 7200	DVD±RW	Intel 5100 ²⁸	WWAN upg		9	Bus 32	W G Sep 08
✗ 4061-32U	T9600	2.80	4GB	15.4" WUXGA	Cam	GMA, V5700	160G 7200	DVD±RW	Intel 5300	WWAN upg	2GB Turbo	9	Bus 64	W Sep 08
4061-38U	T9600	2.80	4GB	15.4" WUXGA	Cam	GMA, V5700	160G 7200	DVD±RW	Intel 5300	WWAN upg		9	XP Pro	Sep 08
4061-3FU	T9400	2.53	2GB	15.4" WUXGA		GMA, V5700	160G 7200	DVD±RW	Intel 5300	WWAN upg	2GB Turbo	6	Bus 32	G Sep 08
✉ 4061-4PU	T9600	2.80	3GB	15.4" WUXGA	Cam	GMA, V5700	80G SSD	DVD±RW	Intel 5100	WWAN upg		9	Bus 32	Jun 09

- Power-packed engineering with Open GL graphics and ISV certifications

Positioning	<i>Mobile workstation; two spindles</i>										Preloaded operating system²⁰			
Processor	Intel® Core™ 2 Duo processor T9400 or T9600 with dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache										- <i>Some:</i> Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business			
Memory	2GB, 3GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available										- <i>Some:</i> Genuine Windows Vista Business 32			
SATA DVD±RW	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214)										- <i>Some:</i> Genuine Windows Vista Business 64			
Ultrabay Slim	One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel										✧ <i>Vista models:</i> Vista Premium logo			
SATA disk	<i>Some:</i> 80GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 160GB (7200 rpm) or 200GB (7200 rpm) Full Disk Encryption [FDE] / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports second disk, Shock Mounted Hard Drive										Preloaded applications¹⁴ (all OSes; only some listed)			
Widescreen display	<i>Some:</i> 15.4" (391mm) WSXGA+ (1680x1050) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio; <i>Some:</i> 15.4" (391mm) WUXGA (1920x1200) color , anti-glare, CCFL backlight, 175 nits, 16:10 aspect ratio, 500:1 contrast ratio										<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) 			
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus										Supports ThinkVantage® technologies			
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45, and ATI™ Mobility FireGL™ V5700 , PCI Express x16, 512MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz										90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys										ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 41C9176			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										ThinkPlus 4-year LOR 9x5 NBD 41C9177			
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label										ThinkPlus 5-year LOR 9x5 NBD 41C9179			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										ThinkPlus 4-year P&L P/U Depot 41C9178			
Dimensions ³	<i>6-cell 15.4W"</i> (WxDxH): 14.1" x 10" x 1.2–1.3"; 357.5mm x 255mm x 30–34mm										ThinkPlus 5-year P&L P/U Depot 41C9180			
Weight ²	<i>9-cell:</i> starting at 6.2 lb (2.8kg)										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Case material	<i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic													
Battery - type	Lithium Ion 6-cell or 9-cell , supports unique 2nd battery in Ultrabay Slim													
Battery - life ¹⁰	<i>9-cell:</i> up to 9.4 hr; <i>9-cell plus Ultrabay battery:</i> up to 10.9 hr													
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)													
ExpressCard slot	One ExpressCard/34 or ExpressCard/54													
PC Card Std slot	One Type I or Type II slot, CardBus 32-bit													
Smart Card Read	None													
Multicard Reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)													
Ports	Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)													
Mini PCI Express	Three Mini PCI Express slots													
Intel 5100 ²⁸	<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)													
Intel 5300 ²⁸	<i>Some:</i> 11a/b/g/n wireless, Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3													
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)													
2G Turbo	<i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator													
UWB	None													
Modem	56K V92 ⁶ modem													
Bluetooth™	Bluetooth 2.1 wireless, LED indicator													
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1													
Intel AMT	Intel Active Management Technology (iAMT)													
Audio support	High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack													
Security	Power-on password, hard disk password, supervisor password, security keyhole													
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant													
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip													
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available													

See footnotes for important warranty information

✦ Intel Centrino® 2 with vPro™ technology

✉ US model announced June 2, 2009; previous models on August 5 or September 23, 2008

✗ US models withdrawn effective August 2009 or February 2010

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(CR5W-2) June 2009

ThinkPad® W500 4063 (Switchable) - Onsite

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Switchable graphics	Disk SATA GB ⁸ rpm	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery cells	Whorse (W) GMP(P) Avail date
4063-33U	T9400	2.53	4GB	15.4" WSXGA+		GMA, V5700	160G 7200 DVD±RW	❖ Intel 5100 ²⁸	WWAN upg			9	Bus 32 WGP Sep 08
❖ 4063-34U	T9600	2.80	4GB	15.4" WUXGA	Cam	GMA, V5700	160G 7200 DVD±RW	❖ Intel 5300 ²⁸	WWAN upg	2GB Turbo		9	Bus 64 W Sep 08
4063-3FU	T9400	2.53	2GB	15.4" WUXGA		GMA, V5700	160G 7200 DVD±RW	❖ Intel 5300	WWAN upg	2GB Turbo		6	Bus 32 GP Sep 08

- Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty
- Power-packed engineering with Open GL graphics and ISV certifications

Positioning	<i>Mobile workstation; two spindles</i>										
Processor	Intel® Core™ 2 Duo processor T9400 or T9600 with dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache										
Memory	2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available										
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner, SATA 1.5Gb/s, Ultrabay Slim, removable (43N3214) One modular bay for interchangeable devices (right side), 9.5mm high bay, flat bezel 160GB ⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 2nd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™										
Widescreen display	<i>Some:</i> 15.4" (391mm) WSXGA+ (1680x1050) color, anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio; <i>Some:</i> 15.4" (391mm) WUXGA (1920x1200) color, anti-glare, CCFL backlight, 175 nits, 16:10 aspect ratio, 500:1 contrast ratio										
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus										
Switchable graphics	Switches between discrete and integrated graphics (Vista only), Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45, and ATI™ Mobility FireGL™ V5700, PCI Express x16, 512MB memory, digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz										
Keyboard TrackPoint® Touch pad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label Illuminates the keyboard to improve visibility in low-light conditions										
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	6-cell 15.4W" (WxDxH): 14.1" x 10" x 1.2-1.3"; 357.5mm x 255mm x 30-34mm 9-cell: starting at 6.2 lb (2.8kg) <i>Top:</i> Super-Elastic PolyCarbonate (SEPC); <i>Bottom:</i> Carbon-Fiber Reinforced Plastic Lithium Ion 6-cell or 9-cell, supports unique 2nd battery in Ultrabay Slim 9-cell: up to 9.4 hr; 9-cell plus Ultrabay battery: up to 10.9 hr										
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus (WPCN385 Super I/O)										
ExpressCard slot PC Card Std slot Smart Card Read Multicard Reader Ports	One ExpressCard/34 or ExpressCard/54 One Type I or Type II slot, CardBus 32-bit None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Three USB 2.0, external monitor ¹¹ (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										
Mini PCI Express	Three Mini PCI Express slots										
Intel 5100 ²⁸ Intel 5300 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11a/b/g/n wireless, Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3 Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack										
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip										
Limited warranty ¹²	3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available										
	Preloaded operating system ²⁰ - <i>Some:</i> Genuine Windows® Vista® Business 32 - <i>Some:</i> Genuine Windows Vista Business 64 ❖ Vista Premium logo Preloaded applications ¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)										
	Supports ThinkVantage® technologies										
	90-watt (ATI graphics) AC adapter ThinkPad Roll Cage and Top Cover Roll Cage (one-piece magnesium) Climate Savers® certified EPEAT™ Silver rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378										
	ThinkPlus™.22 4-year LOR 9x5 NBD 12X5630 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty										

See footnotes for important warranty information
US models announced September 23, 2008
❖ US model withdrawn effective February 2010

❖ Intel Centrino® 2 with vPro™ technology

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(CR5W-3) November 2008

Memory

1GB PC3-8500 DDR3 SODIMM	43R1987	ann	08/05/08
1GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0551	ann	03/17/09
2GB PC3-8500 DDR3 SODIMM	43R1988	ann	08/05/08
2GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0552	ann	03/17/09
4GB PC3-8500 DDR3 SODIMM	51J0493	ann	03/03/09
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann	06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann	06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann	06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann	06/23/09
4GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3708	ann	06/23/09

Ultrabay Slim 9.5mm

Serial ATA Hard Drive Bay Adapter III	43N3412	ann	06/23/09
DVD-ROM Ultrabay Slim SATA 1.5Gb/s	43N3212	ann	08/05/08
CD-RW/DVD-ROM Ultrabay Slim SATA	43N3213	ann	08/05/08
DVD Burner Ultrabay Slim SATA 1.5Gb/s	43N3214	ann	08/05/08

Storage and removable storage

160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	41N5692	ann	03/20/07
160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	41N5737	ann	10/16/07
250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43R8152	ann	01/15/08
250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3410	ann	01/20/09
320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3403	ann	08/05/08
320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3411	ann	01/20/09
500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3420	ann	06/23/09
500GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3423	ann	01/07/10

⁴¹ Can be used as the main HDD or with *Serial ATA Hard Drive Bay Adapter III 43N3412* in the Ultrabay

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	ann	08/26/08
256GB FDE SSD SATA 3Gb/s 1.8" (2.5" cover)	43N3417	ann	06/23/09

USB 2.0 Essential Memory Key 4GB	45J7904	ann	06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann	07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann	10/28/08
USB 2.0 Ultra Secure Memory Key 1GB	45J5915	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann	08/26/08

USB 2.0 Portable 320GB Hard Disk	45K1689	ann	03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	ann	11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann	01/07/10
USB 2.0 Super Multi-Burner Drive	41N5565	ann	01/23/07
USB 2.0 Portable DVD Burner	43N3264	ann	01/05/10

Wireless WAN (Mini PCI Express)

Only WWAN upgradable models:

Verizon® WWAN UNDP Broadband Mini PCle	43R9151	ann	08/05/08
AT&T® WWAN HSPA Broadband Mini PCle	43R9152	ann	08/26/08

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann	05/12/09
USB Port Replicator with Digital Video	45K1610	ann	07/28/09
ThinkPad Essential Port Replicator	250510W	ann	09/20/05
ThinkPad Advanced Mini Dock	250410U	ann	09/20/05

Keyboard

TrackPoint Cap Collection	73P2698	ann	12/16/03
USB Numeric Keypad	33L3225	ann	05/01/00
Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
Ultralim Wireless Keyboard and Mouse ⁵²	57Y4700	ann	09/15/09
⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.			
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann	08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann	02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann	03/24/09

Mouse

Lenovo Mini Optical Mouse - Black (USB)	55Y9308	ann	05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann	05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann	01/22/08

Multimedia

USB 2.0 Lenovo Webcam	40Y8519	ann	08/29/06
ThinkPad In-Ear Headphones	57Y4488	ann	01/07/10

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
T500/R500/W500 Series 15W Privacy Filter	43R2474	ann	08/05/08
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06
PC Card Gemplus Smart Card Reader	41N3004	ann	12/13/05
ExpressCard Gemplus Smart Card Reader	41N3043	ann	06/27/06

Batteries

ThinkPad Battery 41+ (6-cell)	40Y6799	ann	01/05/06
ThinkPad Battery 41++ (9-cell)	40Y6797	ann	09/20/05
ThinkPad Battery 42 (3-cell) ⁴³	57Y4536	ann	08/25/09
⁴³ Used in Ultrabay Slim bay.			
ThinkPad External Battery Charger ⁴⁴	40Y7625	ann	09/20/05
⁴⁴ Requires the <i>ThinkPad 90W AC Adapter 40Y7659</i> or the adapter provided with the system.			

More information at www.lenovo.com/alldaycomputing

ThinkPad 65W AC Adapter ⁴⁵	40Y7696	ann	01/05/06
⁴⁵ Only compatible with the integrated graphics models.			
ThinkPad 90W AC Adapter	40Y7659	ann	09/20/05
90W Ultralim AC/DC Combo Adapter	41R4493	ann	09/22/09

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

•Palm device charge tip (L7)	41R4315	ann	12/18/07
•BlackBerry charge tip (L8a)	41R4478	ann	12/18/07
•iPod and iPhone Charge Tip (L10a)	41R4481	ann	12/18/07
•Generic Micro USB charge tip (L18)	41R4490	ann	01/06/09

More information at www.lenovopowertips.com

Carrying Cases

Up to 15.4" widescreen models:

ThinkPad 15W Case Sleeve	51J0477	ann	08/18/09
Lenovo Business Messenger Case	51J0475	ann	08/18/09
Lenovo Messenger Max	41U5253	ann	05/01/07
Lenovo Performance Backpack	41U5254	ann	05/01/07
Checkpoint Friendly Business Topload Case	51J0418	ann	05/05/09
ThinkPad Business Topload Case	43R2476	ann	05/13/08
ThinkPad Business Backpack	43R2482	ann	05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann	05/13/08
ThinkPad Executive Leather Case	43R2480	ann	05/13/08

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann	10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann	11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann	10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann	10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann	10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann	10/20/09
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann	09/17/08

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann	05/12/09
Lenovo DisplayPort to VGA Monitor Cable	57Y4393	ann	08/04/09
DisplayPort to Single-link DVI-D Cable	45J7915	ann	08/05/08
ThinkVision USB Soundbar	40Y7616	ann	08/23/05
ThinkVision Soundbar	45K1263	ann	09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
Lenovo Easy Reach Monitor Stand	55Y9258	ann	09/22/09
Radial Arm	19K4464	ann	05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

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

More infoFor more information on ThinkPad accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

More infoOther accessories at www.lenovo.com/accessories
Accessories Guide pdf at www.lenovo.com/accessoriesguide



Lenovo® ThinkPad T510



Lenovo ThinkPad T510



ThinkPad Mini Dock Plus Series 3
433810U



ThinkPad Battery 27++ (9-cell, slice)
57Y4545



Lenovo ThinkPad T510



Lenovo ThinkPad T510

ThinkPad® T510 4313 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Avail date
4313-28U	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	250G 5400	DVD±RW	11b/g/n	None	None	None	6	Pro 32	Jan 10

• **This small and medium business (SMB) model is part of the US TopSeller™ Program**

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Adobe® Reader® • Adobe Flash® Player • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 250GB⁸ (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	
Widescreen display Camera	15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)	Supports ThinkVantage® technologies
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	15.6W" (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm <i>6-cell:</i> starting at 5.66 lb (2.57kg); <i>9-cell:</i> starting at 6.01 lb (2.72kg) <i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 6.2 hr; <i>9-cell:</i> up to 10.4 hr; <i>9-cell plus Slice battery:</i> up to 20.8 hr	
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	ThinkPlus™, ²² 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976
PCIe Mini Card 11b/g/n WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card None 56K V.92 ⁶ modem None Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹² 1-year - depot repair service / service upgrades ²² available		

See footnotes for important warranty information
US model announced January 7, 2010

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(KN1-1) January 2010

ThinkPad® T510 4314 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base (GHz)	turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Finger print reader	Bat-Blue tooth	tery Intel vPro	Preload	Avail date
4314-2LU	i5-540M	2.53	3.06	3GB	15.6" HD	2.0M	320G 7200	Intel 6200 ²⁸	Gobi 2000	AT&T ²³	Finger	Blue	6 vPro	XP Pro	Jan 10
4314-2KU	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	320G 7200	Intel 1000	WWAN upg			Blue	6 vPro	XP Pro	Jan 10
4314-7NU	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	320G 7200	Intel 6200	WWAN upg		Finger	Blue	6 vPro	XP Pro	Mar 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have an depot repair service 3-year limited warranty

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M or i5-540M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache										Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32				
Memory	2GB or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available										Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Presentation Director • ThinkVantage Productivity Center • Lenovo System Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)				
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 320GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™														
Widescreen display	15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus														
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)														
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm <i>6-cell:</i> starting at 5.66 lb (2.57kg); <i>9-cell:</i> starting at 6.01 lb (2.72kg) <i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 6.2 hr; <i>9-cell:</i> up to 10.4 hr; <i>9-cell plus Slice battery:</i> up to 20.8 hr														
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										Supports ThinkVantage® technologies				
PCIe Mini Card Intel 1000 Intel 6200 ²⁸ WWAN upg Gobi™ 2000	Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6200, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider										65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378				
Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support	<i>Some:</i> AT&T®, contract required with service provider 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack										ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025				
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Limited warranty ¹²	3-years/1-yr - battery depot repair service / service upgrades²² available														

See footnotes for important warranty information

US model announced March 2, 2010; previous models on January 7, 2010

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ThinkPad® T510 4314 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base (GHz)	turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB ⁸	rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Intel vPro	Preload	Avail date
4314-36U	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	320G	7200	DVD±RW	WiMAX	WWAN upg	Finger	Blue	vPro	Pro 32	Jan 10
4314-2JU	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	250G	5400	DVD±RW	11b/g/n	WWAN upg		Blue		Pro 32	Jan 10

- **These small and medium business (SMB) models are part of the US TopSeller™ Program**
- **These models have an depot repair service 3-year limited warranty**

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache											Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32				
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available											Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) 				
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 250GB⁸ (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™															
Widescreen display Camera	15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus															
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)															
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions															
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm <i>6-cell:</i> starting at 5.66 lb (2.57kg); <i>9-cell:</i> starting at 6.01 lb (2.72kg) <i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 6.2 hr; <i>9-cell:</i> up to 10.4 hr; <i>9-cell plus Slice battery:</i> up to 20.8 hr											Supports ThinkVantage® technologies				
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)											65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378				
PCIe Mini Card 11b/g/n WiMAX WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card <i>Some:</i> 11a/b/g/n and WiMAX wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N + WiMAX 6250, 2x2 AGN + 1x2 WiMAX Wireless WAN upgradable 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack											ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025				
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Limited warranty ¹²	3-years/1-yr - battery depot repair service / service upgrades²² available															

See footnotes for important warranty information
US models announced January 7, 2010

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ThinkPad® T510 4313 (Discrete) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Avail date
4313-29U	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	320G 7200	DVD±RW	11b/g/n	None	None	Blue	9	Pro 32	Feb 10

• **This small and medium business (SMB) model is part of the US TopSeller™ Program**

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Adobe® Reader® • Skype™ for Windows • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 320GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	Supports ThinkVantage® technologies
Widescreen display Camera	15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Discrete graphics	NVIDIA® Quadro® NVS3100M , PCI Express® x16, 512MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)	ThinkPlus™, ²² 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	15.6W" (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm <i>6-cell:</i> starting at 5.66 lb (2.57kg); <i>9-cell:</i> starting at 6.01 lb (2.72kg) <i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic Lithium Ion 9-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 4.7 hr; <i>9-cell:</i> up to 7.8 hr; <i>9-cell plus Slice battery:</i> up to 15.6 hr	
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	
PCIe Mini Card 11b/g/n WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None	
Limited warranty ¹² 1-year - depot repair service / service upgrades ²² available		

See footnotes for important warranty information
US model announced January 7, 2010

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ThinkPad® T510 4314 (Discrete) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Finger print reader	Blue-tooth	Intel vPro	Preload	Avail date
4314-2NU	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	320G 7200	Intel 6200 ²⁸	Gobi 2000	Verizon ¹⁶	Finger	Blue	vPro	XP Pro	Feb 10
4314-7PU	i5-520M	2.40	2.93	2GB	15.6" HD+	2.0M	320G 7200	Intel 6200	WWAN upg			Blue	vPro	XP Pro	Mar 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have an depot repair service 3-year limited warranty

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32 Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Presentation Director • ThinkVantage Productivity Center • Lenovo System Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 320GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	
Widescreen display	<i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus	
Discrete graphics	NVIDIA® Quadro® NVS3100M , PCI Express® x16, 512MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)	
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm <i>6-cell:</i> starting at 5.66 lb (2.57kg); <i>9-cell:</i> starting at 6.01 lb (2.72kg) <i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic Lithium Ion 9-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 4.7 hr; <i>9-cell:</i> up to 7.8 hr; <i>9-cell plus Slice battery:</i> up to 15.6 hr	
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	
PCIe Mini Card Intel 6200 ²⁸ WWAN upg Gobi™ 2000 Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider <i>Some:</i> Verizon®, contract required with service provider 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	
Limited warranty ¹²	3-years/1-yr - battery depot repair service / service upgrades ²² available	

See footnotes for important warranty information

Ⓜ US model announced March 2, 2010; previous model on January 7, 2010

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ThinkPad® T510 4314 (Discrete) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB ³ rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Bat-tery Intel vPro	Preload	Avail date
4314-2MU	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	250G 5400	DVD±RW	Intel 1000	WWAN upg	9	Pro 32	Feb 10
4314-2PU	i5-540M	2.53	3.06	4GB	15.6" HD+	2.0M	500G 7200	DVD±RW	Intel 6200 ²⁸	WWAN upg	9	Pro 32	Feb 10
4314-7QU	i5-520M	2.40	2.93	4GB	15.6" HD+	2.0M	320G 7200	DVD±RW	Intel 6200	WWAN upg	9	Pro 64	Mar 10
4314-7RU	i5-540M	2.53	3.06	4GB	15.6" HD+	2.0M	128G SSD	DVD±RW	Intel 6200	WWAN upg	9	Pro 64	Mar 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- These models have an depot repair service 3-year limited warranty

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M or i5-540M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system²⁰ - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64
Memory	2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 250GB (5400 rpm), 320GB (7200 rpm), or 500GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive	
Widescreen display	<i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus	
Discrete graphics	NVIDIA® Quadro® NVS3100M , PCI Express® x16, 512MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	15.6W" (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm <i>6-cell:</i> starting at 5.66 lb (2.57kg); <i>9-cell:</i> starting at 6.01 lb (2.72kg) <i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic Lithium Ion 9-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 4.7 hr; <i>9-cell:</i> up to 7.8 hr; <i>9-cell plus Slice battery:</i> up to 15.6 hr	Supports ThinkVantage® technologies
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
PCIe Mini Card Intel 1000 Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹² 3-years/1-yr - battery depot repair service / service upgrades ²² available		

See footnotes for important warranty information

US models announced March 2, 2010; previous models on January 7, 2010

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Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory (MHz)	Wide-screen display	Camera	Disk SATA GB ³ rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Blue/ Intel Fing vPro	Pre-load	Whorse (W) Gbl (G) GMP (P)	Avail date
4349-3JU	i5-520M	2.40	2.93	2GBx1 1066	15.6" HD	2.0M	250G 5400	Intel 6200 ²⁸	Gobi 2000	AT&T ²³	Yes	vPro	Pro 32	Jan 10
4349-3KU	i5-520M	2.40	2.93	2GBx1 1066	15.6" HD+	2.0M	320G 7200	Intel 6200	Gobi 2000	Verizon ¹⁶	Yes	vPro	Pro 32	Jan 10
4349-2LU	i5-520M	2.40	2.93	2GBx1 1066	15.6" HD		320G 5400	11b/g/n	WWAN upg				Pro 32	Jan 10
4349-2NU	i5-520M	2.40	2.93	2GBx1 1066	15.6" HD+	2.0M	320G 7200	Intel 6200	Gobi 2000	AT&T	Yes	vPro	Pro 32	Feb 10
4349-2PU	i7-620M	2.66	3.33	4GBx1 1333	15.6" HD+	2.0M	500G 7200	Intel 6200	WWAN upg		Yes	vPro	Pro 32	Jan 10
4349-2MU	i5-520M	2.40	2.93	2GBx1 1066	15.6" HD	2.0M	500G 7200	11b/g/n	WWAN upg		Yes		Pro 32	W G Jan 10
4349-3AU	i5-520M	2.40	2.93	2+1GB 1066	15.6" HD	2.0M	320G 5400	Intel 6200	WWAN upg		Yes	vPro	Pro 32	W G Jan 10
4349-4BU	i5-520M	2.40	2.93	2+1GB 1066	15.6" HD	2.0M	80G SSD	Intel 6200	WWAN upg		Yes	vPro	Pro 32	G Feb 10
4349-4VU	i5-520M	2.40	2.93	2GBx2 1066	15.6" HD	2.0M	320G 5400	Intel 6200	WWAN upg			vPro	Pro 64	G Mar 10

• These models have an depot repair service 3-year limited warranty

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core or Intel Core i7 processor i7-620M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; <i>i5-520M: 3MB cache; i7-620M: 4MB cache</i>	Preloaded operating system²⁰ - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64
Memory	2GB, 3GB, or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz or PC3-10600 1333MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW Ultrabay Enhancd SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some: 80GB® Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high</i> <i>Some: 250GB (5400 rpm), 320GB (5400 or 7200 rpm), or 500GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™</i> <i>All: removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive</i>	
Widescreen display	<i>Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio</i> <i>Some: 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio</i>	
Camera	<i>Some: camera on top of screen, 2.0-megapixel, fixed focus</i>	
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)</i>	
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>15.6W" (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm</i> <i>6-cell: starting at 5.66 lb (2.57kg); 9-cell: starting at 6.01 lb (2.72kg)</i> <i>Display cover: Glass-fiber reinforced plastic; Base: Carbon-fiber reinforced plastic</i> Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell: up to 6.2 hr; 9-cell: up to 10.4 hr; 9-cell plus Slice battery: up to 20.8 hr</i>	
Chipset ExpressCard/34 Smart Card reader Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	Supports ThinkVantage® technologies
PCIe Mini Card 11b/g/n Intel 6200 ²⁸ WWAN upg Gobi™ 2000	Two PCI Express Mini Card slots <i>Some: 11b/g/n wireless⁴, ThinkPad 11b/g/n, PCIe Half Mini Card</i> <i>Some: 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2</i> <i>Some: Wireless WAN upgradable</i> <i>Some: Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider</i>	65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support	<i>Some: AT&T® or Verizon®, contract required with service provider</i> 56K V.92 ⁶ modem <i>Some: Bluetooth 2.1 wireless, LED indicator</i> Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some: UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip</i>	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹² 3-years/1-yr - battery depot repair service / service upgrades ²² available		

See footnotes for important warranty information

US model announced March 2, 2010; previous models on January 7, 2010

ThinkPad® T510 4349 (Discrete) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base (GHz)	turbo (GHz)	Memory (MHz)	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Bat-Blue/ Fing	tery Intel vPro	Whorse (W) Gbl (G) Preload GMP (P)	Avail date
4349-2QU	i5-520M	2.40	2.93	2GBx1 1066	15.6" HD		500G 7200	11b/g/n	WWAN upg	6	Pro 32		Feb 10
4349-3HU	i5-540M	2.53	3.06	2+1GB 1066	15.6" HD	2.0M	128G SSD	Intel 6200 ²⁸	WWAN upg	Yes 6	vPro Pro 32	W G	Feb 10
4349-2RU	i7-620M	2.66	3.33	2GBx1 1066	15.6" HD+	2.0M	320G 7200	Intel 6200	WWAN upg	Yes 9	vPro Pro 32	W G	Feb 10
4349-3BU	i5-520M	2.40	2.93	2+1GB 1066	15.6" HD	2.0M	320G 7200	Intel 6200	WWAN upg	Yes 6	vPro Pro 32	W G	Feb 10
4349-4WU	i5-540M	2.53	3.06	2GBx2 1066	15.6" HD+	2.0M	320G 7200	Intel 6200	WWAN upg	Yes 9	vPro Pro 64	G	Mar 10

• These models have an depot repair service 3-year limited warranty

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M or i5-540M with dual-core or Intel Core i7 processor i7-620M with dual-core DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; <i>i5-520M/i5-540M: 3MB cache; i7-620M: 4MB cache</i>	Preloaded operating system²⁰ - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64
Memory	2GB, 3GB, or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 320GB (7200 rpm) or 500GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive	
Widescreen display	<i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio	
Camera	<i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus	
Discrete graphics	NVIDIA® Quadro® NVS3100M , PCI Express® x16, 512MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)	
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm <i>6-cell:</i> starting at 5.66 lb (2.57kg); <i>9-cell:</i> starting at 6.01 lb (2.72kg) <i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic Lithium Ion 6-cell or 9-cell , supports optional Slice battery (57Y4545) as 2nd battery <i>6-cell:</i> up to 4.7 hr; <i>9-cell:</i> up to 7.8 hr; <i>9-cell plus Slice battery:</i> up to 15.6 hr	Supports ThinkVantage® technologies
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
PCIe Mini Card 11b/g/n Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹² 3-years/1-yr - battery depot repair service / service upgrades ²² available		

See footnotes for important warranty information

US model announced March 2, 2010; previous models on January 7, 2010

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Type-model	Processor	Max Base (GHz)	turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB ⁸	rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Blue/ Intel Fing vPro	Preload	Whorse (W) Gbl (G) GMP (P)	Avail date	
4384-2MU	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	500G	7200	DVD±RW	11b/g/n	WWAN upg	Yes	Pro 32	W G P	Jan 10	
4384-3AU	i5-520M	2.40	2.93	3GB	15.6" HD	2.0M	320G	5400	DVD±RW	Intel 6200 ²⁸	WWAN upg	Yes	vPro	Pro 32	W G P	Jan 10
4384-4BU	i5-520M	2.40	2.93	3GB	15.6" HD	2.0M	80G	SSD	DVD±RW	Intel 6200	WWAN upg	Yes	vPro	Pro 32	G P	Feb 10

• **These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty**

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32
Memory	2GB or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> 80GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 320GB (5400 rpm) or 500GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports 2nd disk, Shock Mounted Hard Drive	
Widescreen display Camera	15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@75Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)	
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	15.6W" (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm <i>6-cell:</i> starting at 5.66 lb (2.57kg); <i>9-cell:</i> starting at 6.01 lb (2.72kg) <i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 6.2 hr; <i>9-cell:</i> up to 10.4 hr; <i>9-cell plus Slice battery:</i> up to 20.8 hr	
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	Supports ThinkVantage® technologies
PCIe Mini Card 11b/g/n Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	ThinkPlus™. ²² 4-year LOR ²⁴ 9x5 NBD 45K6038
Limited warranty ¹²	3-years /1-year - battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US models announced January 7, 2010

ThinkPad® T510 4384 (Discrete) - Onsite (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base (GHz)	turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB ⁸	rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Bat-Blue/ Fing	tery Intel vPro	Whorse (W) Gbl (G) GMP (P)	Avail date
4384-2RU	i7-620M	2.66	3.33	2GB	15.6" HD+	2.0M	320G	7200	DVD±RW	Intel 6200 ²⁸	WWAN upg	Yes	9 vPro	Pro 32	W G P Feb 10
4384-3BU	i5-520M	2.40	2.93	3GB	15.6" HD	2.0M	320G	7200	DVD±RW	Intel 6200	WWAN upg	Yes	6 vPro	Pro 32	W G P Feb 10

- **These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty**

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core or Intel Core i7 processor i7-620M with dual-core DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; <i>i5-520M: 3MB cache; i7-620M: 4MB cache</i>	Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32 Preloaded applications¹⁴ (only some listed)
Memory	2GB or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 320GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	
Widescreen display	<i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus	
Discrete graphics	NVIDIA® Quadro® NVS3100M , PCI Express® x16, 512MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)	
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm <i>6-cell:</i> starting at 5.66 lb (2.57kg); <i>9-cell:</i> starting at 6.01 lb (2.72kg) <i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic Lithium Ion 6-cell or 9-cell , supports optional Slice battery (57Y4545) as 2nd battery <i>6-cell:</i> up to 4.7 hr; <i>9-cell:</i> up to 7.8 hr; <i>9-cell plus Slice battery:</i> up to 15.6 hr	
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	Supports ThinkVantage® technologies
PCIe Mini Card Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	ThinkPlus™.22 4-year LOR ²⁴ 9x5 NBD 45K6038
Limited warranty ¹²	3-years /1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US models announced January 7, 2010

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(KN1-10) January 2010

ThinkPad® T510 4349 (Education) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Finger print reader	Blue-tooth	Intel vPro	Preload	Avail date
4349-E2U	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	250G 5400	11b/g/n				Blue		Pro 32	Jan 10
4349-E3U	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	320G 5400	Intel 6200 ²⁸	Gobi 2000	AT&T ²³	Finger	Blue	vPro	Pro 32	Jan 10
4349-E4U	i5-540M	2.53	3.06	3GB	15.6" HD+	2.0M	320G 7200	Intel 6200	Gobi 2000	AT&T	Finger	Blue	vPro	Pro 32	Jan 10

- **These models have an depot repair service 3-year limited warranty**
- Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.
- Microsoft® Office Ultimate 2007 Academic Edition: Only valid for sale to students, faculty and staff of accredited educational institutions in the United States.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M or i5-540M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32
Memory	2GB or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications¹⁴ (only some listed) • <i>E3U/E4U models:</i> Education software - Microsoft® Office Ultimate 2007 Academic Edition (and CD) • Education software - Microsoft® Office OneNote® 2007 (and CD) - Adobe Digital School Collection - Instructor Resources (and DVD) - Learning Creative Suite 4 (DVD) - Photoshop Elements 7 (DVD) - Premiere Elements 7 (and DVD) - Acrobat 9 Professional (DVD) - Contribute CS4 (and DVD) - Soundbooth CS4 (and DVD) • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 250GB⁸ (5400 rpm) or 320GB (5400 or 7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	
Widescreen display	<i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus	
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)	
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm <i>6-cell:</i> starting at 5.66 lb (2.57kg); <i>9-cell:</i> starting at 6.01 lb (2.72kg) <i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 6.2 hr; <i>9-cell:</i> up to 10.4 hr; <i>9-cell plus Slice battery:</i> up to 20.8 hr	
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0 (one powered), external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	Supports ThinkVantage® technologies 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
PCIe Mini Card 11b/g/n Intel 6200 ²⁸ Gobi™ 2000	Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider	
Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support	<i>Some:</i> AT&T®, contract required with service provider 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹² 3-years/1-yr - battery depot repair service / service upgrades ²² available		

See footnotes for important warranty information
US models announced January 7, 2010

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(KN1-11) January 2010

ThinkPad® T510 4349 (Discrete) - Education (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base (GHz)	turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB ⁸	rpm	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Blue-tooth	Finger reader	Bat-tery Intel vPro	Preload	Avail date	
4349-E5U	i5-520M	2.40	2.93	2GB	15.6" HD	2.0M	250G	5400	Intel 6200 ²⁸	Gobi 2000	AT&T ²³	Blue	Finger	6	vPro	Pro 32	Feb 10
4349-E6U	i5-520M	2.40	2.93	3GB	15.6" HD+	2.0M	320G	7200	Intel 6200	Gobi 2000	AT&T	Blue	Finger	9	vPro	Pro 32	Feb 10

- **These models have an depot repair service 3-year limited warranty**
- Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.
- Microsoft® Office Ultimate 2007 Academic Edition: Only valid for sale to students, faculty and staff of accredited educational institutions in the United States.

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5 processor i5-520M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache											Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32				
Memory	2GB or 3GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available											Preloaded applications¹⁴ (only some listed) • <i>E6U model:</i> Education software - Microsoft® Office Ultimate 2007 Academic Edition (and CD) • Education software - Microsoft® Office OneNote® 2007 (and CD) - Adobe Digital School Collection - Instructor Resources (and DVD) - Learning Creative Suite 4 (DVD) - Photoshop Elements 7 (DVD) - Premiere Elements 7 (and DVD) - Acrobat 9 Professional (DVD) - Contribute CS4 (and DVD) - Soundbooth CS4 (and DVD)				
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 250GB⁸ (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™											• Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)				
Widescreen display	<i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio											Supports ThinkVantage® technologies				
Camera	Camera on top of screen, 2.0-megapixel, fixed focus											90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378				
Discrete graphics	NVIDIA® Quadro® NVS3100M , PCI Express® x16, 512MB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)											ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 45K6021 ThinkPlus 4-year LOR 9x5 NBD 45K6022 ThinkPlus 5-year LOR 9x5 NBD 45K6024 ThinkPlus 4-year P&L P/U Depot 45K6023 ThinkPlus 5-year P&L P/U Depot 45K6025				
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm <i>6-cell:</i> starting at 5.66 lb (2.57kg); <i>9-cell:</i> starting at 6.01 lb (2.72kg) <i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic Lithium Ion 6-cell or 9-cell , supports optional Slice battery (57Y4545) as 2nd battery <i>6-cell:</i> up to 4.7 hr; <i>9-cell:</i> up to 7.8 hr; <i>9-cell plus Slice battery:</i> up to 15.6 hr											Limited warranty ¹² 3-years/1-yr - battery depot repair service / service upgrades ²² available				
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)															
PCIe Mini Card Intel 6200 ²⁸ Gobi™ 2000	Two PCI Express Mini Card slots 11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider															
Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support	AT&T®, contract required with service provider 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack															
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip															

See footnotes for important warranty information
US models announced January 7, 2010

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ThinkPad® T510i 4313 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Battery cells	Preload	Avail date
4313-7DU	i3-330M	2.13	2GB	15.6" HD	2.0M	250G 5400	DVD±RW	Intel 1000	None			6	XP Pro	Feb 10
4313-7FU	i3-330M	2.13	2GB	15.6" HD	2.0M	320G 7200	DVD±RW	Intel 1000	None	Finger	Blue	6	XP Pro	Feb 10

• *These small and medium business (SMB) models are part of the US TopSeller™ Program*

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i3 processor i3-330M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache	Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Presentation Director • ThinkVantage Productivity Center • Roxio® Creator® Business Edition (DVD±RW)
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 250GB⁸ (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	Supports ThinkVantage® technologies
Widescreen display Camera	15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus	
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)	65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	ThinkPlus™.22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	15.6W" (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm <i>6-cell:</i> starting at 5.66 lb (2.57kg); <i>9-cell:</i> starting at 6.01 lb (2.72kg) <i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 6.2 hr; <i>9-cell:</i> up to 10.4 hr; <i>9-cell plus Slice battery:</i> up to 20.8 hr	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	Limited warranty ¹² 1-year - depot repair service / service upgrades ²² available
PCIe Mini Card Intel 1000 WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 None 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	

See footnotes for important warranty information
US models announced February 2, 2010

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ThinkPad® T510i 4313 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Blue-tooth	Bat-tery cells	Preload	Avail date
4313-7EU	i3-330M	2.13	2GB	15.6" HD	2.0M	250G 5400	DVD±RW	Intel 1000	None	None	None	6	Pro 32	Feb 10

• **This small and medium business (SMB) model is part of the US TopSeller™ Program**

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i3 processor i3-330M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache										Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32			
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available										Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Adobe® Reader® • Skype™ for Windows • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)			
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 250GB⁸ (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™										Supports ThinkVantage® technologies 65-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Widescreen display Camera	15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus													
Integrated graphics	Intel HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)										ThinkPlus™, 22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	15.6W" (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm <i>6-cell:</i> starting at 5.66 lb (2.57kg); <i>9-cell:</i> starting at 6.01 lb (2.72kg) <i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic Lithium Ion 6-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom <i>6-cell:</i> up to 6.2 hr; <i>9-cell:</i> up to 10.4 hr; <i>9-cell plus Slice battery:</i> up to 20.8 hr										ThinkPlus™, 22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Chipset ExpressCard/34 Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Four USB 2.0, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)													
PCIe Mini Card Intel 1000 WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 None 56K V.92 ⁶ modem None Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack										ThinkPlus™, 22 1-year LOR ²⁴ 9x5 NBD 45K5968 ThinkPlus 2-year LOR 9x5 NBD 45K5969 ThinkPlus 3-year LOR 9x5 NBD 45K5970 ThinkPlus 4-year LOR 9x5 NBD 45K5973 ThinkPlus 5-year LOR 9x5 NBD 45K5975 ThinkPlus 2-year P&L P/U Depot 45K5971 ThinkPlus 3-year P&L P/U Depot 45K5972 ThinkPlus 4-year P&L P/U Depot 45K5974 ThinkPlus 5-year P&L P/U Depot 45K5976 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant None													
Limited warranty ¹² 1-year - depot repair service / service upgrades ²² available														

See footnotes for important warranty information
US model announced February 2, 2010

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ThinkPad®



Lenovo® ThinkPad W510



Lenovo ThinkPad W510



ThinkPad Mini Dock Plus Series 3 - Mobile WorkStation
433820U



ThinkPad 135W AC Adapter
55Y9317



Lenovo ThinkPad W510



Lenovo ThinkPad W510

ThinkPad® W510 4319 (TopSeller) - XP with Win 7 License

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base (GHz)	Max turbo (GHz)	Memory (MHz)	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	RAID	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Color calib	Intel vPro	Preload	Avail date
4319-4CU	i7-720QM	1.60	2.80	2GBx1 1066	15.6" HD+	2.0M	320G 7200	None	Intel 6300 ²⁸	WWAN upg	None	vPro	XP Pro	Feb 10

- This small and medium business (SMB) model is part of the US TopSeller™ Program
- Power-packed engineering with Open GL graphics and ISV certifications

Positioning Processor	<i>Mobile workstation; two spindles</i> Intel® Core™ i7 processor i7-720QM with quad-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1333MHz), Intel Turbo Boost, Hyper-Threading technology; 6MB cache										Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32			
Memory	2GB std / 16GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, four 204-pin SO-DIMM sockets										Preloaded applications¹⁴ (only some listed)			
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 320GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, Shock Mounted Hard Drive, Active Protection System™										<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) 			
Widescreen display	15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut										Supports ThinkVantage® technologies			
Color calibration	None													
Camera	Camera on top of screen, 2.0-megapixel, fixed focus										135-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Discrete graphics	NVIDIA® Quadro® FX880M , PCI Express® x16, 1GB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via cable 45J7915)</i>													
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys										ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 41C9176			
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
Touchpad	UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch										ThinkPlus 4-year LOR 9x5 NBD 41C9177			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	<i>15.6W" (WxDxH): 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm</i>										ThinkPlus 5-year LOR 9x5 NBD 41C9179			
Weight ²	<i>6-cell: starting at 5.66 lb (2.57kg); 9-cell: starting at 6.01 lb (2.72kg)</i>													
Case material	<i>Display cover: Glass-fiber reinforced plastic; Base: Carbon-fiber reinforced plastic</i>										ThinkPlus 4-year P&L P/U Depot 41C9178			
Battery - type	Lithium Ion 9-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom													
Battery - life ¹⁰	<i>6-cell: up to 3.0 hr; 9-cell: up to 4.9 hr; 9-cell plus slice battery: up to 9.9 hr</i>										ThinkPlus 5-year P&L P/U Depot 41C9180			
Chipset	Mobile Intel QM57 Express Chipset													
ExpressCard/34	One slot (ExpressCard/34)										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Smart Card Read	None													
Multicard Reader	5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC)										Limited warranty ¹² 3-years/1-yr battery - depot repair service / service upgrades ²² available			
Ports	Two USB 3.0, one Powered USB 2.0, one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)													
PCIe Mini Card	Two PCI Express Mini Card slots										See footnotes for important warranty information US model announced February 2, 2010			
Intel 6300 ²⁸	11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Ultimate-N 6300, 3x3													
WWAN upg	Wireless WAN upgradable										© Lenovo (KN1W-4) February 2010			
Modem	56K V.92 ⁶ modem													
Bluetooth™	Bluetooth 2.1 wireless, LED indicator										Security			
Ethernet	Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1													
Intel AMT	Intel Active Management Technology (iAMT)										Security chip Trusted Platform Module, TCG 1.2-compliant			
Audio support	High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack													
Security	Power-on password, hard disk password, supervisor password, security keyhole										Fingerprint reader UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip			
Security chip	Trusted Platform Module, TCG 1.2-compliant													

See footnotes for important warranty information
US model announced February 2, 2010

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(KN1W-4) February 2010

ThinkPad® W510 4319 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base turbo (GHz)	Max turbo (GHz)	Memory (MHz)	Wide-screen display	Multi-Touch Screen	Disk SATA GB ³ rpm	RAID	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Color calib	Intel vPro	Preload	Avail date
4319-2NU	i7-720QM	1.60	2.80	2GBx1 1066	15.6" HD+		320G 7200	None	Intel 6300 ²⁸	WWAN upg			vPro	Pro 32	Jan 10
4319-2PU	i7-720QM	1.60	2.80	2GBx2 1066	15.6" FHD		320G 7200	None	Intel 6300	WWAN upg			vPro	Pro 64	Jan 10
⊗ 4319-2QU	i7-720QM	1.60	2.80	2GBx2 1066	15.6" FHD		320G 7200	None	Intel 6300	Gobi 2000			vPro	Pro 64	Jan 10
4319-2RU	i7-820QM	1.73	3.06	2GBx2 1066	15.6" FHD	Multi	320G 7200	None	Intel 6300	WWAN upg		X-Rite	vPro	Pro 64	Jan 10
4319-4BU	i7-720QM	1.60	2.80	2GBx2 1066	15.6" FHD		320G 7200	None	Intel 6300	Gobi 2000	AT&T ²³		vPro	Pro 64	Feb 10
⊗ 4319-4MU	i7-720QM	1.60	2.80	2GBx2 1066	15.6" HD+		320G 7200	None	Intel 6300	Gobi 2000	AT&T		vPro	Pro 64	Mar 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program
- Power-packed engineering with Open GL graphics and ISV certifications

