

ThinkPad®



Lenovo® ThinkPad T520



Lenovo ThinkPad T520



Lenovo ThinkPad T520



ThinkPad triple external monitor configuration
using NVIDIA's Optimus technology



Lenovo ThinkPad T520

ThinkPad® T520 4240 (TopSeller) - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ² rpm	PCIe Mini Card WLAN	PCIe Mini Card WWAN/mSATA	Modem	Finger print reader	Blue-tooth	Battery cells	Intel AMT	Intel vPro	Preload
4240-5CG	i5-2430M	4GBx1	15.6" HD	720p	500G 7200	Intel 1000	WWAN upg	None	Finger	Blue	6	None	No	Pro 64
4240-6BG	i5-2450M	4GBx1	15.6" HD	720p	500G 7200	Intel 1000	WWAN upg	None	Finger	Blue	6	None	No	Pro 64

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

Positioning Processor	Premiere performance; two spindles Intel® Core™ i5-2430M processor (dual-core, 2.40GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.0GHz), HT technology Intel Core i5-2450M processor (dual-core, 2.50GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.1GHz), HT technology									Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Fingerprint Software (fingerprint models) • Password Manager (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo SimpleTap Preloaded applications¹⁴ (only some listed) • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW)				
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets													
Optical Ultrabay SATA disk	DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive													
mSATA™ SSD	None													
Widescreen display	15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut													
Camera	HD720p resolution, wider view angle, low light sensitive, fixed focus													
Graphics	Intel HD Graphics 3000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via optional cable); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via optional cable)													
Keyboard TrackPoint® Touchpad ThinkLight™	7 row, 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	HD & HD+: 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm FHD: 14.68" x 9.65" x 1.29-1.44"; 372.8mm x 245.1mm x 32.8-36.6mm													
Weight ²	6-cell: starting at 5.54 lb (2.51kg); 9-cell: starting at 5.89 lb (2.67kg)													
Case material	Display cover: Carbon-fiber / Glass-fiber hybrid; Bottom: Glass-fiber reinforced plastic without paint													
Battery - type	Lithium Ion 6-cell or 9-cell, support optional Slice battery as 2nd battery at bottom													
Battery - life ¹⁰	6-cell (57Whr): up to 7.7 hr; 9-cell (94Whr): up to 12.8 hr; 9-cell plus slice battery: up to 25.6 hr													
Chipset	Mobile Intel QM67 Express Chipset													
ExpressCard	One slot (ExpressCard/34)													
Smart Card Read	None													
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)													
Ports	Integrated model: Four USB 2.0 (one powered), Optimus model: Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)													
PCIe Mini Card WLAN ⁴	Two PCI Express Mini Card slots													
WWAN	11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2													
Modem	Wireless WAN upgradable													
Bluetooth™	None													
Ethernet	Bluetooth 3.0 wireless, LED indicator													
Intel AMT	Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1													
Audio support	None													
Security	High Definition (HD) Audio, Conexant 20672 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack													
Security