Positioning Processor	<i>Mobile workstation; two spindles</i> Intel® Core™ i7 processor i7-720QM or i7-820QM with quad-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1333MHz), Intel Turbo Boost, Hyper-Threading technology; <i>i7-720QM: 6MB cache; i7-820QM: 8MB cache</i>	Preloaded operating system ²⁰ - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64
Memory	2GB or 4GB std / 16GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, four 204-pin SO-DIMM sockets	Preloaded applications ¹⁴ (only some listed)
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 320GB ⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, Shock Mounted Hard Drive, Active Protection System™	<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) • huey™PRO Monitor Color Correction by Pantone®/X-Rite® (color calibration models)
Widescreen display	<i>Some: 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut</i> <i>Some: 15.6" (396mm) FHD (1920x1080) color, anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut</i> <i>Some: 15.6" (396mm) FHD (1920x1080) color, anti-glare, LED backlight, 242 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut, MultiTouch (touchscreen supports two-finger touch)</i>	
Color calibration Camera	<i>Some: huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest</i> Camera on top of screen, 2.0-megapixel, fixed focus	
Discrete graphics	NVIDIA® Quadro® FX880M , PCI Express® x16, 1GB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)</i>	
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions (WxDxH) ³	<i>HD+:</i> 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm <i>FHD:</i> 14.68" x 9.65" x 1.29-1.44"; 372.8mm x 245.1mm x 32.8-36.6mm <i>FHD MultiTouch:</i> 14.68" x 9.65" x 1.35-1.57"; 372.8mm x 245.1mm x 34.3-39.8mm	
Weight ²	<i>6-cell:</i> starting at 5.66 lb (2.57kg); <i>9-cell:</i> starting at 6.01 lb (2.72kg)	
Case material	<i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic	
Battery - type	Lithium Ion 9-cell , supports optional Slice battery (57Y4545) as 2nd battery at bottom	
Battery - life ¹⁰	<i>6-cell:</i> up to 3.0 hr; <i>9-cell:</i> up to 4.9 hr; <i>9-cell plus slice battery:</i> up to 9.9 hr	Supports ThinkVantage® technologies
Chipset	Mobile Intel QM57 Express Chipset	
ExpressCard/34	One slot (ExpressCard/34)	135-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Smart Card Reader	None	
Multicard Reader	5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC)	
Ports	Two USB 3.0, one Powered USB 2.0, one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	
PCIe Mini Card	Two PCI Express Mini Card slots 11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Ultimate-N 6300, 3x3 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider	
Carrier	<i>Some: AT&T®</i> , contract required with service provider	
Modem	56K V.92 ⁵ modem	
Bluetooth™	Bluetooth 2.1 wireless, LED indicator	
Ethernet	Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1	
Intel AMT	Intel Active Management Technology (iAMT)	
Audio support	High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack	
Security	Power-on password, hard disk password, supervisor password, security keyhole	
Security chip	Trusted Platform Module, TCG 1.2-compliant	
Fingerprint reader	UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available	ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

See footnotes for important warranty information

⊗ US model announced March 2, 2010; previous models on January 7, 2010 or February 2, 2010

⊗ US model withdrawn effective February 2010

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Type-model	Processor	Max Base turbo (GHz)	Memory (MHz)	Wide-screen display	Multi-Touch Screen	Cam-era	Disk SATA GB ⁸	rpm	RAID	SATA optical	PCIe Mini Card 802.11	Blue/Color Fing calib	Bat-tery Intel vPro	Whorse (W) Pre-GMP (P) Avail Gbl (G) date
4389-22U	i7-720QM	1.60	2.80	2GBx1 1066	15.6"	HD	250G	5400		DVD±RW	Intel 6200 ²⁸		6 vPro	Pro 32 G Jan 10
4389-23U	i7-820QM	1.73	3.06	2GBx2 1066	15.6"	HD+	320G	7200		DVD±RW	Intel 6200	Yes	9 vPro	Pro 32 G Jan 10
4389-24U	i7-820QM	1.73	3.06	4GBx1 1333	15.6"	HD+	500G	7200	1		Intel 6300 ²⁸	Yes	9 vPro	Pro 64 Jan 10
4389-2SU	i7-920XM	2.00	3.20	4GBx1 1333	15.6"	HD+	320G	7200	1		Intel 6300	Yes	9 vPro	Pro 64 Jan 10
4389-2TU	i7-720QM	1.60	2.80	2GBx2 1066	15.6"	HD+	320G	7200		DVD±RW	Intel 6200	Yes	9 vPro	Pro 32 Jan 10
4389-2UU	i7-820QM	1.73	3.06	2GBx2 1066	15.6"	FHD Multi	500G	7200		DVD±RW	Intel 6300	Yes	X-Rite 9 vPro	Pro 32 Jan 10

- Power-packed engineering with Open GL graphics and ISV certifications

Positioning Processor	<p><i>Mobile workstation; two spindles</i></p> <p>Intel® Core™ i7 processor i7-720QM, i7-820QM, or i7-920XM with quad-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1333MHz), Intel Turbo Boost, Hyper-Threading technology; <i>i7-720QM: 6MB cache; i7-820QM/i7-920XM: 8MB cache</i></p>	<p>Preloaded operating system²⁰</p> <ul style="list-style-type: none"> - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64
Memory	<p>2GB or 4GB std / 16GB max⁷ / PC3-8500 1066MHz or PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, four 204-pin SO-DIMM sockets</p>	<p>Preloaded applications¹⁴ (only some listed)</p> <ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) • huey™PRO Monitor Color Correction by Pantone®/X-Rite® (color calibration models)
SATA DVD±RW Ultrabay Enhanced SATA disk	<p><i>Some: DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable</i></p> <p>One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 250GB (5400 rpm), 320GB (7200 rpm), or 500GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, Shock Mounted Hard Drive, Active Protection System™</p>	
Widescreen display	<p><i>Some: 15.6"</i> (396mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut</p> <p><i>Some: 15.6"</i> (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut</p> <p><i>Some: 15.6"</i> (396mm) FHD (1920x1080) color, anti-glare, LED backlight, 242 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut, MultiTouch (touchscreen supports two-finger touch)</p>	
Color calibration Camera	<p><i>Some: huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest</i></p> <p><i>Some: Camera on top of screen, 2.0-megapixel, fixed focus</i></p>	
Discrete graphics	<p>NVIDIA® Quadro® FX880M, PCI Express® x16, 1GB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)</i></p>	
Keyboard TrackPoint® Touchpad ThinkLight™	<p>89-key, ThinkVantage button, spill-resistant, multimedia Fn keys</p> <p>TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar¹³, magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch</p> <p>Illuminates the keyboard to improve visibility in low-light conditions</p>	
Dimensions (WxDxH) ³ Weight ² Case material Battery - type Battery - life ¹⁰	<p><i>HD & HD+:</i> 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm</p> <p><i>FHD MultiTouch:</i> 14.68" x 9.65" x 1.35-1.57"; 372.8mm x 245.1mm x 34.3-39.8mm</p> <p><i>6-cell:</i> starting at 5.66 lb (2.57kg); <i>9-cell:</i> starting at 6.01 lb (2.72kg)</p> <p><i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic</p> <p>Lithium Ion 6-cell or 9-cell, supports optional Slice battery (57Y4545) as 2nd battery</p> <p><i>6-cell:</i> up to 3.0 hr; <i>9-cell:</i> up to 4.9 hr; <i>9-cell plus slice battery:</i> up to 9.9 hr</p>	
Chipset ExpressCard/34 Smart Card Read Multicard Reader Ports	<p>Mobile Intel QM57 Express Chipset</p> <p>One slot (ExpressCard/34)</p> <p>None</p> <p>5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC)</p> <p>Two USB 3.0, one Powered USB 2.0, one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)</p>	<p>Supports ThinkVantage® technologies</p>
PCIe Mini Card Intel 6200 ²⁸ Intel 6300 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	<p>Two PCI Express Mini Card slots</p> <p><i>Some: 11a/b/g/n wireless⁴, PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2</i></p> <p><i>Some: 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Ultimate-N 6300, 3x3</i></p> <p>Wireless WAN upgradable</p> <p>56K V.92⁶ modem</p> <p><i>Some: Bluetooth 2.1 wireless, LED indicator</i></p> <p>Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1</p> <p>Intel Active Management Technology (iAMT)</p> <p>High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack</p>	<p>135-watt AC adapter</p> <p>ThinkPad Roll Cage (one-piece magnesium frame)</p> <p>Next Generation ThinkPad Roll Cage (in display cover)</p> <p>EPEAT™ Gold rating</p> <p>ENERGY STAR® 5.0-compliant</p> <p>RoHS-compliant</p> <p>International Warranty Service¹⁷</p> <p>24 hour x 7 day¹⁸ toll-free support during the warranty period¹² via 800-426-7378</p>
Security Security chip Fingerprint reader	<p>Power-on password, hard disk password, supervisor password, security keyhole</p> <p>Trusted Platform Module, TCG 1.2-compliant</p> <p><i>Some: UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip</i></p>	<p>ThinkPlus™.22 3-year LOR²⁴ 9x5 NBD 41C9176</p> <p>ThinkPlus 4-year LOR 9x5 NBD 41C9177</p> <p>ThinkPlus 5-year LOR 9x5 NBD 41C9179</p> <p>ThinkPlus 4-year P&L P/U Depot 41C9178</p> <p>ThinkPlus 5-year P&L P/U Depot 41C9180</p> <p>Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty</p>
Limited warranty ¹²	<p>3-years/1-yr battery - depot repair service / service upgrades²² available</p>	

See footnotes for important warranty information
 US models announced January 7, 2010

Type-model	Processor	Max Base turbo (GHz) (GHz)	Memory (MHz)	Wide-screen display	Disk SATA GB ⁸ rpm	RAID	SATA optical	PCIe Mini Card 802.11	Blue/ Fing	Bat-Color tery Intel calib cells vPro	Whorse (W) GMP (P) Avail date
4391-22U	i7-720QM	1.60	2.80	2GBx1 1066	15.6" HD	250G 5400	None	DVD±RW	Intel 6200 ²⁸	None	6 vPro Pro 32 G P Jan 10
4391-23U	i7-820QM	1.73	3.06	2GBx2 1066	15.6" HD+	320G 7200	None	DVD±RW	Intel 6200	Yes	9 vPro Pro 32 G P Jan 10

- **These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty**
- **Power-packed engineering with Open GL graphics and ISV certifications**

Positioning Processor	<i>Mobile workstation; two spindles</i> Intel® Core™ i7 processor i7-720QM or i7-820QM with quad-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1333MHz), Intel Turbo Boost, Hyper-Threading technology; <i>i7-720QM: 6MB cache; i7-820QM: 8MB cache</i>										Preloaded operating system ²⁰ - Genuine Windows [®] 7 Professional 32 Preloaded applications ¹⁴ (only some listed)	
Memory	2GB or 4GB std / 16GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, four 204-pin SO-DIMM sockets										<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) 	
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access 250GB⁸ (5400 rpm) or 320GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports second disk, Shock Mounted Hard Drive, Active Protection System™											
Widescreen display	<i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut <i>Some:</i> 15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight , 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut											
Color calibration Camera	None None											
Discrete graphics	NVIDIA® Quadro® FX880M , PCI Express® x16, 1GB memory, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via cable 45J7915); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz; 1920x1200@60Hz (single-link DVI-D via cable 45J7915)											
Keyboard TrackPoint® Touchpad ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keybrd, Tap Zones, scrolling regions label, multi-touch Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³ Weight ² Case material Battery - type Battery - life ¹⁰	<i>15.6W" (WxDxH):</i> 14.68" x 9.65" x 1.26-1.41"; 372.8mm x 245.1mm x 32-35.8mm <i>6-cell:</i> starting at 5.66 lb (2.57kg); <i>9-cell:</i> starting at 6.01 lb (2.72kg) <i>Display cover:</i> Glass-fiber reinforced plastic; <i>Base:</i> Carbon-fiber reinforced plastic Lithium Ion 6-cell or 9-cell , supports optional Slice battery (57Y4545) as 2nd battery <i>6-cell:</i> up to 3.0 hr; <i>9-cell:</i> up to 4.9 hr; <i>9-cell plus slice battery:</i> up to 9.9 hr											
Chipset ExpressCard/34 Smart Card Reader Multicard Reader Ports	Mobile Intel QM57 Express Chipset One slot (ExpressCard/34) None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) Two USB 3.0, one Powered USB 2.0, one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)											Supports ThinkVantage® technologies
PCIe Mini Card Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless ⁴ , PCIe Half Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / speaker volume up, down and mute buttons / dual array microphone, mic mute button, combo audio/mic jack											135-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip											ThinkPlus™.22 4-year LOR 9x5 NBD 12X5630
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time/ service upgrades ²² available										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty	

See footnotes for important warranty information
US models announced January 7, 2010

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(KN1W-3) January 2010

Memory

1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann 06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25Pack)	57Y4385	ann 06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann 06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25Pack)	57Y4386	ann 06/23/09
4GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3708	ann 06/23/09
1GB PC3-10600 DDR3 L-H SODIMM	55Y3709	ann 03/02/10
1GB PC3-10600 DDR3 L-H SODIMM (25Pack)	55Y4415	ann 03/02/10
2GB PC3-10600 DDR3 L-H SODIMM	55Y3710	ann 03/02/10
2GB PC3-10600 DDR3 L-H SODIMM (25Pack)	55Y4416	ann 03/02/10
4GB PC3-10600 DDR3 L-H SODIMM	55Y3711	ann 03/02/10

Ultrabay Slim 9.5mm

Serial ATA Hard Drive Bay Adapter III ⁴⁸	43N3412	ann 06/23/09
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Ultrabay Enhanced 12.7mm

DVD Burner Ultrabay Enhanced II SATA	43N3294	ann 01/07/10
Blu-ray Reader / DVD Burner Ultrabay Enh	43N3295	ann 01/07/10

Storage and removable storage

160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	41N5692	ann 03/20/07
160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	41N5737	ann 10/16/07
250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43R8152	ann 01/15/08
250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3410	ann 01/20/09
320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3403	ann 08/05/08
320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3411	ann 01/20/09
500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3420	ann 06/23/09
500GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3423	ann 01/07/10

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in the Ultrabay

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	ann 08/26/08
256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover)	43N3417	ann 06/23/09

USB 2.0 Essential Memory Key 4GB	45J7904	ann 06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann 07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann 10/28/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann 08/26/08

USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	ann 11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann 01/07/10
USB 2.0 Super Multi-Burner Drive	41N5565	ann 01/23/07
USB 2.0 Portable DVD Burner	43N3264	ann 01/05/10

Wireless WAN (Mini PCI Express)

Only WWAN upgradable models:

ThinkPad Gobi™ 2000 Broadband Option	78Y1399	ann 01/07/10
ThinkPad AT&T® Gobi 2000 Broadband Option	78Y1398	ann 01/07/10

ThinkPad Expansion

T510:

ThinkPad Port Replicator Series 3	433610W	ann 06/23/09
ThinkPad Mini Dock Series 3	433710U	ann 06/23/09
ThinkPad Mini Dock Plus Series 3	433810U	ann 06/23/09

All:

Lenovo® Essential Notebook Stand	45J9292	ann 05/12/09
USB Port Replicator with Digital Video	45K1610	ann 07/28/09
ThinkPad Mini Dock Plus Series 3 - Mobile WS	433820U	ann 01/07/10

Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Ultralim Wireless Keyboard and Mouse ⁵²	57Y4700	ann 09/15/09
⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.		
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

Mouse

Lenovo Mini Optical Mouse - Black (USB)	55Y9308	ann 05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann 05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann 01/22/08

Multimedia

USB 2.0 Lenovo Webcam	40Y8519	ann 08/29/06
ThinkPad In-Ear Headphones	57Y4488	ann 01/07/10

Security

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

Batteries

T510:

ThinkPad Battery 25 (4-cell)	51J0498	ann 10/22/09
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All:

ThinkPad Battery 25+ (6-cell)	51J0499	ann 10/22/09
ThinkPad Battery 25++ (9-cell)	51J0500	ann 10/22/09
ThinkPad Battery 27+++ (9-cell, slice) ⁴³	57Y4545	ann 01/07/10

⁴³ To be used along with system battery for all-day computing; attaches under ThinkPad using docking connector (not supported when using Series 3 Port Replicator or Docks).

ThinkPad External Battery Charger	40Y7625	ann 09/20/05
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More information at www.lenovo.com/alldaycomputing

T510:

ThinkPad 65W AC Adapter ⁴⁵	40Y7696	ann 01/05/06
⁴⁵ Only compatible with the integrated graphics models.		
ThinkPad 90W AC Adapter	40Y7659	ann 09/20/05
90W Ultralim AC/DC Combo Adapter	41R4493	ann 09/22/09

W510:

ThinkPad 135W AC Adapter	55Y9317	ann 01/07/10
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More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

•Palm device charge tip (L7)	41R4315	ann 12/18/07
•BlackBerry charge tip (L8a)	41R4478	ann 12/18/07
•iPod and iPhone Charge Tip (L10a)	41R4481	ann 12/18/07

More information at www.lenovopowertips.com

Carrying Cases

Up to 15.4" widescreen models:

ThinkPad 15W Case Sleeve	51J0477	ann 08/18/09
Lenovo Business Messenger Case	51J0475	ann 08/18/09
Lenovo Messenger Max	41U5253	ann 05/01/07
Lenovo Performance Backpack	41U5254	ann 05/01/07
ThinkPad Business Backpack	43R2482	ann 05/13/08

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann 11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann 10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann 10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann 10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann 10/20/09

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
Lenovo DisplayPort to VGA Monitor Cable	57Y4393	ann 08/04/09
DisplayPort to Single-link DVI-D Cable	45J7915	ann 08/05/08
ThinkVision USB Soundbar	40Y7616	ann 08/23/05
ThinkVision Soundbar	45K1263	ann 09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
Lenovo Easy Reach Monitor Stand	55Y9258	ann 09/22/09
Radial Arm	19K4464	ann 05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:

- www.lenovo.com/support/accessories
- www.lenovo.com/support/notebookaccessories
- www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide



Lenovo® ThinkPad W700



Lenovo ThinkPad W700 with
ThinkPad W700 Mini Dock 2.0
57Y4345



ThinkPad 170W AC Adapter
41R4421



ThinkPad Battery 37++ (9-cell)
45J7914



Lenovo ThinkPad W700



Lenovo ThinkPad W700

ThinkPad® W700 2758 (TopSeller)

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Wide-screen display	Cam-era	Discrete graphics memory	Disk(s) SATA GB ⁸ rpm	RAID	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe UWB or Turbo	Card slot	Color calib	Digitizer	Preload	Avail date
2758-28U	T9400	2.53	1GB	17" WXGA+	Cam	1GB	2x160G 7200	0	DVD±RW	Intel 5300 ²⁸		Smart	X-Rite	Wacom	Bus64	Sep08
2758-4SU	T9600	2.80	4GB	17" WUXGA	Cam	512MB	2x160G 7200		DVD±RW	Intel 5300	2G Turbo	Smart	X-Rite		Bus64	Sep08
2758-29U	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x250G 5400	1	DVD±RW	Intel 5300		Smart	X-Rite	Wacom	Bus64	Sep08
2758-MPU	Q9000	2.00	4GB	17" WUXGA	Cam	512MB	1x80G SSD		DVD±RW	Intel 5300		/54			Bus64	Jun 09
2758-MWU	P8700	2.53	3GB	17" WXGA+	Cam	512MB	1x320G 7200		DVD±RW	Intel 5300		/54			XP Pro	Oct 09
2758-MXU	T9900	3.06	4GB	17" WUXGA	Cam	512MB	2x320G 7200		DVD±RW	Intel 5300		/54			Bus64	Oct 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning Processor	Mobile workstation; three spindles Intel® Core™ 2 Duo processor P8700 with dual-core , Intel HD Boost, 1066MHz system bus, and 3MB L2 cache or Intel Core 2 Duo processor T9400, T9600 or T9900 with dual-core , Intel HD boost, 1066MHz system bus, and 6MB L2 cache or Intel Core 2 Quad processor Q9000 with quad-core , Intel HD boost, 1066MHz system bus, and 6MB L2 cache or Intel Core 2 Extreme processor X9100 with dual-core , Intel HD boost, 1066MHz system bus, and 6MB L2 cache	Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 64 ◇ Vista models: Vista Premium logo
Memory	1GB, 3GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) • huey™ PRO Monitor Color Correction by Pantone®/X-Rite® (color calibration models)
SATA DVD±RW	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149)	ISV software certifications
Ultrabay Enhanced SATA disks	One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high <i>Some:</i> One disk, 80GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> One disk, 320GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>Some:</i> Two disks, 160GB (7200 rpm), 250GB (5400 rpm) or 320GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports three disks max, Shock Mounted Hard Drive	
Widescreen display	<i>Some:</i> 17.0" (431.8mm) WXGA+ (1440x900) color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 400:1 contrast ratio, 45% color gamut <i>Some:</i> 17.0" (431.8mm) WUXGA (1920x1200) color , anti-glare, CCFL backlight, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 72% color gamut	Supports ThinkVantage® technologies
Color calibration Camera	<i>Some:</i> huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest Camera on top of screen, 1.3-megapixel, fixed focus	
Discrete graphics	<i>Some:</i> NVIDIA® Quadro® FX2700M , PCI Express® x16, 512MB memory <i>Some:</i> NVIDIA Quadro FX3700M , PCI Express x16, 1GB memory <i>Max external resolution:</i> 2048x1536@85Hz (VGA DB-15 port); 2048x1536 (DisplayPort)	ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable management for W700 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 watt AC adapter
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys	170-watt AC adapter ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass	
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label	ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 41C9176
Numeric keypad	10-key numeric keypad on right side of keyboard	
Digitizer	<i>Some:</i> Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side	ThinkPlus 4-year LOR 9x5 NBD 41C9177
ThinkLight™	Two LEDs illuminate the keyboard to improve visibility in low-light conditions	
Dimensions ³	<i>9-cell 17W" (WxDxH):</i> 16.1" x 12.2" x 1.6"; 410mm x 310mm x 41mm	ThinkPlus 5-year LOR 9x5 NBD 41C9179
Weight ²	<i>9-cell:</i> starting at 8.4 lb (3.8kg)	
Case material	<i>Top:</i> magnesium alloy; <i>Bottom:</i> Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic	ThinkPlus 4-year P&L P/U Depot 41C9178
Battery - type	Lithium Ion 9-cell	
Battery - life ¹⁰	<i>9-cell:</i> up to 2.3 hr	ThinkPlus 5-year P&L P/U Depot 41C9180
Chipset	Mobile Intel PM45 Express Chipset (Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, RAID 0 or 1 support, USB 2.0, PCI Express 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus	
ExpressCard/34	One ExpressCard/34	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
ExpressCard/54	<i>Some:</i> [/54] One ExpressCard/34 or ExpressCard/54	
Compact Flash	None	Other accessories on O-W700 sheet
Smart Card Read	<i>Some:</i> Smart Card Reader	
Multicard Reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)	Other accessories at lenovo.com/accessories
Ports	Five USB 2.0, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	
Mini PCI Express	Three Mini PCI Express slots	
Intel 5300 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3	
2G Turbo	<i>Some:</i> Intel Turbo Memory, Mini PCIe adapter, 2GB flash, disk-cache accelerator	
UWB	None (uses Half-Mini PCIe slot)	
Modem	56K V.92 ⁶ modem in Communications Daughter Card socket	
Bluetooth™	Bluetooth 2.1 wireless, LED indicator	
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1	
Intel AMT	Intel Active Management Technology (iAMT)	
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack	
Security	Power-on password, hard disk password, supervisor password, security keyhole	
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant	
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip	
Limited warranty ¹²	3-year - EasyServ™.19 depot repair service / service upgrades ²² available	

See footnotes for important warranty information

✦ Intel Centrino® 2 with vPro™ technology

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Ⓜ US models announced October 22, 2009; previous models on August 12, 2008 or June 2, 2009

(NIC1-1) November 2009

✗ US models withdrawn effective September 2008, December 2009, or February 2010

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Discrete Cam- graphics era memory	Disk(s) SATA GB ⁸ rpm	RAID	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe UWB or Turbo slot	Blue/ Color Fing calib	Digit- izer Preload	Workhorse (W) Global (G) Avail date	
2752-36U	T9600	2.80	4GB	17"	WUXGA	Cam 1GB	1	DVD±RW	Intel 5300 ²⁸	None	/54	Yes	X-Rite Bus64 W Sep 08	
2752-37U	T9600	2.80	4GB	17"	WUXGA	Cam 1GB	1	DVD±RW	Intel 5300	None	/54	Yes	X-Rite Bus64 W Sep 08	
2752-38U	T9600	2.80	4GB	17"	WUXGA	Cam 1GB	0	DVD±RW	Intel 5300	None	CF	Yes	X-Rite Wacom Bus64 Sep 08	
2752-3NU	T9600	2.80	4GB	17"	WUXGA	Cam 1GB	0	DVD±RW	Intel 5300	None	CF	Yes	X-Rite Wacom Bus64 Sep 08	
2752-3YU	T9600	2.80	2GB	17"	WXGA+	Cam 1GB	0	DVD±RW	Intel 5300	None	/54	Yes	X-Rite Wacom Bus32 W Sep 08	
2752-MSU	Q9000	2.00	3GB	17"	WUXGA	Cam 512MB	1x160G	7200	DVD±RW	Intel 5300	None	/54	Yes	Bus32 Jun 09
2752-MTU	Q9000	2.00	4GB	17"	WUXGA	Cam 512MB	1x80G	SSD	DVD±RW	Intel 5300	None	/54	Yes	Bus64 Jun 09

• First 17" widescreen ThinkPad workstation with integrated color calibration and two RAID-capable disks
 • Select models include digitizer on palm rest and dual-link DVI-D and DisplayPort ports

Positioning Processor	Mobile workstation; three spindles Intel® Core™ 2 Duo processor T9600 with dual-core, Intel HD boost, 1066MHz system bus, and 6MB L2 cache or Intel Core 2 Quad processor Q9000 with quad-core, Intel HD boost, 1066MHz system bus, and 6MB L2 cache	Preloaded operating system ²⁰ - Some: Genuine Windows® Vista® Business 32 - Some: Genuine Windows Vista Business 64 ◇ Vista Premium logo
Memory	2GB, 3GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications ¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high <i>Some:</i> One disk, 80GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> One disk, 160GB (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>Some:</i> Two disks, 250GB (5400 rpm), 320GB (5400 rpm), or 200GB Full Disk Encryption [FDE] (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports three disks max, Shock Mounted Hard Drive	
Widescreen display	<i>Some:</i> 17.0" (431.8mm) WXGA+ (1440x900) color, anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 400:1 contrast ratio, 45% color gamut <i>Some:</i> 17.0" (431.8mm) WUXGA (1920x1200) color, anti-glare, CCFL backlight, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 72% color gamut	
Color calibration Camera	<i>Some:</i> huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest Camera on top of screen, 1.3-megapixel, fixed focus	
Discrete graphics	<i>Some:</i> NVIDIA® Quadro® FX2700M, PCI Express® x16, 512MB memory <i>Some:</i> NVIDIA Quadro FX3700M, PCI Express x16, 1GB memory <i>Max external resolution:</i> 2048x1536@85Hz (VGA DB-15 port); 2048x1536 (DisplayPort)	
Keyboard TrackPoint® Touch pad Numeric keypad Digitizer ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows and App keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard <i>Some:</i> Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side Two LEDs illuminate the keyboard to improve visibility in low-light conditions	ISV software certifications Supports ThinkVantage® technologies
Dimensions ³ Weight ² Case material	9-cell 17W" (WxDxH): 16.1" x 12.2" x 1.6"; 410mm x 310mm x 41mm 9-cell: starting at 8.4 lb (3.8kg) <i>Top:</i> magnesium alloy; <i>Bottom:</i> Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic	ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable management for W700 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 watt AC adapter
Battery - type Battery - life ¹⁰	Lithium Ion 9-cell 9-cell: up to 2.3 hr	
Chipset	Mobile Intel PM45 Express Chipset (Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, RAID 0 or 1 support, USB 2.0, PCI Express 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus	
ExpressCard/34 ExpressCard/54 Compact Flash Smart Card Read Multicard Reader Ports	One ExpressCard/34 <i>Some:</i> [54] One ExpressCard/34 or ExpressCard/54 <i>Some:</i> [CF] One Type I slot None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Five USB 2.0, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	
Mini PCI Express Intel 5300 ²⁸ 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	Three Mini PCI Express slots 11a/b/g/n wireless ⁷ , Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3 None None (uses Half-Mini PCIe slot) 56K V.92 ⁶ modem in Communications Daughter Card socket Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip	170-watt AC adapter ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180
Limited warranty ¹²	3-year - EasyServ™.19 depot repair service / service upgrades ²² available	
2GB PC3-8500 DDR3 L-H SODIMM 4GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-W700 sheet	55Y3707 55Y3708 ThinkPad Battery 37++ (9-cell) ThinkPad W700 Mini Dock 2.0 Other accessories at lenovo.com/accessories	45J7914 57Y4345 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

See footnotes for important warranty information

◇ Intel Centrino 2 with vPro™ technology

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Ⓜ US models announced June 2, 2009; previous models on August 12, 2008

(NIC1-2) June 2009

Ⓜ US models withdrawn effective August 2009 or February 2010

ThinkPad® W700 2752 (Extreme)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Discrete graphics memory	Disk(s) SATA GB ⁸ rpm	RAID	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe UWB or Turbo	Card Blue/ slot	Fing	Digit- izer	Workhorse (W) Global (G) Avail date
2752-6SU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200	0	DVD±RW	Intel 5300 ²⁸		/54	Yes		Bus64 W G Sep 08
2752-6TU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200	1	DVD±RW	Intel 5300		CF	Yes	Wacom	Bus64 W G Sep 08
2752-3AU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x200G FDE	0	BD burner	Intel 5300		/54	Yes	Wacom	Ult64 Sep 08
2752-6UU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200	0	DVD±RW	Intel 5300		CF	Yes	Wacom	Bus64 W G Sep 08
2752-3DU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x200G FDE	0	BD burner	Intel 5300		CF	Yes	Wacom	Bus64 Sep 08
2752-5ZU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x200G FDE	0	DVD±RW	Intel 5300		CF	Yes	Wacom	Bus64 Sep 08
2752-62U	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200		DVD±RW	Intel 5300	2G Turbo	/54	Yes	Wacom	Bus64 W Sep 08
2752-43U	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x200G FDE	0	BD burner	Intel 5300		/54	Yes	Wacom	Ult64 W Sep 08
2752-6ZU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200		DVD±RW	Intel 5300		CF	Yes		XP Pro G Sep 08
2752-72U	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200		DVD±RW	Intel 5300		CF	Yes	Wacom	XP Pro G Sep 08

- First 17" widescreen ThinkPad workstation with integrated color calibration and two RAID-capable disks
- Select models include digitizer on palm rest and dual-link DVI-D and DisplayPort ports

Positioning Processor	Mobile workstation; three spindles Intel® Core™ 2 Extreme processor X9100 with dual-core, Intel HD boost, 1066MHz system bus, and 6MB L2 cache										Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business					
Memory	4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available										- Some: Genuine Windows Vista Business 64 - Some: Genuine Windows Vista Ultimate 64 ◇ Vista models: Vista Premium logo					
SATA DVD±RW SATA BD burner UltraBay Enhancd SATA disk	Some: DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) Some: Blu-ray™ burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enh, removable (43R9150) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high Two disks, 160GB⁸ (7200 rpm) or 200GB Full Disk Encryption [FDE] (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 3rd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™										- Some: Genuine Windows Vista Business 64 - Some: Genuine Windows Vista Ultimate 64 ◇ Vista models: Vista Premium logo					
Widescreen display Color calibration Camera	17.0" (431.8mm) WUXGA (1920x1200) color , anti-glare, CCFL backlight, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 72% color gamut huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest Camera on top of screen, 1.3-megapixel, fixed focus										Preloaded applications¹⁴ (all OSes, only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software • ThinkPad Utilities (Power Manager and Presentation Director) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) • huey™PRO Monitor Color Correction by Pantone®/X-Rite®					
Discrete graphics	NVIDIA® Quadro® FX3700M , PCI Express x16, 1GB memory <i>Max external resolution:</i> 2048x1536@85Hz (VGA DB-15 port); 2048x1536 (DisplayPort)										ISV software certifications					
Keyboard TrackPoint® Touch pad Numeric keypad Digitizer ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard Some: Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side Two LEDs illuminate the keyboard to improve visibility in low-light conditions										Supports ThinkVantage® technologies					
Dimensions ³ Weight ² Case material	9-cell 17W" (WxDxH): 16.1" x 12.2" x 1.6"; 410mm x 310mm x 41mm 9-cell: starting at 8.4 lb (3.8kg) <i>Top:</i> magnesium alloy; <i>Bottom:</i> Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic										ThinkPad W700 Mini Dock 2.0					
Battery - type Battery - life ¹⁰	Lithium Ion 9-cell 9-cell: up to 2.3 hr										Provides desktop expansion and cable management for W700 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 watt AC adapter					
Chipset	Mobile Intel PM45 Express Chipset (Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, RAID 0 or 1 support, USB 2.0, PCI Express 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus One ExpressCard/34										ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²					
ExpressCard/34 ExpressCard/54 Compact Flash Smart Card Read Multicard Reader Ports	Some: [/54] One ExpressCard/34 or ExpressCard/54 Some: [CF] One Type I slot 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Five USB 2.0, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 41C9176					
Mini PCI Express Intel 5300 ²⁸ 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3 Some: Intel Turbo Memory, Mini PCIe adapter, 2GB flash, disk-cache accelerator None (uses Half-Mini PCIe slot) 56K V.92 ⁶ modem in Communications Daughter Card socket Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack										ThinkPlus 4-year LOR 9x5 NBD 41C9177					
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty					
Limited warranty ¹²	3-year - EasyServ™-19 depot repair service / service upgrades ²² available															
	1GB PC3-8500 DDR3 L-H SODIMM		55Y3706		ThinkPad Battery 37++ (9-cell)		45J7914									
	2GB PC3-8500 DDR3 L-H SODIMM		55Y3707		ThinkPad 170W AC Adapter		41R4421									
	4GB PC3-8500 DDR3 L-H SODIMM		55Y3708		ThinkPad W700 Mini Dock 2.0		57Y4345									
	Other accessories on O-W700 sheet															

See footnotes for important warranty information

US models announced August 12, 2008

⚡ US models withdrawn effective August 2009 or February 2010

ThinkPad® W700 2753 (Onsite)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	Cam- era	Discrete graphics memory	Disk(s) SATA GB ³ rpm	RAID	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe UWB or Turbo	Card slot	Blue/ Fing	Digit- izer	Preload	Workhorse (W) Global (G), Ed Avail date
2753-48U	T9400	2.53	1GB	17" WUXGA		512MB	2x160G 7200	0	Combo	Intel 5300 ²⁸	None	/54	Yes		Bus32	Sep 08
2753-6SU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200	0	DVD±RW	Intel 5300	None	/54	Yes		Bus64	W G P Sep 08
2753-6TU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200	1	DVD±RW	Intel 5300	None	CF	Yes	Wacom	Bus64	W G P Sep 08
2753-6UU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200	0	DVD±RW	Intel 5300	None	CF	Yes	Wacom	Bus64	W G P Sep 08
2753-6ZU	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200	0	DVD±RW	Intel 5300	None	CF	Yes	Wacom	XP Pro	G P Sep 08
2753-72U	X9100	3.06	4GB	17" WUXGA	Cam	1GB	2x160G 7200	0	DVD±RW	Intel 5300	None	CF	Yes	Wacom	XP Pro	G P Sep 08
2753-MNUT9600	T9600	2.80	4GB	17" WUXGA	Cam	512MB	2x160G 7200		DVD±RW	Intel 5300	None	/54	Yes		Bus32	W Ed Mar 09

- Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty
- First 17" widescreen ThinkPad workstation with integrated color calibration and two RAID-capable disks

Processor	Intel® Core™ 2 Duo processor T9400 or T9600 with dual-core, Intel HD boost, 1066MHz system bus, and 6MB L2 cache or Intel Core 2 Extreme processor X9100 with dual-core, Intel HD boost, 1066MHz system bus, and 6MB L2 cache	Preloaded operating system ²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 - Some: Genuine Windows Vista Business 64 ♦ Vista models: Vista Premium logo
Memory	1GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available	Preloaded applications ¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) • huey™PRO Monitor Color Correction by Pantone®/X-Rite®
SATA Combo SATA DVD±RW UltraBay Enhanced SATA disk	Some: DVD-ROM/CD-RW, SATA 1.5Gb/s, 12.7mm Ultrabay Enh, removable (43R9148) Some: DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high Two disks, 160GB ⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 3rd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™	ISV software certifications
Widescreen display Color calibration Camera	17.0" (431.8mm) WUXGA (1920x1200) color, anti-glare, CCFL backlight, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 72% color gamut huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest Some: camera on top of screen, 1.3-megapixel, fixed focus	Supports ThinkVantage® technologies
Discrete graphics	Some: NVIDIA® Quadro® FX2700M, PCI Express® x16, 512MB memory Some: NVIDIA Quadro FX3700M, PCI Express x16, 1GB memory Max external resolution: 2048x1536@85Hz (VGA DB-15 port); 2048x1536 (DisplayPort)	ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable management for W700 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 watt AC adapter
Keyboard TrackPoint® Touch pad Numeric keypad Digitizer ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard Some: Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side Two LEDs illuminate the keyboard to improve visibility in low-light conditions	170-watt AC adapter ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Dimensions ³ Weight ² Case material	9-cell 17" (WxDxH): 16.1" x 12.2" x 1.6"; 410mm x 310mm x 41mm 9-cell: starting at 8.4 lb (3.8kg) Top: magnesium alloy; Bottom: Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic	ThinkPlus™ ²² 4-year LOR ²⁴ 9x5 NBD 12X5630
Battery - type Battery - life ¹⁰	Lithium Ion 9-cell 9-cell: up to 2.3 hr	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Chipset	Mobile Intel PM45 Express Chipset (Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, RAID 0 or 1 support, USB 2.0, PCI Express 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus	
ExpressCard/34 ExpressCard/54 Compact Flash Smart Card Read Multicard Reader Ports	One ExpressCard/34 Some: [/54] One ExpressCard/34 or ExpressCard/54 Some: [CF] One Type I slot None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Five USB 2.0, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	
Mini PCI Express Intel 5300 ²⁸ 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3 None None (uses Half-Mini PCIe slot) 56K V.92 ⁶ modem in Communications Daughter Card socket Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip	
Limited warranty ¹²	3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available	
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM 4GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-W700 sheet	55Y3706 55Y3707 55Y3708	ThinkPad Battery 37++ (9-cell) 45J7914 ThinkPad 170W AC Adapter 41R4421 ThinkPad W700 Mini Dock 2.0 57Y4345 Other accessories at lenovo.com/accessories

See footnotes for important warranty information
US models announced August 12, 2008 or March 24, 2009

♦ Intel Centrino® 2 with vPro™ technology

✗ US models withdrawn effective February 2010

ThinkPad®



Lenovo® ThinkPad W700ds



Lenovo ThinkPad W700ds



Lenovo ThinkPad W700ds



ThinkPad 17W Business Topload Case
43R9117



Lenovo ThinkPad W700ds

ThinkPad® W700ds 2758 (TopSeller)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Primary display	Secondary display	Camera	Disk(s) SATA GB ⁸	RAID	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe UWB or Turbo	Card Blue/ slot	Digit- izer	Workhorse (W) Global (G) Avail Preload date
⌘ 2758-MMU	Q9000	2.00	4GB	17" WUXGA	10.6" WXGA	Cam	2x320GB	1	DVD±RW	❖Intel 5300 ²⁸	None	/54	Yes Wacom	Bus64 No Mar 09
⌘ 2758-MYU	Q9000	2.00	4GB	17" WUXGA	10.6" WXGA	Cam	2x320GB	1	DVD±RW	❖Intel 5300	None	/54	Yes Wacom	Bus64 No Oct 09

- **ds = dual screen**
- **17" widescreen ThinkPad workstation with integrated color calibration and two RAID-capable disks**
- **Select models include digitizer on palm rest**

Positioning Processor	<i>Mobile workstation; three spindles</i> Intel® Core™ 2 Quad processor Q9000 with quad-core , Intel HD boost, 1066MHz system bus, and 6MB L2 cache										Preloaded operating system²⁰ - Genuine Windows® Vista® Business 64 ↳ Vista Premium logo			
Memory	4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available;										Preloaded applications¹⁴ (only some listed)			
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high Two disks, 320GB⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports third disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™										<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) • huey™PRO Monitor Color Correction by Pantone®/X-Rite® 			
Displays	<i>Primary:</i> 17.0" (431.8mm) WUXGA (1920x1200) color , widescreen, anti-glare, CCFL backlight, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 72% color gamut; <i>Secondary:</i> 10.6" (268.7mm) WXGA (768x1280) color , portrait, anti-glare, LED backlight, 230 nits, 9:15 aspect ratio, 190:1 contrast ratio, 45% color gamut, slides out of right side of top cover, 30° tilt, 40% of primary screen size													
Color calibration Camera	huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest Camera on top of screen, 1.3-megapixel, fixed focus													
Discrete graphics	NVIDIA® Quadro® FX3700M , PCI Express® x16, 1GB memory; <i>Max external resolution:</i> 2048x1536@85Hz (VGA DB-15 port); 2048x1536 (DisplayPort)													
Keyboard TrackPoint® Touch pad Numeric keypad Digitizer ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows and App keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side Two LEDs illuminate the keyboard to improve visibility in low-light conditions										ISV software certifications Supports ThinkVantage® technologies			
Dimensions ³ Weight ² Case color Case material	<i>9-cell 17W" (WxDxH):</i> 16.1" x 12.2" x 2.1"; 410mm x 310mm x 52.2mm <i>9-cell:</i> starting at 10.9 lb (4.96kg) Black <i>Top:</i> magnesium alloy; <i>Bottom:</i> Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic										ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable management for W700 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 watt AC adapter			
Battery - type Battery - life ¹⁰	Lithium Ion 9-cell <i>9-cell:</i> up to 2.1 hr													
Chipset	Mobile Intel PM45 Express Chipset (Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, RAID 0 or 1 support, USB 2.0, PCI Express 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus													
ExpressCard/34 ExpressCard/54 Compact Flash Smart Card read Multicard reader Ports	One slot (ExpressCard/34) One slot (ExpressCard/34, ExpressCard/54) None None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Five USB 2.0, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin conn; 1394a-2000 standard)													
Mini PCI Express Intel 5300 ²⁸ 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3 None (uses Half-Mini PCIe slot) None (uses Half-Mini PCIe slot) 56K V.92 ⁶ modem in Communications Daughter Card socket Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack										170-watt AC adapter ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²			
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip										ThinkPlus™-22 3-year LOR 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180			
Limited warranty ¹²	3-year - EasyServ™-19 depot repair service / service upgrades ²² available										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706		ThinkPad Battery 37++ (9-cell)				45J7914							
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707		ThinkPad 170W AC Adapter				41R4421							
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708		ThinkPad W700 Mini Dock 2.0				57Y4345							
Other accessories on O-W700 sheet										Other accessories at lenovo.com/accessories				

See footnotes for important warranty information

❖ Intel Centrino® 2 with vPro™ technology

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⌘ US model announced October 22, 2009; previous models on March 24, 2009

(NIC15-3) October 2009

⌘ US model withdrawn effective December 2009

Type-model	Proc-essor	Mem-ory	Primary display	Secondary display	Camera	Disk(s) SATA GB ^a	RAID	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe UWB or Turbo	CardBlue/ slot	Digit-izer	Workhorse (W) Global (G) Avail date
2752-EPU Q9100	2.26	4GB	17" WUXGA	10.6" WXGA	Cam	2x160GB	None	DVD±RW	Intel 5300 ²⁸	None	/54	Yes	Bus64 Jan 09
2752-E7U QX9300	2.53	4GB	17" WUXGA	10.6" WXGA	Cam	2x160GB	None	DVD±RW	Intel 5300	None	/54	Yes	Wacom Bus64 WG Jan 09

- *ds = dual screen*
- *17" widescreen ThinkPad workstation with integrated color calibration and two RAID-capable disks*
- *Select models include digitizer on palm rest*

Positioning Processor	<i>Mobile workstation; three spindles</i> Intel® Core™ 2 Quad processor Q9100 with quad-core, Intel HD boost, 1066MHz system bus, and 12MB L2 cache or Intel Core 2 Extreme processor QX9300 with quad-core, Intel HD boost, 1066MHz system bus, and 12MB L2 cache										Preloaded operating system ²⁰ - Genuine Windows® Vista® Business 64 - Vista Premium logo
Memory	4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available										Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) • huey™PRO Monitor Color Correction by Pantone®/X-Rite®
SATA DVD±RW	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149)										ISV software certifications
Ultrabay Enhanced SATA disk	One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high Two disks, 160GB⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports third disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™										
Displays	<i>Primary:</i> 17.0" (431.8mm) WUXGA (1920x1200) color , widescreen, anti-glare, CCFL backlight, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 72% color gamut; <i>Secondary:</i> 10.6" (268.7mm) WXGA (768x1280) color , portrait, anti-glare, LED backlight, 230 nits, 9:15 aspect ratio, 190:1 contrast ratio, 45% color gamut, slides out of right side of top cover, 30° tilt, 40% of primary screen size										Supports ThinkVantage® technologies
Color calibration Camera	huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest Camera on top of screen, 1.3-megapixel, fixed focus										
Discrete graphics	NVIDIA® Quadro® FX3700M , PCI Express® x16, 1GB memory; <i>Max external resolution:</i> 2048x1536@85Hz (VGA DB-15 port); 2048x1536 (DisplayPort)										ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable management for W700 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 watt AC adapter
Keyboard TrackPoint®	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows and App keys										170-watt AC adapter ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Touch pad	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										
Numeric keypad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label										ThinkPlus™.22 3-year LOR 9x5 NBD 41C9176
Digitizer	10-key numeric keypad on right side of keyboard <i>Some:</i> Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side										
ThinkLight™	Two LEDs illuminate the keyboard to improve visibility in low-light conditions										ThinkPlus 4-year LOR 9x5 NBD 41C9177
Dimensions ³	<i>9-cell 17W" (WxDxH):</i> 16.1" x 12.2" x 2.1"; 410mm x 310mm x 52.2mm										ThinkPlus 5-year LOR 9x5 NBD 41C9179
Weight ²	<i>9-cell:</i> starting at 10.9 lb (4.96kg)										
Case color	Black										ThinkPlus 4-year P&L P/U Depot 41C9178
Case material	<i>Top:</i> magnesium alloy; <i>Bottom:</i> Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic										
Battery - type	Lithium Ion 9-cell										ThinkPlus 5-year P&L P/U Depot 41C9180
Battery - life ¹⁰	<i>9-cell:</i> up to 2.1 hr										
Chipset	Mobile Intel PM45 Express Chipset (Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, RAID 0 or 1 support, USB 2.0, PCI Express 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
ExpressCard/34	One slot (ExpressCard/34) <i>Some:</i> One slot (ExpressCard/34, ExpressCard/54)										
ExpressCard/54	None										
Compact Flash	None										
Smart Card read	None										
Multicard reader	7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H)										
Ports	Five USB 2.0, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin conn; 1394a-2000 standard)										
Mini PCI Express	Three Mini PCI Express slots										
Intel 5300 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5300, 3x3 (Shirley Peak)										
2G Turbo	None										
UWB	None (uses Half-Mini PCIe slot)										
Modem	56K V.92 ⁶ modem in Communications Daughter Card socket										
Bluetooth™	Bluetooth 2.1 wireless, LED indicator										
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1										
Intel AMT	Intel Active Management Technology (iAMT)										
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack										
Security	Power-on password, hard disk password, supervisor password, security keyhole										
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant										
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip										
Limited warranty ¹²	3-year - EasyServ™.19 depot repair service / service upgrades ²² available										
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706		ThinkPad Battery 37++ (9-cell)		45J7914						
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707		ThinkPad 170W AC Adapter		41R4421						
4GB PC3-8500 DDR3 L-H SODIMM	55Y3708		ThinkPad W700 Mini Dock 2.0		57Y4345						
Other accessories on O-W700 sheet	Other accessories at lenovo.com/accessories										

See footnotes for important warranty information
US models announced January 6, 2009
⚡ US model withdrawn effective November 2009

⚡ Intel Centrino 2 with vPro™ technology

ThinkPad® W700ds 2753 (Onsite)

Personal Systems Reference (PSREF)

Type-model	Proc-essor	Mem-ory	Primary display	Secondary display	Camera	Disk(s) SATA GB ^a	RAID	SATA optical	Mini PCIe 802.11 wireless	Mini PCIe UWB or Turbo	CardBlue/ Digit-izer	Workhorse (W) Global (G) Avail (P) date
2753-E7U QX9300	2.53	4GB	17" WUXGA	10.6" WXGA	Cam	2x160GB	None	DVD±RW	Intel 5300 ²⁸	None	/54 Yes Wacom	Bus64 WGP Jan 09

- *ds = dual screen*
- *17" widescreen ThinkPad workstation with integrated color calibration and two RAID-capable disks*
- *Select models include digitizer on palm rest*
- *This model is part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty*

Positioning Processor	<i>Mobile workstation; three spindles</i> Intel® Core™ 2 Extreme processor QX9300 with quad-core , Intel HD boost, 1066MHz system bus, and 12MB L2 cache											Preloaded operating system ²⁰ - Genuine Windows® Vista® Business 64 ◇ Vista Premium logo
Memory	4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available											Preloaded applications ¹⁴ (only some listed)
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable (43R9149) One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high Two disks, 160GB⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports third disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™											<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) • huey™PRO Monitor Color Correction by Pantone®/X-Rite®
Displays	<i>Primary:</i> 17.0" (431.8mm) WUXGA (1920x1200) color , widescreen, anti-glare, CCFL backlight, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 72% color gamut; <i>Secondary:</i> 10.6" (268.7mm) WXGA (768x1280) color , portrait, anti-glare, LED backlight, 230 nits, 9:15 aspect ratio, 190:1 contrast ratio, 45% color gamut, slides out of right side of top cover, 30° tilt, 40% of primary screen size											
Color calibration Camera	huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest Camera on top of screen, 1.3-megapixel, fixed focus											
Discrete graphics	NVIDIA® Quadro® FX3700M , PCI Express® x16, 1GB memory; <i>Max external resolution:</i> 2048x1536@85Hz (VGA DB-15 port); 2048x1536 (DisplayPort)											
Keyboard TrackPoint® Touch pad Numeric keypad Digitizer ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, Windows and App keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side Two LEDs illuminate the keyboard to improve visibility in low-light conditions											
Dimensions ³ Weight ² Case color Case material	<i>9-cell 17W" (WxDxH):</i> 16.1" x 12.2" x 2.1"; 410mm x 310mm x 52.2mm <i>9-cell:</i> starting at 10.9 lb (4.96kg) Black <i>Top:</i> magnesium alloy; <i>Bottom:</i> Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic											
Battery - type Battery - life ¹⁰	Lithium Ion 9-cell <i>9-cell:</i> up to 2.1 hr											ISV software certifications
Chipset	Mobile Intel PM45 Express Chipset (Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, RAID 0 or 1 support, USB 2.0, PCI Express 1.1, PCI 2.3, security chip, ethernet MAC), LPC bus											Supports ThinkVantage® technologies
ExpressCard/34 ExpressCard/54 Compact Flash Smart Card read Multicard reader Ports	One slot (ExpressCard/34) One slot (ExpressCard/34, ExpressCard/54) None None 7-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC, XD, XD Type H) Five USB 2.0, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin conn; 1394a-2000 standard)											ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable management for W700 Series Features: <ul style="list-style-type: none"> • Security key lock • Security cable lock slot • External monitor ports <ul style="list-style-type: none"> – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 watt AC adapter
Mini PCI Express Intel 5300 ²⁸ 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3 None None (uses Half-Mini PCIe slot) 56K V.92 ⁶ modem in Communications Daughter Card socket Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack											170-watt AC adapter ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip											
Limited warranty ¹²	3-years /1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time/ service upgrades ²² available											
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM 4GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-W700 sheet	55Y3706 55Y3707 55Y3708	ThinkPad Battery 37++ (9-cell) ThinkPad 170W AC Adapter ThinkPad W700 Mini Dock 2.0 Other accessories at lenovo.com/accessories	45J7914 41R4421 57Y4345									ThinkPlus™.22 4-year LOR 9x5 NBD 12X5630 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US model announced January 6, 2009

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(NIC15-2) January 2009

Memory

1GB PC3-8500 DDR3 SODIMM	43R1987	ann 08/05/08
1GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0551	ann 03/17/09
2GB PC3-8500 DDR3 SODIMM	43R1988	ann 08/05/08
2GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0552	ann 03/17/09
4GB PC3-8500 DDR3 SODIMM	51J0493	ann 03/03/09
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann 06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann 06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann 06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann 06/23/09
4GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3708	ann 06/23/09

Ultrabay Slim 9.5mm

Serial ATA Hard Drive Bay Adapter III ⁴⁸	43N3412	ann 06/23/09
DVD-ROM Ultrabay Slim SATA 1.5Gb/s	43N3212	ann 08/05/08
CD-RW/DVD-ROM Ultrabay Slim SATA ⁴⁸	43N3213	ann 08/05/08
DVD Burner Ultrabay Slim SATA 1.5Gb/s ⁴⁸	43N3214	ann 08/05/08

⁴⁸ Slim 9.5mm device in 12.7mm bay shows gap above the device.

Ultrabay Enhanced 12.7mm

DVD-ROM Ultrabay Enhanced SATA 1.5Gb/s	43R9147	ann 08/05/08
DVD Burner Ultrabay Enh SATA 1.5Gb/s	43R9149	ann 08/05/08
Blu-ray™ Burner Ultrabay Enh SATA 1.5Gb/s	43R9150	ann 08/05/08

Storage and removable storage

160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	41N5692	ann 03/20/07
160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	41N5737	ann 10/16/07
250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43R8152	ann 01/15/08
250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3410	ann 01/20/09
320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3403	ann 08/05/08
320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3411	ann 01/20/09
500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3420	ann 06/23/09
500GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3423	ann 01/07/10

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in the Ultrabay

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	ann 08/26/08
256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover)	43N3417	ann 06/23/09

USB 2.0 Essential Memory Key 4GB	45J7904	ann 06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann 07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann 10/28/08
USB 2.0 Ultra Secure Memory Key 1GB	45J5915	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann 08/26/08

USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	ann 11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann 01/07/10
USB 2.0 Super Multi-Burner Drive	41N5565	ann 01/23/07
USB 2.0 Portable DVD Burner	43N3264	ann 01/05/10

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann 05/12/09
USB Port Replicator with Digital Video	45K1610	ann 07/28/09
ThinkPad W700 Mini Dock 2.0	57Y4345	ann 09/29/09

More information at www.lenovo.com/support/W700minidock

Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Ultraslim Wireless Keyboard and Mouse ⁵²	57Y4700	ann 09/15/09

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

ThinkPad USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

Mouse

Lenovo Mini Optical Mouse - Black (USB)	55Y9308	ann 05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann 05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann 01/22/08

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06
ExpressCard Gemplus Smart Card Reader	41N3043	ann 06/27/06

⁵⁷ Only compatible with the models having 54mm Express card slot.

Multimedia

USB 2.0 Lenovo Webcam	40Y8519	ann 08/29/06
ThinkPad In-Ear Headphones	57Y4488	ann 01/07/10

Batteries

ThinkPad Battery 37++ (9-cell)	45J7914	ann 08/12/08
ThinkPad 170W AC Adapter	41R4421	ann 08/12/08
ThinkPad 230W AC Adapter	55Y9333	ann 02/23/10

More information at www.lenovo.com/alldaycomputing

Carrying Cases

Up to 17.0" widescreen models:

ThinkPad 17W Business Topload Case	43R9117	ann 08/12/08
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Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann 11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann 10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann 10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann 10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann 10/20/09
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann 09/17/08

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
ThinkVision USB Soundbar	40Y7616	ann 08/23/05
ThinkVision Soundbar	45K1263	ann 09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
Lenovo Easy Reach Monitor Stand	55Y9258	ann 09/22/09
Radial Arm	19K4464	ann 05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:

- www.lenovo.com/support/accessories
- www.lenovo.com/support/notebookaccessories
- www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
Accessories Guide pdf at www.lenovo.com/accessoriesguide



Lenovo® ThinkPad W701



Lenovo ThinkPad W701 with
ThinkPad W700 Mini Dock 2.0
57Y4345



ThinkPad 170W AC Adapter
41R4421



ThinkPad Battery 37++ (9-cell)
45J7914



Lenovo ThinkPad W701



Lenovo ThinkPad W701

ThinkPad® W701 2500 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Processor	Memory (MHz)	Widescreen display	Discrete graphics	Disk(s) SATA GB ⁸ rpm	RAID	SATA optical	PCIe Mini Card 802.11	Card slot	Color calib/ Adapter Intel vPro	Power (watt)	Preload	Avail date
2500-3AU	i7-720QM	2GBx1 1066	17" WXGA+	FX2800M	1x320G 7200	No	DVD±RW	Intel 6300 ²⁸	Exp 54		170W	vPro Pro 64	Mar 10
2500-3BU	i7-820QM	2GBx2 1066	17" WUXGA	FX2800M	1x320G 7200	No	DVD±RW	Intel 6300	Smart	Yes	230W	vPro Pro 64	Mar 10

- *These small and medium business (SMB) models are part of the US TopSeller™ Program*

Positioning	<i>Mobile workstation; three spindles</i>										Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64 Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • Fingerprint Software • ThinkVantage Toolbox • Adobe® Reader® • Skype™ for Windows • Corel® WinDVD® (DVD±RW) ISV software certifications Supports ThinkVantage® technologies ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable mgmt for W700 and W701 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 or 230 watt AC adptry 170-watt or 230-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Processor	Intel® Core™ i7 processor i7-720QM or i7-820QM with quad-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1333MHz), Intel Turbo Boost, Hyper-Threading technology; <i>i7-720QM: 1.60GHz, 6MB cache; i7-820QM: 1.73GHz, 8MB cache</i>										
Memory	2GB or 4GB std / 16GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, four 204-pin SO-DIMM sockets										
SATA DVD±RW Ultrabay Enhanced	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable										
SATA disk(s)	One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high One disk, 320GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports 3rd disk, ThinkPad Shock Mounted Hard Drive, Active Protection System™										
Widescreen display	<i>Some: 17.0"</i> (433.0mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 300:1 contrast ratio, 45% color gamut <i>Some: 17.0"</i> (433.0mm) WUXGA (1920x1200) color , anti-glare, RGB LED backlight , 280 nits, 16:10 aspect ratio, 600:1 contrast ratio, 100% color gamut										
Color calibration	<i>Some: huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest</i>										
Camera	Camera on top of screen, 2.0-megapixel, fixed focus										
Discrete graphics	NVIDIA® Quadro® FX2800M , PCI Express® x16, 1GB memory supports dual independent display; <i>Maximum external resolution: 2560x1600 (DisplayPort or dual-link DVI-D)@60Hz; 2048x1536 (VGA)@85Hz</i>										
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys										
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label										
Numeric keypad	10-key numeric keypad on right side of keyboard										
Digitizer	<i>Some: Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side</i>										
ThinkLight™	Two LEDs illuminate the keyboard to improve visibility in low-light conditions										
Dimensions ³	<i>9-cell 17W" (WxDxH): 16.1" x 12.2" x 1.60-1.63"; 410mm x 310mm x 40.6-41.4mm</i>										
Weight ²	<i>9-cell: starting at 8.97 lb (4.07kg)</i>										
Case material	<i>Top: magnesium alloy;</i> <i>Bottom: Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic</i>										
Battery - type	Lithium Ion 9-cell										
Battery - life ¹⁰	<i>9-cell: up to 2.0 hr</i>										
Chipset	Mobile Intel QM57 Express Chipset										
ExpressCard/34	One ExpressCard/34										
ExpressCard/54	<i>Some: [/54] One ExpressCard/34 or ExpressCard/54</i>										
Compact Flash	None										
Smart Card Read	<i>Some: Smart Card Reader</i>										
Multicard Reader	5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC)										
Ports	One USB 3.0, Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										
PCIe Mini Card	One PCI Express Half Mini Card slot										
Intel 6300 ²⁸	11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Ultimate-N 6300, 3x3										
Modem	56K V.92 ⁶ modem										
Bluetooth™	Bluetooth 2.1 wireless, LED indicator										
Ethernet	Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1										
Intel AMT	Intel Active Management Technology (iAMT)										
Audio support	High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack										
Security	Power-on password, hard disk password, supervisor password, security keyhole										
Security chip	Trusted Platform Module, TCG 1.2-compliant										
Fingerprint reader	UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip										
Limited warranty ¹²	3-year - depot repair service / service upgrades ²² available										

See footnotes for important warranty information
 US models announced February 23, 2010

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Type-model	Processor	Memory (MHz)	Widescreen display	Camera	Discrete graphics	Disk(s) SATA GB ⁸ rpm	RAID	Card slot	Color calib/ Digitizer	Power Adapter (watt)	Intel vPro	Workhorse (W) Global (G) Avail date
2541-25U	i7-920XM	2GBx2 1066	17" WUXGA		FX3800M	320G 7200 x 2	0	CF	Yes	230W	Pro 64	Mar 10
2541-28U	i7-920XM	4GBx2 1333	17" WUXGA	2.0M	FX3800M	128G SSD + 320G 5400		CF	Yes	230W	Pro 64	Mar 10
2541-29U	i7-920XM	2GBx2 1066	17" WUXGA		FX2800M	320G 5400		CF	Yes	230W	Pro 64	Mar 10
2541-4HU	i7-820QM	2GBx2 1066	17" WUXGA	2.0M	FX3800M	500G 7200 x 2		Smart	Yes	230W	vPro Pro 64 W	Mar 10
2541-4KU	i7-820QM	4GBx1 1333	17" WUXGA	2.0M	FX2800M	320G 5400 x2	0	Smart	Yes	230W	vPro Pro 64 W	Mar 10
2541-58U	i7-720QM	2+1GB 1066	17" WXGA+		FX2800M	320G 7200		Exp 54		170W	vPro Pro 64 W G	Mar 10
2541-59U	i7-820QM	2GBx2 1066	17" WUXGA	2.0M	FX2800M	500G 7200 x 2		Exp 54		230W	vPro Pro 64 W G	Mar 10
2541-5BU	i7-820QM	2GBx2 1066	17" WUXGA	2.0M	FX3800M	128G SSD + 500G 7200		Exp 54		230W	vPro Pro 64 W G	Mar 10

• These models have an depot repair service 3-year limited warranty

Positioning Processor	Mobile workstation; three spindles Intel® Core™ i7 processor i7-720QM, i7-820QM, or i7-920XM with quad-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1333MHz), Intel Turbo Boost, Hyper-Threading technology; <i>i7-720QM: 1.60GHz, 6MB cache; i7-820QM/ i7-920XM: 1.73GHz/2.00GHz, 8MB cache</i>	Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64 Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software • ThinkVantage Toolbox • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft Research AutoCollage Touch • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW)
Memory	3GB, 4GB, or 8GB std / 16GB max ⁷ / PC3-8500 1066MHz or PC3-10600 1333MHz DDR3 , non-parity, dual-channel capable, four 204-pin SO-DIMM sockets	
SATA DVD±RW Ultrabay Enhanced SATA disk(s)	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high <i>Some: One disk, 320GB⁸ (5400 or 7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ (APS)</i> <i>Some: Two same disks, 320GB (5400 or 7200 rpm) or 500GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, APS</i> <i>Some: Two disks, 128GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high and 320GB (5400 rpm) or 500GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, APS</i> <i>All: removable, upgradable, supports three disks max, Shock Mounted Hard Drive</i>	
Widescreen display	<i>Some: 17.0" (433.0mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio, 45% color gamut</i> <i>Some: 17.0" (433.0mm) WUXGA (1920x1200) color, anti-glare, RGB LED backlight, 280 nits, 16:10 aspect ratio, 600:1 contrast ratio, 100% color gamut</i> <i>huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest</i> <i>Some: camera on top of screen, 2.0-megapixel, fixed focus</i>	
Color calibration Camera	<i>Some: huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest</i> <i>Some: camera on top of screen, 2.0-megapixel, fixed focus</i>	ISV software certifications Supports ThinkVantage® technologies
Discrete graphics	<i>Some: NVIDIA® Quadro® FX2800M, PCI Express® x16, 1GB memory</i> <i>Some: NVIDIA Quadro FX3800M, PCI Express x16, 1GB memory</i> supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort or dual-link DVI-D) @60Hz; 2048x1536 (VGA) @85Hz	ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable mgmt for W700 and W701 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 or 230 watt AC adptr
Keyboard TrackPoint® Touch pad Numeric keypad Digitizer ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard <i>Some: Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side</i> Two LEDs illuminate the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case material	<i>9-cell 17W" (WxDxH): 16.1" x 12.2" x 1.60-1.63"; 410mm x 310mm x 40.6-41.4mm</i> <i>9-cell: starting at 8.97 lb (4.07kg)</i> <i>Top: magnesium alloy;</i> <i>Bottom: Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic</i>	
Battery - type Battery - life ¹⁰	Lithium Ion 9-cell <i>9-cell: up to 2.0 hr</i>	170-watt or 230-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Chipset ExpressCard/34 ExpressCard/54 Compact Flash Smart Card Read Multicard Reader Ports	Mobile Intel QM57 Express Chipset One ExpressCard/34 <i>Some: [54] One ExpressCard/34 or ExpressCard/54</i> <i>Some: [CF] One Type I slot</i> <i>Some: Smart Card Reader</i> 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One USB 3.0, Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)	
PCIe Mini Card Intel 6300 ²⁸ Modem Bluetooth™ Ethernet Intel AMT Audio support	One PCI Express Half Mini Card slot 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Ultimate-N 6300, 3x3 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack	ThinkPlus™, 22 3-year LOR ²⁴ 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹²	3-year - depot repair service / service upgrades ²² available	

See footnotes for important warranty information
US models announced February 23, 2010

Type-model	Processor	Memory (MHz)	Widescreen display	Camera	Discrete graphics	Disk(s) SATA GB ⁸ rpm	RAID	Color calib/ Adapter Digitizer (watt)	Intel vPro	Preload	Workhorse (W) Global (G) GMP (P)	Avail date
2542-58U	i7-720QM	2+1GB	1066	17" WXGA+	FX2800M	320G 7200	None	None	170W	vPro	Pro 64	W G P Mar 10
2542-59U	i7-820QM	2GBx2	1066	17" WUXGA	2.0M FX2800M	500G 7200 x 2	None	None	230W	vPro	Pro 64	W G P Mar 10
2542-5BU	i7-820QM	2GBx2	1066	17" WUXGA	2.0M FX3800M	128G SSD + 500G 7200	None	None	230W	vPro	Pro 64	W G P Mar 10

• These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

Positioning Processor	<i>Mobile workstation; three spindles</i> Intel® Core™ i7 processor i7-720QM or i7-820QM with quad-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1333MHz), Intel Turbo Boost, Hyper-Threading technology; <i>i7-720QM: 1.60GHz, 6MB cache; i7-820QM: 1.73GHz, 8MB cache</i>										Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 64
Memory	3GB or 4GB std / 16GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, four 204-pin SO-DIMM sockets										Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • FingerPrint Software • ThinkVantage Toolbox • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Microsoft Research AutoCollage Touch • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW)
SATA DVD±RW Ultrabay Enhanced SATA disk(s)	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high <i>Some: One disk, 320GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ (APS)</i> <i>Some: Two same disks, 500GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, APS</i> <i>Some: Two disks, 128GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high and 500GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, APS</i> <i>All: removable, upgradable, supports three disks max, Shock Mounted Hard Drive</i>										ISV software certifications
Widescreen display	<i>Some: 17.0" (433.0mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 300:1 contrast ratio, 45% color gamut</i> <i>Some: 17.0" (433.0mm) WUXGA (1920x1200) color, anti-glare, RGB LED backlight, 280 nits, 16:10 aspect ratio, 600:1 contrast ratio, 100% color gamut</i>										Supports ThinkVantage® technologies
Color calibration Camera	None <i>Some: camera on top of screen, 2.0-megapixel, fixed focus</i>										ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable mgmt for W700 and W701 Series Features: • Security key lock • Security cable lock slot • External monitor ports – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 or 230 watt AC adpтр
Discrete graphics	<i>Some: NVIDIA® Quadro® FX2800M, PCI Express® x16, 1GB memory</i> <i>Some: NVIDIA Quadro FX3800M, PCI Express x16, 1GB memory</i> supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort or dual-link DVI-D) @60Hz; 2048x1536 (VGA) @85Hz										
Keyboard TrackPoint® Touch pad Numeric keypad Digitizer ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard None Two LEDs illuminate the keyboard to improve visibility in low-light conditions										
Dimensions ³ Weight ² Case material	<i>9-cell 17W" (WxDxH): 16.1" x 12.2" x 1.60-1.63"; 410mm x 310mm x 40.6-41.4mm</i> <i>9-cell: starting at 8.97 lb (4.07kg)</i> <i>Top: magnesium alloy;</i> <i>Bottom: Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic</i>										
Battery - type Battery - life ¹⁰	Lithium Ion 9-cell <i>9-cell: up to 2.0 hr</i>										
Chipset ExpressCard/34 ExpressCard/54 Compact Flash Smart Card Read Multicard Reader Ports	Mobile Intel QM57 Express Chipset One ExpressCard/34 [54] One ExpressCard/34 or ExpressCard/54 None None 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One USB 3.0, Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										170-watt or 230-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
PCIe Mini Card Intel 6300 ²⁸ Modem Bluetooth™ Ethernet Intel AMT Audio support	One PCI Express Half Mini Card slot 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Ultimate-N 6300, 3x3 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack										ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip										ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180
Limited warranty ¹²	3-years/1-year - battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time/ service upgrades ²² available										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty

See footnotes for important warranty information
US models announced February 23, 2010



Lenovo® ThinkPad W701ds



Lenovo ThinkPad W701ds



Lenovo ThinkPad W701ds



ThinkPad 17W Business Topload Case
43R9117



ThinkPad 230W AC Adapter
55Y9333

ThinkPad® W701ds 2500 (TopSeller) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Processor	Memory (MHz)	Primary display	Secondary display	Camera	Discrete graphics	Disk(s) SATA GB ⁸ rpm	Color RAID	Power Adapter (watt)	Intel vPro	Preload	Avail date
2500-2XU	i7-820QM	4GBx2 1333	17" WUXGA	10.6" WXGA		FX3800M	128G SSD + 320G 5400	None	Yes	230W	vPro Pro 64	Mar 10
2500-3CU	i7-820QM	2GBx2 1066	17" WUXGA	10.6" WXGA	2.0M	FX3800M	500G 7200	None	Yes	230W	vPro Pro 64	Mar 10

- **ds = dual screen**
- **17" widescreen ThinkPad workstation with two RAID-capable disks**
- **Select models include integrated color calibration and digitizer on palm rest**

Positioning	<i>Mobile workstation; three spindles</i>							Preloaded operating system²⁰ - Genuine Windows [®] 7 Professional 64				
Processor	Intel[®] Core[™] i7 processor i7-820QM with quad-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1333MHz), Intel Turbo Boost, Hyper-Threading technology; 1.73GHz, 8MB cache							Preloaded applications¹⁴ (only some listed)				
Memory	4GB or 8GB std / 16GB max ⁷ / PC3-8500 1066MHz or PC3-10600 1333MHz DDR3 , non-parity, dual-channel capable, four 204-pin SO-DIMM sockets							<ul style="list-style-type: none"> • Rescue and Recovery[™] • Access Connections[™] • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software • ThinkVantage Toolbox • Adobe[®] Reader[®] • Skype[™] for Windows • Corel[®] WinDVD[®] (DVD±RW) • Corel Burn.Now[™] Lenovo Edition (DVD±RW) 				
SATA DVD±RW	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable							ISV software certifications Supports ThinkVantage[®] technologies ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable mgmt for W700 and W701 Series Features: <ul style="list-style-type: none"> • Security key lock • Security cable lock slot • External monitor ports <ul style="list-style-type: none"> - Analog VGA DB-15 - Dual-link DVI-D - DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 or 230 watt AC adptr 				
Ultrabay Enhanced	One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high											
SATA disk	<i>Some:</i> One disk, 500GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System [™] (APS) <i>Some:</i> Two disks, 128GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high and 320GB (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, APS <i>All:</i> removable, upgradable, supports three disks max, Shock Mounted Hard Drive											
Displays	<i>Primary:</i> 17.0" (433.0mm) WUXGA (1920x1200) color , anti-glare, RGB LED backlight , 280 nits, 16:10 aspect ratio, 600:1 contrast ratio, 100% color gamut; <i>Secondary:</i> 10.6" (268.7mm) WXGA (768x1280) color , portrait, anti-glare, LED backlight, 230 nits, 9:15 aspect ratio, 190:1 contrast ratio, 45% color gamut, slides out of right side of top cover, 30° tilt, 40% of primary screen size							ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable mgmt for W700 and W701 Series Features: <ul style="list-style-type: none"> • Security key lock • Security cable lock slot • External monitor ports <ul style="list-style-type: none"> - Analog VGA DB-15 - Dual-link DVI-D - DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 or 230 watt AC adptr 				
Color calibration	huey [™] PRO Colorimeter by X-Rite [®] color calibration sensor in palm rest											
Camera	<i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus							ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable mgmt for W700 and W701 Series Features: <ul style="list-style-type: none"> • Security key lock • Security cable lock slot • External monitor ports <ul style="list-style-type: none"> - Analog VGA DB-15 - Dual-link DVI-D - DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 or 230 watt AC adptr 				
Discrete graphics	NVIDIA[®] Quadro[®] FX3800M , PCI Express [®] x16, 1GB memory, supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort or dual-link DVI-D) @ 60Hz; 2048x1536 (VGA) @ 85Hz											
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys							230-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT[™] Gold rating ENERGY STAR[®] 5.0-compliant RoHS-compliant International Warranty Service¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus[™].²² 3-year LOR 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty				
TrackPoint [®]	TrackPoint [®] pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											
Touch pad	UltraNav [™] , wide touch pad below keyboard, Tap Zones, scrolling regions label											
Numeric keypad	10-key numeric keypad on right side of keyboard											
Digitizer	Wacom [®] digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side											
ThinkLight [™]	Two LEDs illuminate the keyboard to improve visibility in low-light conditions											
Dimensions ³	<i>9-cell 17W" (WxDxH):</i> 16.1" x 12.2" x 1.60-1.63"; 410mm x 310mm x 40.6-41.4mm											
Weight ²	<i>9-cell:</i> starting at 8.97 lb (4.07kg)											
Case material	<i>Top:</i> magnesium alloy; <i>Bottom:</i> Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic											
Battery - type	Lithium Ion 9-cell											
Battery - life ¹⁰	<i>9-cell:</i> up to 2.0 hr											
Chipset	Mobile Intel QM57 Express Chipset											
ExpressCard/34	One ExpressCard/34											
ExpressCard/54	None											
Compact Flash	[CF] One Type I slot											
Smart Card read	None											
Multicard reader	5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC)											
Ports	One USB 3.0, Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)											
PCIe Mini Card	One PCI Express Half Mini Card slot											
Intel 6300 ²⁸	11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino [®] Ultimate-N 6300, 3x3											
Modem	56K V.92 ⁶ modem											
Bluetooth [™]	Bluetooth 2.1 wireless, LED indicator											
Ethernet	Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1											
Intel AMT	Intel Active Management Technology (iAMT)											
Audio support	High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack											
Security	Power-on password, hard disk password, supervisor password, security keyhole											
Security chip	Trusted Platform Module, TCG 1.2-compliant											
Fingerprint reader	UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip											
Limited warranty ¹² 3-year - depot repair service / service upgrades ²² available												

See footnotes for important warranty information
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ThinkPad® W701ds 2541 (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base turbo (GHz)	Memory (MHz)	Primary display	Secondary display	Camera	Disk(s) SATA GB ⁸ rpm	RAID	Card slot	Power Adapter (watt)	Intel vPro	Workhorse (W) Global (G) Avail date
2541-4JU	i7-920XM	2.00	3.20	4GBx1 1333	17" WUXGA	10.6" WXGA	2.0M 320G 7200 x 2	0	Exp 54	230W		Pro 64 W Mar 10
2541-5AU	i7-820QM	1.73	3.06	2GBx2 1066	17" WUXGA	10.6" WXGA	2.0M 500G 7200		Smart	230W	vPro	Pro 64 W G Mar 10

- **ds = dual screen**
- **17" widescreen ThinkPad workstation with two RAID-capable disks**
- **Select models include integrated color calibration and digitizer on palm rest**

Positioning Processor	<i>Mobile workstation; three spindles</i> Intel® Core™ i7 processor i7-820QM or i7-920XM with quad-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1333MHz), Intel Turbo Boost, Hyper-Threading technology; 8MB cache										Preloaded operating system ²⁰ - Genuine Windows [®] 7 Professional 64
Memory	4GB std / 16GB max ⁷ / PC3-8500 1066MHz or PC3-10600 1333MHz DDR3 , non-parity, dual-channel capable, four 204-pin SO-DIMM sockets										Preloaded applications ¹⁴ (only some listed)
SATA DVD±RW Ultrabay Enhanced SATA disk	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high <i>Some:</i> One disk, 500GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ (APS) <i>Some:</i> Two same disks, 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, APS <i>All:</i> removable, upgradable, supports three disks max, Shock Mounted Hard Drive										<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software • ThinkVantage Toolbox • Adobe® Reader® • Skype™ for Windows • Corel® WinDVD™ (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW)
Displays	<i>Primary:</i> 17.0" (433.0mm) WUXGA (1920x1200) color , anti-glare, RGB LED backlight , 280 nits, 16:10 aspect ratio, 600:1 contrast ratio, 100% color gamut; <i>Secondary:</i> 10.6" (268.7mm) WXGA (768x1280) color , portrait, anti-glare, LED backlight, 230 nits, 9:15 aspect ratio, 190:1 contrast ratio, 45% color gamut, slides out of right side of top cover, 30° tilt, 40% of primary screen size										ISV software certifications
Color calibration Camera	huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest Camera on top of screen, 2.0-megapixel, fixed focus										Supports ThinkVantage® technologies
Discrete graphics	NVIDIA® Quadro® FX2800M , PCI Express® x16, 1GB memory, supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort or dual-link DVI-D) @ 60Hz; 2048x1536 (VGA) @ 85Hz										ThinkPad W700 Mini Dock 2.0 Provides desktop expansion and cable mgmt for W700 and W701 Series Features: <ul style="list-style-type: none"> • Security key lock • Security cable lock slot • External monitor ports <ul style="list-style-type: none"> – Analog VGA DB-15 – Dual-link DVI-D – DisplayPort • Four USB 2.0 ports • eSATA port • Gigabit ethernet port • Microphone in and headphone out • S/PDIF (RCA coaxial digital out) • Requires 170 or 230 watt AC adptr
Keyboard TrackPoint® Touch pad Numeric keypad Digitizer ThinkLight™	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label 10-key numeric keypad on right side of keyboard Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side Two LEDs illuminate the keyboard to improve visibility in low-light conditions										
Dimensions ³ Weight ² Case material	<i>9-cell 17W" (WxDxH):</i> 16.1" x 12.2" x 1.60-1.63"; 410mm x 310mm x 40.6-41.4mm <i>9-cell:</i> starting at 8.97 lb (4.07kg) <i>Top:</i> magnesium alloy; <i>Bottom:</i> Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic										
Battery - type Battery - life ¹⁰	Lithium Ion 9-cell <i>9-cell:</i> up to 2.0 hr										
Chipset ExpressCard/34 ExpressCard/54 Compact Flash Smart Card read Multicard reader Ports	Mobile Intel QM57 Express Chipset One ExpressCard/34 <i>Some:</i> [/54] One ExpressCard/34 or ExpressCard/54 None <i>Some:</i> Smart Card Reader 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One USB 3.0, Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										230-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
PCIe Mini Card Modem Bluetooth™ Ethernet Intel AMT Audio support	One PCI Express Half Mini Card slot 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Ultimate-N 6300, 3x3 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack										ThinkPlus™.22 3-year LOR 9x5 NBD 41C9176 ThinkPlus 4-year LOR 9x5 NBD 41C9177 ThinkPlus 5-year LOR 9x5 NBD 41C9179 ThinkPlus 4-year P&L P/U Depot 41C9178 ThinkPlus 5-year P&L P/U Depot 41C9180
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty
Limited warranty ¹² 3-year - depot repair service / service upgrades ²² available											

See footnotes for important warranty information
US models announced February 23, 2010

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ThinkPad® W701ds 2542 (Onsite) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base turbo (GHz)	Memory (MHz)	Primary display	Secondary display	Camera	Disk(s) SATA GB ⁸ rpm	RAID	Card slot	Power Adapter (watt)	Intel vPro	Workhorse (W) Global (G) Preload GMP (P)	Avail date
2542-5AU	i7-820QM	1.73	3.06	2GBx2 1066	17" WUXGA	10.6" WXGA	2.0M 500G 7200 x 1	No	Smart	230W	vPro	Pro 64 W G P	Mar 10

- **ds = dual screen**
- **17" widescreen ThinkPad workstation with two RAID-capable disks**
- **Select models include integrated color calibration and digitizer on palm rest**

Positioning	<i>Mobile workstation; three spindles</i>										Preloaded operating system²⁰		
Processor	Intel® Core™ i7 processor i7-820QM with quad-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1333MHz), Intel Turbo Boost, Hyper-Threading technology; 8MB cache										- Genuine Windows® 7 Professional 64		
Memory	4GB std / 16GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, four 204-pin SO-DIMM sockets										Preloaded applications¹⁴ (only some listed)		
SATA DVD±RW	DVD burner, SATA 1.5Gb/s, 12.7mm Ultrabay Enhanced, removable										• Rescue and Recovery™		
Ultrabay Enhanced	One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high										• Access Connections™		
SATA disk	One disk, 500GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, supports three disks max, Shock Mounted Hard Drive Active Protection System™ (APS)										• Password Manager		
Displays	<i>Primary:</i> 17.0" (433.0mm) WUXGA (1920x1200) color , anti-glare, RGB LED backlight , 280 nits, 16:10 aspect ratio, 600:1 contrast ratio, 100% color gamut;										• ThinkVantage Power Manager		
	<i>Secondary:</i> 10.6" (268.7mm) WXGA (768x1280) color , portrait, anti-glare, LED backlight, 230 nits, 9:15 aspect ratio, 190:1 contrast ratio, 45% color gamut, slides out of right side of top cover, 30° tilt, 40% of primary screen size										• Fingerprint Software		
Color calibration	huey™PRO Colorimeter by X-Rite® color calibration sensor in palm rest										• ThinkVantage Toolbox		
Camera	Camera on top of screen, 2.0-megapixel, fixed focus										• Adobe® Reader®		
Discrete graphics	NVIDIA® Quadro® FX2800M , PCI Express® x16, 1GB memory, supports dual independent display;										• Skype™ for Windows		
	<i>Maximum external resolution:</i> 2560x1600 (DisplayPort or dual-link DVI-D) @60Hz; 2048x1536 (VGA) @85Hz										• Corel® WinDVD® (DVD±RW)		
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys										• Corel Burn.Now™ Lenovo Edition (DVD±RW)		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										ISV software certifications		
Touch pad	UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label										Supports ThinkVantage® technologies		
Numeric keypad	10-key numeric keypad on right side of keyboard										ThinkPad W700 Mini Dock 2.0		
Digitizer	Wacom® digitizer (128x80mm) on palm rest, digitizer pen, pen holder in right side										Provides desktop expansion and cable mgmt for W700 and W701 Series		
ThinkLight™	Two LEDs illuminate the keyboard to improve visibility in low-light conditions										Features:		
Dimensions ³	<i>9-cell 17W" (WxDxH):</i> 16.1" x 12.2" x 1.60-1.63"; 410mm x 310mm x 40.6-41.4mm										• Security key lock		
Weight ²	<i>9-cell:</i> starting at 8.97 lb (4.07kg)										• Security cable lock slot		
Case material	<i>Top:</i> magnesium alloy;										• External monitor ports		
	<i>Bottom:</i> Polycarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic										– Analog VGA DB-15		
Battery - type	Lithium Ion 9-cell										– Dual-link DVI-D		
Battery - life ¹⁰	<i>9-cell:</i> up to 2.0 hr										– DisplayPort		
Chipset	Mobile Intel QM57 Express Chipset										• Four USB 2.0 ports		
ExpressCard/34	One ExpressCard/34										• eSATA port		
ExpressCard/54	None										• Gigabit ethernet port		
Compact Flash	None										• Microphone in and headphone out		
Smart Card read	Smart Card Reader										• S/PDIF (RCA coaxial digital out)		
Multicard reader	5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC)										• Requires 170 or 230 watt AC adptry		
Ports	One USB 3.0, Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor ¹¹ (VGA DB-15, dual-link DVI-D, DisplayPort), modem (RJ-11), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)										230-watt AC adapter		
PCIe Mini Card	One PCI Express Half Mini Card slot										ThinkPad Roll Cage (one-piece magnesium frame)		
Intel 6300 ²⁸	11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Ultimate-N 6300, 3x3										EPEAT™ Gold rating		
Modem	56K V.92 ⁶ modem										ENERGY STAR® 5.0-compliant		
Bluetooth™	Bluetooth 2.1 wireless, LED indicator										RoHS-compliant		
Ethernet	Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1										International Warranty Service ¹⁷		
Intel AMT	Intel Active Management Technology (iAMT)										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378		
Audio support	High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack										ThinkPlus™.22 3-year LOR 9x5 NBD 41C9176		
Security	Power-on password, hard disk password, supervisor password, security keyhole										ThinkPlus 4-year LOR 9x5 NBD 41C9177		
Security chip	Trusted Platform Module, TCG 1.2-compliant										ThinkPlus 5-year LOR 9x5 NBD 41C9179		
Fingerprint reader	UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip										ThinkPlus 4-year P&L P/U Depot 41C9178		
Limited warranty ¹²	3-years/1-year - battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available										ThinkPlus 5-year P&L P/U Depot 41C9180		
											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		

See footnotes for important warranty information
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Memory

1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann 06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann 06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann 06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann 06/23/09

Ultrabay Slim 9.5mm

Serial ATA Hard Drive Bay Adapter III ⁴⁸	43N3412	ann 06/23/09
DVD-ROM Ultrabay Slim SATA 1.5Gb/s	43N3212	ann 08/05/08
CD-RW/DVD-ROM Ultrabay Slim SATA ⁴⁸	43N3213	ann 08/05/08
DVD Burner Ultrabay Slim SATA 1.5Gb/s ⁴⁸	43N3214	ann 08/05/08

⁴⁸ Slim 9.5mm device in 12.7mm bay shows gap above the device.

Ultrabay Enhanced 12.7mm

DVD-ROM Ultrabay Enhanced SATA 1.5Gb/s	43R9147	ann 08/05/08
DVD Burner Ultrabay Enh SATA 1.5Gb/s	43R9149	ann 08/05/08
Blu-ray™ Burner Ultrabay Enh SATA 1.5Gb/s	43R9150	ann 08/05/08
Blu-ray Reader / DVD Burner Ultrabay Enh	43N3295	ann 01/07/10

Storage and removable storage

160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	41N5692	ann 03/20/07
160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	41N5737	ann 10/16/07
250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43R8152	ann 01/15/08
250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3410	ann 01/20/09
320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3403	ann 08/05/08
320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3411	ann 01/20/09
500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3420	ann 06/23/09
500GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3423	ann 01/07/10

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in the Ultrabay

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	ann 08/26/08
256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover)	43N3417	ann 06/23/09

USB 2.0 Essential Memory Key 4GB	45J7904	ann 06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann 07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann 10/28/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann 08/26/08

USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	ann 11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann 01/07/10
USB 2.0 Super Multi-Burner Drive	41N5565	ann 01/23/07
USB 2.0 Portable DVD Burner	43N3264	ann 01/05/10

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann 05/12/09
USB Port Replicator with Digital Video	45K1610	ann 07/28/09
ThinkPad W700 Mini Dock 2.0	57Y4345	ann 09/29/09

More information at www.lenovo.com/support/W700minidock

Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Ultraslim Wireless Keyboard and Mouse ⁵²	57Y4700	ann 09/15/09

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

ThinkPad USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

Mouse

Lenovo Mini Optical Mouse - Black (USB)	55Y9308	ann 05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann 05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann 01/22/08

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06
ExpressCard Gemplus Smart Card Reader ⁵⁷	41N3043	ann 06/27/06

⁵⁷ Only compatible with the models having 54mm Express card slot.

Multimedia

USB 2.0 Lenovo Webcam	40Y8519	ann 08/29/06
ThinkPad In-Ear Headphones	57Y4488	ann 01/07/10

Batteries

ThinkPad Battery 37++ (9-cell)	45J7914	ann 08/12/08
ThinkPad 170W AC Adapter	41R4421	ann 08/12/08
ThinkPad 230W AC Adapter	55Y9333	ann 02/23/10

More information at www.lenovo.com/alldaycomputing

Carrying Cases

<i>Up to 17.0" widescreen models:</i>		
ThinkPad 17W Business Topload Case	43R9117	ann 08/12/08

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann 11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann 10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann 10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann 10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann 10/20/09
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann 09/17/08

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
ThinkVision USB Soundbar	40Y7616	ann 08/23/05
ThinkVision Soundbar	45K1263	ann 09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
Lenovo Easy Reach Monitor Stand	55Y9258	ann 09/22/09
Radial Arm	19K4464	ann 05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad X100e



Lenovo ThinkPad X100e



Lenovo ThinkPad X100e



Lenovo ThinkPad X100e with 3-cell battery



Lenovo ThinkPad X100e



Lenovo ThinkPad X100e family

ThinkPad® X100e (3508) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Integrated graphics	Disk SATA GB ³	SATA rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Bat- tery cells	Blue- tooth	Preload	Avail date
3508-28U	MV-40	1.60	1GB	11.6" HD	LED	0.3M	HD 3200	160GB	5400	None	11b/g/n	WWAN upg		6	None	Home P	Jan 10
3508-29U	MV-40	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250GB	5400	None	11b/g/n	WWAN upg		6	None	Pro 32	Jan 10
3508-2AU	MV-40	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250GB	5400	None	11b/g/n	Gobi 2000	AT&T ²³	6	None	Pro 32	Jan 10

- **These small and medium business (SMB) models are part of the US TopSeller™ Program**

Positioning	<i>Entry ultraportable for excellent usability and reliability; one spindle</i>												Preloaded operating system²⁰			
Processor	AMD® Athlon™ Neo Processor for Ultrathin Notebooks MV-40 with single-core, virtualization technology, integrated DDR2 memory controller, and 512KB L2 cache												- <i>Some:</i> Genuine Windows® 7 Professional 32			
Memory	1GB or 2GB std / 4GB max ⁷ / PC2-5300 667MHz DDR2 , non-parity, dual-channel capable, two 200-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available												- <i>Some:</i> Genuine Windows 7 Home Premium 32			
SATA DVD±RW SATA disk	None (use optional USB-based optical drive) 160GB⁸ (5400 rpm) or 250GB (5400 rpm) / SATA 3.0Gb/s, 9.5mm high, Active Protection System™, upgradable												Preloaded applications¹⁴ (only some listed)			
Widescreen display	11.6" (295mm) HD (1366x768) TFT color , anti-glare, LED backlight , 200 nits, 16:9 aspect ratio, 300:1 contrast ratio												• Rescue and Recovery™			
Camera	Camera on top of screen, 0.3-megapixel, fixed focus, low light sensitive												• Access Connections™			
Integrated graphics	ATI™ Radeon™ HD 3200 graphics , in M780G, external analog monitor support via VGA DB-15 connector; <i>Maximum external resolution:</i> 2048x1536@60Hz												• Password Manager			
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 6-row, spill-resistant, multimedia Fn keys TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass Two-button touch pad, supports multi-touch function None												• ThinkVantage System Update			
Dimensions ³ Weight ² Case	<i>6-cell:</i> 11.1" x 8.2" x 0.6-1.2"; 282mm x 209mm x 16-30mm <i>6-cell:</i> from 3.3 lb (1.5kg) <i>Color:</i> black; <i>Material:</i> PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic												• ThinkVantage Power Manager			
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell <i>6-cell:</i> up to 5 hr												• ThinkVantage Toolbox			
Chipset	AMD M780G Chipset, SB710 south bridge												• Lenovo Online Data Backup			
Multicard reader ExpressCard/54 Ports	4-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital) None Three USB 2.0 (one powered), external monitor (VGA DB-15), ethernet (RJ-45)												• Adobe® Reader®			
PCIe Mini Card 11b/g/n WWAN upg Gobi™ 2000	Two PCI Express Mini Card slots 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card, Realtek® chipset, 1x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider												• Adobe Flash® Player			
Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support	AT&T®, contract required with service provider None None Realtek RT8111DL Gigabit Network Connection, PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20582-11Z codec / stereo speakers, 1.5 watt x 2 / combo audio/mic jack												• Windows Live™ Toolbar			
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole None None												• Skype™ for Windows			
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available												• Microsoft Research AutoCollage Touch			
1GB PC2-5300 DDR2 SODIMM 2GB PC2-5300 DDR2 SODIMM Other accessories on O-X100-E sheet	40Y7734 40Y7735		ThinkPad Battery 17 (3-cell) ThinkPad Battery 17+ (6-cell)				57Y4558 57Y4559		Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty							

See footnotes for important warranty information
US models announced January 5, 2010

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ThinkPad® X100e (3508) - TopSeller (XP Home)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Camera	Integrated graphics	Disk SATA GB ⁵ rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Bat- tery Carrier cells	Whorse (W) Gbl (G) Educ	Avail date
3508-24U	MV-40	1.60	1GB	11.6" HD	LED	0.3M	HD 2200	160G 5400	None	11b/g/n	Gobi 2000	None	6 XP Home	No Jan 10

- **This small and medium business (SMB) model is part of the US TopSeller™ Program**

Positioning	<i>Entry ultraportable for excellent usability and reliability; one spindle</i>											Preloaded operating system²⁰		
Processor	AMD® Athlon™ Neo Processor for Ultrathin Notebooks MV-40 with single-core, virtualization technology, integrated DDR2 memory controller, and 512KB L2 cache											- Genuine Windows® XP Home Edition		
Memory	1GB std / 4GB max ⁷ / PC2-5300 667MHz DDR2 , non-parity, dual-channel capable, two 200-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available											Preloaded applications¹⁴ (only some listed)		
SATA DVD±RW	None (use optional USB-based optical drive)											<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Presentation Director • Lenovo System Toolbox • Lenovo Online Data Backup • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft® Office 2007 Trial (60-day) 		
SATA disk	160GB⁸ (5400 rpm) / SATA 3.0Gb/s, 9.5mm high, Active Protection System™, upgradable													
Widescreen display	11.6" (295mm) HD (1366x768) TFT color , anti-glare, LED backlight , 200 nits, 16:9 aspect ratio, 300:1 contrast ratio													
Camera	Camera on top of screen, 0.3-megapixel, fixed focus, low light sensitive													
Integrated graphics	ATI™ Radeon™ HD 2200 graphics , in M780G, external analog monitor support via VGA DB-15 connector; <i>Maximum external resolution:</i> 2048x1536@60Hz													
Keyboard	Full-size, 6-row, spill-resistant, multimedia Fn keys													
TrackPoint®	TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
Touch pad	Two-button touch pad, supports multi-touch function													
ThinkLight™	None													
Dimensions ³	<i>6-cell:</i> 11.1" x 8.2" x 0.6-1.2"; 282mm x 209mm x 16-30mm													
Weight ²	<i>6-cell:</i> from 3.3 lb (1.5kg)													
Case	<i>Color:</i> black; <i>Material:</i> PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic													
Battery - type	Lithium Ion 6-cell											Supports ThinkVantage® technologies		
Battery - life ¹⁰	<i>6-cell:</i> up to 5 hr											65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378		
Chipset	AMD M780G Chipset, SB710 south bridge											ThinkPlus™.22 1-year LOR ²⁴ 9x5 NBD 41C9166		
Multicard reader	4-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital)											ThinkPlus 2-year LOR 9x5 NBD 41C9167		
ExpressCard/54	None											ThinkPlus 3-year LOR 9x5 NBD 41C9168		
Ports	Three USB 2.0 (one powered), external monitor (VGA DB-15), ethernet (RJ-45)											ThinkPlus 4-year LOR 9x5 NBD 41C9171		
PCIe Mini Card	Two PCI Express Mini Card slots											ThinkPlus 2-year P&L P/U Depot 41C9169		
11b/g/n	11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card, Realtek® chipset, 1x2											ThinkPlus 3-year P&L P/U Depot 41C9170		
Gobi™ 2000	Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider											ThinkPlus 4-year P&L P/U Depot 41C9172		
Carrier	None											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		
Modem	None													
Bluetooth™	Bluetooth 2.1 wireless													
Ethernet	Realtek RT8111DL Gigabit Network Connection, PHY, PCIe x1													
Intel AMT	None													
Audio support	High Definition (HD) Audio, Conexant CX20582-11Z codec / stereo speakers, 1.5 watt x 2 / combo audio/mic jack													
Security	Power-on password, hard disk password, supervisor password, security keyhole													
Security chip	None													
Fingerprint reader	None													
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available													
1GB PC2-5300 DDR2 SODIMM					40Y7734	ThinkPad Battery 17 (3-cell)				57Y4558				
2GB PC2-5300 DDR2 SODIMM					40Y7735	ThinkPad Battery 17+ (6-cell)				57Y4559				
Other accessories on O-X100-E sheet					Other accessories at lenovo.com/accessories									

See footnotes for important warranty information
US model announced January 12, 2010

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ThinkPad® X100e (2876) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Proc-essor	GHz	Memory	Wide-screen display	CCFL or LED	Camera	Integrated graphics	Disk SATA GB ³ rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Bat-tery Carrier	Blue-tooth cells	Preload	Avail date	
2876-2JU	MV-40	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	160GB 5400	None	11b/g/n	WWAN upg	None	6	Pro 32	Jan 10	
2876-2FU	MV-40	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250GB 5400	None	11b/g/n	WWAN upg	None	6	Blue	Pro 32	Jan 10
2876-35U	MV-40	1.60	3GB	11.6" HD	LED	0.3M	HD 3200	250GB 5400	None	11b/g/n	Gobi 2000	None	6	Blue	Pro 32	Jan 10
2876-33U	MV-40	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250GB 5400	None	WiMAX	WWAN upg	None	6	Blue	Pro 32	Mar 10
2876-34U	MV-40	1.60	4GB	11.6" HD	LED	0.3M	HD 3200	250GB 5400	None	WiMAX	WWAN upg	None	6	Blue	Pro 32	Mar 10
2876-6RU	MV-40	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250GB 5400	None	11b/g/n	WWAN upg	None	6	Blue	Pro 32	Mar 10

Positioning Processor	<i>Entry ultraportable for excellent usability and reliability; one spindle</i> AMD® Athlon™ Neo Processor for Ultrathin Notebooks MV-40 with single-core, virtualization technology, integrated DDR2 memory controller, and 512KB L2 cache											Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32	
Memory	2GB, 3GB, or 4GB std / 4GB max ⁷ / PC2-5300 667MHz DDR2 , non-parity, dual-channel capable, two 200-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available											Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Norton™ Internet Security 2009 (30 days of virus definitions) • Adobe® Reader® • Adobe Flash® Player • Windows Live™ Toolbar • Skype™ for Windows • Microsoft Research AutoCollage Touch	
SATA DVD±RW SATA disk	None (use optional USB-based optical drive) 160GB⁸ (5400 rpm) or 250GB (5400 rpm) / SATA 3.0Gb/s, 9.5mm high, Active Protection System™, upgradable												
Widescreen display Camera	11.6" (295mm) HD (1366x768) TFT color , anti-glare, LED backlight , 200 nits, 16:9 aspect ratio, 300:1 contrast ratio Camera on top of screen, 0.3-megapixel, fixed focus, low light sensitive												
Integrated graphics	ATI™ Radeon™ HD 3200 graphics , in M780G, external analog monitor support via VGA DB-15 connector; <i>Maximum external resolution:</i> 2048x1536@60Hz												
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass Two-button touch pad, supports multi-touch function None												
Dimensions ³ Weight ² Case	6-cell: 11.1" x 8.2" x 0.6-1.2"; 282mm x 209mm x 16-30mm 6-cell: from 3.3 lb (1.5kg) Color: black; Material: PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic											Supports ThinkVantage® technologies	
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell 6-cell: up to 5 hr											65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant	
Chipset	AMD M780G Chipset, SB710 south bridge											International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378	
Multicard reader ExpressCard/54 Ports	4-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital) None Three USB 2.0 (one powered), external monitor (VGA DB-15), ethernet (RJ-45)												
PCIe Mini Card 11b/g/n WiMAX	Two PCI Express Mini Card slots <i>Some:</i> 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card, Realtek® chipset, 1x2 <i>Some:</i> 11a/b/g/n and WiMAX wireless, PCIe Half Mini Card, Intel Centrino Advanced-N + WiMAX 6250, 2x2 AGN + 1x2 WiMAX											ThinkPlus™.22 1-year LOR ²⁴ 9x5 NBD 41C9166	
WWAN upg Gobi™ 2000	<i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider											ThinkPlus 2-year LOR 9x5 NBD 41C9167	
Carrier Modem	None None											ThinkPlus 3-year LOR 9x5 NBD 41C9168	
Bluetooth™	<i>Some:</i> Bluetooth 2.1 wireless											ThinkPlus 4-year LOR 9x5 NBD 41C9171	
Ethernet	Realtek RT8111DL Gigabit Network Connection, PHY, PCIe x1											ThinkPlus 2-year P&L P/U Depot 41C9169	
Intel AMT	None											ThinkPlus 3-year P&L P/U Depot 41C9170	
Audio support	High Definition (HD) Audio, Conexant CX20582-11Z codec / stereo speakers, 1.5 watt x 2 / combo audio/mic jack											ThinkPlus 4-year P&L P/U Depot 41C9172	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole None None											Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty	
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available												

See footnotes for important warranty information

Ⓜ US models announced March 2, 2010; previous models on January 5, 2010

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ThinkPad® X100e (3508) - Education (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Camera	Integrated graphics	Disk SATA GB ⁵ rpm	SATA optical	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Bat- tery Carrier	Whorse (W) Gbl (G)	Avail date
3508-2GU	MV-40	1.60	2GB	11.6" HD	LED	0.3M	HD 3200	250G 5400	None	11b/g/n	WWAN upg	None	6 Pro 32 Edu	Jan 10

- Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Entry ultraportable for excellent usability and reliability; one spindle</i> AMD® Athlon™ Neo Processor for Ultrathin Notebooks MV-40 with single-core, virtualization technology, integrated DDR2 memory controller, and 512KB L2 cache										Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32			
Memory	2GB std / 4GB max ⁷ / PC2-5300 667MHz DDR2 , non-parity, dual-channel capable, two 200-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in one socket; one socket available										Preloaded applications¹⁴ (only some listed) • Education software - VitalSource Library College Edition - Adobe® Instructor Resource Cntr - Adobe Digital School Collection - Photoshop Elements (and CD) - Premiere Elements (and DVD) - Acrobat 8 Professional - Contribute 4 • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Adobe Reader® • Skype™ for Windows • Microsoft Research AutoCollage Touch			
SATA DVD±RW SATA disk	None (use optional USB-based optical drive) 250GB⁸ (5400 rpm) / SATA 3.0Gb/s, 9.5mm high, Active Protection System™, upgradable										Supports ThinkVantage® technologies			
Widescreen display Camera	11.6" (295mm) HD (1366x768) TFT color , anti-glare, LED backlight , 200 nits, 16:9 aspect ratio, 300:1 contrast ratio Camera on top of screen, 0.3-megapixel, fixed focus, low light sensitive													
Integrated graphics	ATI™ Radeon™ HD 3200 graphics , in M780G, external analog monitor support via VGA DB-15 connector; <i>Maximum external resolution:</i> 2048x1536@60Hz										65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378 ThinkPlus™, ²² 1-year LOR ²⁴ 9x5 NBD 41C9166 ThinkPlus 2-year LOR 9x5 NBD 41C9167 ThinkPlus 3-year LOR 9x5 NBD 41C9168 ThinkPlus 4-year LOR 9x5 NBD 41C9171 ThinkPlus 2-year P&L P/U Depot 41C9169 ThinkPlus 3-year P&L P/U Depot 41C9170 ThinkPlus 4-year P&L P/U Depot 41C9172 Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 6-row, spill-resistant, multimedia Fn keys TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass Two-button touch pad, supports multi-touch function None													
Dimensions ³ Weight ² Case	<i>6-cell:</i> 11.1" x 8.2" x 0.6-1.2"; 282mm x 209mm x 16-30mm <i>6-cell:</i> from 3.3 lb (1.5kg) <i>Color:</i> black; <i>Material:</i> PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic													
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell <i>6-cell:</i> up to 5 hr													
Chipset	AMD M780G Chipset, SB710 south bridge													
Multicard reader ExpressCard/54 Ports	4-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital) None Three USB 2.0 (one powered), external monitor (VGA DB-15), ethernet (RJ-45)													
PCIe Mini Card 11b/g/n WWAN upg Gobi™ 2000 Carrier	Two PCI Express Mini Card slots 11b/g/n wireless ⁴ , ThinkPad 11b/g/n, PCIe Half Mini Card, Realtek® chipset, 1x2 Wireless WAN upgradable None None													
Modem Bluetooth™ Ethernet Intel AMT Audio support	None None Realtek RT8111DL Gigabit Network Connection, PHY, PCIe x1 None High Definition (HD) Audio, Conexant CX20582-11Z codec / stereo speakers, 1.5 watt x 2 / combo audio/mic jack													
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole None None													
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available													
1GB PC2-5300 DDR2 SODIMM 2GB PC2-5300 DDR2 SODIMM Other accessories on O-X100-E sheet	40Y7734 40Y7735		ThinkPad Battery 17 (3-cell) ThinkPad Battery 17+ (6-cell)				57Y4558 57Y4559							

See footnotes for important warranty information
US model announced January 5, 2010

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Memory		
1GB PC2-5300 DDR2 SODIMM	40Y7734	ann 01/05/06
1GB PC2-5300 DDR2 SODIMM (25-Pack)	51J0502	ann 03/17/09
2GB PC2-5300 DDR2 SODIMM	40Y7735	ann 11/28/06
2GB PC2-5300 DDR2 SODIMM (25-Pack)	51J0548	ann 03/17/09

Storage and removable storage		
500GB Disk SATA 1.5Gb/s (5400 rpm)	43N3420	ann 06/23/09
USB 2.0 Essential Memory Key 4GB	45J7904	ann 06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann 07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann 10/28/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann 08/26/08
USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	ann 11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann 01/07/10
USB 2.0 Super Multi-Burner Drive	41N5565	ann 01/23/07
USB 2.0 Portable DVD Burner	43N3264	ann 01/05/10

Wireless WAN (Mini PCI Express)		
<i>Only WWAN upgradable models:</i>		
ThinkPad AT&T® Gobi 2000 Broadband Opt	78Y1398	ann 01/07/10
ThinkPad Gobi 2000 Broadband Option	78Y1399	ann 01/07/10

ThinkPad Expansion		
Lenovo® Essential Notebook Stand	45J9292	ann 05/12/09
USB Port Replicator with Digital Video	45K1610	ann 07/28/09

Keyboard		
TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Ultraslim Wireless Keyboard and Mouse ⁵²	57Y4700	ann 09/15/09
⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.		
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Preferred Pro USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

Mouse		
Lenovo Mini Optical Mouse - Black (USB)	55Y9308	ann 05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann 05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann 01/22/08
Lenovo Wireless Laser Mouse - Black ⁵²	45K1696	ann 11/25/08
Lenovo Wireless Laser Mouse - Red/Black ⁵²	51J0198	ann 11/25/08

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

Multimedia		
USB 2.0 Lenovo Webcam	40Y8519	ann 08/29/06
ThinkPad In-Ear Headphones	57Y4488	ann 01/07/10

Batteries		
ThinkPad Battery 17 (3-cell)	57Y4558	ann 01/05/10
ThinkPad Battery 17+ (6-cell)	57Y4559	ann 01/05/10
ThinkPad External Battery Charger ⁴⁴	40Y7625	ann 09/20/05
⁴⁴ Requires the <i>ThinkPad 90W AC Adapter 40Y7659</i> or the adapter provided with the system.		

More information at www.lenovo.com/alldaycomputing

ThinkPad 65W AC Adapter	40Y7696	
ThinkPad 90W AC Adapter	40Y7659	ann 09/20/05
90W Ultraslim AC/DC Combo Adapter	41R4493	ann 09/22/09

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493

- BlackBerry charge tip (L8a) 41R4478 ann 12/18/07
- iPod and iPhone Charge Tip (L10a) 41R4481 ann 12/18/07
- Generic Micro USB charge tip (L18) 41R4490 ann 01/06/09

More information at www.lenovopowertips.com

Carrying Cases		
ThinkPad X100e Sleeve	57Y4286	ann 01/05/10
ThinkPad X100e Sling	57Y4287	ann 01/05/10

Monitors		
ThinkVision® L1711p 17" Monitor	5047HB2	ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann 11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann 10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann 10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann 10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann 10/20/09

Monitor Accessories⁴⁶		
Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
ThinkVision USB Soundbar	40Y7616	ann 08/23/05
ThinkVision Soundbar	45K1263	ann 09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
Lenovo Easy Reach Monitor Stand	55Y9258	ann 09/22/09
Radial Arm	19K4464	ann 05/05/00
⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.		

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

For more information on accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad X200



Lenovo ThinkPad X200 with
X200/X200s (WXGA) 12W Privacy Filter
55Y9264



Lenovo ThinkPad X200



Lenovo ThinkPad X200 with
ThinkPad X200 UltraBase
43R8781



Lenovo ThinkPad X200



ThinkPad 65W AC Adapter
40Y7696

ThinkPad® X200 (7454) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED Camera	Disk SATA GB ⁵ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo Intel AMT	Preload	Avail date
7454-32U	P8700	2.53	2GB	12.1" WXGA	LED	160GB 5400			✦ Intel 5100 ²⁸	WWAN upg	None	XP Pro	Oct 09
7454-34U	P8700	2.53	2GB	12.1" WXGA	LED Cam	160GB 7200	DVD±RW	UltraBase	✦ Intel 5100	WWAN upg	None	XP Pro	Oct 09
7454-3SU	P8800	2.66	4GB	12.1" WXGA	LED Cam	160GB 7200	DVD±RW	UltraBase	✦ Intel 5100	WWAN upg	None	Yes XP Pro	Oct 09
7454-GKU	P8600	2.40	2GB	12.1" WXGA	LED	250GB 5400			✦ Intel 5100	WWAN upg	None	Yes XP Pro	Dec 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning	An ultraportable for the executive on the move; one spindle										Preloaded operating system ²⁰		
Processor	Intel® Core™ 2 Duo processor P8600, P8700, or P8800 with dual-core, Intel HD boost, 1066MHz system bus, and 3MB L2 cache										- Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32		
Memory	2GB or 4GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications ¹⁴ (only some listed)		
SATA DVD±RW Ultrabay Slim SATA disk	Some: DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 160GB ⁸ (5400 or 7200 rpm) or 250GB (5400 rpm) / SATA 1.5Gb/s, 9.5mm high, Active Protection System™, removable, upgradable, Shock Mounted Hard Drive, supports second disk in optional or std X200 UltraBase										<ul style="list-style-type: none"> Rescue and Recovery™ Access Connections™ Client Security Solution™ ThinkVantage Productivity Center ThinkVantage System Update Fingerprint Software ThinkPad Utilities (Power Manager and Presentation Director) 		
Widescreen display	12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio										Supports ThinkVantage® technologies		
Camera	Some: camera on top of screen, 1.3-megapixel, fixed focus												
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45										ThinkPad X200 UltraBase™ <ul style="list-style-type: none"> Provides desktop expansion and cable management for X200 Series Easily connects to the bottom of the X200 Series for traveling Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: <ul style="list-style-type: none"> CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): <ul style="list-style-type: none"> 250GB FDE 7200 rpm 43N3410 320GB Disk 7200 rpm 43N3411 		
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; Maximum external resolution: 2048x1536@75Hz												
Keyboard	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys										Other features: <ul style="list-style-type: none"> Power button (front) Stereo speakers (2 watt) Security key lock, security keyhole, and optional security screw Analog DB-15 monitor port DisplayPort (supports single-link DVI-D via cable 45J7915) Four USB 2.0 ports Gigabit ethernet port Microphone in and headphone out Second battery charger Requires 65 or 90 watt AC adapter 1.6 lb; 730g 		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass												
Touch pad	None												
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	without X200 UltraBase; 4-cell: 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 21-35mm without X200 UltraBase; 9-cell: 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm												
Weight ²	4-cell: from 2.98 lb (1.35kg); 6-cell: from 3.26 lb (1.48kg); 9-cell: from 3.61 lb (1.64kg)												
Case color	Black												
Case material	Magnesium alloy												
Battery - type	Lithium Ion 6-cell												
Battery - life ¹⁰	4-cell: up to 3.3 hr; 6-cell: up to 6.5 hr; 9-cell: up to 9.8 hr												
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)												
Media slice	Some: X200 UltraBase media slice (see right side)										65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378		
Multicard reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)												
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)												
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)												
Mini PCI Express	Three Mini PCI Express slots												
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)												
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)												
2G Turbo	None												
UWB	None												
Modem	56K V.92 ⁶ modem												
Bluetooth™	Bluetooth 2.1 wireless, LED indicator												
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1												
Intel AMT	Some: Intel Active Management Technology (iAMT)												
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack												
Security	Power-on password, hard disk password, supervisor password, security keyhole												
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant												
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip												
Limited warranty ¹²	1-year - EasyServ™.19 depot repair service / service upgrades ²² available												
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	ThinkPad Battery 47 (4-cell)	43R9253										
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	ThinkPad Battery 47+ (6-cell)	43R9254										
ThinkPad X200 UltraBase	43R8781	ThinkPad Battery 47++ (9-cell)	43R9255										
Other accessories on O-X200 sheet	Other accessories at lenovo.com/accessories												

See footnotes for important warranty information
 US model announced December 15, 2009;
 previous models on October 22, 2009

✦ Intel Centrino® 2 processor technology
 ✦ Intel Centrino 2 with vPro™ technology

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ThinkPad® X200 (7454) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Wide- screen display	CCFL or LED	Cam- era	Disk SATA GB ⁹ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery or Turbo	Whorse (W) Pre- Gbl (G) Avail load Educ date
7454-33U	P8700	2.53	2GB	12.1" WXGA	LED		160GB 5400			Intel 5100 ²⁸	WWAN upg	None	6 Pro 32 No Oct 09
7454-3VU	P8700	2.53	2GB	12.1" WXGA	LED	Cam	160GB 7200	DVD±RW	UltraBase	Intel 5100	Verizon ¹⁶	None	6 Pro 32 No Nov 09
7454-3WU	P8700	2.53	2GB	12.1" WXGA	LED	Cam	160GB 7200	DVD±RW	UltraBase	WiMAX	WWAN upg	None	6 Pro 32 No Nov 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning	An ultraportable for the executive on the move; one spindle										Preloaded operating system ²⁰
Processor	Intel® Core™ 2 Duo processor P8700 with dual-core, Intel HD boost, 1066MHz system bus, and 3MB L2 cache										- Genuine Windows® 7 Professional 32
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Non-italics: standard memory in 1 socket; 1 socket available										Preloaded applications ¹⁴ (only some listed)
SATA DVD±RW	Some: DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase										<ul style="list-style-type: none"> Rescue and Recovery™ Access Connections™ Password Manager ThinkVantage Power Manager ThinkVantage System Update Fingerprint Software ThinkVantage Toolbox Lenovo Online Data Backup
Ultrabay Slim	Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781)										
SATA disk	160GB ⁹ (5400 or 7200 rpm) / SATA 1.5Gb/s, 9.5mm high, Active Protection System™, removable, upgradable, Shock Mounted Hard Drive, supports second disk in optional or std X200 UltraBase										
Widescreen display	12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio										Supports ThinkVantage® technologies
Camera	Some: camera on top of screen, 1.3-megapixel, fixed focus										
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45										ThinkPad X200 UltraBase™
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; Maximum external resolution: 2048x1536 @ 75Hz										<ul style="list-style-type: none"> Provides desktop expansion and cable management for X200 Series Easily connects to the bottom of the X200 Series for traveling Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: <ul style="list-style-type: none"> CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): <ul style="list-style-type: none"> 250GB FDE 7200 rpm 43N3410 320GB Disk 7200 rpm 43N3411
Keyboard	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys										Other features: <ul style="list-style-type: none"> Power button (front) Stereo speakers (2 watt) Stereo speakers (2 watt) Security key lock, security keyhole, and optional security screw Analog DB-15 monitor port DisplayPort (supports single-link DVI-D via cable 45J7915) Four USB 2.0 ports Gigabit ethernet port Microphone in and headphone out Second battery charger Requires 65 or 90 watt AC adapter 1.6 lb; 730g
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										
Touch pad	None										
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions										
Dimensions ³	without X200 UltraBase; 4-cell: 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 21-35mm without X200 UltraBase; 9-cell: 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm										
Weight ²	4-cell: from 2.98 lb (1.35kg); 6-cell: from 3.26 lb (1.48kg); 9-cell: from 3.61 lb (1.64kg)										
Case	Color: black; Material: magnesium alloy										
Battery - type	Lithium Ion 6-cell										
Battery - life ¹⁰	4-cell: up to 3.3 hr; 6-cell: up to 6.5 hr; 9-cell: up to 9.8 hr										
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)										
Media slice	Some: X200 UltraBase media slice (see right side)										
Multicard reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)										
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)										
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)										
Mini PCI Express	Three Mini PCI Express slots										
Intel 5100 ²⁸	Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)										
WiMAX	Some: 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5150, 1x2 (300Mbps) WiFi + 1x2 WiMAX (Echo Peak)										
WWAN upg	Some: Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)										
Verizon ¹⁶	Some: Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adptr, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon										
2G Turbo	None										
UWB	None										
Modem	56K V.92 ⁶ modem										
Bluetooth™	Bluetooth 2.1 wireless, LED indicator										
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1										
Intel AMT	None										
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack										
Security	Power-on password, hard disk password, supervisor password, security keyhole										
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant										
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip										
Limited warranty ¹²	1-year - EasyServ™.19 depot repair service / service upgrades ²² available										65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378

See footnotes for important warranty information Intel Centrino® 2 processor technology
 US models announced November 3, 2009; previous model on October 22, 2009

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 (MOC2-2) March 2010

Proc- Type-model	essor GHz	Memory	Wide- screen display	Cam- era	Disk SATA GB ⁹ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Blue- tooth	Finger print reader	Bat- tery cells	Whorse (W) Pre- Gbl (G) TAA	Avail date
7458-5EU	P8600	2.40	2GB	12.1" WXGA	160GB 5400	Optional	Optional	Intel 5100 ²⁸			Blue	Finger	6	B32 W G	Aug 08
7458-5FU	P8600	2.40	2GB	12.1" WXGA	160GB 7200	Optional	Optional	Intel 5100			Blue	Finger	6	B32 W G	Aug 08
7458-69U	P8600	2.40	2GB	12.1" WXGA	160GB 5400	Optional	Optional	Intel 5300 ²⁸	WWAN upg	2G Turbo	Blue	Finger	6	B32 W G	Aug 08
7458-M2U	P8600	2.40	1GB	12.1" WXGA	160GB 5400	Optional	Optional	Intel 5100			Blue	Finger	4	B32 W G	Aug 08
7458-M3U	P8600	2.40	1GB	12.1" WXGA	160GB 5400	Optional	Optional	Intel 5100			Blue	Finger	6	B32 W G	Aug 08
7458-7DU	P8600	2.40	2GB	12.1" WXGA	160GB 7200	Optional	Optional	Intel 5300	WWAN upg	2G Turbo	Blue	Finger	6	B32	Aug 08
7458-X4U	P8600	2.40	2GB	12.1" WXGA	160GB 5400	Optional	Optional	Intel 5100	WWAN upg		Blue	Finger	6	B32 TAA	Aug 08
7458-5HU	P8600	2.40	4GB	12.1" WXGA	160GB 7200	Optional	Optional	Intel 5300	Verizon ¹⁶		Blue	Finger	9	B32 W	Sep 08
7458-7CU	P8600	2.40	4GB	12.1" WXGA	160GB 7200	Optional	Optional	Intel 5300	AT&T ²³		Blue	Finger	9	B32 W	Sep 08
7458-87U	P8600	2.40	2GB	12.1" WXGA	160GB 7200	Optional	Optional	Intel 5100			Blue	Finger	6	XP G	Sep 08
7458-88U	P8600	2.40	4GB	12.1" WXGA	160GB 7200	Optional	Optional	Intel 5300	AT&T		Blue	Finger	9	XP W	Sep 08
7458-89U	P8600	2.40	2GB	12.1" WXGA	160GB 5400	Optional	Optional	Intel 5300	Verizon		Blue	Finger	9	XP W	Sep 08

• These models have an depot repair service 3-year limited warranty

Positioning US Govt (TAA) ⁵ Processor	An ultraportable for the executive on the move; one spindle X4U: US Government model (Trade Act Agreement-compliant) Intel® Core™ 2 Duo processor P8600 with dual-core, Intel HD boost, 1066MHz system bus, and 3MB L2 cache	Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ◇ Vista models: Vista Premium logo
Memory	1GB, 2GB, or 4GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available	Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • Fingerprint Software (fingerprint models)
SATA Combo Ultrabay Slim SATA disk	Option for ThinkPad X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 160GB ⁸ (5400 or 7200rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std X200 UltraBase	Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus	Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g
Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GM45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA)	65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Silver rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 21-35mm <i>without X200 UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm <i>4-cell:</i> from 2.98 lb (1.35kg); <i>6-cell:</i> from 3.26 lb (1.48kg); <i>9-cell:</i> from 3.61 lb (1.64kg) Black Magnesium alloy Lithium Ion 4-cell, 6-cell, or 9-cell <i>4-cell:</i> up to 3.3 hr; <i>6-cell:</i> up to 6.5 hr; <i>9-cell:</i> up to 9.8 hr	
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)	
Media slice Multicard reader ExpressCard/54 Ports	Option: ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)	
Mini PCI Express Intel 5100 ²⁸ Intel 5300 ²⁸ WWAN upg Verizon ¹⁶ AT&T ²³ 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11a/b/g/n wireless, Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3 <i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adptr, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon <i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T <i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant <i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip	
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available	

See footnotes for important warranty information † Intel Centrino® 2 with vPro™ technology
 † US model announced September 2, 2008; previous models on August 5, 2008
 † US model withdrawn effective August 2008

Proc- Type-model	essor GHz	Memory	Wide- screen display	Cam- era	Disk SATA GB ⁹ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger Bat- tery Pre- load	Whorse (W) Gbl (G) Avail date
7458-8SU	P8600	2.40	2GB	12.1" WXGA	Cam 128GB SSD			Intel 5100 ²⁸	WWAN upg		6 XP	Dec08
7458-8RU	P8600	2.40	2GB	12.1" WXGA	128GB SSD			Intel 5300 ²⁸	WWAN upg	Blue Finger	6 B32	Dec08
7458-8QU	P8600	2.40	2GB	12.1" WXGA	Cam 128GB SSD			WiMAX	WWAN upg	Blue Finger	6 B32	Dec08
7458-8PU	P8600	2.40	2GB	12.1" WXGA	128GB SSD			WiMAX	WWAN upg	Blue Finger	6 B32	Dec08
✗ 7458-7BU	P8600	2.40	2GB	12.1" WXGA	Cam 160GB 7200	Combo UltraBase		WiMAX	WWAN upg	2G Turbo Blue	Finger 9 U32 W	Dec08

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ 2 Duo processor P8600 with dual-core , Intel HD boost, 1066MHz system bus, and 3MB L2 cache	Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available	- Some: Genuine Windows Vista Business 32 - Some: Genuine Windows Vista Ultimate 32 ✦ Vista models: Vista Premium logo
SATA Combo Ultrabay Slim SATA disk	<i>Some:</i> CD-RW/DVD-ROM (43N3213), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) <i>Some:</i> 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 160GB⁸ (7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, shock mounted storage, supports 2nd disk in optional or standard X200 UltraBase	- Some: Genuine Windows Vista Ultimate 32 ✦ Vista models: Vista Premium logo Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage System Update • Fingerprint Software (fingerprint models)
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus	Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411
Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA)	
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 21-35mm <i>without X200 UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm <i>4-cell:</i> from 2.98 lb (1.35kg); <i>6-cell:</i> from 3.26 lb (1.48kg); <i>9-cell:</i> from 3.61 lb (1.64kg)	
Weight ² Case color Case material Battery - type Battery - life ¹⁰	Black Magnesium alloy Lithium Ion 6-cell or 9-cell <i>4-cell:</i> up to 3.3 hr; <i>6-cell:</i> up to 6.5 hr; <i>9-cell:</i> up to 9.8 hr	
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)	
Media slice Multicard reader ExpressCard/54 Ports	<i>Some:</i> ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)	
Mini PCI Express Intel 5100 ²⁸ Intel 5300 ²⁸ WiMAX WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11a/b/g/n wireless, Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3 <i>Some:</i> 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5350, 3x3 (450Mbps) WiFi + 1x2 WiMAX (Echo Peak) <i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant <i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip	Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available	65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Silver rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM ThinkPad X200 UltraBase Other accessories on O-X200 sheet	55Y3706 55Y3707 43R8781	ThinkPad Battery 47 (4-cell) 43R9253 ThinkPad Battery 47+ (6-cell) 43R9254 ThinkPad Battery 47++ (9-cell) 43R9255 Other accessories at lenovo.com/accessories

See footnotes for important warranty information
US models announced December 2 or December 9, 2008
✗ US model withdrawn effective February 2010

✦ Intel Centrino® 2 with vPro™ technology

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(MOC1-6) December 2008

ThinkPad® X200 (7459) - Onsite

Type-model	Proc- essor	Mem- ory	Wide- screen display	Cam- era	Disk SATA GB ⁵	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger Bat- print tery reader cells	Whorse (W) Gbl (G) Avail Preload GMP (P) date
7459-M2U	P8600	2.40	1GB	12.1" WXGA	160GB	5400		❖ Intel 5100 ²⁸			4	Bus32 WGP Aug 08
7459-M3U	P8600	2.40	1GB	12.1" WXGA	160GB	5400		❖ Intel 5100			Finger 6	Bus32 WGP Aug 08
7459-5EU	P8600	2.40	2GB	12.1" WXGA	160GB	5400		❖ Intel 5100			Finger 6	Bus32 WGP Aug 08
7459-5FU	P8600	2.40	2GB	12.1" WXGA	160GB	7200		❖ Intel 5100			Finger 6	Bus32 WGP Aug 08
7459-69U	P8600	2.40	2GB	12.1" WXGA Cam	160GB	5400		❖ Intel 5300 ²⁸	WWAN upg	2G Turbo	Finger 6	Bus32 WGP Aug 08
⚡ 7459-M4U	P8600	2.40	2GB	12.1" WXGA Cam	160GB	7200	Combo UltraBase	❖ WiMAX	WWAN upg		Finger 9	Ult 32 W Oct 08

• Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ 2 Duo processor P8600 with dual-core , Intel HD boost, 1066MHz system bus, and 3MB L2 cache							Preloaded operating system²⁰ - Some: Genuine Windows® Vista® Business 32 - Some: Genuine Windows Vista Ultimate 32 ❖ Vista Premium logo				
Memory	1GB or 2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available							Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director)				
SATA Combo Ultrabay Slim SATA disk	<i>Some:</i> CD-RW/DVD-ROM (43N3213), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional ThinkPad X200 UltraBase (43R8781) 160GB⁸ (5400 or 7200rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std X200 UltraBase											
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio <i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus											
Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA)											
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions							Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411				
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 21-35mm <i>without X200 UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm <i>4-cell:</i> from 2.98 lb (1.35kg); <i>6-cell:</i> from 3.26 lb (1.48kg); <i>9-cell:</i> from 3.61 lb (1.64kg) <i>Color:</i> black; <i>Material:</i> magnesium alloy											
Weight ² Case Battery - type Battery - life ¹⁰	Lithium Ion 4-cell , 6-cell , or 9-cell <i>4-cell:</i> up to 3.3 hr; <i>6-cell:</i> up to 6.5 hr; <i>9-cell:</i> up to 9.8 hr											
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)											
Media slice Multicard Reader ExpressCard slot Ports	<i>Some:</i> ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One ExpressCard/34 or ExpressCard/54 Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)											
Mini PCI Express Intel 5100 ²⁸ Intel 5300 ²⁸ WiMAX WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11a/b/g/n wireless, Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3 <i>Some:</i> 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5350, 3x3 (450Mbps) WiFi + 1x2 WiMAX (Echo Peak) <i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant <i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip							Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g				
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available							65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Silver rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378				
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM ThinkPad X200 UltraBase Other accessories on O-X200 sheet	55Y3706 55Y3707 43R8781		ThinkPad Battery 47 (4-cell) ThinkPad Battery 47+ (6-cell) ThinkPad Battery 47+++ (9-cell) Other accessories at lenovo.com/accessories		43R9253 43R9254 43R9255							

See footnotes for important warranty information
US models announced August 5 or October 14, 2008
⚡ US model withdrawn effective February 2010

❖ Intel Centrino® 2 with vPro™ technology

ThinkPad® X200 (7458) - Education (EasyServ)

Personal Systems Reference (PSREF)

Proc- Type-model	essor	GHz	Memory	Wide- screen display	Cam- era	Disk SATA GB ⁵	rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Bat- tery cells	Whorse (W) Gbl (G)	Avail date
7458-E2U	P8600	2.40	2GB	12.1"	WXGA	Cam	160GB	5400	Optional	Optional	❖Intel 5100 ²⁸	WWAN upg	None	Finger	6	Bus32 W Aug 08
7458-FQU	P8600	2.40	2GB	12.1"	WXGA	Cam	160GB	5400	Optional	Optional	❖Intel 5100	WWAN upg	None	Finger	6	Bus32 W Mar 09

• **This model has an EasyServ™¹⁹ depot repair service 3-year limited warranty**

Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ 2 Duo processor P8600 with dual-core, Intel HD boost, 1066MHz system bus, and 3MB L2 cache										Preloaded operating system²⁰ - Genuine Windows® Vista® Business 32 ❖ Vista Premium logo					
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • Adobe® Reader®					
SATA DVD±RW Ultrabay Slim SATA disk	Option for <i>ThinkPad X200 UltraBase</i> Supports Ultrabay Slim devices in optional <i>ThinkPad X200 UltraBase</i> (43R8781) 160GB⁸ (5400 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std <i>X200 UltraBase</i>															
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus															
Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase <i>Maximum external resolution: 2048x1536 @75Hz</i>										Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 320GB Disk 7200 rpm 43N3411					
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions															
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 21-35mm <i>without X200 UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm <i>6-cell:</i> from 3.26 lb (1.48kg); <i>9-cell:</i> from 3.61 lb (1.64kg) <i>Color:</i> black; <i>Material:</i> magnesium alloy															
Weight ² Case Battery - type Battery - life ¹⁰	Lithium Ion 6-cell <i>6-cell:</i> up to 6.5 hr; <i>9-cell:</i> up to 9.8 hr															
Chipset	Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)															
Media slice Multicard Reader ExpressCard slot Ports	<i>Option:</i> ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One ExpressCard/34 or ExpressCard/54 Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)										Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g					
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack															
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip										65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Silver rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378					
Limited warranty ¹²	3-years/1-yr battery - EasyServ™¹⁹ depot repair service / service upgrades²² available															
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706		ThinkPad Battery 47 (4-cell)				43R9253									
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707		ThinkPad Battery 47+ (6-cell)				43R9254									
ThinkPad X200 UltraBase	43R8781		ThinkPad Battery 47+++ (9-cell)				43R9255									
Other accessories on O-X200 sheet											Other accessories at lenovo.com/accessories					

See footnotes for important warranty information

❖ Intel Centrino® 2 with vPro™ technology

Ⓜ US model announced March 24, 2009; previous model on August 5, 2008

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(MOC1-4) April 2009

ThinkPad® X200 (7459) - Education (Onsite)

Personal Systems Reference (PSREF)

Proc- Type-model	essor GHz	Memory	Wide- screen display	Cam- era	Disk SATA GB ⁵	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Finger print reader	Bat- tery cells	Whorse (W) Gbl (G)	Avail date			
7459-E3U	P8600	2.40	2GB	12.1" WXGA	Cam	160GB	5400	Optional	Optional	Intel 5100 ²⁸	WWAN upg	None	None	6	Bus32	W	Aug 08

• This model has a limited onsite service²⁴ 3-year limited warranty

Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel Core 2 Duo processor P8600 with dual-core, Intel HD boost, 1066MHz system bus, and 3MB L2 cache											Preloaded operating system²⁰ - Genuine Windows® Vista® Business 32 ↳ Vista Premium logo	
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available											Preloaded applications¹⁴ (only some listed)	
SATA DVD±RW Ultrabay Slim SATA disk	Option for <i>ThinkPad X200 UltraBase</i> Supports Ultrabay Slim devices in optional <i>ThinkPad X200 UltraBase</i> (43R8781) 160GB⁸ (5400 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std <i>X200 UltraBase</i>											<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) 	
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus											Supports ThinkVantage® technologies	
Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GM45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase <i>Maximum external resolution: 2048x1536 @75Hz</i>											ThinkPad X200 UltraBase™	
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions											<ul style="list-style-type: none"> • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: <ul style="list-style-type: none"> - CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 - DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 - Serial ATA Hard Drive Bay Adapter III 43N3412 • Disks supported (some): <ul style="list-style-type: none"> • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 	
Dimensions ³ Weight ² Case Battery - type Battery - life ¹⁰ Chipset	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 21-35mm <i>without X200 UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm <i>6-cell:</i> from 3.26 lb (1.48kg); <i>9-cell:</i> from 3.61 lb (1.64kg) <i>Color:</i> black; <i>Material:</i> magnesium alloy Lithium Ion 6-cell <i>6-cell:</i> up to 6.5 hr; <i>9-cell:</i> up to 9.8 hr Mobile Intel GM45 Express Chipset (Graphics Memory Controller Hub), ICH9M-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)											Other features: <ul style="list-style-type: none"> • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 	
Media slice Multicard Reader ExpressCard slot Ports	<i>Option:</i> ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One ExpressCard/34 or ExpressCard/54 Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)											65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Silver rating ENERGY STAR® 5.0-compliant ROHS-compliant	
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant None											International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378	
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available												
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706		ThinkPad Battery 47 (4-cell)				43R9253						
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707		ThinkPad Battery 47+ (6-cell)				43R9254						
ThinkPad X200 UltraBase	43R8781		ThinkPad Battery 47++ (9-cell)				43R9255						
Other accessories on O-X200 sheet	Other accessories at lenovo.com/accessories												

See footnotes for important warranty information
US models announced August 5, 2008

↳ Intel Centrino® 2 with vPro™ technology

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(MOC1-5) November 2008



Lenovo® ThinkPad X200s



Lenovo ThinkPad X200s



Lenovo ThinkPad X200s



ThinkPad 12W Case Sleeve
51J0476



Lenovo ThinkPad X200s



ThinkPad Battery 47++ (9-cell)
43R9255

ThinkPad® X200s (7466) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	Disk SATA GB ⁹ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Blue/ Fing cells	Workhorse (W) Pre-Global (G) Avail date
7466-43U	SL9600	2.13	2GB	12.1" WXGA	160GB 7200	DVD±RW	UltraBase	❖ Intel 5100 ²⁸	WWAN upg	None	Yes	6 XP Pro No Oct 09

- Compared to the X200, the X200s has lighter weight, low voltage processors, LED backlight displays, and roll cage in display cover
- This small and medium business (SMB) model is part of the US TopSeller™ Program
- This model has a 3-years limited warranty

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ 2 Duo processor SL9600 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache										Preloaded operating system ²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications ¹⁴ (only some listed)
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 160GB ⁹ (7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std X200 UltraBase										<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus										Supports ThinkVantage® technologies
Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; Maximum external resolution: 2048x1536@75Hz										ThinkPad X200 UltraBase™ <ul style="list-style-type: none"> • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: <ul style="list-style-type: none"> - CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 - DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 - Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): <ul style="list-style-type: none"> • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions										Other features:
Dimensions ³	without X200 UltraBase; 4-cell: 11.6" x 8.3" x 0.8-1.1"; 295mm x 210mm x 21-29mm without X200 UltraBase; 9-cell: 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm 4-cell: from 2.43 lb (1.1kg); 6-cell: from 2.71 lb (1.23kg); 9-cell: from 3.05 lb (1.38kg)										<ul style="list-style-type: none"> • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g
Weight ² Case color Case material	black Display cover: Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); Base: Magnesium alloy										65-watt (GMA graphics) AC Adapter Next Generation ThinkPad Roll Cage (in display cover)
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell 4-cell: up to 4.4 hr; 6-cell: up to 8.8 hr; 9-cell: up to 13.2 hr										Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)										International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Media slice Multicard Reader ExpressCard/54 Ports	X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)										
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack										
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip										
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available										
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM ThinkPad X200 UltraBase Other accessories on O-X200 sheet	55Y3706 55Y3707 43R8781	ThinkPad Battery 47 (4-cell) ThinkPad Battery 47+ (6-cell) ThinkPad Battery 47++ (9-cell) Other accessories at lenovo.com/accessories	43R9253 43R9254 43R9255								

See footnotes for important warranty information
US model announced October 22, 2009

❖ Intel Centrino® 2 with vPro™ technology

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(PEC2-1) October 2009

ThinkPad® X200s (7466) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	Disk SATA GB ³ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Fing cells	Workhorse (W) Pre-Global (G) Avail date
7466-44U	SL9600	2.13	4GB	12.1" WXGA+	320GB 7200	DVD±RW	UltraBase	❖ Intel 5100 ²⁸	None	None	Yes	9 Pro 64 No Oct 09
<ul style="list-style-type: none"> • Compared to the X200, the X200s has lighter weight, low voltage processors, LED backlight displays, and roll cage in display cover • This small and medium business (SMB) model is part of the US TopSeller™ Program • This model has a 3-years limited warranty 												
Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ 2 Duo processor SL9600 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache										Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 64	
Memory	4GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available										Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software • Lenovo Online Data Backup • Norton™ Internet Security 2009	
SATA DVD±RW Ultrabay Slim SATA disk	DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 320GB ⁸ (7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std X200 UltraBase											
Widescreen display Camera	12.1" (308mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 250 nits, 16:10 aspect ratio, 300:1 contrast ratio None										Supports ThinkVantage® technologies	
Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; Maximum external resolution: 2048x1536@75Hz										ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411	
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions										Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g	
Dimensions ³	without X200 UltraBase; 4-cell: 11.6" x 8.3" x 0.8-1.1"; 295mm x 210mm x 21-29mm without X200 UltraBase; 9-cell: 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm 4-cell: from 2.43 lb (1.1kg); 6-cell: from 2.71 lb (1.23kg); 9-cell: from 3.05 lb (1.38kg)											
Weight ² Case color Case material	black Display cover: Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); Base: Magnesium alloy											
Battery - type Battery - life ¹⁰	Lithium Ion 9-cell 4-cell: up to 4.4 hr; 6-cell: up to 8.8 hr; 9-cell: up to 13.2 hr											
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)											
Media slice Multicard Reader ExpressCard/54 Ports	X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)											
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) None None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack											
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor, supports the security chip										65-watt (GMA graphics) AC Adapter Next Generation ThinkPad Roll Cage (in display cover) Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378	
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available											
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	ThinkPad Battery 47 (4-cell)		43R9253								
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	ThinkPad Battery 47+ (6-cell)		43R9254								
ThinkPad X200 UltraBase	43R8781	ThinkPad Battery 47++ (9-cell)		43R9255								
Other accessories on O-X200 sheet				Other accessories at lenovo.com/accessories								

See footnotes for important warranty information
US model announced October 22, 2009

❖ Intel Centrino® 2 with vPro™ technology

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(PEC2-2) October 2009

Type-model	Proc-essor	GHz	Memory	Widescreen display	Disk SATA GB ³ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat-tery Blue/ Fing cells	Workhorse (W) Global (G) Avail date
7469-5GU	SL9400	1.86	2GB	12.1" WXGA+	160GB 5400			❖ Intel 5100 ²⁸	None	None	Yes 6	Bus 32 G W Sep 08
7469-5HU	SL9400	1.86	2GB	12.1" WXGA+	160GB 7200			❖ Intel 5300 ²⁸	None	None	Yes 4	Bus 32 G W Sep 08
7469-5JU	SL9400	1.86	2GB	12.1" WXGA+	80GB SSD	Combo	UltraBase	❖ Intel 5100	None	None	Yes 6	XP Pro W Dec 08
7469-74U	SL9400	1.86	2GB	12.1" WXGA+	80GB SSD			❖ Intel 5300	None	None	Yes 4	XP Pro W Dec 08
❖ 7469-7YU	SL9300	1.60	2GB	12.1" WXGA+	128GB SSD			❖ WiMAX	None	None	Yes 6	Bus 32 Dec 08
❖ 7469-7ZU	SL9300	1.60	2GB	12.1" WXGA+	128GB SSD			❖ Intel 5100	None	None	Yes 4	Bus 32 Dec 08
❖ 7469-82U	SL9300	1.60	2GB	12.1" WXGA+	128GB SSD			❖ Intel 5300	None	None	Yes 6	XP Pro Dec 08
❖ 7469-8TU	SL9400	1.86	3GB	12.1" WXGA+	160GB 5400			❖ Intel 5100	None	None	Yes 6	Bus 32 G W Mar 09

• Compared to the X200, the X200s has lighter weight, low voltage processors, LED backlight displays, and roll cage in display cover

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ 2 Duo processor SL9300, or SL9400 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache	Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ⇨ Vista models: Vista Premium logo Preloaded applications¹⁴ (all OSES; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 65-watt (GMA graphics) AC Adapter Next Generation ThinkPad Roll Cage (in display cover) Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Memory	2GB or 3GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available	
SATA Combo Ultrabay Slim SATA disk	Some: CD-RW/DVD-ROM (43N3213), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) Some: 80GB ⁸ or 128GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high Some: 160GB ⁸ (5400 or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high Active Protection System™ All: removable, upgradable, shock mounted storage, supports 2nd disk in optional or standard X200 UltraBase	
Widescreen display Camera	12.1" (308mm) WXGA+ (1440x900) color, anti-glare, LED backlight, 250 nits, 16:10 aspect ratio, 300:1 contrast ratio None	
Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; Maximum external resolution: 2048x1536@75Hz	
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³	without X200 UltraBase; 4-cell: 11.6" x 8.3" x 0.8-1.1"; 295mm x 210mm x 21-29mm without X200 UltraBase; 9-cell: 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm 4-cell: from 2.43 lb (1.1kg); 6-cell: from 2.71 lb (1.23kg); 9-cell: from 3.05 lb (1.38kg)	
Weight ² Case color Case material	Black Display cover: Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); Base: Magnesium alloy	
Battery - type Battery - life ¹⁰	Lithium Ion 4-cell or 6-cell 4-cell: up to 4.4 hr; 6-cell: up to 8.8 hr; 9-cell: up to 13.2 hr	
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)	
Media slice Multicard reader ExpressCard/54 Ports	Some: ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)	
Mini PCI Express Intel 5100 ²⁸ Intel 5300 ²⁸ WiMAX	Three Mini PCI Express slots Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Some: 11a/b/g/n wireless, Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3 Some: 11a/b/g/n and WiMAX wireless, Mini PCIe adap, Intel WiMAX/WiFi Link 5350, 3x3 (450Mbps) WiFi + 1x2 WiMAX (Echo Peak)	
WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	None None None 56K V.92 ⁶ modem Some: Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Some: Fingerprint reader on palm rest, swipe sensor, supports the security chip	
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available	
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM ThinkPad X200 UltraBase Other accessories on O-X200 sheet	55Y3706 55Y3707 43R8781 ThinkPad Battery 47 (4-cell) ThinkPad Battery 47+ (6-cell) ThinkPad Battery 47+++ (9-cell) Other accessories at lenovo.com/accessories	

See footnotes for important warranty information

❖ Intel Centrino® 2 with vPro™ technology

❖ US model announced March 10, 2009; previous models on September 23 or December 9, 2008

❖ US models withdrawn effective September 2009

Type-model	Proc- essor	GHz	Memory	Widescreen display	Disk SATA GB ⁹ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Blue/ Fing	Bat- tery cells	Preload	Workhorse (W) Global (G) Avail date
7469-8UU	Cel 723	1.20	2GB	12.1" WXGA	160GB 5400	Optional	Optional	Intel 5100 ²⁸	WWAN upg	None	Blue	6	Bus 32	G W Apr 09
7469-8ZU	Cel 723	1.20	2GB	12.1" WXGA	160GB 5400	Optional	Optional	11n ²⁸	WWAN upg	None	Yes	6	Bus 32	G W May 09

• *These models have an EasyServ™,19 depot repair service 3-year limited warranty*

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Celeron® Processor 723 with single-core, 800MHz system bus, and 1MB L2 cache										Preloaded operating system ²⁰ - Genuine Windows® Vista® Business 32 ↳ Vista Premium logo			
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications ¹⁴ (only some listed)			
SATA Combo Ultrabay Slim SATA disk	Option for <i>ThinkPad X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 160GB⁹ (5400) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std <i>X200 UltraBase</i>										<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® 			
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus													
Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536 @ 75Hz													
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None Illuminates the keyboard to improve visibility in low-light conditions										Supports ThinkVantage® technologies			
Dimensions ³ Weight ² Case color Case material Battery - type Battery - life ¹⁰ Chipset	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 8.3" x 0.8-1.1"; 295mm x 210mm x 21-29mm <i>without X200 UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm <i>4-cell:</i> from 2.43 lb (1.1kg); <i>6-cell:</i> from 2.71 lb (1.23kg); <i>9-cell:</i> from 3.05 lb (1.38kg) Black <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy Lithium Ion 6-cell <i>4-cell:</i> up to 4.4 hr; <i>6-cell:</i> up to 8.8 hr; <i>9-cell:</i> up to 13.2 hr Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)										ThinkPad X200 UltraBase™ <ul style="list-style-type: none"> • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: <ul style="list-style-type: none"> - CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 - DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 - Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): <ul style="list-style-type: none"> • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features: <ul style="list-style-type: none"> • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 			
Media slice Multicard reader ExpressCard/54 Ports Mini PCI Express Intel 5100 ²⁸ 11n ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader Limited warranty ¹²	Option: ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45) Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11b/g/n wireless, Mini-PCIe Adapter II Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant <i>Some:</i> Fingerprint reader on palm rest, swipe sensor, supports the security chip 3-years/1-yr battery - EasyServ™,19 depot repair service / service upgrades²² available										65-watt (GMA graphics) AC Adapter Next Generation ThinkPad Roll Cage (in display cover) ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	ThinkPad Battery 47 (4-cell)	43R9253											
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	ThinkPad Battery 47+ (6-cell)	43R9254											
ThinkPad X200 UltraBase	43R8781	ThinkPad Battery 47++ (9-cell)	43R9255											
Other accessories on O-X200 sheet												Other accessories at lenovo.com/accessories		

See footnotes for important warranty information
 13 US model announced May 12, 2009; previous model on April 14, 2009

ThinkPad® X200s (7470) - Onsite

Type-model	Proc-essor	GHz	Memory	Widescreen display	Cam-era	Disk SATA GB ⁹	rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat-tery Blue/ery	Workhorse (W) Global (G) Avail date
7470-5GU	SL9400	1.86	2GB	12.1" WXGA+		160GB	5400	Optional	Optional	❖ Intel 5100 ²⁸		None	Yes	6 Bus 32 W G P Sep 08
7470-5HU	SL9400	1.86	2GB	12.1" WXGA+		160GB	7200	Optional	Optional	❖ Intel 5300 ²⁸		None	Yes	4 Bus 32 W G P Sep 08
7470-6FU	SL9400	1.86	2GB	12.1" WXGA+		160GB	5400	Optional	Optional	❖ Intel 5100		None	Yes	6 Bus 32 W Sep 08
7470-6GU	SL9400	1.86	2GB	12.1" WXGA+		80GB	5400	Optional	Optional	❖ Intel 5300		None	Yes	4 Bus 32 W Sep 08
7470-6HU	SL9400	1.86	2GB	12.1" WXGA+		80GB	SSD	Optional	Optional	❖ Intel 5300		None	Yes	4 XP Pro W Dec 08
7470-8TU	SL9400	1.86	3GB	12.1" WXGA+		160GB	5400	Optional	Optional	❖ Intel 5100		None	Yes	6 Bus 32 W G P Mar 09
7470-8UU	Cel 723	1.20	2GB	12.1" WXGA	Cam	160GB	5400	Optional	Optional	Intel 5100	WWAN upg	None	Blue	6 Bus 32 W G P Apr 09
7470-8ZU	Cel 723	1.20	2GB	12.1" WXGA	Cam	160GB	5400	Optional	Optional	11n ²⁸	WWAN upg	None	Blue	6 Bus 32 W G P May 09

• **Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty**

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Celeron® Processor 723 with single-core, 800MHz system bus, and 1MB L2 cache or Intel Core™ 2 Duo processor SL9400 with low voltage, dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache	Preloaded operating system²⁰ - Some: Windows® XP Professional preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ❖ Vista models: Vista Premium logo
Memory	2GB or 3GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available	Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director)
SATA DVD±RW Ultrabay Slim SATA disk	Option for <i>ThinkPad X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) Some: 80GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high Some: 80GB (5400) or 160GB (5400 or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ All: removable, upgradable, shock mounted storage, supports 2nd disk in optional or standard <i>X200 UltraBase</i>	
Widescreen display	Some: 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio Some: 12.1" (308mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 250 nits, 16:10 aspect ratio, 300:1 contrast ratio	
Camera	Some: Camera on top of screen, 1.3-megapixel, fixed focus	
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45	Supports ThinkVantage® technologies
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution: 2048x1536@75Hz</i>	ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411
Keyboard	Full-size, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys	
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass	
Touch pad	None	
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 8.3" x 0.8-1.1"; 295mm x 210mm x 21-29mm <i>without X200 UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm <i>4-cell:</i> from 2.43 lb (1.1kg); <i>6-cell:</i> from 2.71 lb (1.23kg); <i>9-cell:</i> from 3.05 lb (1.38kg)	
Weight ²		
Case color	Black	
Case material	<i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy	
Battery - type	Lithium Ion 4-cell or 6-cell	
Battery - life ¹⁰	<i>4-cell:</i> up to 4.4 hr; <i>6-cell:</i> up to 8.8 hr; <i>9-cell:</i> up to 13.2 hr	
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)	
Media slice	<i>Option: ThinkPad X200 UltraBase media slice</i> (see right side)	Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g
Multicard reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)	
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)	
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)	
Mini PCI Express	Three Mini PCI Express slots	
Intel 5100 ²⁸	Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)	
Intel 5300 ²⁸	Some: 11a/b/g/n wireless, Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3	
11n ²⁸	Some: 11b/g/n wireless, Mini-PCIe Adapter II	
WWAN upg	Some: Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)	
2G Turbo	None	
UWB	None	
Modem	56K V.92 ⁶ modem	
Bluetooth™	Bluetooth 2.1 wireless, LED indicator	
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1	
Intel AMT	Intel Active Management Technology (iAMT)	
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack	
Security	Power-on password, hard disk password, supervisor password, security keyhole	
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant	
Fingerprint reader	Some: Fingerprint reader on palm rest, swipe sensor, supports the security chip	
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available	

1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	ThinkPad Battery 47 (4-cell)	43R9253
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	ThinkPad Battery 47+ (6-cell)	43R9254
ThinkPad X200 UltraBase	43R8781	ThinkPad Battery 47++ (9-cell)	43R9255
Other accessories on O-X200 sheet		Other accessories at lenovo.com/accessories	

ROHS-compliant
International Warranty Service¹⁷
24 hour x 7 day¹⁸ toll-free support during the warranty period¹²

See footnotes for important warranty information

❖ Intel Centrino® 2 with vPro™ technology

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Ⓜ US model announced May 12, 2009; previous models on September 23 or December 9, 2008, or March 10 or April 14, 2009

(PEC1-3) May 2009

ThinkPad® X200s (7469) - Education

Type-model	Proc- essor	GHz	Memory	Widescreen display	Disk SATA GB ⁵ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Blue/ Fing cells	Workhorse (W) Global (G) Avail date
7469-E2U	Cel 723	1.20	2GB	12.1" WXGA	160GB 5400	Optional	Optional	Intel 5100 ²⁸	WWAN upg	None	None	6 Bus 32 W Apr 09

• **This model has an EasyServ™,19 depot repair service 3-year limited warranty**

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Celeron® Processor 723 with single-core, 800MHz system bus, and 1MB L2 cache											
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available											
SATA Combo Ultrabay Slim SATA disk	Option for <i>ThinkPad X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 160GB⁸ (5400) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std <i>X200 UltraBase</i>											
Widescreen display	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 200 nits, 16:10 aspect ratio, 250:1 contrast ratio											
Camera	Camera on top of screen, 1.3-megapixel, fixed focus											
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45											
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536@75Hz											
Keyboard	Full-size, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys											
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass											
Touch pad	None											
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 8.3" x 0.8-1.1"; 295mm x 210mm x 21-29mm <i>without X200 UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 21-35mm <i>4-cell:</i> from 2.43 lb (1.1kg); <i>6-cell:</i> from 2.71 lb (1.23kg); <i>9-cell:</i> from 3.05 lb (1.38kg)											
Weight ²												
Case color	Black											
Case material	<i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy											
Battery - type	Lithium Ion 6-cell											
Battery - life ¹⁰	<i>4-cell:</i> up to 4.4 hr; <i>6-cell:</i> up to 8.8 hr; <i>9-cell:</i> up to 13.2 hr											
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)											
Media slice	Option: ThinkPad X200 UltraBase media slice (see right side)											
Multicard reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)											
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)											
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)											
Mini PCI Express	Three Mini PCI Express slots											
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)											
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)											
2G Turbo	None											
UWB	None											
Modem	56K V.92 ⁶ modem											
Bluetooth™	None											
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1											
Intel AMT	Intel Active Management Technology (iAMT)											
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack											
Security	Power-on password, hard disk password, supervisor password, security keyhole											
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant											
Fingerprint reader	None											
Limited warranty ¹²	3-years/1-yr battery - EasyServ™,19 depot repair service / service upgrades²² available											
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	ThinkPad Battery 47 (4-cell)							43R9253			
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	ThinkPad Battery 47+ (6-cell)							43R9254			
ThinkPad X200 UltraBase	43R8781	ThinkPad Battery 47++ (9-cell)							43R9255			
Other accessories on O-X200 sheet	Other accessories at lenovo.com/accessories											

Preloaded operating system²⁰
- Genuine Windows® Vista® Business 32
↳ Vista Premium logo

Preloaded applications¹⁴ (only some listed)
• Rescue and Recovery™
• Access Connections™
• Client Security Solution™
• ThinkVantage Productivity Center
• ThinkVantage System Update
• Fingerprint Software (fingerprint models)
• Lenovo System Toolbox
• ThinkPad Utilities (Power Manager and Presentation Director)

Supports ThinkVantage® technologies

ThinkPad X200 UltraBase™

- Provides desktop expansion and cable management for X200 Series
- Easily connects to the bottom of the X200 Series for traveling
- Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side:
 - CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213
 - DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214
 - Serial ATA Hard Drive Bay Adapter III 43N3412
- Disks supported (some):
 - 250GB FDE 7200 rpm 43N3410
 - 320GB Disk 7200 rpm 43N3411

Other features:

- Power button (front)
- Stereo speakers (2 watt)
- Security key lock, security keyhole, and optional security screw
- Analog DB-15 monitor port
- DisplayPort (supports single-link DVI-D via cable 45J7915)
- Four USB 2.0 ports
- Gigabit ethernet port
- Microphone in and headphone out
- Second battery charger
- Requires 65 or 90 watt AC adapter • 1.6 lb; 730g

65-watt (GMA graphics) AC Adapter
Next Generation ThinkPad Roll Cage (in display cover)
ROHS-compliant
International Warranty Service¹⁷
24 hour x 7 day¹⁸ toll-free support during the warranty period¹²
via 800-426-7378

See footnotes for important warranty information
US model announced April 14, 2009

Memory

1GB PC3-8500 DDR3 SODIMM	43R1987	ann 08/05/08
1GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0551	ann 03/17/09
2GB PC3-8500 DDR3 SODIMM	43R1988	ann 08/05/08
2GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0552	ann 03/17/09
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann 06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann 06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann 06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann 06/23/09

Ultrabay Slim 9.5mm

Most Ultrabay Slim accessories supported in ThinkPad X200 UltraBase

Storage and removable storage

160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	41N5692	ann 03/20/07
160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	41N5737	ann 10/16/07
250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43R8152	ann 01/15/08
250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3410	ann 01/20/09
320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3403	ann 08/05/08
320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3411	ann 01/20/09
500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3420	ann 06/23/09
500GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3423	ann 01/07/10

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in X200 UltraBase (43R8781)

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	ann 08/26/08
256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover)	43N3417	ann 06/23/09
USB 2.0 Essential Memory Key 4GB	45J7904	ann 06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann 07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann 10/28/08
USB 2.0 Ultra Secure Memory Key 1GB	45J5915	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann 08/26/08
USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	ann 11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann 01/07/10
USB 2.0 Super Multi-Burner Drive	41N5565	ann 01/23/07
USB 2.0 Portable DVD Burner	43N3264	ann 01/05/10

Wireless WAN (Mini PCI Express)

Only WWAN upgradable models:

Verizon® WWAN U NDP Broadband Mini PCIe	43R9151	ann 08/05/08
AT&T® WWAN HSPA Broadband Mini PCIe	43R9152	ann 08/26/08

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann 05/12/09
USB Port Replicator with Digital Video	45K1610	ann 07/28/09
ThinkPad X200 UltraBase	43R8781	ann 08/05/08

Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Ultralim Wireless Keyboard and Mouse ⁵²	57Y4700	ann 09/15/09

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

ThinkPad USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

Mouse

Lenovo Mini Optical Mouse - Black (USB)	55Y9308	ann 05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann 05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann 01/22/08

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
X200s (WXGA+) 12W Privacy Filter	43R2470	ann 08/05/08
X200/X200s (WXGA) 12W Privacy Filter	55Y9264	ann 04/07/09
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06
ExpressCard Gemplus Smart Card Reader	41N3043	ann 06/27/06

Multimedia

USB 2.0 Lenovo Webcam	40Y8519	ann 08/29/06
ThinkPad In-Ear Headphones	57Y4488	ann 01/07/10

Batteries

ThinkPad Battery 47 (4-cell)	43R9253	ann 08/05/08
ThinkPad Battery 47+ (6-cell)	43R9254	ann 08/05/08
ThinkPad Battery 47++ (9-cell)	43R9255	ann 08/05/08
ThinkPad External Battery Charger	40Y7625	ann 09/20/05

More information at www.lenovo.com/alldaycomputing

ThinkPad 65W AC Adapter	40Y7696	ann 01/05/06
ThinkPad 90W AC Adapter	40Y7659	ann 09/20/05
90W Ultralim AC/DC Combo Adapter	41R4493	ann 09/22/09

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

• iPod and iPhone Charge Tip (L10a)	41R4481	ann 12/18/07
• Generic Micro USB charge tip (L18)	41R4490	ann 01/06/09

More information at www.lenovopowertips.com

Carrying Cases

Up to 12" widescreen models:		
ThinkPad 12W Case Sleeve	51J0476	ann 08/18/09

Up to 13.3" widescreen models:		
ThinkPad Ultraportable Case	41U5062	ann 05/13/08

Up to 14.1" widescreen models:		
ThinkPad Women's Microfiber Tote	22P8855	ann 06/24/08
ThinkPad Women's Leather Trim Tote	22P8856	
ThinkPad Women's Executive Leather Tote	22P8857	
Women's Executive Red Leather Tote	22P8858	

Up to 15.4" widescreen models:		
Lenovo Business Messenger Case	51J0475	ann 08/18/09
Lenovo Messenger Max	41U5253	ann 05/01/07
Lenovo Performance Backpack	41U5254	ann 05/01/07
Checkpoint Friendly Business Topload Case	51J0418	ann 05/05/09
ThinkPad Business Topload Case	43R2476	ann 05/13/08
ThinkPad Business Backpack	43R2482	ann 05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann 05/13/08
ThinkPad Executive Leather Case	43R2480	ann 05/13/08

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann 11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann 10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann 10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann 10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann 10/20/09
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann 09/17/08

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
Lenovo DisplayPort to VGA Monitor Cable ⁵⁰	57Y4393	ann 08/04/09
DisplayPort to Single-link DVI-D Cable ⁵⁰	45J7915	ann 08/05/08

⁵⁰ Can only be used via ThinkPad X200 UltraBase (43R8781)

ThinkVision USB Soundbar	40Y7616	ann 08/23/05
ThinkVision Soundbar	45K1263	ann 09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
Lenovo Easy Reach Monitor Stand	55Y9258	ann 09/22/09
Radial Arm	19K4464	ann 05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad X200 Tablet



Lenovo ThinkPad X200 Tablet



Lenovo ThinkPad X200 Tablet



Lenovo ThinkPad X200 Tablet



Lenovo ThinkPad X200 Tablet with
ThinkPad X200 Tablet Sleeve
43R9115



Lenovo ThinkPad X200 Tablet with
ThinkPad X200 Tablet Sleeve
43R9115

ThinkPad® X200 Tablet (7449) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	Cam	Disk SATA GB ³	Optical in rpm	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Preload	Avail date
7449-43U	SL9600	2.13	2GB	12.1" WXGA <i>Entry</i>		160G	5400		❖ Intel 5100 ²⁸	WWAN upg	None	4 XP Tab	Oct 09
7449-45U	SL9600	2.13	2GB	12.1" WXGA <i>Entry</i>	Cam	160G	7200	DVD±RW	❖ Intel 5100	WWAN upg	None	8 XP Tab	Oct 09
7449-47U	SL9600	2.13	4GB	12.1" WXGA <i>Entry</i>	Cam	160G	7200	DVD±RW	❖ Intel 5100	AT&T ²³	None	8 XP Tab	Oct 09
7449-49U	SL9600	2.13	2GB	12.1" WXGA <i>MultiTouch</i>	Cam	160G	7200		❖ Intel 5100	WWAN upg	None	8 XP Tab	Oct 09
7449-4AU	SL9600	2.13	4GB	12.1" WXGA <i>MultiTouch</i>	Cam	160G	7200	DVD±RW	❖ Intel 5100	WWAN upg	None	8 XP Tab	Oct 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Processor	Intel® Core™ 2 Duo processor SL9600 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache										Preloaded operating system ²⁰		
Memory	2GB or 4GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										- Windows® XP Tablet PC Edition 2005 preinstalled through downgrade rights in Genuine Windows 7 Professional 32		
SATA DVD±RW Ultrabay Slim SATA disk	Some: DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 160GB ⁸ (5400 or 7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std X200 UltraBase										Preloaded applications ¹⁴ (only some listed)		
Widescreen display	<i>Entry:</i> 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, frameless screen <i>MultiTouch:</i> 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 270 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, MultiView (indoor/outdoor), enhanced MultiTouch (touchscreen support pen & two-finger touch) <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen, pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)										<ul style="list-style-type: none"> Rescue and Recovery™ Access Connections™ Client Security Solution™ ThinkVantage Productivity Center ThinkVantage System Update Fingerprint Software Lenovo System Toolbox ThinkPad Utilities (Power Manager and Presentation Director) Adobe® Reader® Windows Live™ Toolbar Microsoft® Office 2007 Trial (60-day) Roxio® Creator® Business Edition (DVD±RW) Roxio MyDVD® (DVD±RW) Corel® WinDVD® (DVD±RW) 		
Camera	Some: camera on top of screen, 1.3-megapixel, digital zoom (focus range: 33 - 330cm)										Supports ThinkVantage® technologies		
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45										ThinkPad X200 UltraBase™ <ul style="list-style-type: none"> Provides desktop expansion and cable management for X200 Series Easily connects to the bottom of the X200 Series for traveling Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: <ul style="list-style-type: none"> CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): <ul style="list-style-type: none"> 250GB FDE 7200 rpm 43N3410 320GB Disk 7200 rpm 43N3411 		
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; Maximum external resolution: 2048x1536@75Hz (VGA)										Other features:		
Keyboard	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys										<ul style="list-style-type: none"> Power button (front) Stereo speakers (2 watt) Security key lock, security keyhole, and optional security screw Analog DB-15 monitor port DisplayPort (supports single-link DVI-D via cable 45J7915) Four USB 2.0 ports Gigabit ethernet port Microphone in and headphone out Second battery charger Requires 65 or 90 watt AC adapter 1.6 lb; 730g 		
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										Climate Savers® certified		
Touch pad	None										EPEAT™ Gold rating		
ThinkLight™	None										ENERGY STAR® 5.0-compliant		
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm <i>without X200 UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm <i>4-cell:</i> from 3.5 lb (1.6kg); <i>8-cell:</i> from 3.88 lb (1.76kg) <i>Color:</i> black; <i>Material:</i> magnesium alloy										ROHS-compliant		
Weight ²											International Warranty Service ¹⁷		
Case	Lithium Ion 4-cell or 8-cell										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²		
Battery - type	Lithium Ion 4-cell or 8-cell										via 800-426-7378		
Battery - life ¹⁰	<i>4-cell:</i> up to 4.4 hr; <i>8-cell:</i> up to 10.3 hr												
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)												
Media slice	Some: X200 UltraBase media slice (see right side)												
Multicard Reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)												
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)												
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)												
Mini PCI Express	Three Mini PCI Express slots												
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)												
WWAN upg	Some: Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)												
AT&T ²³	Some: Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T												
2G Turbo	None												
UWB	None												
Modem	56K V.92 ⁶ modem												
Bluetooth™	Bluetooth 2.1 wireless, LED indicator												
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1												
Intel AMT	Intel Active Management Technology (iAMT)												
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack												
Security	Power-on password, hard disk password, supervisor password, security keyhole												
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant												
Fingerprint reader	Fingerprint reader on right base of display / used in tablet or notebook mode / 2-way swipe sensor, LED indicator / supports the security chip												
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available												
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706		ThinkPad Battery 12 (4-cell)		43R9256								
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707		ThinkPad Battery 12++ (8-cell)		43R9257								
Other accessories on O-X200-T sheet										Other accessories at lenovo.com/accessories			

See footnotes for important warranty information
US models announced October 22, 2009

❖ Intel Centrino® 2 with vPro™ technology

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(CML2-3) October 2009

ThinkPad® X200 Tablet (7449) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	Cam	Disk SATA GB ⁵	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery cells	Preload	Avail date
7449-44U	SL9600	2.13	2GB	12.1" WXGA Entry		160G 5400	Optional	Optional	❖ Intel 5100 ²⁸	WWAN upg	None	4	Pro 32	Oct 09
7449-4KU	SL9600	2.13	2GB	12.1" WXGA MultiTouch	Cam	160G 7200	Optional	Optional	❖ Intel 5100	WWAN upg	None	8	Pro 32	Oct 09

- These small and medium business (SMB) models are part of the US TopSeller™ Program

Processor	Intel® Core™ 2 Duo processor SL9600 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache										Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 32			
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications ¹⁴ (only some listed)			
SATA DVD±RW Ultrabay Slim SATA disk	None Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 160GB ⁸ (5400 or 7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std X200 UltraBase										<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software • ThinkVantage Toolbox • Lenovo Online Data Backup • Adobe® Reader® • Skype™ for Windows • Microsoft Research AutoCollage Touch • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) 			
Widescreen display	<i>Entry:</i> 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, frameless screen <i>MultiTouch:</i> 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 270 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, MultiView (indoor/outdoor), enhanced MultiTouch (touchscreen support pen & two-finger touch) <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen, pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)										Supports ThinkVantage® technologies			
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45										ThinkPad X200 UltraBase™			
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA)										<ul style="list-style-type: none"> • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: <ul style="list-style-type: none"> - CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 - DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 - Serial ATA Hard Drive Bay Adapter III 43N3412 • Disks supported (some): <ul style="list-style-type: none"> • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 			
Keyboard TrackPoint®	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys										Other features: <ul style="list-style-type: none"> • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 			
Touch pad	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass													
ThinkLight™	None										65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm <i>without X200 UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm <i>4-cell:</i> from 3.5 lb (1.6kg); <i>8-cell:</i> from 3.88 lb (1.76kg)													
Weight ²	<i>Color:</i> black; <i>Material:</i> magnesium alloy Lithium Ion 4-cell or 8-cell										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Case	<i>Color:</i> black; <i>Material:</i> magnesium alloy Lithium Ion 4-cell or 8-cell													
Battery - type	Lithium Ion 4-cell or 8-cell										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Battery - life ¹⁰	4-cell: up to 4.4 hr; 8-cell: up to 10.3 hr													
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Media slice	Optional: X200 UltraBase media slice (see right side)													
Multicard Reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)													
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Mini PCI Express	Three Mini PCI Express slots													
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)													
2G Turbo	None										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
UWB	None													
Modem	56K V.92 ⁶ modem										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Bluetooth™	Bluetooth 2.1 wireless, LED indicator													
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Intel AMT	Intel Active Management Technology (iAMT)													
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Security	Power-on password, hard disk password, supervisor password, security keyhole													
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Fingerprint reader	Fingerprint reader on right base of display / used in tablet or notebook mode / 2-way swipe sensor, LED indicator / supports the security chip													
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706		ThinkPad Battery 12 (4-cell)		43R9256		24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378							
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707		ThinkPad Battery 12++ (8-cell)		43R9257									
Other accessories on O-X200-T sheet	Other accessories at lenovo.com/accessories										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			

See footnotes for important warranty information
US models announced October 22, 2009

❖ Intel Centrino® 2 with vPro™ technology

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ThinkPad® X200 Tablet (7450)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	CCFL or LED	Cam	Disk SATA	Optical in	ThinkPad X200	Mini PCIe 802.11	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Blue/ Fing	Workhorse (W) Global (G) Avail date
7450-2CU	SL9400	1.86	2GB	12.1" WXGA			160G 5400	Optional	Opt	Intel 5100 ²⁸	WWAN upg			Bus 32 W G Oct 08
✗ 7450-28U	SL9300	1.60	2GB	12.1" WXGA		Cam	250G 5400	Optional	Opt	Intel 5300 ²⁸	WWAN upg	2G Turbo	Yes	Bus 32 W G Oct 08
✗ 7450-EDU	SL9400	1.86	2GB	12.1" WXGA	Touch LED		160G 7200	Optional	Opt	Intel 5100	WWAN upg		Yes	Bus 32 W G Oct 08
7450-8HU	SL9400	1.86	2GB	12.1" WXGA	LED	Cam	160G 7200	Optional	Opt	Intel 5100	WWAN upg		Yes	Bus 32 W G Oct 08
7450-9GU	SL9400	1.86	2GB	12.1" WXGA		Cam	160G 7200	Optional	Opt	Intel 5300	WWAN upg		Yes	XP Tab W G Oct 08
✗ 7450-EYU	SL9300	1.60	2GB	12.1" WXGA	Touch LED	Cam	160G 5400	Optional	Opt	Intel 5300	WWAN upg		Yes	XP Tab Oct 08
✗ 7450-FDU	SL9400	1.86	2GB	12.1" WXGA	Touch LED		160G 7200	Optional	Opt	Intel 5100	WWAN upg		Yes	XP Tab W G Oct 08
Positioning Processor	Convertible tablet ultraportable; one spindle													
Processor	Intel® Core™ 2 Duo processor SL9300 or SL9400 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache													
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Non-italics: standard memory in 1 socket; 1 socket available													
SATA DVD±RW Ultrabay Slim SATA disk	None Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 160GB ⁹ (5400 or 7200 rpm) or 250GB (5400 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std X200 UltraBase													
Widescreen display	Some: 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, CCFL backlight, 190 nits, 16:10 aspect ratio, 500:1 contrast ratio, FFS, frameless screen Some: 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 285 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, frameless screen Touch: 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 230 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, MultiView (indoor/outdoor), MultiTouch (touchscreen via finger and pen) All: WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen, pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)													
Camera	Some: camera on top of screen, 1.3-megapixel, fixed focus													
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45													
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; Maximum external resolution: 2048x1536@75Hz													
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None None													
Dimensions ³	without X200 UltraBase; 4-cell: 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm without X200 UltraBase; 8-cell: 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm													
Weight ²	4-cell: from 3.5 lb (1.6kg); 8-cell: from 3.88 lb (1.76kg)													
Case	Color: black; Material: magnesium alloy													
Battery - type	Lithium Ion 8-cell													
Battery - life ¹⁰	4-cell: up to 4.4 hr; 8-cell: up to 10.3 hr													
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)													
Media slice	Optional: X200 UltraBase media slice (see right side)													
Multicard Reader ExpressCard/54 Ports	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)													
Mini PCI Express	Three Mini PCI Express slots													
Intel 5100 ²⁸	Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)													
Intel 5300 ²⁸	Some: 11a/b/g/n wireless, Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3													
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)													
2G Turbo	Some: Intel Turbo Memory, Half-Mini PCIe adapter, 2GB flash, disk-cache accelerator													
UWB	None													
Modem	56K V.92 ⁵ modem													
Bluetooth™	Some: Bluetooth 2.1 wireless, LED indicator													
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1													
Intel AMT	Intel Active Management Technology (iAMT)													
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack													
Security	Power-on password, hard disk password, supervisor password, security keyhole													
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant													
Fingerprint reader	Some: Fingerprint reader on right base of display / used in tablet or notebook mode / 2-way swipe sensor, LED indicator / supports the security chip													
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available													
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	ThinkPad Battery 12 (4-cell)	43R9256											
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	ThinkPad Battery 12++ (8-cell)	43R9257											
Other accessories on O-X200-T sheet	Other accessories at lenovo.com/accessories													
Preloaded operating system ²⁰													- Some: Windows® XP Tablet PC Edition 2005 preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ✦ Vista models: Vista Premium logo	
Preloaded applications ¹⁴ (all OSes; only some listed)													• Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader®	
Supports ThinkVantage® technologies													ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411	
Other features:													• Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g	
65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver rating (other models) ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378														

See footnotes for important warranty information

✦ Intel Centrino® 2 with vPro™ technology

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US models announced September 23, 2008

(CML1-2) September 2008

✗ US models withdrawn effective September or December 2009

ThinkPad® X200 Tablet (7450) - December 2008

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	CCFL or LED	Cam	Disk SATA GB ⁹	rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Blue/ Fing cells	Pre- load	Avail date
7450-8UU	SL94001	.86	2GB	12.1" WXGA	LED	Cam	80GBSSD		DVD±RW	Ultrabase	Intel 5300 ²⁸	AT&T ²³	None	Yes	8	Bus 32 Dec 08
✗ 7450-G9U	SL93001	.60	2GB	12.1" WXGA			128G SSD				Intel 5100 ²⁸	WWAN upg	None	Yes	4	Bus 32 Dec 08
7450-GDU	SL94001	.86	2GB	12.1" WXGA	LED	Cam	128G SSD				Intel 5300	WWAN upg	None	Yes	8	Bus 32 Dec 08
✗ 7450-GEU	SL94001	.86	2GB	12.1" WXGA	LED	Cam	128G SSD				Intel 5300	WWAN upg	None	Yes	8	Bus 32 Dec 08
✗ 7450-GAU	SL94001	.86	2GB	12.1" WXGA			128G SSD				WiMAX	WWAN upg	None	Yes	8	Bus 32 Jan 09
✗ 7450-GBU	SL94001	.86	2GB	12.1" WXGA	LED	Cam	128G SSD				WiMAX	WWAN upg	None	Yes	8	Bus 32 Jan 09
✗ 7450-GCU	SL94001	.86	2GB	12.1" WXGA	LED	Cam	128G SSD				WiMAX	WWAN upg	None	Yes	8	Bus 32 Jan 09
Positioning Processor	Convertible tablet ultraportable; one spindle Intel® Core™ 2 Duo processor SL9300 or SL9400 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache										Preloaded operating system ²⁰ - Genuine Windows® Vista® Business 32 - Vista Premium logo					
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Non-italics: standard memory in 1 socket; 1 socket available										Preloaded applications ¹⁴ (only some listed)					
SATA DVD±RW Ultrabay Slim SATA disk	Some: DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 80GB ⁹ or 128GB Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high removable, upgradable, shock mounted storage, supports second disk in optional or standard X200 UltraBase										<ul style="list-style-type: none"> Rescue and Recovery™ Access Connections™ Client Security Solution™ ThinkVantage Productivity Center ThinkVantage System Update Fingerprint Software (fingerprint models) McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) Lenovo System Toolbox ThinkPad Utilities (Power Manager and Presentation Director) Adobe® Reader® Windows Live™ Toolbar Microsoft® Office 2007 Trial (60-day) Roxio® Creator® Business Edition (DVD±RW) Roxio MyDVD® (DVD±RW) Corel® WinDVD® (DVD±RW) 					
Widescreen display	Some: 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, CCFL backlight, 190 nits, 16:10 aspect ratio, 500:1 contrast ratio, FFS, frameless screen Some: 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 285 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, frameless screen Touch: 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 230 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, MultiView (indoor/outdoor), MultiTouch (touchscreen via finger and pen) All: WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen, pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)															
Camera	Some: camera on top of screen, 1.3-megapixel, fixed focus															
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45															
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; Maximum external resolution: 2048x1536 @ 75Hz															
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None None										Supports ThinkVantage® technologies					
Dimensions ³	without X200 UltraBase; 4-cell: 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm without X200 UltraBase; 8-cell: 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm 4-cell: from 3.5 lb (1.6kg); 8-cell: from 3.88 lb (1.76kg)										ThinkPad X200 UltraBase™ <ul style="list-style-type: none"> Provides desktop expansion and cable management for X200 Series Easily connects to the bottom of the X200 Series for traveling Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: <ul style="list-style-type: none"> CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): <ul style="list-style-type: none"> 250GB FDE 7200 rpm 43N3410 320GB Disk 7200 rpm 43N3411 					
Weight ²	Color: black; Material: magnesium alloy															
Battery - type	Lithium Ion 4-cell or 8-cell															
Battery - life ¹⁰	4-cell: up to 4.4 hr; 8-cell: up to 10.3 hr															
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)															
Media slice	Some: X200 UltraBase media slice (see right side)															
Multicard reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)															
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)															
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)															
Mini PCI Express	Three Mini PCI Express slots															
Intel 5100 ²⁸	Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)															
Intel 5300 ²⁸	Some: 11a/b/g/n wireless, Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3															
WiMAX	Some: 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5350, 3x3 (450Mbps) WiFi + 1x2 WiMAX (Echo Peak)															
WWAN upg	Some: Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)															
AT&T ²³	Some: Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T															
2G Turbo UWB	None															
Modem	56K V.92 ⁶ modem															
Bluetooth™	Some: Bluetooth 2.1 wireless, LED indicator															
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1															
Intel AMT	Intel Active Management Technology (iAMT)															
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack															
Security	Power-on password, hard disk password, supervisor password, security keyhole															
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant															
Fingerprint reader	Some: Fingerprint reader on right base of display / used in tablet or notebook mode / 2-way swipe sensor, LED indicator / supports the security chip										65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Gold rating (LED models) EPEAT Silver rating (other models) ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378					
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available															
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706		ThinkPad Battery 12 (4-cell)		43R9256											
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707		ThinkPad Battery 12++ (8-cell)		43R9257											
Other accessories on O-X200-T sheet				Other accessories at lenovo.com/accessories												

See footnotes for important warranty information

✦ Intel Centrino® 2 with vPro™ technology

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✦ US models announced January 6, 2009; previous models December 9, 2008

(CML1-6) January 2009

✗ US models withdrawn effective September or December 2009

Type-model	Proc- essor	GHz	Memory	Widescreen display	CCFL or LED Cam	Disk SATA GB ⁷ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat- tery Blue/ Fing cells	Pre- load	Avail date
7450-9RU	SL9600	2.13	2GB	12.1" WXGA	LED Cam	160GB 7200	DVD±RW	Ultrabase	❖ Intel 5100 ²⁸	WWAN upg	None	Yes	8 Bus 32	May 09
7450-9SU	SL9600	2.13	2GB	12.1" WXGA	LED Cam	128G SSD			❖ Intel 5100	AT&T ²³	None	Yes	8 Bus 32	May 09
7450-2NU	SL9600	2.13	2GB	12.1" WXGA		160GB 5400			❖ Intel 5100	WWAN upg	None	Yes	8 Bus 32	May 09
Positioning Processor	<i>Convertible tablet ultraportable; one spindle</i> Intel® Core™ 2 Duo processor SL9600 with low voltage, dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache										Preloaded operating system²⁰ - Genuine Windows® Vista® Business 32 ❖ Vista Premium logo			
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW)			
SATA DVD±RW Ultrabay Slim SATA disk	<i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from <i>X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) <i>Some:</i> 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 160GB (5400 or 7200 rpm) / SATA 1.5Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive, supports second disk in optional or std <i>X200 UltraBase</i>										ThinkPad X200 UltraBase™ <ul style="list-style-type: none"> • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: <ul style="list-style-type: none"> - CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 - DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 - Serial ATA Hard Drive Bay Adapter III 43N3412 • Disks supported (some): <ul style="list-style-type: none"> • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features: <ul style="list-style-type: none"> • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 			
Widescreen display	<i>Some:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 190 nits, 16:10 aspect ratio, 500:1 contrast ratio, FFS, frameless screen <i>Some:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 285 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, frameless screen <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)													
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, fixed focus													
Graphics controller Graphics - external	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45 External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536@75Hz										Supports ThinkVantage® technologies			
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None None										ThinkPad X200 UltraBase™ <ul style="list-style-type: none"> • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: <ul style="list-style-type: none"> - CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 - DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 - Serial ATA Hard Drive Bay Adapter III 43N3412 • Disks supported (some): <ul style="list-style-type: none"> • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features: <ul style="list-style-type: none"> • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 			
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm <i>without X200 UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm <i>4-cell:</i> from 3.5 lb (1.6kg); <i>8-cell:</i> from 3.88 lb (1.76kg)													
Weight ² Case color Case material Battery - type Battery - life ¹⁰	Black Magnesium alloy Lithium Ion 8-cell <i>4-cell:</i> up to 4.4 hr; <i>8-cell:</i> up to 10.3 hr													
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)													
Media slice Multicard reader ExpressCard/54 Ports	<i>Some:</i> X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)													
Mini PCI Express Intel 5100 ²⁸ WWAN upg AT&T ²³	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T													
2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on right base of display / used in tablet or notebook mode / 2-way swipe sensor, LED indicator / supports the security chip													
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on right base of display / used in tablet or notebook mode / 2-way swipe sensor, LED indicator / supports the security chip													
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available													
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-X200-T sheet	55Y3706 55Y3707		ThinkPad Battery 12 (4-cell) ThinkPad Battery 12++ (8-cell) Other accessories at lenovo.com/accessories				43R9256 43R9257							

See footnotes for important warranty information
US models announced April 28, 2009

❖ Intel Centrino® 2 with vPro™ technology

ThinkPad® X200 Tablet (7450) - September 2009

Personal Systems Reference (PSREF)

Type-model	Proc- essor GHz	Memory	Widescreen display	CCFL or LED Cam	Disk SATA GB ³ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Bat- tery Pre- load	Avail date
7450-66U	SL9600	2.13	2GB	12.1" WXGA <i>MultiTouch</i>	LED Cam	160GB 5400		❖ Intel 5100 ²⁸	WWAN upg	8 Bus 32	Sep 09
7450-67U	SL9600	2.13	2GB	12.1" WXGA <i>Outdoor</i>	LED	250GB 5400	DVD±RW	❖ Intel 5100	AT&T ²³	Yes 8 XP Tab	Sep 09
7450-68U	SL9600	2.13	2GB	12.1" WXGA <i>MultiTouch</i>	LED Cam	160GB 7200		❖ Intel 5100	WWAN upg	Yes 8 Bus 32	Sep 09
7450-69U	SL9600	2.13	2GB	12.1" WXGA <i>Outdoor</i>	LED Cam	160GB 7200		❖ Intel 5100	WWAN upg	Yes 8 Bus 32	Sep 09
7450-6AU	SL9600	2.13	2GB	12.1" WXGA <i>MultiTouch</i>	LED Cam	160GB 7200		❖ Intel 5300 ²⁸	WWAN upg	Yes 8 XP Tab	Sep 09
7450-6BU	SL9600	2.13	2GB	12.1" WXGA <i>Outdoor</i>	LED Cam	160GB 7200		11n ²⁸	WWAN upg	Yes 8 Bus 32	Sep 09
7450-6CU	SL9600	2.13	2GB	12.1" WXGA <i>Outdoor</i>	LED	320GB 7200		❖ Intel 5100	Verizon ¹⁶	Yes 8 Bus 32	Sep 09

• **These models have an depot repair service 3-year limited warranty**

Positioning	<i>Convertible tablet ultraportable; one spindle</i>	Preloaded operating system²⁰ - <i>Some:</i> Windows® XP Tablet PC Edition 2005 preinstalled through downgrade rights in Genuine Windows Vista® Business - <i>Some:</i> Genuine Windows Vista Business 32 ⇨ <i>Vista models:</i> Vista Premium logo Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Roxio® Creator® Business Edition (DVD±RW) Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: - CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 - DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 - Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Processor	Intel® Core™ 2 Duo processor SL9600 with low voltage, dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache	
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available	
SATA DVD±RW Ultrabay Slim SATA disk	<i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from <i>X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 160GB⁸ (5400 or 7200 rpm), 250GB (5400 rpm) or 320GB (7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std <i>X200 UltraBase</i>	
Widescreen display	<i>Outdoor:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, IPS <i>MultiTouch:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 270 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, MultiView (indoor/outdoor), enhanced MultiTouch (touchscreen support pen & two-finger touch) <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)	
Camera	<i>Some:</i> camera on top of screen, 1.3-megapixel, digital zoom (focus range: 33 - 330cm)	
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45	
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536 @ 75Hz	
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None None	
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm <i>without X200 UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm <i>4-cell:</i> from 3.5 lb (1.6kg); <i>8-cell:</i> from 3.88 lb (1.76kg)	
Weight ² Case Battery - type Battery - life ¹⁰	<i>Color:</i> black; <i>Material:</i> magnesium alloy Lithium Ion 8-cell <i>4-cell:</i> up to 4.4 hr; <i>8-cell:</i> up to 10.3 hr	
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)	
Media slice Multicard reader ExpressCard/54 Ports	<i>Some:</i> X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)	
Mini PCI Express Intel 5100 ²⁸ Intel 5300 ²⁸ 11n ²⁸ WWAN upg Verizon ¹⁶ AT&T ²³ 2G Turbo UWB	Three Mini PCI Express slots <i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11a/b/g/n wireless, Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3 <i>Some:</i> 11b/g/n wireless, Mini-PCIe Adapter II <i>Some:</i> Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i> Wireless WAN, Qualcomm Gobi 1000 chipset, Mini PCIe adptry, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon <i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T	
Modem Bluetooth™ Ethernet Intel AMT Audio support	56K V.92 ⁵ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (AMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant <i>Some:</i> Fingerprint reader on right base of display / used in tablet or notebook mode / 2-way swipe sensor, LED indicator / supports the security chip	
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available	

See footnotes for important warranty information
US models announced September 15, 2009

❖ Intel Centrino® 2 with vPro™ technology

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(CML2-1) March 2010

ThinkPad® X200 Tablet (7450) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Proc-essor	GHz	Memory	Widescreen display	Disk SATA GB ⁹	Optical in rpm	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat-tery cells	Workhorse (W) Global (G) Avail date	
7450-DDU	SL9600	2.13	2GB	12.1" WXGA <i>MultiTouch</i>	160G	7200	Optional	Optional	❖ Intel 5300 ²⁸	WWAN upg	None	8 Pro 64 G Oct 09	
Processor	Intel® Core™ 2 Duo processor SL9600 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache												
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available												
SATA DVD±RW Ultrabay Slim SATA disk	None Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 160GB ⁸ (7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std X200 UltraBase												
Widescreen display	12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 270 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, MultiView (indoor/outdoor), enhanced MultiTouch (touchscreen support pen & two-finger touch), WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen, pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock) Camera on top of screen, 1.3-megapixel, digital zoom (focus range: 33 - 330cm)												
Camera	Camera on top of screen, 1.3-megapixel, digital zoom (focus range: 33 - 330cm)												
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45												
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution: 2048x1536@75Hz (VGA)</i>												
Keyboard	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys												
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass												
Touch pad	None												
ThinkLight™	None												
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm <i>without X200 UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm												
Weight ²	<i>4-cell:</i> from 3.5 lb (1.6kg); <i>8-cell:</i> from 3.88 lb (1.76kg)												
Case	<i>Color:</i> black; <i>Material:</i> magnesium alloy												
Battery - type	Lithium Ion 8-cell												
Battery - life ¹⁰	<i>4-cell:</i> up to 4.4 hr; <i>8-cell:</i> up to 10.3 hr												
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)												
Media slice	Optional: X200 UltraBase media slice (see right side)												
Multicard Reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)												
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)												
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)												
Mini PCI Express	Three Mini PCI Express slots												
Intel 5300 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3												
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) <i>Some:</i>												
2G Turbo	None												
UWB	None												
Modem	56K V.92 ⁶ modem												
Bluetooth™	Bluetooth 2.1 wireless, LED indicator												
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1												
Intel AMT	Intel Active Management Technology (iAMT)												
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack												
Security	Power-on password, hard disk password, supervisor password, security keyhole												
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant												
Fingerprint reader	Fingerprint reader on right base of display / used in tablet or notebook mode / 2-way swipe sensor, LED indicator / supports the security chip												
Limited warranty ¹²	3-years/1-yr battery - EasyServ™ ¹⁹ depot repair service / service upgrades ²² available												
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	ThinkPad Battery 12 (4-cell)						43R9256					
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	ThinkPad Battery 12++ (8-cell)						43R9257					
Other accessories on O-X200-T sheet		Other accessories at lenovo.com/accessories											

- Preloaded operating system²⁰**
- Genuine Windows® 7 Professional 64
- Preloaded applications¹⁴** (only some listed)
- Rescue and Recovery™
 - Access Connections™
 - Password Manager
 - ThinkVantage Power Manager
 - ThinkVantage System Update
 - Fingerprint Software
 - ThinkVantage Toolbox
 - Lenovo Online Data Backup
 - Norton™ Internet Security 2009 (30 days of virus definitions)
 - Adobe® Reader®
 - Skype™ for Windows

Supports ThinkVantage® technologies

- ThinkPad X200 UltraBase™**
- Provides desktop expansion and cable management for X200 Series
 - Easily connects to the bottom of the X200 Series for traveling
 - Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side:
 - CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213
 - DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214
 - Serial ATA Hard Drive Bay Adapter III 43N3412
 - Disks supported (some):
 - 250GB FDE 7200 rpm 43N3410
 - 320GB Disk 7200 rpm 43N3411

- Other features:
- Power button (front)
 - Stereo speakers (2 watt)
 - Security key lock, security keyhole, and optional security screw
 - Analog DB-15 monitor port
 - DisplayPort (supports single-link DVI-D via cable 45J7915)
 - Four USB 2.0 ports
 - Gigabit ethernet port
 - Microphone in and headphone out
 - Second battery charger
 - Requires 65 or 90 watt AC adapter
 - 1.6 lb; 730g

65-watt (GMA graphics) AC Adapter
Climate Savers® certified
EPEAT™ Gold rating
ENERGY STAR® 5.0-compliant
ROHS-compliant
International Warranty Service¹⁷
24 hour x 7 day¹⁸ toll-free support during the warranty period¹²
via 800-426-7378

See footnotes for important warranty information
US model announced October 22, 2009

❖ Intel Centrino® 2 with vPro™ technology

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(CML2-5) October 2009

ThinkPad® X200 Tablet (7453) - Onsite

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	CCFL or LED	Cam	Disk SATA	Optical in	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB Blue/ or TurboFing	Workhorse (W) Global (G) Avail Preload GMP (P) date
7453-2CU	SL9400	1.86	2GB	12.1" WXGA			160G5400			Intel 5100 ²⁸	WWAN upg	No	Bus 32 W G P Oct 08
✗ 7453-EDU	SL9400	1.86	2GB	12.1" WXGA	LED		160G7200			Intel 5100	WWAN upg	No	Yes Bus 32 W Oct 08
7453-9GU	SL9400	1.86	2GB	12.1" WXGA		Cam	160G7200			Intel 5300 ²⁸	WWAN upg	No	Yes XP Tab W G P Oct 08
✗ 7453-FDU	SL9400	1.86	2GB	12.1" WXGA	LED		160G7200			Intel 5100	WWAN upg	No	Yes XP Tab W G P Oct 08
7453-8HU	SL9400	1.86	2GB	12.1" WXGA		LED Cam	160G7200			Intel 5100	WWAN upg	No	Yes Bus 32 W Oct 08
☞ 7453-9RU	SL9600	2.13	2GB	12.1" WXGA	LED	Cam	160G7200	DVD±RW	UltraBase	Intel 5100	WWAN upg	No	Yes Bus 32 G P Apr 09
Positioning Processor	Convertible tablet ultraportable; one spindle												
Processor	Intel® Core™ 2 Duo processor SL9400 or SL9600 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache												
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Non-italics: standard memory in 1 socket; 1 socket available												
SATA DVD±RW Ultrabay Slim SATA disk	Some: DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 160GB ⁸ (5400 or 7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std X200 UltraBase												
Widescreen display	Some: 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, CCFL backlight, 190 nits, 16:10 aspect ratio, 500:1 contrast ratio, FFS, frameless screen Some: 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 285 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, frameless screen Touch: 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 230 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, MultiView (indoor/outdoor), MultiTouch (touchscreen via finger and pen) All: WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen, pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)												
Camera	Some: camera on top of screen, 1.3-megapixel, fixed focus												
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45												
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; Maximum external resolution: 2048x1536@75Hz												
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None None												
Dimensions ⁹	without X200 UltraBase; 4-cell: 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm without X200 UltraBase; 8-cell: 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm 4-cell: from 3.5 lb (1.6kg); 8-cell: from 3.88 lb (1.76kg) Color: black; Material: magnesium alloy												
Weight ² Case	Lithium Ion 8-cell												
Battery - type	4-cell: up to 4.4 hr; 8-cell: up to 10.3 hr												
Battery - life ¹⁰													
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)												
Media slice	Some: X200 UltraBase media slice (see right side)												
Multicard Reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)												
ExpressCard/54 Ports	One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)												
Mini PCI Express	Three Mini PCI Express slots												
Intel 5100 ²⁸	Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)												
Intel 5300 ²⁸	Some: 11a/b/g/n wireless, Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3												
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)												
2G Turbo	None												
UWB	None												
Modem	56K V.92 ⁶ modem												
Bluetooth™	Some: Bluetooth 2.1 wireless, LED indicator												
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1												
Intel AMT	Intel Active Management Technology (iAMT)												
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack												
Security	Power-on password, hard disk password, supervisor password, security keyhole												
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant												
Fingerprint reader	Some: Fingerprint reader on right base of display / used in tablet or notebook mode / 2-way swipe sensor, LED indicator / supports the security chip												
Limited warranty ¹²	3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available												
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	ThinkPad Battery 12 (4-cell)		43R9256									
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	ThinkPad Battery 12++ (8-cell)		43R9257									
Other accessories on O-X200-T sheet					Other accessories at lenovo.com/accessories								
Preloaded operating system ²⁰												<ul style="list-style-type: none"> - Some: Windows® XP Tablet PC Edition 2005 preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ✦ Vista models: Vista Premium logo 	
Preloaded applications ¹⁴ (all OSes; only some listed)												<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Microsoft® Office 2007 Trial (60-day) 	
Supports ThinkVantage® technologies												<p>ThinkPad X200 UltraBase™</p> <ul style="list-style-type: none"> • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: <ul style="list-style-type: none"> - CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 - DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 - Serial ATA Hard Drive Bay Adapter III 43N3412 • Disks supported (some): <ul style="list-style-type: none"> • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 <p>Other features:</p> <ul style="list-style-type: none"> • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 	
65-watt (GMA graphics) AC Adapter												Climate Savers® certified	
												EPEAT™ Gold rating (LED models)	
												EPEAT Silver rating (other models)	
												ENERGY STAR® 5.0-compliant	
												ROHS-compliant	
												International Warranty Service ¹⁷	
												24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²	
												via 800-426-7378	

See footnotes for important warranty information

✦ Intel Centrino® 2 with vPro™ technology

☞ US model announced April 28, 2009; previous models on September 23, 2008

✗ US models withdrawn effective December 2009

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(CML1-3) May 2009

ThinkPad® X200 Tablet (7453) - Onsite (September 2009)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	CCFL or LED	Cam	Disk SATA	Optical in	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Blue/ Fing	Workhorse (W) Global (G) Avail Preload (P) date
7453-68U	SL9600	2.13	2GB	12.1" WXGA	LED	Cam	160G 7200	Optional	Optional	Intel 5100 ²⁸	WWAN upg	Yes	Bus 32 G P Sep 09
7453-69U	SL9600	2.13	2GB	12.1" WXGA	LED	Cam	160G 7200	Optional	Optional	Intel 5100	WWAN upg	Yes	Bus 32 G P Sep 09
7453-6AU	SL9600	2.13	2GB	12.1" WXGA	LED	Cam	160G 7200	Optional	Optional	Intel 5300 ²⁸	WWAN upg	Yes	XP Tab G P Sep 09
7453-6BU	SL9600	2.13	2GB	12.1" WXGA	LED	Cam	160G 7200	Optional	Optional	11n ²⁸	WWAN upg	Yes	Bus 32 G P Sep 09

• These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

Positioning Processor	Convertible tablet ultraportable; one spindle Intel® Core™ 2 Duo processor SL9600 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache											Preloaded operating system²⁰ - Some: Windows® XP Tablet PC Edition 2005 preinstalled through downgrade rights in Genuine Windows Vista® Business - Some: Genuine Windows Vista Business 32 ⇨ Vista models: Vista Premium logo Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader®
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; Non-italics: standard memory in 1 socket; 1 socket available											
SATA DVD±RW Ultrabay Slim SATA disk	None Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 160GB⁸ (7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std X200 UltraBase											
Widescreen display	Outdoor: 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, IPS MultiTouch: 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 270 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, MultiView (indoor/outdoor), enhanced MultiTouch (touchscreen support pen & two-finger touch) All: WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)											
Camera	Some: camera on top of screen, 1.3-megapixel, digital zoom (focus range: 33 - 330cm)											Supports ThinkVantage® technologies
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45											ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: - CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 - DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 - Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution: 2048x1536@75Hz</i>											
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint®: pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None None											
Dimensions ³	without X200 UltraBase; 4-cell: 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm without X200 UltraBase; 8-cell: 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm 4-cell: from 3.5 lb (1.6kg); 8-cell: from 3.88 lb (1.76kg) Color: black; Material: magnesium alloy											
Weight ² Case Battery - type Battery - life ¹⁰	Lithium Ion 8-cell 4-cell: up to 4.4 hr; 8-cell: up to 10.3 hr											
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)											
Media slice Multicard Reader ExpressCard/54 Ports	Optional: X200 UltraBase media slice (see right side) 5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)											
Mini PCI Express Intel 5100 ²⁸ Intel 5300 ²⁸ 11n ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support Security Security chip Fingerprint reader	Three Mini PCI Express slots Some: 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Some: 11a/b/g/n wireless, Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3 Some: 11b/g/n wireless, Mini-PCIe Adapter II Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on right base of display / used in tablet or notebook mode / 2-way swipe sensor, LED indicator / supports the security chip											
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available											
1GB PC3-8500 DDR3 L-H SODIMM 2GB PC3-8500 DDR3 L-H SODIMM Other accessories on O-X200-T sheet	55Y3706 55Y3707	ThinkPad Battery 12 (4-cell) ThinkPad Battery 12++ (8-cell) Other accessories at lenovo.com/accessories							43R9256 43R9257			

See footnotes for important warranty information
US models announced September 15, 2009

⇨ Intel Centrino® 2 with vPro™ technology

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(CML2-2) October 2009

ThinkPad® X200 Tablet (7453) - Onsite (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	Disk SATA GB ⁹	Optical in rpm	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe Bat- tery or Turbo cells	Workhorse (W) Global (G) Avail Preload GMP (P)	date
7453-DDU	SL9600	2.13	2GB	12.1" WXGA MultiTouch	160G	7200	Optional	Optional	❖ Intel 5300 ²⁸	WWAN upg	None	8 Pro 64 G P Oct 09

• **This model is part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty**

Processor	Intel® Core™ 2 Duo processor SL9600 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache										
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										
SATA DVD±RW Ultrabay Slim SATA disk	None Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 160GB ⁸ (7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std X200 UltraBase										
Widescreen display	12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 270 nits, 16:10 aspect ratio, 500:1 contrast ratio, IPS, MultiView (indoor/outdoor), enhanced MultiTouch (touchscreen support pen & two-finger touch), WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen, pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock) Camera on top of screen, 1.3-megapixel, digital zoom (focus range: 33 - 330cm)										
Camera	Camera on top of screen, 1.3-megapixel, digital zoom (focus range: 33 - 330cm)										
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45										
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA)										
Keyboard	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys										
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass										
Touch pad	None										
ThinkLight™	None										
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm <i>without X200 UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm										
Weight ²	<i>4-cell:</i> from 3.5 lb (1.6kg); <i>8-cell:</i> from 3.88 lb (1.76kg)										
Case	<i>Color:</i> black; <i>Material:</i> magnesium alloy										
Battery - type	Lithium Ion 8-cell										
Battery - life ¹⁰	<i>4-cell:</i> up to 4.4 hr; <i>8-cell:</i> up to 10.3 hr										
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)										
Media slice	Optional: X200 UltraBase media slice (see right side)										
Multicard Reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)										
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)										
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)										
Mini PCI Express	Three Mini PCI Express slots										
Intel 5300 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel Ultimate N WiFi Link 5300, 3x3										
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)										
2G Turbo	None										
UWB	None										
Modem	56K V.92 ⁶ modem										
Bluetooth™	Bluetooth 2.1 wireless, LED indicator										
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1										
Intel AMT	Intel Active Management Technology (iAMT)										
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack										
Security	Power-on password, hard disk password, supervisor password, security keyhole										
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant										
Fingerprint reader	Fingerprint reader on right base of display / used in tablet or notebook mode / 2-way swipe sensor, LED indicator / supports the security chip										
Limited warranty ¹²	3-years/1-year battery, limited onsite service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time/ service upgrades ²² available										
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	ThinkPad Battery 12 (4-cell)	43R9256								
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	ThinkPad Battery 12++ (8-cell)	43R9257								
Other accessories on O-X200-T sheet	Other accessories at lenovo.com/accessories										

Preloaded operating system²⁰
- Genuine Windows® 7 Professional 64

Preloaded applications¹⁴ (only some listed)

- Rescue and Recovery™
- Access Connections™
- Password Manager
- ThinkVantage Power Manager
- ThinkVantage System Update
- Fingerprint Software
- ThinkVantage Toolbox
- Lenovo Online Data Backup
- Skype™ for Windows
- Microsoft Research AutoCollage Touch
- Roxio® Creator® Business Edition (DVD±RW)

Supports ThinkVantage® technologies

ThinkPad X200 UltraBase™

- Provides desktop expansion and cable management for X200 Series
- Easily connects to the bottom of the X200 Series for traveling
- Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side:
 - CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213
 - DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214
 - Serial ATA Hard Drive Bay Adapter III 43N3412
- Disks supported (some):
 - 250GB FDE 7200 rpm 43N3410
 - 320GB Disk 7200 rpm 43N3411

Other features:

- Power button (front)
- Stereo speakers (2 watt)
- Security key lock, security keyhole, and optional security screw
- Analog DB-15 monitor port
- DisplayPort (supports single-link DVI-D via cable 45J7915)
- Four USB 2.0 ports
- Gigabit ethernet port
- Microphone in and headphone out
- Second battery charger
- Requires 65 or 90 watt AC adapter
- 1.6 lb; 730g

65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free support during the warranty period¹² via 800-426-7378

See footnotes for important warranty information
US model announced October 22, 2009

❖ Intel Centrino® 2 with vPro™ technology

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(CML2-6) October 2009

ThinkPad® X200 Tablet (7450) - Education (EasyServ)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	Cam	Disk SATA GB ⁵	Optical in rpm	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB Blue/ Fing	Bat- tery cells	Workhorse (W) Global (G) Avail date
7450-2DU	SL9400	1.86	2GB	12.1" WXGA	Cam	160G 5400	Optional	Optional	✦ Intel 5100 ²⁸	WWAN upg	None	Yes	8 Bus 32 W Oct 08
7450-2KU	SL9400	1.86	2GB	12.1" WXGA	Cam	160G 7200	Optional	Optional	✦ Intel 5100	WWAN upg	None	Yes	8 Ult 32 W Feb 09
7450-2PU	SL9400	1.86	2GB	12.1" WXGA	Cam	160G 5400	Optional	Optional	✦ Intel 5100	WWAN upg	None	Yes	8 Bus 32 W Mar 09

- **These models have an EasyServ™,19 depot repair service 3-year limited warranty**
- Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.
- Microsoft® Office Ultimate 2007 Academic Edition: Only valid for sale to students, faculty and staff of accredited educational institutions in the United States.

Positioning Processor	<i>Convertible tablet ultraportable; one spindle</i> Intel® Core™ 2 Duo processor SL9400 with low voltage, dual-core, Intel HD Boost, 1066MHz system bus, and 6MB L2 cache										Preloaded operating system²⁰ - <i>Some:</i> Genuine Windows® Vista® Business 32 - <i>Some:</i> Genuine Windows Vista Ultimate 32 ✦ Vista Premium logo		
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications ¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day)		
SATA DVD±RW Ultrabay Slim SATA disk	None Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 160GB⁸ (5400 or 7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std <i>X200 UltraBase</i>												
Widescreen display	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 190 nits, 16:10 aspect ratio, 500:1 contrast ratio, FFS, frameless screen, WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock) Camera on top of screen, 1.3-megapixel, fixed focus												
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45												
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution:</i> 2048x1536@75Hz												
Keyboard TrackPoint® Touch pad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass None None												
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm <i>without X200 UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm												
Weight ² Case Battery - type Battery - life ¹⁰	<i>4-cell:</i> from 3.5 lb (1.6kg); <i>8-cell:</i> from 3.88 lb (1.76kg) <i>Color:</i> black; <i>Material:</i> magnesium alloy Lithium Ion 8-cell <i>4-cell:</i> up to 4.4 hr; <i>8-cell:</i> up to 10.3 hr												
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)										Supports ThinkVantage® technologies		
Media slice	<i>Optional: X200 UltraBase media slice</i> (see right side)										ThinkPad X200 UltraBase™		
Multicard Reader ExpressCard slot Ports	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC) One ExpressCard/34 or ExpressCard/54 Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)										• Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
Mini PCI Express Intel 5100 ²⁸ WWAN upg 2G Turbo UWB Modem Bluetooth™ Ethernet Intel AMT Audio support	Three Mini PCI Express slots 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152) None None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole												
Security Security chip Fingerprint reader	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant Fingerprint reader on right base of display / used in tablet or notebook mode / 2-way swipe sensor, LED indicator / supports the security chip										65-watt (GMA graphics) AC Adapter Climate Savers® certified EPEAT Silver rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378		
Limited warranty ¹²	3-years/1-yr battery - EasyServ™,19 depot repair service / service upgrades²² available												
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	ThinkPad Battery 12 (4-cell)					43R9256						
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	ThinkPad Battery 12++ (8-cell)					43R9257						
Other accessories on O-X200-T sheet		Other accessories at lenovo.com/accessories											

See footnotes for important warranty information

✦ Intel Centrino® 2 with vPro™ technology

US model announced March 24, 2009; previous models on September 23, 2008 or February 17, 2009

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ThinkPad® X200 Tablet (7453) - Education (Onsite)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	GHz	Memory	Widescreen display	Cam	Disk SATA GB ⁵	Optical in rpm	ThinkPad in UltraBase	ThinkPad X200 UltraBase	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB Blue/ Turbo	Bat- tery cells	Workhorse (W) Global (G) Avail date
7453-2DU	SL9400	1.86	2GB	12.1" WXGA	Cam	160G	5400	Optional	Optional	Intel 5100 ²⁸	WWAN upg	None	Yes	8 Bus 32 W Oct 08
7453-2KU	SL9400	1.86	2GB	12.1" WXGA	Cam	160G	7200	Optional	Optional	Intel 5100	WWAN upg	None	Yes	8 Ult 32 W Feb 09

- **These models have a limited onsite service²⁴ 3-year limited warranty**
- Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.
- Microsoft® Office Ultimate 2007 Academic Edition: Only valid for sale to students, faculty and staff of accredited educational institutions in the United States.

Positioning Processor	<i>Convertible tablet ultraportable; one spindle</i> Intel® Core™ 2 Duo processor SL9400 with low voltage, dual-core , Intel HD Boost, 1066MHz system bus, and 6MB L2 cache										Preloaded operating system²⁰ - Some: Genuine Windows® Vista® Business 32 - Some: Genuine Windows Vista Ultimate 32 ↔ Vista Premium logo						
Memory	2GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										- Some: Genuine Windows Vista Ultimate 32 ↔ Vista Premium logo						
SATA DVD±RW Ultrabay Slim SATA disk	None Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 160GB⁸ (5400 or 7200 rpm) / SATA 1.5Gb/s, 9.5mm high, removable, upgradable, ThinkPad Shock Mounted Hard Drive, Active Protection System™, supports 2nd disk in optional or std <i>X200 UltraBase</i>										Preloaded applications¹⁴ (all OSes; only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader®						
Widescreen display	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, CCFL backlight, 190 nits, 16:10 aspect ratio, 500:1 contrast ratio, FFS, frameless screen, WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in front base, rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)																
Camera	Camera on top of screen, 1.3-megapixel, fixed focus																
Graphics controller	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45										Supports ThinkVantage® technologies						
Graphics - external	External monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; <i>Maximum external resolution: 2048x1536@75Hz</i>										ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 Series • Easily connects to the bottom of the X200 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411						
Keyboard	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys																
TrackPoint®	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass																
Touch pad	None																
ThinkLight™	None																
Dimensions ³	<i>without X200 UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33mm <i>without X200 UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33mm <i>4-cell:</i> from 3.5 lb (1.6kg); <i>8-cell:</i> from 3.88 lb (1.76kg)																
Weight ²	<i>4-cell:</i> from 3.5 lb (1.6kg); <i>8-cell:</i> from 3.88 lb (1.76kg)																
Case	<i>Color:</i> black; <i>Material:</i> magnesium alloy																
Battery - type	Lithium Ion 8-cell																
Battery - life ¹⁰	<i>4-cell:</i> up to 4.4 hr; <i>8-cell:</i> up to 10.3 hr																
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub), ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC)																
Media slice	<i>Optional: X200 UltraBase media slice</i> (see right side)																
Multicard Reader	5-in-1 reader (MultiMediaCard, Memory Stick, Mem Stick Pro, Secure Digital, SDHC)																
ExpressCard slot	One ExpressCard/34 or ExpressCard/54																
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)																
Mini PCI Express	Three Mini PCI Express slots																
Intel 5100 ²⁸	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)																
WWAN upg	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)																
2G Turbo	None																
UWB	None																
Modem	56K V.92 ⁶ modem																
Bluetooth™	Bluetooth 2.1 wireless, LED indicator																
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1																
Intel AMT	Intel Active Management Technology (iAMT)																
Audio support	High Definition (HD) Audio, Conexant CX20561 codec / stereo speakers, 1 watt / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack																
Security	Power-on password, hard disk password, supervisor password, security keyhole																
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant																
Fingerprint reader	Fingerprint reader on right base of display / used in tablet or notebook mode / 2-way swipe sensor, LED indicator / supports the security chip																
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available																
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706		ThinkPad Battery 12 (4-cell)				43R9256										
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707		ThinkPad Battery 12++ (8-cell)				43R9257										
Other accessories on O-X200-T sheet										Other accessories at lenovo.com/accessories				24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			

See footnotes for important warranty information

↔ Intel Centrino® 2 with vPro™ technology

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US model announced February 17, 2009; previous model on September 23, 2008

(CML1-5) February 2009

Memory

1GB PC3-8500 DDR3 SODIMM	43R1987	ann 08/05/08
1GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0551	ann 03/17/09
2GB PC3-8500 DDR3 SODIMM	43R1988	ann 08/05/08
2GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0552	ann 03/17/09
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann 06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann 06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann 06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann 06/23/09

Ultrabay Slim 9.5mm
Most Ultrabay Slim accessories supported in ThinkPad X200 UltraBase

Storage and removable storage

160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	41N5692	ann 03/20/07
160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	41N5737	ann 10/16/07
250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43R8152	ann 01/15/08
250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3410	ann 01/20/09
320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3403	ann 08/05/08
320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3411	ann 01/20/09
500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3420	ann 06/23/09
500GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3423	ann 01/07/10

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in X200 UltraBase (43R8781)

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	ann 08/26/08
256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover)	43N3417	ann 06/23/09
USB 2.0 Essential Memory Key 4GB	45J7904	ann 06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann 07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann 10/28/08
USB 2.0 Ultra Secure Memory Key 1GB	45J5915	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann 08/26/08
USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	ann 11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann 01/07/10
USB 2.0 Super Multi-Burner Drive	41N5565	ann 01/23/07
USB 2.0 Portable DVD Burner	43N3264	ann 01/05/10

Wireless WAN (Mini PCI Express)

Verizon® WWAN UNDP Broadband Mini PCle	43R9151	ann 08/05/08
AT&T® WWAN HSPA Broadband Mini PCle	43R9152	ann 08/26/08

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann 05/12/09
USB Port Replicator with Digital Video	45K1610	ann 07/28/09
ThinkPad X200 UltraBase	43R8781	ann 08/05/08

Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Ultralim Wireless Keyboard and Mouse ⁵²	57Y4700	ann 09/15/09
⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.		
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

Mouse

Lenovo Mini Optical Mouse - Black (USB)	55Y9308	ann 05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann 05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann 01/22/08

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06
ExpressCard Gemplus Smart Card Reader	41N3043	ann 06/27/06

Multimedia

USB 2.0 Lenovo Webcam	40Y8519	ann 08/29/06
ThinkPad In-Ear Headphones	57Y4488	ann 01/07/10

Tablet

ThinkPad Digitizer Pen	41U3143	ann 11/14/06
ThinkPad Tablet Tether (3-pack)	41U4820	ann 11/14/06

Batteries

ThinkPad Battery 12 (4-cell)	43R9256	ann 09/23/08
ThinkPad Battery 12++ (8-cell)	43R9257	ann 09/23/08
ThinkPad External Battery Charger ⁴⁷	40Y7625	ann 09/20/05

⁴⁷ Only supports ThinkPad Battery 12 (4-cell) 43R9256

More information at www.lenovo.com/alldaycomputing

ThinkPad 65W AC Adapter	40Y7696	ann 01/05/06
ThinkPad 90W AC Adapter	40Y7659	ann 09/20/05
90W Ultralim AC/DC Combo Adapter	41R4493	ann 09/22/09

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

- BlackBerry charge tip (L8a) 41R4478 ann 12/18/07
- iPod and iPhone Charge Tip (L10a) 41R4481 ann 12/18/07
- Generic Micro USB charge tip (L18) 41R4490 ann 01/06/09

More information at www.lenovopowertips.com

Carrying Cases

X200 Tablet:

ThinkPad X200 Tablet Sleeve	43R9115	ann 09/23/08
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Up to 13.3" widescreen models:

ThinkPad Ultraportable Case	41U5062	ann 05/13/08
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Up to 14.1" widescreen models:

ThinkPad Women's Microfiber Tote	22P8855	ann 06/24/08
ThinkPad Women's Leather Trim Tote	22P8856	
ThinkPad Women's Executive Leather Tote	22P8857	
Women's Executive Red Leather Tote	22P8858	

Up to 15.4" widescreen models:

Lenovo Business Messenger Case	51J0475	ann 08/18/09
Lenovo Messenger Max	41U5253	ann 05/01/07
Lenovo Performance Backpack	41U5254	ann 05/01/07
Checkpoint Friendly Business Topload Case	51J0418	ann 05/05/09
ThinkPad Business Topload Case	43R2476	ann 05/13/08
ThinkPad Business Backpack	43R2482	ann 05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann 05/13/08
ThinkPad Executive Leather Case	43R2480	ann 05/13/08

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann 11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann 10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann 10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann 10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann 10/20/09
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann 09/17/08

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
Lenovo DisplayPort to VGA Monitor Cable ⁵⁰	57Y4393	ann 08/04/09
DisplayPort to Single-link DVI-D Cable ⁵⁰	45J7915	ann 08/05/08

⁵⁰ Can only be used via ThinkPad X200 UltraBase (43R8781)

ThinkVision USB Soundbar	40Y7616	ann 08/23/05
ThinkVision Soundbar	45K1263	ann 09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
Lenovo Easy Reach Monitor Stand	55Y9258	ann 09/22/09
Radial Arm	19K4464	ann 05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:
www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad X201
(TrackPoint model)



Lenovo ThinkPad X201 with
ThinkPad Battery 47++ (9-cell)
43R9255



Lenovo ThinkPad X201
(UltraNav model)



Lenovo ThinkPad X201
(UltraNav model)



ThinkPad X200 UltraBase
43R8781



ThinkPad 65W AC Adapter
40Y7696

ThinkPad® X201 (3249) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	Max Base turbo (GHz)(GHz)	Memory	Wide- screen display	Camera	Disk SATA GB ³ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Intel vPro	Preload	Avail date
3249-2RU	i5-540M	2.53 3.06	2GB	12.1" WXGA	2.0M	250G 5400	DVD±RW	UltraBase	Intel 6200 ²⁸	WWAN upg		vPro	XP Pro	Mar 10
3249-2PU	i5-540M	2.53 3.06	4GB	12.1" WXGA	2.0M	320G 7200	DVD±RW	UltraBase	Intel 6200	Gobi 2000	AT&T ²³	vPro	XP Pro	Mar 10
3249-2SU	i5-540M	2.53 3.06	2GB	12.1" WXGA		250G 5400			Intel 6200	WWAN upg		vPro	XP Pro	Mar 10

- These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ i5 processor i5-540M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache										Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32			
Memory	2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • Fingerprint Software			
SATA DVD±RW Ultrabay Slim SATA disk	<i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 250GB⁸ (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std X200 UltraBase										Supports ThinkVantage® technologies			
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 250:1 contrast ratio <i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus										ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411			
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz										Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g			
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	<i>without UltraBase; 4/6-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 20.7-35.3mm <i>without UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 233.8mm x 20.7-35.3mm <i>4-cell:</i> from 2.89 lb (1.31kg); <i>6-cell:</i> from 3.18 lb (1.44kg); <i>9-cell:</i> from 3.52 lb (1.60kg)													
Weight ² Case Battery - type Battery - life ¹⁰	<i>Color:</i> black; <i>Material:</i> magnesium alloy Lithium Ion 6-cell <i>4-cell:</i> up to 3.4 hr; <i>6-cell:</i> up to 6.7 hr; <i>9-cell:</i> up to 11.3 hr													
Chipset	Mobile Intel QM57 Express Chipset													
Media slice Multicard reader ExpressCard/54 Ports	<i>Some:</i> ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)													
PCIe Mini Card Intel 6200 ²⁸ WWAN upg Gobi™ 2000	Two PCI Express Mini Card slots 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider													
Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support	<i>Some:</i> AT&T®, contract required with service provider 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speaker, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack													
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip										65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available													

See footnotes for important warranty information
US models announced March 2, 2010

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(MOC3-7) March 2010

ThinkPad® X201 (3249) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	Max Base turbo (GHz)(GHz)	Memory	Wide- screen display	Camera	Disk SATA GB ^o rpm	Optical in UltraBase	ThinkPad X200 UltraBase	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Carrier	Intel vPro	Preload	Avail date
3249-2EU	i5-540M	2.53 3.06	2GB	12.1" WXGA		250G 5400			Intel 6200 ²⁸	WWAN upg		vPro	Pro 32	Mar 10
3249-2FU	i5-540M	2.53 3.06	2GB	12.1" WXGA	2.0M	320G 7200	DVD±RW	UltraBase	Intel 6200	WWAN upg		vPro	Pro 32	Mar 10
3249-2GU	i5-540M	2.53 3.06	4GB	12.1" WXGA	2.0M	320G 7200	DVD±RW	UltraBase	Intel 6200	Gobi 2000	Verizon ¹⁶	vPro	Pro 32	Mar 10
3249-2HU	i5-520M	2.40 2.93	4GB	12.1" WXGA	2.0M	320G 7200	DVD±RW	UltraBase	Intel 6200	WWAN upg		vPro	Pro 32	Mar 10
3249-2TU	i5-540M	2.53 3.06	4GB	12.1" WXGA	2.0M	320G 7200	DVD±RW	UltraBase	WiMAX	WWAN upg		vPro	Pro 64	Mar 10
3249-2UU	i5-540M	2.53 3.06	4GB	12.1" WXGA	2.0M	320G 7200	DVD±RW	UltraBase	Intel 6200	Gobi 2000	AT&T ²³	vPro	Pro 64	Mar 10
3249-2VU	i5-540M	2.53 3.06	4GB	12.1" WXGA	2.0M	320G 7200	DVD±RW	UltraBase	Intel 6200	WWAN upg		vPro	Pro 64	Mar 10

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ i5 processor i5-520M or i5-540M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache										Preloaded operating system²⁰ - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64			
Memory	2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software			
SATA DVD±RW Ultrabay Slim SATA disk	<i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 250GB^o (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std X200 UltraBase													
Widescreen display	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 250:1 contrast ratio										Supports ThinkVantage® technologies			
Camera	<i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus													
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz										ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411			
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	<i>without UltraBase; 4/6-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 20.7-35.3mm <i>without UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 233.8mm x 20.7-35.3mm <i>4-cell:</i> from 2.89 lb (1.31kg); <i>6-cell:</i> from 3.18 lb (1.44kg); <i>9-cell:</i> from 3.52 lb (1.60kg)													
Weight ² Case Battery - type Battery - life ¹⁰	<i>Color:</i> black; <i>Material:</i> magnesium alloy Lithium Ion 6-cell <i>4-cell:</i> up to 3.4 hr; <i>6-cell:</i> up to 6.7 hr; <i>9-cell:</i> up to 11.3 hr													
Chipset	Mobile Intel QM57 Express Chipset													
Media slice Multicard reader ExpressCard/54 Ports	<i>Some:</i> ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)										Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g			
PCIe Mini Card Intel 6200 ²⁸ WiMAX WWAN upg Gobi™ 2000 Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots <i>Some:</i> 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 <i>Some:</i> 11a/b/g/n and WiMAX wireless, PCIe Half Mini Card, Intel Centrino Advanced-N + WiMAX 6250, 2x2 AGN + 1x2 WiMAX <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider <i>Some:</i> AT&T® or Verizon®, contract required with service provider 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speaker, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack													
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip										65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available													

See footnotes for important warranty information

Ⓢ US models announced March 2, 2010; previous models on February 23, 2010

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Type-model	Processor	Max Base (GHz)	turbo (GHz)	Memory	Wide-screen display	Camera	Disk SATA GB ⁹	Optical in UltraBase	ThinkPad X200 UltraBase	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Finger print reader	Bat- tery Intel vPro	Workhorse (W) Global (G) Avail date	
3626-R3U	i5-540M	2.53	3.06	2GB	12.1" WXGA		320G 7200		Intel 6200 ²⁸	upg	Fing Blue	6 vPro	Pro 32	Mar 10	
3626-11U	i5-540M	2.53	3.06	2GB	12.1" WXGA		320G 7200		Intel 6200	upg	Fing Blue	6 vPro	Pro 32	G Mar 10	
3626-F2U	i5-540M	2.53	3.06	2GB	12.1" WXGA		320G 7200		Intel 6200	upg	Blue	6 vPro	Pro 32	W Mar 10	
3626-F3U	i5-540M	2.53	3.06	4GB	12.1" WXGA		320G 7200		Intel 6200	Gobi	Fing Blue	6 vPro	Pro 64	W Mar 10	
3626-F4U	i5-540M	2.53	3.06	2GB	12.1" WXGA		320G 5400	DVD±RW	UltraB	Intel 6200	upg	Fing Blue	9 vPro	Pro 32	W Mar 10
3626-F5U	i5-540M	2.53	3.06	4GB	12.1" WXGA	2.0M	320G 7200	DVD±RW	UltraB	Intel 6200	upg	Fing Blue	6 vPro	Pro 64	W Mar 10
3626-F6U	i5-540M	2.53	3.06	3GB	12.1" WXGA	2.0M	128G SSD		Intel 6200	upg	Fing Blue	6 vPro	Pro 32	W Mar 10	
3626-F7U	i5-540M	2.53	3.06	4GB	12.1" WXGA		320G 7200		Intel 6300 ²⁸	upg	Fing Blue	9 vPro	Pro 32	W G Mar 10	
3626-F8U	i5-540M	2.53	3.06	2GB	12.1" WXGA		250G 5400		Intel 6200			4 vPro	Pro 32	W G Mar 10	
3626-F9U	i5-540M	2.53	3.06	2GB	12.1" WXGA		320G 7200	DVD±RW	UltraB	Intel 6200	upg	Fing Blue	6 vPro	Pro 32	W G Mar 10
3626-FAU	i5-540M	2.53	3.06	2GB	12.1" WXGA	2.0M	320G 7200		Intel 6200	upg	Fing Blue	9 vPro	Pro 32	W G Mar 10	
3626-FBU	i5-520M	2.40	2.93	2GB	12.1" WXGA	2.0M	250G 5400		Intel 6200	upg	Fing Blue	6 vPro	Pro 32	W G Mar 10	

• These models have an depot repair service 3-year limited warranty

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ i5 processor i5-520M or i5-540M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache	Preloaded operating system²⁰ - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64
Memory	2GB, 3GB, or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models)
SATA DVD±RW Ultrabay Slim SATA disk	<i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from <i>X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) <i>Some:</i> 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 250GB (5400 rpm) or 320GB (5400 rpm or 7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, shock mounted storage, supports 2nd disk in optional or standard <i>X200 UltraBase</i>	
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 250:1 contrast ratio <i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus	Supports ThinkVantage® technologies
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz	ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g
Dimensions ³	<i>without UltraBase; 4/6-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 20.7-35.3mm <i>without UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 233.8mm x 20.7-35.3mm <i>4-cell:</i> from 2.89 lb (1.31kg); <i>6-cell:</i> from 3.18 lb (1.44kg); <i>9-cell:</i> from 3.52 lb (1.60kg) <i>Color:</i> black; <i>Material:</i> magnesium alloy	
Weight ² Case Battery - type Battery - life ¹⁰	Lithium Ion 4-cell, 6-cell, or 9-cell <i>4-cell:</i> up to 3.4 hr; <i>6-cell:</i> up to 6.7 hr; <i>9-cell:</i> up to 11.3 hr	
Chipset	Mobile Intel QM57 Express Chipset	
Media slice Multicard reader ExpressCard/54 Ports	<i>Some:</i> ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)	
PCIe Mini Card Intel 6200 ²⁸ Intel 6300 ²⁸ WWAN upg Gobi™ 2000	Two PCI Express Mini Card slots <i>Some:</i> 11a/b/g/n wireless ⁴ , PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 <i>Some:</i> 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino Ultimate-N 6300, 3x3 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider	
Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support	<i>F3U model:</i> Verizon®, contract required with service provider 56K V.92 ⁶ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speaker, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	
Limited warranty ¹²	3-years /1-yr battery - depot repair service / service upgrades ²² available	65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378

See footnotes for important warranty information
US models announced February 23, 2010

ThinkPad® X201 (3680) - Onsite (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	Max Base turbo (GHz)(GHz)	Memory	Wide- screen display	Camera	Disk SATA GB ⁹ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Bat- tery Intel vPro	Preload	Workhorse (W) Global (G) GMP (P)	Avail date	
3680-F7U	i5-540M	2.53	3.06	4GB	12.1" WXGA	320G 7200		Intel 6300 ²⁸	upg	Yes	9 vPro	Pro 32	W G P	Mar 10	
3680-F8U	i5-540M	2.53	3.06	2GB	12.1" WXGA	250G 5400		Intel 6200 ²⁸		Yes	4 vPro	Pro 32	W G P	Mar 10	
3680-F9U	i5-540M	2.53	3.06	2GB	12.1" WXGA	320G 7200	DVD±RW	UltraB	Intel 6200	upg	Yes	6 vPro	Pro 32	W G P	Mar 10
3680-FAU	i5-540M	2.53	3.06	2GB	12.1" WXGA	2.0M 320G 7200			Intel 6200	upg	Yes	9 vPro	Pro 32	W G P	Mar 10
3680-FBU	i5-520M	2.40	2.93	2GB	12.1" WXGA	2.0M 250G 5400			Intel 6200	upg	Yes	6 vPro	Pro 32	W G P	Mar 10
3680-11U	i5-540M	2.53	3.06	2GB	12.1" WXGA	320G 7200			Intel 6200	upg	Yes	6 vPro	Pro 32	G P	Mar 10

• These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ i5 processor i5-520M or i5-540M with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache										Preloaded operating system²⁰ - Genuine Windows [®] 7 Professional 32			
Memory	2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update			
SATA DVD±RW Ultrabay Slim SATA disk	<i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 250GB⁹ (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std X200 UltraBase										Supports ThinkVantage® technologies			
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 250:1 contrast ratio <i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus										ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411			
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz										Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g			
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	<i>without UltraBase; 4/6-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 20.7-35.3mm <i>without UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 233.8mm x 20.7-35.3mm <i>4-cell:</i> from 2.89 lb (1.31kg); <i>6-cell:</i> from 3.18 lb (1.44kg); <i>9-cell:</i> from 3.52 lb (1.60kg)													
Weight ² Case Battery - type Battery - life ¹⁰	<i>Color:</i> black; <i>Material:</i> magnesium alloy Lithium Ion 4-cell, 6-cell, or 9-cell <i>4-cell:</i> up to 3.4 hr; <i>6-cell:</i> up to 6.7 hr; <i>9-cell:</i> up to 11.3 hr													
Chipset	Mobile Intel QM57 Express Chipset													
Media slice Multicard reader ExpressCard/54 Ports	<i>Some:</i> ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)													
PCIe Mini Card Intel 6200 ²⁸ Intel 6300 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots <i>Some:</i> 11a/b/g/n wireless ⁴ , PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 <i>Some:</i> 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino Ultimate-N 6300, 3x3 <i>Some:</i> Wireless WAN upgradable 56K V.92 ⁵ modem <i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speaker, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack													
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip										65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Limited warranty ¹²	3-years/1-year - battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time/ service upgrades ²² available													

See footnotes for important warranty information
US models announced February 23, 2010

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ThinkPad® X201 (3626) - Education (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	Max Base turbo (GHz)(GHz)	Memory	Wide- screen display	Camera	Disk SATA GB ⁹ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Blue/ Fing	Intel vPro	Preload	Avail date
3626-N2U	i5-540M	2.53 3.06	2GB	12.1" WXGA	2.0M	250G 5400	Optional	Optional	Intel 6200 ²⁸	WWAN upg	Yes	vPro	Pro 32	Mar 10

- **This model has an depot repair service 3-year limited warranty**
- Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ i5 processor i5-540M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache										Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32			
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications¹⁴ (only some listed) • Education software - Microsoft Office OneNote® 2007 (and CD)			
SATA DVD±RW Ultrabay Slim SATA disk	Option for <i>ThinkPad X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 250GB⁹ (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std <i>X200 UltraBase</i>										Supports ThinkVantage® technologies			
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 250:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus										ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: - CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 - DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 - Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411			
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution: 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz</i>										Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g			
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	<i>without UltraBase; 4/6-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 20.7-35.3mm <i>without UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 233.8mm x 20.7-35.3mm <i>4-cell:</i> from 2.89 lb (1.31kg); <i>6-cell:</i> from 3.18 lb (1.44kg); <i>9-cell:</i> from 3.52 lb (1.60kg) <i>Color:</i> black; <i>Material:</i> magnesium alloy													
Weight ² Case Battery - type Battery - life ¹⁰	Lithium Ion 6-cell <i>4-cell:</i> up to 3.4 hr; <i>6-cell:</i> up to 6.7 hr; <i>9-cell:</i> up to 11.3 hr													
Chipset	Mobile Intel QM57 Express Chipset													
Media slice Multicard reader ExpressCard/54 Ports	<i>Option: ThinkPad X200 UltraBase media slice</i> (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)													
PCIe Mini Card Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless ⁴ , PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speaker, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack													
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip										65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades²² available													

See footnotes for important warranty information
US model announced February 23, 2010

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ThinkPad® X201 (3680) - Education (Onsite) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Proc- essor	Max Base turbo (GHz)(GHz)	Memory	Wide- screen display	Camera	Disk SATA GB ⁹ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Blue/ Fing Intel vPro	Preload	Avail date
3680-N2U	i5-540M	2.53 3.06	2GB	12.1" WXGA	2.0M	250G 5400	Optional	Optional	Intel 6200 ²⁸	WWAN upg	Yes	vPro Pro 32	Mar 10
<ul style="list-style-type: none"> • This model has a limited onsite service²⁴ 3-year limited warranty • Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers. 													
Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ i5 processor i5-540M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 3MB cache										Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32		
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications¹⁴ (only some listed) • Education software - Microsoft Office OneNote® 2007 (and CD) - Adobe Digital School Collection		
SATA DVD±RW Ultrabay Slim SATA disk	Option for <i>ThinkPad X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 250GB⁹ (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std <i>X200 UltraBase</i>										Supports ThinkVantage® technologies		
Widescreen display Camera	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 250:1 contrast ratio Camera on top of screen, 2.0-megapixel, fixed focus										ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: - CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 - DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 - Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution: 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz</i>										Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g		
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch Illuminates the keyboard to improve visibility in low-light conditions												
Dimensions ³	<i>without UltraBase; 4/6-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 20.7-35.3mm <i>without UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 233.8mm x 20.7-35.3mm <i>4-cell:</i> from 2.89 lb (1.31kg); <i>6-cell:</i> from 3.18 lb (1.44kg); <i>9-cell:</i> from 3.52 lb (1.60kg) <i>Color:</i> black; <i>Material:</i> magnesium alloy												
Weight ² Case Battery - type Battery - life ¹⁰	Lithium Ion 6-cell <i>4-cell:</i> up to 3.4 hr; <i>6-cell:</i> up to 6.7 hr; <i>9-cell:</i> up to 11.3 hr												
Chipset	Mobile Intel QM57 Express Chipset												
Media slice Multicard reader ExpressCard/54 Ports	<i>Option: ThinkPad X200 UltraBase media slice</i> (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)												
PCIe Mini Card Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless ⁴ , PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / stereo speaker, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack												
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip										65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378		
Limited warranty ¹²	3-years/1-year - battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available												

See footnotes for important warranty information
US model announced February 23, 2010

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ThinkPad® X201i (3249) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Processor	GHz	Memory	Wide-screen display	Camera	Disk SATA GB ⁵ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Intel vPro	Preload	Avail date
3249-J2U	i3-330M	2.13	2GB	12.1" WXGA	None	250G 5400	Optional	Optional	Intel 1000	WWAN upg	No	Pro 32	Mar 10

- *This small and medium business (SMB) model is part of the US TopSeller™ Program*

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ i3 processor i3-330M with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Hyper-Threading technology; 3MB cache										Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 32
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™
SATA DVD±RW Ultrabay Slim SATA disk	Option for <i>ThinkPad X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 250GB⁸ (5400 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std <i>X200 UltraBase</i>										Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411
Widescreen display	12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 250:1 contrast ratio										Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g
Camera	None										
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution: 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz</i>										
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch Illuminates the keyboard to improve visibility in low-light conditions										
Dimensions ³	<i>without UltraBase; 4/6-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 20.7-35.3mm <i>without UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 233.8mm x 20.7-35.3mm <i>4-cell:</i> from 2.89 lb (1.31kg); <i>6-cell:</i> from 3.18 lb (1.44kg); <i>9-cell:</i> from 3.52 lb (1.60kg) <i>Color:</i> black; <i>Material:</i> magnesium alloy										
Weight ²											
Case	Lithium Ion 6-cell										
Battery - type	4-cell: up to 3.4 hr; 6-cell: up to 6.7 hr; 9-cell: up to 11.3 hr										
Battery - life ¹⁰											
Chipset	Mobile Intel QM57 Express Chipset										
Media slice	<i>Option: ThinkPad X200 UltraBase media slice</i> (see right side)										
Multicard reader	5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC)										
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)										
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)										
PCIe Mini Card	Two PCI Express Mini Card slots										
Intel 1000	11b/g/n wireless ⁴ , PCIe Mini Card, Intel Centrino® Wireless-N 1000, 1x2										
WWAN upg	Wireless WAN upgradable										
Modem	56K V.92 ⁶ modem										
Bluetooth™	None										
Ethernet	Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1										
Intel AMT	Intel Active Management Technology (iAMT)										
Audio support	High Definition (HD) Audio, Conexant 20585 codec / stereo speaker, 1 watt x 2 / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack										
Security	Power-on password, hard disk password, supervisor password, security keyhole										
Security chip	Trusted Platform Module, TCG 1.2-compliant										
Fingerprint reader	None										
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available										65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378

See footnotes for important warranty information
US model announced February 23, 2010

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Lenovo® ThinkPad X201s
(TrackPoint model)



Lenovo ThinkPad X201s



Lenovo ThinkPad X201s
(UltraNav model)



Lenovo ThinkPad X201s
(TrackPoint model)



Lenovo ThinkPad X201s
(UltraNav model)



ThinkPad Battery 47++ (9-cell)
43R9255

ThinkPad® X201s (5143) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Widescreen display	Disk SATA GB ⁸ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Blue/Fing	Bat-tery cells	Intel vPro	Preload	Avail date
5143-28U	i7-640LM	2.13	2.93	4GB	12.1" WXGA+	320G 7200	Optional	Optional	Intel 6200 ²⁸	None	Yes	6	vPro	Pro 32	Mar 10

- Compared to the X201, the X201s has lighter weight, low voltage processors, and roll cage in display cover
- This small and medium business (SMB) model is part of the US TopSeller™ Program
- This model has an depot repair service 3-year limited warranty

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ i7 processor i7-640LM with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 4MB cache										Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32				
Memory	4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available										Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager				
SATA DVD±RW Ultrabay Slim SATA disk	Option for <i>ThinkPad X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 320GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std <i>X200 UltraBase</i>										Supports ThinkVantage® technologies				
Widescreen display Camera	12.1" (308mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 250 nits, 16:10 aspect ratio, 300:1 contrast ratio None										ThinkPad X200 UltraBase™ <ul style="list-style-type: none"> • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: <ul style="list-style-type: none"> - CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 - DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 - Serial ATA Hard Drive Bay Adapter III 43N3412 • Disks supported (some): <ul style="list-style-type: none"> • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 Other features: <ul style="list-style-type: none"> • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 65-watt AC Adapter Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free support during the warranty period¹² via 800-426-7378				
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution: 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz</i>														
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch Illuminates the keyboard to improve visibility in low-light conditions														
Dimensions ³	<i>without UltraBase; 4-cell:</i> 11.6" x 8.3" x 0.8-1.1"; 295mm x 210mm x 20.7-28.7mm <i>without UltraBase; 6-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 20.7-35.3mm <i>without UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 20.7-35.3mm <i>4-cell:</i> from 2.51 lb (1.1kg); <i>6-cell:</i> from 2.79 lb (1.23kg); <i>9-cell:</i> from 3.13 lb (1.39kg)														
Weight ² Case color Case material	black <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy														
Battery - type Battery - life ¹⁰	Lithium Ion 6-cell <i>4-cell:</i> up to 3.7 hr; <i>6-cell:</i> up to 7.4 hr; <i>9-cell:</i> up to 12.3 hr														
Chipset	Mobile Intel QM57 Express Chipset														
Media slice Multicard Reader ExpressCard/54 Ports	<i>Option: ThinkPad X200 UltraBase media slice</i> (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)														
PCIe Mini Card Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack														
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip														
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades²² available														

See footnotes for important warranty information
US model announced February 23, 2010

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ThinkPad® X201s (5397) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Widescreen display	Disk SATA GB ⁹ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Bat- tery Intel vPro	Workhorse (W) Global (G) Avail date
5397-FDU	i7-640LM	2.13	2.93	2GB	12.1" WXGA+	250G 5400			Intel 6200 ²⁸	None	Yes 4 vPro	Pro 32 W G Mar 10
5397-FEU	i7-640LM	2.13	2.93	3GB	12.1" WXGA+	320G 7200	DVD±RW	UltraB	Intel 6200	None	Yes 9 vPro	Pro 32 W G Mar 10
5397-FFU	i7-640LM	2.13	2.93	4GB	12.1" WXGA+	320G 7200			Intel 6200	None	Yes 6 vPro	Pro 64 W G Mar 10
5397-FGU	i7-640LM	2.13	2.93	2GB	12.1" WXGA+	250G 5400			Intel 6200	None	Yes 6 vPro	Pro 32 W G Mar 10

- Compared to the X201, the X201s has lighter weight, low voltage processors, and roll cage in display cover
- These models have an depot repair service 3-year limited warranty

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ i7 processor i7-640LM with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 4MB cache	Preloaded operating system²⁰ - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64
Memory	2GB, 3GB, or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™
SATA DVD±RW Ultrabay Slim SATA disk	<i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 250GB⁸ (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std X200 UltraBase	Supports ThinkVantage® technologies
Widescreen display Camera	12.1" (308mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 250 nits, 16:10 aspect ratio, 300:1 contrast ratio None	ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DP)@60Hz; 2048x1536 (VGA)@75Hz	Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	
Dimensions ³	<i>without UltraBase; 4-cell:</i> 11.6" x 8.3" x 0.8-1.1"; 295mm x 210mm x 20.7-28.7mm <i>without UltraBase; 6-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 20.7-35.3mm <i>without UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 20.7-35.3mm <i>4-cell:</i> from 2.51 lb (1.1kg); <i>6-cell:</i> from 2.79 lb (1.23kg); <i>9-cell:</i> from 3.13 lb (1.39kg)	
Weight ² Case color Case material	black <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy	
Battery - type Battery - life ¹⁰	Lithium Ion 4-cell, 6-cell, or 9-cell <i>4-cell:</i> up to 3.7 hr; <i>6-cell:</i> up to 7.4 hr; <i>9-cell:</i> up to 12.3 hr	
Chipset	Mobile Intel QM57 Express Chipset	
Media slice Multicard Reader ExpressCard/54 Ports	<i>Some:</i> ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)	
PCIe Mini Card Intel 6200 ²⁸ WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available	65-watt AC Adapter Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378

See footnotes for important warranty information
US models announced February 23, 2010

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ThinkPad® X201s (5413) - Onsite (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Widescreen display	Disk SATA GB ³	Optical in UltraBase	ThinkPad X200 UltraBase	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Bat- tery Intel vPro	Whorse (W) Gbl (G) GMP (P)	Avail date
5413-FDU	i7-640LM	2.13	2.93	2GB	12.1" WXGA+	250G 5400			Intel 6200 ²⁸	None	Yes 4	vPro Pro 32 W G P	Mar 10
5413-FEU	i7-640LM	2.13	2.93	3GB	12.1" WXGA+	320G 7200	DVD±RW	UltraB	Intel 6200	None	Yes 9	vPro Pro 32 W G P	Mar 10
5413-FFU	i7-640LM	2.13	2.93	4GB	12.1" WXGA+	320G 7200			Intel 6200	None	Yes 6	vPro Pro 64 W G P	Mar 10
5413-FGU	i7-640LM	2.13	2.93	2GB	12.1" WXGA+	250G 5400			Intel 6200	None	Yes 6	vPro Pro 32 W G P	Mar 10

- Compared to the X201, the X201s has lighter weight, low voltage processors, and roll cage in display cover
- These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty

Positioning Processor	An ultraportable for the executive on the move; one spindle Intel® Core™ i7 processor i7-640LM with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 4MB cache	Preloaded operating system²⁰ - Some: Genuine Windows® 7 Professional 32 - Some: Genuine Windows 7 Professional 64
Memory	2GB, 3GB, or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available	Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager
SATA DVD±RW Ultrabay Slim SATA disk	Some: DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 250GB⁸ (5400 rpm) or 320GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std X200 UltraBase	Supports ThinkVantage® technologies
Widescreen display Camera	12.1" (308mm) WXGA+ (1440x900) color , anti-glare, LED backlight , 250 nits, 16:10 aspect ratio, 300:1 contrast ratio None	ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz	Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch Illuminates the keyboard to improve visibility in low-light conditions	65-watt AC Adapter Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378
Dimensions ³	<i>without UltraBase; 4-cell:</i> 11.6" x 8.3" x 0.8-1.1"; 295mm x 210mm x 20.7-28.7mm <i>without UltraBase; 6-cell:</i> 11.6" x 8.3" x 0.8-1.4"; 295mm x 210mm x 20.7-35.3mm <i>without UltraBase; 9-cell:</i> 11.6" x 9.2" x 0.8-1.4"; 295mm x 234mm x 20.7-35.3mm <i>4-cell:</i> from 2.51 lb (1.1kg); <i>6-cell:</i> from 2.79 lb (1.23kg); <i>9-cell:</i> from 3.13 lb (1.39kg)	
Weight ² Case color Case material	black <i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy	
Battery - type Battery - life ¹⁰	Lithium Ion 4-cell, 6-cell, or 9-cell <i>4-cell:</i> up to 3.7 hr; <i>6-cell:</i> up to 7.4 hr; <i>9-cell:</i> up to 12.3 hr	
Chipset	Mobile Intel QM57 Express Chipset	
Media slice Multicard Reader ExpressCard/54 Ports	Some: ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)	
PCIe Mini Card WWAN upg Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 None 56K V.92 ⁶ modem Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20585 codec / mono speaker, 1 watt / volume up, down, mute buttons / digital microphone, microphone input jack, headphone jack	
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip	
Limited warranty ¹²	3-years/1-year - battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades ²² available	

See footnotes for important warranty information
US models announced February 23, 2010

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Memory

1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann 06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann 06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann 06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann 06/23/09
4GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3708	ann 06/23/09

Ultrabay Slim 9.5mm

Most Ultrabay Slim accessories supported in ThinkPad X200 UltraBase

Storage and removable storage

160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	41N5692	ann 03/20/07
160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	41N5737	ann 10/16/07
250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43R8152	ann 01/15/08
250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3410	ann 01/20/09
320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3403	ann 08/05/08
320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3411	ann 01/20/09
500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3420	ann 06/23/09
500GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3423	ann 01/07/10

⁴¹ Can be used as the main HDD or with Serial ATA Hard Drive Bay Adapter III 43N3412 in X200 UltraBase (43R8781)

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	ann 08/26/08
256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover)	43N3417	ann 06/23/09
USB 2.0 Essential Memory Key 4GB	45J7904	ann 06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann 07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann 10/28/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann 08/26/08
USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	ann 11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann 01/07/10
USB 2.0 Super Multi-Burner Drive	41N5565	ann 01/23/07

Wireless WAN (Mini PCI Express)

Only WWAN upgradable models:

ThinkPad Gobi™ 2000 Broadband Option	78Y1399	ann 01/07/10
ThinkPad AT&T® Gobi 2000 Broadband Option	78Y1398	ann 01/07/10

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann 05/12/09
USB Port Replicator with Digital Video	45K1610	ann 07/28/09
ThinkPad X200 UltraBase	43R8781	ann 08/05/08

Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Ultrabay Wireless Keyboard and Mouse ⁵²	57Y4700	ann 09/15/09
⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.		
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

Mouse

Lenovo Mini Optical Mouse - Black (USB)	55Y9308	ann 05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann 05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann 01/22/08

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
X200s (WXGA+) 12W Privacy Filter	43R2470	ann 08/05/08
X200/X200s (WXGA) 12W Privacy Filter	55Y9264	ann 04/07/09
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06
ExpressCard Gemplus Smart Card Reader	41N3043	ann 06/27/06

Multimedia

USB 2.0 Lenovo Webcam	40Y8519	ann 08/29/06
ThinkPad In-Ear Headphones	57Y4488	ann 01/07/10

Batteries

ThinkPad Battery 47 (4-cell)	43R9253	ann 08/05/08
ThinkPad Battery 47+ (6-cell)	43R9254	ann 08/05/08
ThinkPad Battery 47++ (9-cell)	43R9255	ann 08/05/08
ThinkPad External Battery Charger	40Y7625	ann 09/20/05

More information at www.lenovo.com/alldaycomputing

ThinkPad 65W AC Adapter	40Y7696	ann 01/05/06
ThinkPad 90W AC Adapter	40Y7659	ann 09/20/05
90W Ultralim AC/DC Combo Adapter	41R4493	ann 09/22/09

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

•BlackBerry charge tip (L8a)	41R4478	ann 12/18/07
•iPod and iPhone Charge Tip (L10a)	41R4481	ann 12/18/07

More information at www.lenovopowertips.com

Carrying Cases

Up to 12" widescreen models:		
ThinkPad 12W Case Sleeve	51J0476	ann 08/18/09

Up to 13.3" widescreen models:		
ThinkPad Ultraportable Case	41U5062	ann 05/13/08

Up to 14.1" widescreen models:		
ThinkPad Women's Microfiber Tote	22P8855	ann 06/24/08
ThinkPad Women's Leather Trim Tote	22P8856	
ThinkPad Women's Executive Leather Tote	22P8857	
Women's Executive Red Leather Tote	22P8858	

Up to 15.4" widescreen models:		
Lenovo Messenger Max	41U5253	ann 05/01/07
Lenovo Performance Backpack	41U5254	ann 05/01/07
Checkpoint Friendly Business Topload Case	51J0418	ann 05/05/09
ThinkPad Business Topload Case	43R2476	ann 05/13/08
ThinkPad Business Backpack	43R2482	ann 05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann 05/13/08
ThinkPad Executive Leather Case	43R2480	ann 05/13/08

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann 11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann 10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann 10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann 10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann 10/20/09
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann 09/17/08

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
Lenovo DisplayPort to VGA Monitor Cable ⁵⁰	57Y4393	ann 08/04/09
DisplayPort to Single-link DVI-D Cable ⁵⁰	45J7915	ann 08/05/08
⁵⁰ Can only be used via ThinkPad X200 UltraBase (43R8781)		

ThinkVision USB Soundbar	40Y7616	ann 08/23/05
ThinkVision Soundbar	45K1263	ann 09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
Lenovo Easy Reach Monitor Stand	55Y9258	ann 09/22/09
Radial Arm	19K4464	ann 05/05/00
⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.		

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

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad X201 Tablet



Lenovo ThinkPad X201 Tablet



Lenovo ThinkPad X201 Tablet



Lenovo ThinkPad X201 Tablet



Lenovo ThinkPad X201 Tablet with
ThinkPad X200 Tablet Sleeve
43R9115



Lenovo ThinkPad X201 Tablet with
ThinkPad X200 Tablet Sleeve
43R9115

ThinkPad® X201 Tablet (2985) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Processor	Base (GHz)	Max turbo (GHz)	Memory	Widescreen display	Camera	Disk SATA GB ⁸ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	PCle Mini Card WWAN	Battery Intel vPro	Carrier	Preload	Avail date
2985-EUU	i7-640LM	2.13	2.93	2GB	12.1" WXGA Entry		250G 5400			WWAN upg	4 vPro	AT&T ²³	XP Pro	Mar 10
2985-EVU	i7-640LM	2.13	2.93	4GB	12.1" WXGA Entry	2.0M	320G 7200	DVD±RW	UltraB	Gobi 2000	8 vPro		XP Pro	Mar 10

- **These small and medium business (SMB) models are part of the US TopSeller™ Program**

Positioning Processor	<i>Convertible tablet ultraportable; one spindle</i> Intel® Core™ i7 processor i7-640LM with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 4MB cache										Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32			
Memory	2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Power Manager • Presentation Director • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software • Lenovo System Toolbox			
SATA DVD±RW Ultrabay Slim SATA disk	<i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from <i>X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 250GB⁸ (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std <i>X200 UltraBase</i>										Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411			
Widescreen display	<i>Entry:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, frameless WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in side base (right), rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)													
Camera	<i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus										Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g			
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz													
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch None										65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Dimensions ³	<i>without UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33.3mm <i>without UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33.3mm <i>4-cell:</i> from 3.57 lb (1.62kg); <i>8-cell:</i> from 3.96 lb (1.8kg)													
Weight ²	<i>Color:</i> black; <i>Material:</i> magnesium alloy										Limited warranty ¹² 3-years/1-yr battery - depot repair service / service upgrades ²² available			
Case	Lithium Ion 4-cell or 8-cell <i>4-cell:</i> up to 3.5 hr; <i>8-cell:</i> up to 7.9 hr													
Battery - type	Mobile Intel QM57 Express Chipset										See footnotes for important warranty information US models announced March 2, 2010			
Battery - life ¹⁰	<i>Some:</i> ThinkPad X200 UltraBase media slice (see right side) 5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) <i>Some:</i> Wireless WAN upgradable One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)													
Chipset	Two PCI Express Mini Card slots 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 <i>Some:</i> Wireless WAN upgradable										© Lenovo (CML3-7) March 2010			
Media slice	<i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider													
Multicard Reader	<i>Some:</i> AT&T®, contract required with service provider										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
ExpressCard/54 Ports	56K V.92 ⁶ modem													
Ports	Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT)										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
PCle Mini Card Intel 6200 ²⁸ WWAN upg Gobi™ 2000	High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader (right base of display), used in tablet/notebook mode, 2-way swipe sensor, LED indicator, Power On Authentication, supports the security chip													
Carrier Modem	Bluetooth 2.1 wireless, LED indicator										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Bluetooth™ Ethernet Intel AMT Audio support	Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT)													
Security Security chip Fingerprint reader	High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader (right base of display), used in tablet/notebook mode, 2-way swipe sensor, LED indicator, Power On Authentication, supports the security chip										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available													

See footnotes for important warranty information
US models announced March 2, 2010

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(CML3-7) March 2010

ThinkPad® X201 Tablet (2985) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base turbo (GHz)	Memory	Widescreen display	Camera (Mega-pixel)	Disk SATA GB ³ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Battery Intel vPro Preload	Avail date
2985-C2U	i7-640LM	2.13	2.93	2GB	12.1" WXGA	Entry	250G 5400		Intel 6200 ²⁸	upg	4 vPro Pro 32	Mar 10
2985-C3U	i7-640LM	2.13	2.93	2GB	12.1" WXGA	Entry	2.0 320G 7200	DVD±RW UltraB	Intel 6200	upg	8 vPro Pro 32	Mar 10
2985-C4U	i7-640LM	2.13	2.93	4GB	12.1" WXGA	Entry	2.0 320G 7200	DVD±RW UltraB	Intel 6200	Gobi Verizon ¹⁶	8 vPro Pro 32	Mar 10
2985-C5U	i7-640LM	2.13	2.93	4GB	12.1" WXGA	Outdoor	2.0 320G 7200		Intel 6200	upg	8 vPro Pro 32	Mar 10
2985-C6U	i7-640LM	2.13	2.93	2GB	12.1" WXGA	Multi	2.0 250G 5400		Intel 6200	upg	8 vPro Pro 32	Mar 10
2985-C7U	i7-640LM	2.13	2.93	4GB	12.1" WXGA	Multi	2.0 320G 7200	DVD±RW UltraB	Intel 6200	upg	8 vPro Pro 32	Mar 10
2985-EWU	i7-640LM	2.13	2.93	4GB	12.1" WXGA	Entry	2.0 320G 7200	DVD±RW UltraB	Intel 6200	Gobi Verizon	8 vPro Pro 64	Mar 10
2985-EXU	i7-640LM	2.13	2.93	4GB	12.1" WXGA	Entry	2.0 320G 7200	DVD±RW UltraB	Intel 6200	Gobi AT&T ²³	8 vPro Pro 64	Mar 10
2985-EYU	i7-640LM	2.13	2.93	4GB	12.1" WXGA	Multi	2.0 320G 7200	DVD±RW UltraB	Intel 6200	upg	8 vPro Pro 64	Mar 10

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning	<i>Convertible tablet ultraportable; one spindle</i>										
Processor	Intel® Core™ i7 processor i7-640LM with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 4MB cache										
Memory	2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										
SATA DVD±RW Ultrabay Slim SATA disk	<i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) 250GB⁸ (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std X200 UltraBase										
Widescreen display	<p><i>Entry:</i> 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 200 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, frameless</p> <p><i>Outdoor:</i> 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, PVA or IPS</p> <p><i>MultiTouch:</i> 12.1" (308mm) WXGA (1280x800) TFT color, anti-glare, LED backlight, 300 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, enhanced MultiTouch (touchscreen support pen & two-finger touch)</p> <p><i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen, pen holder in side base (right), rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)</p>										
Camera	<i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus										
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz										
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch None										
Dimensions ³	<i>without UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33.3mm <i>without UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33.3mm										
Weight ²	<i>4-cell:</i> from 3.57 lb (1.62kg); <i>8-cell:</i> from 3.96 lb (1.8kg)										
Case	<i>Color:</i> black; <i>Material:</i> magnesium alloy										
Battery - type	Lithium Ion 4-cell or 8-cell										
Battery - life ¹⁰	<i>4-cell:</i> up to 3.5 hr; <i>8-cell:</i> up to 7.9 hr										
Chipset	Mobile Intel QM57 Express Chipset										
Media slice	<i>Some:</i> ThinkPad X200 UltraBase media slice (see right side)										
Multicard Reader ExpressCard/54	5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC)										
Ports	One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)										
PCIe Mini Card	Two PCI Express Mini Card slots										
Intel 6200 ²⁸	11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2										
WWAN upg	<i>Some:</i> Wireless WAN upgradable										
Gobi™ 2000	<i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider										
Carrier	<i>Some:</i> AT&T® or Verizon®, contract required with service provider										
Modem	56K V.92 ⁶ modem										
Bluetooth™	Bluetooth 2.1 wireless, LED indicator										
Ethernet	Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1										
Intel AMT	Intel Active Management Technology (iAMT)										
Audio support	High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack										
Security	Power-on password, hard disk password, supervisor password, security keyhole										
Security chip	Trusted Platform Module, TCG 1.2-compliant										
Fingerprint reader	UPEK Fingerprint reader (right base of display), used in tablet/notebook mode, 2-way swipe sensor, LED indicator, Power On Authentication, supports the security chip										
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available										
	<p>Preloaded operating system²⁰</p> <ul style="list-style-type: none"> - <i>Some:</i> Genuine Windows® 7 Professional 32 - <i>Some:</i> Genuine Windows 7 Professional 64 <p>Preloaded applications¹⁴ (only some listed)</p> <ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software • ThinkVantage Toolbox • Lenovo SimpleTap (Multi-Touch models) • Adobe® Reader® • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW) <p>Supports ThinkVantage® technologies</p> <p>ThinkPad X200 UltraBase™</p> <ul style="list-style-type: none"> • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: <ul style="list-style-type: none"> - CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 - DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 - Serial ATA Hard Drive Bay Adapter III 43N3412 • Disks supported (some): <ul style="list-style-type: none"> • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411 <p>Other features:</p> <ul style="list-style-type: none"> • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g <p>65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free support during the warranty period¹² via 800-426-7378</p>										

See footnotes for important warranty information

Ⓢ US models announced March 2, 2010; previous models on February 23, 2010

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ThinkPad® X201 Tablet (3093) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Proc-essor	Max Base turbo (GHz)	Memory	Widescreen display	Camera	Disk SATA GB ⁵ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	PCIe Mini Card 802.11	PCIe Mini Card Blue/WWAN	Intel vPro	Pre-load	Whorse (W) Gbl (G) Avail
3093-R5U	i7-620LM	2.00	2.80 2GB	12.1" WXGA <i>Entry</i>		160G 5400		Intel 6200 ²⁸	upg	vPro	Pro 32	Mar 10	
3093-R6U	i7-640LM	2.13	2.93 4GB	12.1" WXGA <i>Outdoor</i>	2.0M	320G 7200	DVD±RW	Intel 6200	upg	Yes vPro	Pro 32	Mar 10	
3093-92U	i7-640LM	2.13	2.93 2GB	12.1" WXGA <i>Entry</i>	2.0M	320G 7200	DVD±RW	Intel 6200	upg	Yes vPro	Pro 32	W G Mar 10	
3093-93U	i7-640LM	2.13	2.93 2GB	12.1" WXGA <i>Entry</i>		250G 5400		Intel 6200	upg	Yes vPro	Pro 32	W G Mar 10	
3093-94U	i7-620LM	2.00	2.80 2GB	12.1" WXGA <i>Entry</i>		250G 5400		Intel 6200	upg	vPro	Pro 32	W G Mar 10	
3093-95U	i7-640LM	2.13	2.93 4GB	12.1" WXGA <i>Outdoor</i>	2.0M	320G 7200		Intel 6200	upg	Yes vPro	Pro 32	W G Mar 10	
3093-96U	i7-640LM	2.13	2.93 4GB	12.1" WXGA <i>Multi</i>	2.0M	320G 7200		Intel 6200	upg	Yes vPro	Pro 32	W G Mar 10	

- **These models have an depot repair service 3-year limited warranty**

Positioning Processor	<i>Convertible tablet ultraportable; one spindle</i> Intel® Core™ i7 processor i7-620LM or i7-640LM with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 4MB cache										Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32		
Memory	2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • ThinkVantage Toolbox • Lenovo SimpleTap (Multi-Touch models) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Corel® WinDVD® (DVD±RW)		
SATA DVD±RW Ultrabay Slim SATA disk	<i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from <i>X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 160GB (5400 rpm), 250GB (5400 rpm), or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std <i>X200 UltraBase</i>										Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
Widescreen display	<i>Entry:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, frameless <i>Outdoor:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, PVA or IPS <i>MultiTouch:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, enhanced MultiTouch (touchscreen support pen & two-finger touch) <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in side base (right), rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)												
Camera	<i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus										Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g		
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz												
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch None										65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378		
Dimensions ³	<i>without UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33.3mm <i>without UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33.3mm <i>4-cell:</i> from 3.57 lb (1.62kg); <i>8-cell:</i> from 3.96 lb (1.8kg)												
Weight ² Case	<i>Color:</i> black; <i>Material:</i> magnesium alloy										• 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411		
Battery - type Battery - life ¹⁰	Lithium Ion 8-cell <i>4-cell:</i> up to 3.5 hr; <i>8-cell:</i> up to 7.9 hr												
Chipset	Mobile Intel QM57 Express Chipset										• Requires 65 or 90 watt AC adapter		
Media slice	<i>Some:</i> ThinkPad X200 UltraBase media slice (see right side)												
Multicard Reader ExpressCard/54 Ports	5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)										• 1.6 lb; 730g		
PCIe Mini Card Intel 6200 ²⁸ WWAN upg	Two PCI Express Mini Card slots 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable												
Modem	56K V.92 ⁶ modem										• Requires 65 or 90 watt AC adapter		
Bluetooth™ Ethernet Intel AMT	<i>Some:</i> Bluetooth 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT)												
Audio support	High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack										• Requires 65 or 90 watt AC adapter		
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> UPEK Fingerprint reader (right base of display), used in tablet/notebook mode, 2-way swipe sensor, LED indicator, Power On Authentication, supports the security chip												
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available												

See footnotes for important warranty information

US models announced February 23, 2010

⚠ US model withdrawn effective March 2010

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(CML3-2) February 2010

ThinkPad® X201 Tablet (3093) - Windows 7 (February 2010)

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base turbo (GHz)	Widescreen Memory display	Camera	Disk SATA GB ³ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	PCIe Mini Card WWAN	Carrier	Bat-Blue/ tery Intel vPro Preload	Whorse (W) Gbl (G) Avail date	
3093-21U	i7-620LM	2.00	2.80	2GB	Entry	250G	5400	WWAN upg		4 vPro	Pro 32	G Mar 10
3093-22U	i7-640LM	2.13	2.93	4GB	Outdoor	2.0M	320G 7200	WWAN upg	Yes	8 vPro	Pro 32	G Mar 10
3093-23U	i7-640LM	2.13	2.93	4GB	Multi	2.0M	320G 7200	WWAN upg	Yes	8 vPro	Pro 32	G Mar 10
3093-24U	i7-640LM	2.13	2.93	4GB	Entry	2.0M	320G 7200	DVD±RW	UltraB	Gobi 2000	Verizon ¹⁶	Yes 8 vPro Pro 32 W Mar 10
3093-25U	i7-640LM	2.13	2.93	4GB	Outdoor	2.0M	320G 7200			Gobi 2000	Verizon	Yes 8 vPro Pro 32 W Mar 10
3093-26U	i7-640LM	2.13	2.93	3GB	Multi	2.0M	128G SSD	DVD±RW	UltraB	WWAN upg		Yes 8 vPro Pro 32 W Mar 10
3093-27U	i7-640LM	2.13	2.93	2GB	Entry	2.0M	320G 7200	DVD±RW	UltraB	WWAN upg		Yes 8 vPro Pro 32 W G Mar 10
3093-28U	i7-640LM	2.13	2.93	2GB	Entry		250G 5400			WWAN upg		Yes 8 vPro Pro 32 W G Mar 10
Positioning Processor	Convertible tablet ultraportable; one spindle Intel® Core™ i7 processor i7-620LM or i7-640LM with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 4MB cache										Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32	
Memory	2GB, 3GB, or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • ThinkVantage Toolbox • Lenovo SimpleTap (Multi-Touch models) • Adobe® Reader® • Adobe Flash® Player • Skype™ for Windows • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW)	
SATA DVD±RW Ultrabay Slim SATA disk	<i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from X200 UltraBase Supports Ultrabay Slim devices in optional or standard X200 UltraBase (43R8781) <i>Some:</i> 128GB⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high <i>Some:</i> 250GB (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive, supports second disk in opt or std X200 UltraBase											
Widescreen display	<i>Entry:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, frameless <i>Outdoor:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, PVA or IPS <i>MultiTouch:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, enhanced MultiTouch (touchscreen support pen & two-finger touch) <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in side base (right), rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)											
Camera	<i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus										Supports ThinkVantage® technologies	
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz										ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: – CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 – DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 – Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411	
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch None											
Dimensions ³	<i>without UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33.3mm <i>without UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33.3mm <i>4-cell:</i> from 3.57 lb (1.62kg); <i>8-cell:</i> from 3.96 lb (1.8kg)											
Weight ²	<i>Color:</i> black; <i>Material:</i> magnesium alloy											
Case	Lithium Ion 4-cell or 8-cell											
Battery - type	<i>4-cell:</i> up to 3.5 hr; <i>8-cell:</i> up to 7.9 hr											
Battery - life ¹⁰												
Chipset	Mobile Intel QM57 Express Chipset											
Media slice	<i>Some:</i> ThinkPad X200 UltraBase media slice (see right side)											
Multicard Reader	5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC)											
ExpressCard/54 Ports	One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)											
PCIe Mini Card	Two PCI Express Mini Card slots											
Intel 6200 ²⁸	11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2											
WWAN upg	<i>Some:</i> Wireless WAN upgradable											
Gobi™ 2000	<i>Some:</i> Wireless WAN, Qualcomm chipset, PCIe Mini Card, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, contract required with service provider											
Carrier	<i>Some:</i> Verizon®, contract required with service provider											
Modem	56K V.92 ⁶ modem											
Bluetooth™	<i>Some:</i> Bluetooth 2.1 wireless, LED indicator											
Ethernet	Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1											
Intel AMT	Intel Active Management Technology (iAMT)											
Audio support	High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack											
Security	Power-on password, hard disk password, supervisor password, security keyhole											
Security chip	Trusted Platform Module, TCG 1.2-compliant											
Fingerprint reader	<i>Some:</i> UPEK Fingerprint reader (right base of display), used in tablet/notebook mode, 2-way swipe sensor, LED indicator, Power On Authentication, supports the security chip											
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available										65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378	

See footnotes for important warranty information
US models announced February 23, 2010

⚠ US models withdrawn effective March 2010

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(CML3-3) February 2010

ThinkPad® X201 Tablet (3113) - Onsite (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Proc- essor	Max Base turbo (GHz) (GHz)	Memory	Widescreen display	Camera	Disk SATA GB ³ rpm	Optical in UltraBase	ThinkPad X200 UltraBase	PCIe Mini Card 802.11	Blue/ Intel Fing vPro	Whorse (W) Gbl (G) Preload GMP (P)	Avail date				
3113-92U	i7-640LM	2.13	2.93	2GB	12.1" WXGA	Entry	2.0M	320G 7200	DVD±RW	UltraB	Intel 6200 ²⁸	Yes	vPro	Pro 32	W G P	Mar 10
3113-93U	i7-640LM	2.13	2.93	2GB	12.1" WXGA	Entry		250G 5400			Intel 6200	Yes	vPro	Pro 32	W G P	Mar 10
3113-94U	i7-620LM	2.00	2.80	2GB	12.1" WXGA	Entry		250G 5400			Intel 6200		vPro	Pro 32	W G P	Mar 10
3113-95U	i7-640LM	2.13	2.93	4GB	12.1" WXGA	Outdoor	2.0M	320G 7200			Intel 6200	Yes	vPro	Pro 32	W G P	Mar 10
3113-96U	i7-640LM	2.13	2.93	4GB	12.1" WXGA	Multi	2.0M	320G 7200			Intel 6200	Yes	vPro	Pro 32	W G P	Mar 10

- **These models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty**

Positioning Processor	<i>Convertible tablet ultraportable; one spindle</i> Intel® Core™ i7 processor i7-620LM or i7-640LM with dual-core , DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 4MB cache										Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32	
Memory	2GB or 4GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Password Manager • ThinkVantage Power Manager • ThinkVantage System Update • Fingerprint Software (fingerprint models) • ThinkVantage Toolbox • Lenovo SimpleTap (Multi-Touch models) • Adobe® Reader® • Skype™ for Windows • Microsoft Research AutoCollage Touch • Corel® WinDVD® (DVD±RW)	
SATA DVD±RW Ultrabay Slim SATA disk	<i>Some:</i> DVD burner (43N3214), SATA 1.5Gb/s, removable from <i>X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 250GB⁸ (5400 rpm) or 320GB (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std <i>X200 UltraBase</i>											
Widescreen display	<i>Entry:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, frameless <i>Outdoor:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 400 nits, 16:10 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, PVA or IPS <i>MultiTouch:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, enhanced MultiTouch (touchscreen support pen & two-finger touch) <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in side base (right), rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)										Supports ThinkVantage® technologies	
Camera	<i>Some:</i> camera on top of screen, 2.0-megapixel, fixed focus											
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DP) @60Hz; 2048x1536(VGA) @75Hz											
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch None											
Dimensions ³	<i>without UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33.3mm <i>without UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33.3mm <i>4-cell:</i> from 3.57 lb (1.62kg); <i>8-cell:</i> from 3.96 lb (1.8kg) <i>Color:</i> black; <i>Material:</i> magnesium alloy											
Weight ² Case												
Battery - type	Lithium Ion 8-cell											
Battery - life ¹⁰	<i>4-cell:</i> up to 3.5 hr; <i>8-cell:</i> up to 7.9 hr											
Chipset	Mobile Intel QM57 Express Chipset											
Media slice	<i>Some:</i> ThinkPad X200 UltraBase media slice (see right side)											
Multicard Reader	5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC)											
ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)											
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)											
PCIe Mini Card	Two PCI Express Mini Card slots											
Intel 6200 ²⁸	11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2											
WWAN upg	Wireless WAN upgradable											
Modem	56K V.92 ⁶ modem											
Bluetooth™	<i>Some:</i> Bluetooth 2.1 wireless, LED indicator											
Ethernet	Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1											
Intel AMT	Intel Active Management Technology (iAMT)											
Audio support	High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack											
Security	Power-on password, hard disk password, supervisor password, security keyhole											
Security chip	Trusted Platform Module, TCG 1.2-compliant											
Fingerprint reader	<i>Some:</i> UPEK Fingerprint reader (right base of display), used in tablet/notebook mode, 2-way swipe sensor, LED indicator, Power On Authentication, supports the security chip											
Limited warranty ¹²	3-years/1-year - battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time/ service upgrades ²² available										65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378	

See footnotes for important warranty information
US models announced February 23, 2010

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ThinkPad® X201 Tablet (3093) - Education (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base turbo (GHz)	Memory	Widescreen display	Camera	Disk SATA GB ⁵	Optical in UltraBase	ThinkPad X200 UltraBase	PCle Mini Card 802.11	PCle Mini Card WWAN	Intel vPro	Workhorse (W) Global (G) Avail date
3093-N2U	i7-640LM	2.13	2.93	2GB	12.1" WXGA Entry	2.0M	320G 7200	Optional	Opt	Intel 6200 ²⁸	WWAN upg	vPro Pro 32 W Mar 10
3093-N3U	i7-640LM	2.13	2.93	2GB	12.1" WXGA Entry	2.0M	320G 7200	Optional	Opt	Intel 6200	WWAN upg	vPro Pro 32 W Mar 10

- **These models have an depot repair service 3-year limited warranty**
- Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Convertible tablet ultraportable; one spindle</i> Intel® Core™ i7 processor i7-640LM with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 4MB cache										Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications¹⁴ (only some listed) • <i>N2U model:</i> Education software - Microsoft® Office OneNote® 2007 (and CD) • <i>N3U model:</i> Education software - Microsoft Office Ultimate 2007 Academic Edition (and CD) • Education software - Adobe Digital School Collection
SATA DVD±RW Ultrabay Slim SATA disk	Option for <i>ThinkPad X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 320GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std <i>X200 UltraBase</i>										
Widescreen display	<i>Entry:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, frameless WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in side base (right), rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)										Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: - CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 - DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 - Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411
Camera	Camera on top of screen, 2.0-megapixel, fixed focus										
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DP)@60Hz; 2048x1536(VGA)@75Hz										
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch None										
Dimensions ³	<i>without UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33.3mm <i>without UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33.3mm <i>4-cell:</i> from 3.57 lb (1.62kg); <i>8-cell:</i> from 3.96 lb (1.8kg) <i>Color:</i> black; <i>Material:</i> magnesium alloy										
Weight ² Case	Lithium Ion 8-cell										
Battery - type	<i>4-cell:</i> up to 3.5 hr; <i>8-cell:</i> up to 7.9 hr										
Battery - life ¹⁰	Mobile Intel QM57 Express Chipset										
Chipset	<i>Option:</i> ThinkPad X200 UltraBase media slice (see right side)										
Media slice	5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC)										
Multicard Reader ExpressCard/54	One slot (ExpressCard/34, ExpressCard/54)										
Ports	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)										
PCle Mini Card Intel 6200 ²⁸ WWAN upg	Two PCI Express Mini Card slots 11a/b/g/n wireless, PCle Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable										
Modem	56K V.92 ⁶ modem										
Bluetooth™	Bluetooth 2.1 wireless, LED indicator										
Ethernet	Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1										
Intel AMT	Intel Active Management Technology (iAMT)										
Audio support	High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack Power-on password, hard disk password, supervisor password, security keyhole										
Security Security chip	Trusted Platform Module, TCG 1.2-compliant										
Fingerprint reader	UPEK Fingerprint reader on right base of display, used in tablet or notebook mode, 2-way swipe sensor, LED indicator, Power On Authentication, supports the security chip										
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades²² available										Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g 65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378

See footnotes for important warranty information
US models announced February 23, 2010

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ThinkPad® X201 Tablet (3113) - Onsite (Education) - Windows 7

Personal Systems Reference (PSREF)

Type-model	Processor	Max Base turbo (GHz)	Memory (GHz)	Widescreen display	Camera	Disk SATA GB ⁵	Optical in rpm	ThinkPad X200 UltraBase	PCIe Mini Card 802.11	PCIe Mini Card WWAN	Intel vPro	Workhorse (W) Global (G) Avail date
3113-N2U	i7-640LM	2.13	2.93	2GB	12.1" WXGA Entry	2.0M	320G 7200	Optional	Opt	Intel 6200 ²⁸	WWAN upg	vPro Pro 32 W Mar 10
3113-N3U	i7-640LM	2.13	2.93	2GB	12.1" WXGA Entry	2.0M	320G 7200	Optional	Opt	Intel 6200	WWAN upg	vPro Pro 32 W Mar 10

- **These models have an depot repair service 3-year limited warranty**
- Educational models are available only to public or private K-12 or higher accredited schools organized and operated exclusively for educational purposes for use by qualified students and teachers.

Positioning Processor	<i>Convertible tablet ultraportable; one spindle</i> Intel® Core™ i7 processor i7-640LM with dual-core, DMI (Direct Media Interface), integrated DDR3 memory controller (up to 1066MHz), Intel Turbo Boost, Hyper-Threading technology; 4MB cache										Preloaded operating system²⁰ - Genuine Windows® 7 Professional 32
Memory	2GB std / 8GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications¹⁴ (only some listed) • <i>N2U model:</i> Education software - Microsoft® Office OneNote® 2007 (and CD) • <i>N3U model:</i> Education software - Microsoft Office Ultimate 2007 Academic Edition (and CD) • Education software - Adobe Digital School Collection
SATA DVD±RW Ultrabay Slim SATA disk	Option for <i>ThinkPad X200 UltraBase</i> Supports Ultrabay Slim devices in optional or standard <i>X200 UltraBase</i> (43R8781) 320GB⁸ (7200 rpm) / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™, supports second disk in opt or std <i>X200 UltraBase</i>										Supports ThinkVantage® technologies ThinkPad X200 UltraBase™ • Provides desktop expansion and cable management for X200 and X201 Series • Easily connects to the bottom of the X200 or X201 Series for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side: - CD-RW/DVD-ROM Ultrabay Slim SATA 1.5Gb/s 43N3213 - DVD Burner Ultrabay Slim SATA 1.5Gb/s 43N3214 - Serial ATA Hard Drive Bay Adapter III 43N3412 Disks supported (some): • 250GB FDE 7200 rpm 43N3410 • 320GB Disk 7200 rpm 43N3411
Widescreen display	<i>Entry:</i> 12.1" (308mm) WXGA (1280x800) TFT color , anti-glare, LED backlight , 200 nits, 16:10 aspect ratio, 500:1 contrast ratio, PVA or IPS, frameless WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in side base (right), rotatable dual swivel hinge for tablet mode (portrait or landscape) or picture frame mode (keyboard faces away from user), buttons on display bottom (power with slide-lock, reset, rotation, menu, all button lock)										
Camera	Camera on top of screen, 2.0-megapixel, fixed focus										Other features: • Power button (front) • Stereo speakers (2 watt) • Security key lock, security keyhole, and optional security screw • Analog DB-15 monitor port • DisplayPort (supports single-link DVI-D via cable 45J7915) • Four USB 2.0 ports • Gigabit ethernet port • Microphone in and headphone out • Second battery charger • Requires 65 or 90 watt AC adapter • 1.6 lb; 730g
Integrated graphics	Intel HD Graphics in processor, external monitor support via analog VGA DB-15 connector / DisplayPort via UltraBase; supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DP) @60Hz; 2048x1536(VGA) @75Hz										
Keyboard TrackPoint® Touchpad ThinkLight™	Full-size, 89-key, ThinkVantage button, spill-resistant, mm Fn keys TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touchpad below keyboard, Tap Zones, scrolling regions, multi-touch None										
Dimensions ³	<i>without UltraBase; 4-cell:</i> 11.6" x 9" x 1-1.3"; 295mm x 228mm x 26.5-33.3mm <i>without UltraBase; 8-cell:</i> 11.6" x 10.1" x 1-1.3"; 295mm x 257mm x 26.5-33.3mm <i>4-cell:</i> from 3.57 lb (1.62kg); <i>8-cell:</i> from 3.96 lb (1.8kg) <i>Color:</i> black; <i>Material:</i> magnesium alloy										
Weight ² Case	Lithium Ion 8-cell										
Battery - type	<i>4-cell:</i> up to 3.5 hr; <i>8-cell:</i> up to 7.9 hr										
Battery - life ¹⁰	Mobile Intel QM57 Express Chipset										
Chipset	<i>Option:</i> ThinkPad X200 UltraBase media slice (see right side)										
Media slice	5-in-1 reader (MMC, Memory Stick, Mem Stick Pro, SD, SDHC)										
Multicard Reader	One slot (ExpressCard/34, ExpressCard/54)										
ExpressCard/54	Three USB 2.0, external monitor (VGA DB-15), modem (RJ-11), ethernet (RJ-45)										
Ports	Two PCI Express Mini Card slots 11a/b/g/n wireless, PCIe Mini Card, Intel Centrino® Advanced-N 6200, 2x2 Wireless WAN upgradable 56K V.92 ⁶ modem Bluetooth™ 2.1 wireless, LED indicator Intel 82577LM Gigabit Network Connection (Hanksville), PHY, PCIe x1 Intel Active Management Technology (iAMT)										
PCIe Mini Card	High Definition (HD) Audio, Conexant 20585 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic input jack, headphone jack										
Intel 6200 ²⁸	Power-on password, hard disk password, supervisor password, security keyhole										
WWAN upg	Trusted Platform Module, TCG 1.2-compliant										
Modem	UPEK Fingerprint reader (right base of display), used in tablet/notebook mode, 2-way swipe sensor, LED indicator, Power On Authentication, supports the security chip										
Bluetooth™	65-watt AC Adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378										
Ethernet											
Intel AMT											
Audio support											
Security											
Security chip											
Fingerprint reader											
Limited warranty ¹²	3-years/1-year - battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time/ service upgrades ²² available										

See footnotes for important warranty information
US models announced February 23, 2010

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Memory

1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann 06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann 06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann 06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann 06/23/09
4GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3708	ann 06/23/09

Ultrabay Slim 9.5mm

Most Ultrabay Slim accessories supported in ThinkPad X200 UltraBase

Storage and removable storage

160GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	41N5692	ann 03/20/07
160GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	41N5737	ann 10/16/07
250GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43R8152	ann 01/15/08
250GB Disk FDE SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3410	ann 01/20/09
320GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3403	ann 08/05/08
320GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3411	ann 01/20/09
500GB Disk SATA 1.5Gb/s (5400 rpm) ⁴¹	43N3420	ann 06/23/09
500GB Disk SATA 1.5Gb/s (7200 rpm) ⁴¹	43N3423	ann 01/07/10

⁴¹ Can be used as the main HDD or with *Serial ATA Hard Drive Bay Adapter III 43N3412* in X200 UltraBase (43R8781)

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	ann 08/26/08
256GB FDE SSD SATA 3Gb/s 1.8"(2.5" cover)	43N3417	ann 06/23/09
USB 2.0 Essential Memory Key 4GB	45J7904	ann 06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann 07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann 10/28/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann 08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann 08/26/08
USB 2.0 Portable 320GB Hard Disk	45K1689	ann 03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	ann 11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann 11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann 01/07/10
USB 2.0 Super Multi-Burner Drive	41N5565	ann 01/23/07

Wireless WAN (Mini PCI Express)

Only WWAN upgradable models:

ThinkPad Gobi™ 2000 Broadband Option	78Y1399	ann 01/07/10
ThinkPad AT&T® Gobi 2000 Broadband Option	78Y1398	ann 01/07/10

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann 05/12/09
USB Port Replicator with Digital Video	45K1610	ann 07/28/09
ThinkPad X200 UltraBase	43R8781	ann 08/05/08

Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
Ultralim Wireless Keyboard and Mouse ⁵²	57Y4700	ann 09/15/09
⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.		
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

Mouse

Lenovo Mini Optical Mouse - Black (USB)	55Y9308	ann 05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann 05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann 01/22/08

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06
ExpressCard Gemplus Smart Card Reader	41N3043	ann 06/27/06

Multimedia

USB 2.0 Lenovo Webcam	40Y8519	ann 08/29/06
ThinkPad In-Ear Headphones	57Y4488	ann 01/07/10

Tablet

ThinkPad Digitizer Pen	41U3143	ann 11/14/06
ThinkPad Tablet Tether (3-pack)	41U4820	ann 11/14/06

Batteries

ThinkPad Battery 12 (4-cell)	43R9256	ann 09/23/08
ThinkPad Battery 12++ (8-cell)	43R9257	ann 09/23/08
ThinkPad External Battery Charger ⁴⁷	40Y7625	ann 09/20/05

⁴⁷ Only supports *ThinkPad Battery 12 (4-cell)* 43R9256

More information at www.lenovo.com/alldaycomputing

ThinkPad 65W AC Adapter	40Y7696	ann 01/05/06
ThinkPad 90W AC Adapter	40Y7659	ann 09/20/05
90W Ultralim AC/DC Combo Adapter	41R4493	ann 09/22/09

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultralim AC/DC Combo Adapter 41R4493

•BlackBerry charge tip (L8a)	41R4478	ann 12/18/07
•iPod and iPhone Charge Tip (L10a)	41R4481	ann 12/18/07

More information at www.lenovopowertips.com

Carrying Cases

X200 Tablet:		
ThinkPad X200 Tablet Sleeve	43R9115	ann 09/23/08
Up to 13.3" widescreen models:		
ThinkPad Ultraportable Case	41U5062	ann 05/13/08
Up to 14.1" widescreen models:		
ThinkPad Women's Microfiber Tote	22P8855	ann 06/24/08
ThinkPad Women's Leather Trim Tote	22P8856	
ThinkPad Women's Executive Leather Tote	22P8857	
Women's Executive Red Leather Tote	22P8858	
Up to 15.4" widescreen models:		
Lenovo Business Messenger Case	51J0475	ann 08/18/09
Lenovo Messenger Max	41U5253	ann 05/01/07
Lenovo Performance Backpack	41U5254	ann 05/01/07
Checkpoint Friendly Business Topload Case	51J0418	ann 05/05/09
ThinkPad Business Topload Case	43R2476	ann 05/13/08
ThinkPad Business Backpack	43R2482	ann 05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann 05/13/08
ThinkPad Executive Leather Case	43R2480	ann 05/13/08

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann 10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann 11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann 10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann 10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann 10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann 10/20/09
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann 09/17/08

Monitor Accessories⁴⁶

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann 05/12/09
Lenovo DisplayPort to VGA Monitor Cable ⁵⁰	57Y4393	ann 08/04/09
DisplayPort to Single-link DVI-D Cable ⁵⁰	45J7915	ann 08/05/08

⁵⁰ Can only be used via ThinkPad X200 UltraBase (43R8781)

ThinkVision USB Soundbar	40Y7616	ann 08/23/05
ThinkVision Soundbar	45K1263	ann 09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann 12/29/03
Kensington Twin Head Cable Lock	45K1620	ann 09/30/08
Lenovo Easy Reach Monitor Stand	55Y9258	ann 09/22/09
Radial Arm	19K4464	ann 05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories
 Accessories Guide pdf at www.lenovo.com/accessoriesguide

ThinkPad®



Lenovo® ThinkPad X301



Lenovo ThinkPad X301



Lenovo ThinkPad X301



Lenovo ThinkPad X301



Lenovo ThinkPad X301



USB Port Replicator with Digital Video
45K1610

ThinkPad® X301 (2776) - TopSeller (XP with Win 7 License)

Personal Systems Reference (PSREF)

Type-model	Low Voltage processor	GHz	Memory	Wide-screen display	Camera	Disk SATA GB ³	SATA RPM	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Bat-tery Blue/ Fing cells	Preload	Avail date
2776-3AU	SU9600	1.60	2GB	13.3" WXGA+	Cam	250GB	5400	DVD±RW	❖ Intel 5100 ²⁸	WWAN upg	None	Yes	6 XP Pro	Oct 09
2776-3BU	SU9600	1.60	2GB	13.3" WXGA+	Cam	80GB	SSD	DVD±RW	❖ Intel 5100	WWAN upg	None	Yes	6 XP Pro	Oct 09
2776-3CU	SU9600	1.60	4GB	13.3" WXGA+	Cam	128GB	SSD	DVD±RW	❖ Intel 5100	WWAN upg	None	Yes	6 XP Pro	Oct 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning Processor	<i>Thin and light; two spindles</i> Intel® Core™ 2 Duo processor SU9600 with ultra low voltage, dual-core , Intel HD Boost, 800MHz system bus, and 3MB L2 cache										Preloaded operating system²⁰ - Windows® XP Professional preinstalled through downgrade rights in Genuine Windows 7 Professional 32			
Memory	2GB or 4GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3 , non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in 1 socket; 1 socket available										Preloaded applications¹⁴ (only some listed)			
EIDE DVD±RW Option Bay Serial ATA disk	Ultrathin DVD burner, 7mm high, removable from Option Bay, tray-in Modular bay for devices (DVD burner, battery), 7mm high <i>Some:</i> 80GB⁸ or 128GB Solid State Drive (SSD) / SATA 3.0Gb/s <i>Some:</i> 250GB (5400 rpm) / SATA 1.5Gb/s, Active Protection System™ <i>All:</i> 1.8" wide, 8mm high, removable, upgradable, shock mounted storage										<ul style="list-style-type: none"> • Rescue and Recovery™ • Access Connections™ • Client Security Solution™ • ThinkVantage Productivity Center • ThinkVantage System Update • Fingerprint Software (fingerprint models) • McAfee VirusScan® Plus with SiteAdvisor™ (30 days of virus definitions) • Lenovo System Toolbox • ThinkPad Utilities (Power Manager and Presentation Director) • Adobe® Reader® • Windows Live™ Toolbar • Microsoft® Office 2007 Trial (60-day) • Roxio® Creator® Business Edition (DVD±RW) • Roxio MyDVD® (DVD±RW) • Corel® WinDVD® (DVD±RW) 			
Widescreen display Camera	13.3" (338mm) WXGA+ (1440x900) TFT color , anti-glare, LED backlight , 300 nits, 16:10 aspect ratio, 250:1 contrast ratio Camera on top of screen, 1.3-megapixel, fixed focus, USB 2.0													
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD) , in GS45 External monitor support via analog VGA DB-15 connector or DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA, DisplayPort)													
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, illuminated buttons (Power, ThinkVantage, Mute, and CapsLk)													
TrackPoint® Touch pad	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, supports multi-touch function													
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions ³	<i>3-cell:</i> (WxDxH): 12.5" x 9.09" x 0.73-0.92"; 318mm x 231mm x 18.6-23.4mm <i>6-cell:</i> (WxDxH): 12.5" x 9.09" x 0.85-0.92"; 318mm x 231mm x 18.6-25.9mm													
Weight ²	<i>3-cell:</i> from 3.16 lb (1.43kg); <i>6-cell:</i> from 3.35 (1.52kg)													
Case color	Black													
Case material	<i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy													
Battery - type	Lithium Ion 6-cell , supports optional Option Bay 3-cell battery (for two batteries)													
Battery - life ¹⁰	<i>3-cell:</i> up to 3.4 hr; <i>6-cell:</i> up to 5.5 hr; <i>6-cell and Option Bay battery:</i> up to 9.5 hr													
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express® 1.1, PCI 2.3, security chip, ethernet MAC), Marvell® SATA-to-EIDE bridge (for optical)										Supports ThinkVantage® technologies			
ExpressCard Multicard reader	None										65-watt (GMA graphics) AC Adapter			
Ports	Three USB 2.0, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)										Next Generation ThinkPad Roll Cage (in display cover)			
Wireless antenna	UltraConnect™ II Antenna / on-off switch for all wireless radios										EPEAT™ Gold rating			
Mini PCI Express Intel 5100 ²⁸	Three Mini PCI Express slots / 802.11 and WWAN are customer upgradable										ENERGY STAR® 5.0-compliant			
WWAN upg	11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak)										RoHS-compliant			
Turbo Memory UWB	Wireless WAN upgradable, requires Verizon® (43R9151) or AT&T® (43R9152)										International Warranty Service ¹⁷			
Modem	None (use optional USB-based modem)										24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378			
Bluetooth™	Bluetooth 2.1 wireless, USB 2.0 interface via ICH, LED indicator										ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 41C9176			
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1										ThinkPlus 4-year LOR 9x5 NBD 41C9177			
Intel AMT	Intel Active Management Technology (iAMT)										ThinkPlus 5-year LOR 9x5 NBD 41C9179			
Audio support	High Definition (HD) Audio, AD1984A codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack										ThinkPlus 4-year P&L P/U Depot 41C9178			
Security	Power-on password, hard disk password, supervisor password, security keyhole										ThinkPlus 5-year P&L P/U Depot 41C9180			
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant													
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip													
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available													
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706		ThinkPad Battery 49 (3-cell)		43R1965									
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707		ThinkPad Battery 49+ (6-cell)		43R1967									
USB Port Replicator with Digital Video	45K1610		ThinkPad Battery 50 (3-cell)		43R1966									
Other accessories on O-X300 sheet	Other accessories at lenovo.com/accessories										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty			

See footnotes for important warranty information
US models announced October 22, 2009

❖ Intel Centrino® 2 with vPro™ technology

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(KOD2-7) October 2009

ThinkPad® X301 (2776) - TopSeller (Windows 7)

Personal Systems Reference (PSREF)

Type-model	Low Voltage processor	GHz	Memory	Wide-screen display	Camera	Disk SATA GB ³ RPM	EIDE optical	Mini PCIe 802.11 wireless	Mini PCIe WWAN	Mini PCIe UWB or Turbo	Battery Blue/ Fing cells	Preload	Avail date
2776-3DU	SU9600	1.60	4GB	13.3" WXGA+	Cam	128GB SSD	DVD±RW	Intel 5100 ²⁸	AT&T ²³	None	Yes	6 Pro 64	Oct 09
2776-3NU	SU9600	1.60	2GB	13.3" WXGA+	Cam	128GB SSD	DVD±RW	Intel 5100	Verizon ¹⁶	None	Yes	6 Pro 32	Nov 09
2776-3PU	SU9600	1.60	2GB	13.3" WXGA+	Cam	128GB SSD	DVD±RW	Intel 5100	Verizon ¹⁶	None	Yes	6 Pro 32	Nov 09

• These small and medium business (SMB) models are part of the US TopSeller™ Program

Positioning	<i>Thin and light; two spindles</i>											
Processor	Intel® Core™ 2 Duo processor SU9600 with ultra low voltage, dual-core, Intel HD Boost, 800MHz system bus, and 3MB L2 cache											
Memory	2GB or 4GB std / 4GB max ⁷ / PC3-8500 1066MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets; <i>Italics:</i> standard memory in both sockets; no sockets available; <i>Non-italics:</i> standard memory in one socket; one socket available											
EIDE DVD±RW Option Bay Serial ATA disk	Ultrathin DVD burner, 7mm high, removable from Option Bay, tray-in Modular bay for devices (DVD burner, battery), 7mm high 128GB ⁸ Solid State Drive (SSD) / SATA 3.0Gb/s, 1.8" wide, 8mm high, removable, upgradable, shock mounted storage											
Widescreen display	13.3" (338mm) WXGA+ (1440x900) TFT color, anti-glare, LED backlight, 300 nits, 16:10 aspect ratio, 250:1 contrast ratio											
Camera	Camera on top of screen, 1.3-megapixel, fixed focus, USB 2.0											
Integrated graphics	Intel Graphics Media Accelerator 4500MHD (GMA 4500MHD), in GS45 External monitor support via analog VGA DB-15 connector or DisplayPort (supports single-link DVI-D via cable 45J7915); <i>Maximum external resolution:</i> 2048x1536@75Hz (VGA, DisplayPort)											
Keyboard	89-key, ThinkVantage button, spill-resistant, multimedia Fn keys, illuminated buttons (Power, ThinkVantage, Mute, and CapsLk)											
TrackPoint® Touch pad	TrackPoint® pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, wide touch pad below keyboard, Tap Zones, scrolling regions label, supports multi-touch function											
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions											
Dimensions ³	3-cell: (WxDxH): 12.5" x 9.09" x 0.73-0.92"; 318mm x 231mm x 18.6-23.4mm 6-cell: (WxDxH): 12.5" x 9.09" x 0.85-0.92"; 318mm x 231mm x 18.6-25.9mm 3-cell: from 3.16 lb (1.43kg); 6-cell: from 3.35 (1.52kg)											
Weight ²												
Case color	Black											
Case material	<i>Display cover:</i> Carbon-fiber reinforced plastic (top), glass-fiber reinforced plastic (side walls); <i>Base:</i> Magnesium alloy											
Battery - type	Lithium Ion 6-cell, supports optional Option Bay 3-cell battery (for two batteries)											
Battery - life ¹⁰	3-cell: up to 3.4 hr; 6-cell: up to 5.5 hr; 6-cell and Option Bay battery: up to 9.5 hr											
Chipset	Mobile Intel GS45 Express Chipset (Graphics Memory Controller Hub); ICH9M-SFF-Enhanced I/O Controller Hub (SATA 3.0Gb/s, USB 2.0, PCI Express ⁹ 1.1, PCI 2.3, security chip, ethernet MAC), Marvell ⁸ SATA-to-EIDE bridge (for optical)											
ExpressCard	None											
Multicard reader	None											
Ports	Three USB 2.0, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)											
Wireless antenna	UltraConnect™ II Antenna / on-off switch for all wireless radios											
Mini PCI Express	Three Mini PCI Express slots / 802.11 and WWAN are customer upgradable											
Intel 5100 ²⁸ WiMAX	<i>Some:</i> 11a/b/g/n wireless ⁴ , Mini PCIe adapter, Intel WiFi Link 5100, 1x2 (Shirley Peak) <i>Some:</i> 11a/b/g/n and WiMAX wireless ⁴ , Mini PCIe adap, Intel WiMAX/WiFi Link 5150, 1x2 (300Mbps) WiFi + 1x2 WiMAX (Echo Peak)											
WWAN upg Verizon ¹⁶	<i>Some:</i> Wireless WAN upgradable, requires Verizon [®] (43R9151) or AT&T [®] (43R9152) <i>Some:</i> Wireless WAN, Qualcomm chipset, Mini PCIe adapter and SIM, EV-DO Rev. A, GPRS/WCDMA/HSPA, GPS, service contract required with Verizon											
AT&T ²³	<i>Some:</i> Wireless WAN, Ericsson chipset, Mini PCIe adapter and SIM, GPRS/WCDMA/HSPA, GPS, service contract required with AT&T											
Turbo Memory UWB	None											
Modem	None (use optional USB-based modem)											
Bluetooth™	Bluetooth 2.1 wireless, USB 2.0 interface via ICH, LED indicator											
Ethernet	Intel 82567LM Gigabit Network Connection (Boazman), PHY, PCIe x1											
Intel AMT	Intel Active Management Technology (iAMT)											
Audio support	High Definition (HD) Audio, AD1984A codec / stereo speakers, 1 watt / volume up, down, mute buttons / digital microphone, mic input jack, headphone jack											
Security	Power-on password, hard disk password, supervisor password, security keyhole											
Security chip	Trusted Platform Module, integrated in ICH9M, TCG 1.2-compliant											
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor, supports the security chip											
Limited warranty ¹²	3-years/1-yr battery - EasyServ™.19 depot repair service / service upgrades ²² available											
1GB PC3-8500 DDR3 L-H SODIMM	55Y3706	ThinkPad Battery 49 (3-cell)	43R1965									
2GB PC3-8500 DDR3 L-H SODIMM	55Y3707	ThinkPad Battery 49+ (6-cell)	43R1967									
USB Port Replicator with Digital Video	45K1610	ThinkPad Battery 50 (3-cell)	43R1966									
Other accessories on O-X300 sheet	Other accessories at lenovo.com/accessories											
										Supports ThinkVantage® technologies		
										65-watt (GMA graphics) AC Adapter Next Generation ThinkPad Roll Cage (in display cover) EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² via 800-426-7378		
										ThinkPlus™.22 3-year LOR ²⁴ 9x5 NBD 41C9176		
										ThinkPlus 4-year LOR 9x5 NBD 41C9177		
										ThinkPlus 5-year LOR 9x5 NBD 41C9179		
										ThinkPlus 4-year P&L P/U Depot 41C9178		
										ThinkPlus 5-year P&L P/U Depot 41C9180		
										Post-warranty annual maintenance agreements at lenovo.com/thinkplus/warranty		

See footnotes for important warranty information

✦ Intel Centrino® 2 with vPro™ technology

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Ⓢ US models announced November 3, 2009; previous model on October 22, 2009

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Memory**X300:**

1GB PC2-5300 DDR2 SODIMM	40Y7734	ann	01/05/06
1GB PC2-5300 DDR2 SODIMM (25-Pack)	51J0502	ann	03/17/09
2GB PC2-5300 DDR2 SODIMM	40Y7735	ann	11/28/06
2GB PC2-5300 DDR2 SODIMM (25-Pack)	51J0548	ann	03/17/09

X301:

1GB PC3-8500 DDR3 SODIMM	43R1987	ann	08/05/08
1GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0551	ann	03/17/09
2GB PC3-8500 DDR3 SODIMM	43R1988	ann	08/05/08
2GB PC3-8500 DDR3 SODIMM (25-Pack)	51J0552	ann	03/17/09
1GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3706	ann	06/23/09
1GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4385	ann	06/23/09
2GB PC3-8500 DDR3 Low-Halogen SODIMM	55Y3707	ann	06/23/09
2GB PC3-8500 DDR3 L-H SODIMM (25-Pack)	57Y4386	ann	06/23/09

Storage and removable storage**X301:**

1.8" 250GB Disk SATA 3.0Gb/s (5400 rpm)	43N3418	ann	06/23/09
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All:

128GB SSD SATA 3.0Gb/s 1.8" (2.5" cover)	43N3406	ann	08/26/08
256GB FDE SSD SATA 3Gb/s 1.8" (2.5" cover)	43N3417	ann	06/23/09

USB 2.0 Essential Memory Key 4GB	45J7904	ann	06/24/08
USB 2.0 Essential Memory Key 8GB	45J7905	ann	07/15/08
USB 2.0 Essential Memory Key 32GB	45K1258	ann	10/28/08
USB 2.0 Ultra Secure Memory Key 1GB	45J5915	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 2GB	45J5916	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 4GB	45J5917	ann	08/26/08
USB 2.0 Ultra Secure Memory Key 8GB	45J5918	ann	08/26/08

USB 2.0 Portable 320GB Hard Disk	45K1689	ann	03/17/09
USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 2.0 Portable Secure 160GB Hard Disk	43R2018	ann	11/18/08
USB 2.0 Portable Secure 320GB Hard Disk	43R2019	ann	11/18/08
eSATA/USB 2.0 Secure 500GB Hard Drive	57Y4400	ann	01/07/10
USB 2.0 Super Multi-Burner Drive	41N5565	ann	01/23/07
USB 2.0 Portable DVD Burner	43N3264	ann	01/05/10

Wireless WAN (Mini PCI Express)**X301 WWAN upgradable models:**

Verizon® WWAN UNDP Broadband Mini PCIe	43R9151	ann	08/05/08
AT&T® WWAN HSPA Broadband Mini PCIe	43R9152	ann	08/26/08

ThinkPad Expansion

Lenovo® Essential Notebook Stand	45J9292	ann	05/12/09
USB Port Replicator with Digital Video	45K1610	ann	07/28/09

Keyboard

TrackPoint Cap Collection	73P2698	ann	12/16/03
USB Numeric Keypad	33L3225	ann	05/01/00
Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
Ultraslim Wireless Keyboard and Mouse ⁵²	57Y4700	ann	09/15/09
⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.			
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann	08/18/09
Lenovo® USB Fingerprint Keyboard	73P4730	ann	02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann	03/24/09

Mouse

Lenovo Mini Optical Mouse - Black (USB)	55Y9308	ann	05/19/09
Lenovo Mini Optical Mouse - White (USB)	55Y9309	ann	05/19/09
Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
ThinkPad Bluetooth Laser Mouse	41U5008	ann	01/22/08

Security

Kensington® MicroSaver® Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08

Multimedia

USB 2.0 Lenovo Webcam	40Y8519	ann	08/29/06
ThinkPad In-Ear Headphones	57Y4488	ann	01/07/10

Modem

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

ThinkPad Battery 49 (3-cell)	43R1965	ann	02/26/08
ThinkPad Battery 49+ (6-cell)	43R1967	ann	02/26/08
ThinkPad Battery 50 (3-cell)	43R1966	ann	02/26/08
ThinkPad External Battery Charger	40Y7625	ann	09/20/05

More information at www.lenovo.com/alldaycomputing

ThinkPad 65W AC Adapter	40Y7696	ann	01/05/06
ThinkPad 90W AC Adapter	40Y7659	ann	09/20/05
90W Ultraslim AC/DC Combo Adapter	41R4493	ann	09/22/09

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493

•Palm device charge tip (L7)	41R4315	ann	12/18/07
•BlackBerry charge tip (L8a)	41R4478	ann	12/18/07
•iPod and iPhone Charge Tip (L10a)	41R4481	ann	12/18/07
•Generic Micro USB charge tip (L18)	41R4490	ann	01/06/09

More information at www.lenovopowertips.com

Carrying Cases**Up to 13.3" widescreen models:**

ThinkPad Ultraportable Case	41U5062	ann	05/13/08
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Up to 14.1" widescreen models:

ThinkPad Women's Microfiber Tote	22P8855	ann	06/24/08
ThinkPad Women's Leather Trim Tote	22P8856		
ThinkPad Women's Executive Leather Tote	22P8857		
Women's Executive Red Leather Tote	22P8858		

Up to 15.4" widescreen models:

ThinkPad 15W Case Sleeve	51J0477	ann	08/18/09
Lenovo Business Messenger Case	51J0475	ann	08/18/09
Lenovo Messenger Max	41U5253	ann	05/01/07
Lenovo Performance Backpack	41U5254	ann	05/01/07
Checkpoint Friendly Business Topload Case	51J0418	ann	05/05/09
ThinkPad Business Topload Case	43R2476	ann	05/13/08
ThinkPad Business Backpack	43R2482	ann	05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann	05/13/08
ThinkPad Executive Leather Case	43R2480	ann	05/13/08

Lenovo luxury cases at www.lenovoluxurycases.com

Monitors

ThinkVision® L1711p 17" Monitor	5047HB2	ann	10/20/09
ThinkVision L1900p 19" Monitor	4431HE1	ann	11/11/08
ThinkVision L1951p Wide 19" Monitor	2448HB6	ann	10/20/09
ThinkVision L2250p Wide 22" Monitor	2572HB6	ann	10/20/09
ThinkVision L2251p Wide 22" Monitor	2572HD6	ann	10/20/09
ThinkVision L2251x Wide 22" Monitor	2578HB6	ann	10/20/09
ThinkVision L2440p Wide 24" Monitor	4420HB2	ann	09/17/08

Monitor Accessories⁴⁶**X301:**

Lenovo DisplayPort to VGA Monitor Cable	57Y4393	ann	08/04/09
DisplayPort to Single-link DVI-D Cable	45J7915	ann	08/05/08

All:

Lenovo USB-to-DVI Monitor Adapter	45K5296	ann	05/12/09
ThinkVision USB Soundbar	40Y7616	ann	08/23/05
ThinkVision Soundbar	45K1263	ann	09/16/08
Kensington MicroSaver Cable Lock	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock	45K1620	ann	09/30/08
Lenovo Easy Reach Monitor Stand	55Y9258	ann	09/22/09
Radial Arm	19K4464	ann	05/05/00

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

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

For more information on ThinkPad accessories, please visit:

www.lenovo.com/support/accessories
www.lenovo.com/support/notebookaccessories
www.lenovo.com/support/security

Other accessories at www.lenovo.com/accessories

Accessories Guide pdf at www.lenovo.com/accessoriesguide

Partial list of Lenovo® ThinkPlus Services²² for ThinkPad notebooks

For more information see: http://www.lenovo.com/services_warranty/us/en/index.html

<p>ThinkPlus service upgrade options for ThinkPad W/X series</p> <p>ThinkPad X100e notebook with 1-year Mail-In warranty</p> <p>2-year Mail-In repair service 78Y1519 3-year Mail-In repair service 78Y1520</p> <p>1-year LOR²⁴ 9x5 Next Business Day 78Y1517 2-year LOR 9x5 Next Business Day 78Y1521 3-year LOR 9x5 Next Business Day 78Y1522</p> <p>ThinkPad X100e notebook with 1-year Depot warranty</p> <p>2-year parts and labor depot repair service 41C9169 3-year parts and labor depot repair service 41C9170</p> <p>1-year LOR 9x5 Next Business Day 41C9166 2-year LOR 9x5 Next Business Day 41C9167 3-year LOR 9x5 Next Business Day 41C9168</p> <p>ThinkPad X series notebook with 1-year Depot warranty</p> <p>2-year parts and labor depot repair service 41C9169 3-year parts and labor depot repair service 41C9170 4-year parts and labor depot repair service 41C9172 5-year parts and labor depot repair service 41C9174</p> <p>1-year LOR 9x5 Next Business Day 41C9166 2-year LOR 9x5 Next Business Day 41C9167 3-year LOR 9x5 Next Business Day 41C9168 4-year LOR 9x5 Next Business Day 41C9171 5-year LOR 9x5 Next Business Day 41C9173</p> <p>ThinkPad W/X series notebook with 3-year Depot warranty</p> <p>4-year parts and labor depot repair service 41C9178 5-year parts and labor depot repair service 41C9180</p> <p>3-year LOR 9x5 Next Business Day 41C9176 4-year LOR 9x5 Next Business Day 41C9177 5-year LOR 9x5 Next Business Day 41C9179</p> <p>ThinkPad W/X series notebook with 3-year Onsite warranty</p> <p>4-year LOR 9x5 Next Business Day 12X5630 5-year LOR 9x5 Next Business Day 43R2162</p>	<p>ThinkPlus Secure Business</p> <p>Lenovo Online Data Backup</p> <ul style="list-style-type: none"> Secure offsite data storage 256-bit Advanced Encryption System Data recovery or access in case of an unforeseen event Automatic, remote management Choose which business critical data to back up <p>1-year Lenovo Online Data Backup - 10GB 51J0787 1-year Lenovo Online Data Backup - 25GB 51J0795 1-year Lenovo Online Data Backup - 50GB 45K5849 1-year Lenovo Online Data Backup - Unlimited 45K5870</p> <p>ThinkPad notebook with 1-year Depot warranty</p> <p>1-year Secure Business 55Y2380</p> <ul style="list-style-type: none"> 1-year Lenovo Onsite Repair service upgrade 1-year ThinkPad Protection 1-year 50GB Lenovo Online Data Backup <p>3-year Secure Business 55Y2381</p> <ul style="list-style-type: none"> 3-year Lenovo Onsite Repair service upgrade 3-year ThinkPad Protection 3-year 50GB Lenovo Online Data Backup <p>ThinkPad notebook with 3-year Depot warranty</p> <p>3-year Secure Business 45K5893</p> <ul style="list-style-type: none"> 3-year Lenovo Onsite Repair service upgrade 3-year ThinkPad Protection 3-year 50GB Lenovo Online Data Backup
<p>ThinkPlus service upgrade options for ThinkPad T/R series</p> <p>ThinkPad T/R series notebook with 1-year Depot warranty</p> <p>2-year parts and labor depot repair service 45K5971 3-year parts and labor depot repair service 45K5972 4-year parts and labor depot repair service 45K5974 5-year parts and labor depot repair service 45K5976</p> <p>1-year LOR 9x5 Next Business Day 45K5968 2-year LOR 9x5 Next Business Day 45K5969 3-year LOR 9x5 Next Business Day 45K5970 4-year LOR 9x5 Next Business Day 45K5973 5-year LOR 9x5 Next Business Day 45K5975</p> <p>ThinkPad T/R series notebook with 3-year Depot warranty</p> <p>4-year parts and labor depot repair service 45K6023 5-year parts and labor depot repair service 45K6025</p> <p>3-year LOR 9x5 Next Business Day 45K6021 4-year LOR 9x5 Next Business Day 45K6022 5-year LOR 9x5 Next Business Day 45K6024</p> <p>ThinkPad T/R series notebook with 3-year Onsite warranty</p> <p>4-year LOR 9x5 Next Business Day 45K6038 5-year LOR 9x5 Next Business Day 43R2162</p>	<p>ThinkPlus Priority Support for enterprise customers</p> <ul style="list-style-type: none"> 9x5 next-business-day response Lenovo Onsite Repair 24x7 support with priority routing and advanced level technicians <p>ThinkPad notebook with 1-year Depot warranty</p> <p>3-year Priority Support 45J9094</p> <p>ThinkPad notebook with 3-year Depot warranty</p> <p>3-year Priority Support 45J9095 4-year Priority Support 45J9096 5-year Priority Support 45J9097 3-year Priority Support 4-hour response 45J9101 4-year Priority Support 4-hour response 45J9102 5-year Priority Support 4-hour response 45J9103</p> <p>ThinkPad notebook with 3-year Onsite (GMP) warranty</p> <p>3-year Priority Support 45J9098 4-year Priority Support 45J9099 5-year Priority Support 45J9100 3-year Priority Support 4-hour response 45J9104 4-year Priority Support 4-hour response 45J9105 5-year Priority Support 4-hour response 45J9106</p> <p>ThinkPad Workstation notebook with 1-year Depot warranty</p> <p>3-year Priority Support 45J9107</p> <p>ThinkPad Workstation notebook with 3-year Depot warranty</p> <p>3-year Priority Support 45J9108 4-year Priority Support 45J9109 5-year Priority Support 45J9110 3-year Priority Support 4-hour response 45J9114 4-year Priority Support 4-hour response 45J9115 5-year Priority Support 4-hour response 45J9116</p> <p>ThinkPad Workstation notebook with 3-year Onsite (GMP) warranty</p> <p>3-year Priority Support 45J9111 4-year Priority Support 45J9112 5-year Priority Support 45J9113 3-year Priority Support 4-hour response 45J9117 4-year Priority Support 4-hour response 45K1520 5-year Priority Support 4-hour response 45K1521</p>

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.

Footnotes:

- ¹ Power management, including Intel® SpeedStep® Technology, reduces processor speed when in battery mode.
- ² **Weight** includes battery and standard optical drive; weight may vary due to vendor components, manufacturing process and options.
- ³ **Thinness** may vary at certain points on the system.
- ⁴ **Wireless capability:** Requires compatible wireless-enabled options sold separately.
- ⁵ **TAA:** ThinkPad notebook is compliant with the U.S. Federal Government's country-of-origin requirements prescribed in 48 C.F.R. Subpart 25.4; Trade Act Agreement (TAA) model.
- ⁶ **Public network download modem 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.
- ⁷ **Maximum memory capacity** may require the replacement of standard component with largest supported component available. On ThinkPad systems, even though it is possible to physically install 4GB of memory, the actual amount of memory addressable by a 32-bit operating system will be limited to 3GB. This limitation does not exist with 64-bit operating systems.
- ⁸ **Hard drive:** GB = billion bytes, TB = trillion bytes. Accessible capacity is less; up to 4GB is service partition.
- ⁹ **CD/DVD drive speeds** list maximum rates; rates are variable and are often less than the maximum.
- ¹⁰ **Battery:** These model numbers achieved the battery life based on MobileMark® 2007 during testing. For the ThinkPad X300, battery life is based on Business Winstone Battery Mark 2002. Battery life (and recharge times) will vary based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.
- ¹¹ **External monitor:** This system supports a maximum of two external monitors. The integrated display(s) must be disabled to support two external monitors.
- ¹² **Limited warranty:** Support unrelated to a warranty issue may be subject to additional charges.
- ¹³ **Internet access not included.**
- ¹⁴ **Included software** may differ from its retail version (if available), and may not include user manuals or all program functionality. Software license agreements may apply.
- ¹⁵ **Activating Verizon Wireless Service:** Lenovo customers will be contacted after purchase to activate service; requires separate agreement with Verizon Wireless and is subject to the Customer Agreement, Calling Plan, and credit approval. Service, airtime, and early termination charges may apply. Verizon Wireless, not Lenovo, is solely responsible for service. Service not available in all areas; purchaser is responsible for verifying that service is available for the intended location before purchasing a computer equipped with WAN card. Network details, coverage limitations, and maps at www.verizonwireless.com.
- ¹⁶ **Activating Verizon Wireless Service:** Lenovo customers will be contacted after purchase to activate service; requires separate agreement with Verizon Wireless and is subject to the Customer Agreement, Calling Plan, and credit approval. Service, airtime, and early termination charges may apply. Verizon Wireless, not Lenovo, is solely responsible for service. Service not available in all areas; purchaser is responsible for verifying that service is available for the intended location before purchasing a computer equipped with WAN card. Network details, coverage limitations, and maps at www.verizonwireless.com.
- ¹⁷ **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.
- ¹⁸ **Telephone support** may be subject to additional charges, even during the limited warranty period. Response times may vary. May exclude some holidays. If a machine is listed as having "On-site service for select repairs", this means that onsite service is available only for the replacement of select parts. For all other warranty repairs, Lenovo will provide the customer a replacement part for customer installation. The parts for which onsite service is available varies by machine, but may include the processor, power supply, heat sink, system board, or base cover. For ThinkPad notebooks with EasyServ or Courier service, Lenovo will attempt to diagnose and resolve the problem remotely before sending a courier.
- ¹⁹ **EasyServ depot repair service:** In the United States call 1-800-426-7378. The customer may be asked certain diagnostic questions before a courier is sent. Your ThinkPad purchase includes this depot repair service, available in the U.S. during the limited warranty period.
- 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.
- ²¹ **For combination drives**, maximum possible speeds only are given in the following order: CD write, CD rewrite, CD read, DVD read.

²² **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. For ThinkPad notebooks requiring LCD or other component replacement, Lenovo may choose to perform service at the depot repair center. Calls must be received by 5 pm local time in order to qualify for Next Business Day service. P&L means parts and labor. P/U means pick-up. See ThinkPlus terms and conditions for complete details and restrictions.

²³ **Activating AT&T Wireless Service:** Requires separate agreement with AT&T, subject to service agreement, rate plan and coverage maps. AT&T, not Lenovo, is solely responsible for service. Coverage not available in all areas; AT&T BroadbandConnect available in select metropolitan markets. Special credit and tenure restrictions and additional charges may apply to international roaming. A network connection, third-party software, additional hardware, and/or subscription to a third-party service may be required for certain solutions/applications. Additional restrictions apply, including early termination fee; see www.wireless.att.com for details. To activate call Lenovo Wireless Activation Hot Line at 1-877-299-4710.

²⁴ **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.

²⁶ **Full-size keyboard:** As defined by ISO/IEC 15412.

²⁷ **Based on IEEE 802.11a and 802.11b.** A customer can not upgrade to a different wireless Mini PCI adapter due to FCC regulations. Security screws prevent removal of this adapter. This wireless LAN product has been designed to permit legal operation world-wide in regions which it is approved. This product has been tested and certified to be interoperable by the Wireless Ethernet Compatibility Alliance and is authorized to carry the Wi-Fi logo.

²⁸ **The IEEE 802.11n specification (MIMO)** has been finalized and is currently in IEEE 802.11n-2009 release. The maximum speed depends on the access point device and the number of integrated antenna used for connection. An adapter with 11a/b, 11a/b/g, 11b/g/n, or 11a/b/g/n can communicate on any of its supported formats.

³⁰ **Measures only maximum** data transfer rate, not application performance. Many factors affect application performance.

³² **Wireless:** Based on IEEE 802.11a, 802.11b, and 802.11g respectively. An adapter with 11a/b, 11b/g, or 11a/b/g can communicate on either/any of these listed formats respectively, the actual connection will be based on the access point to which it connects.

³⁶ **Wireless upgradable** allows the system to be wireless-enabled with an optional wireless Mini PCI or Mini PCI Express card. Designed to operate only with Lenovo options.

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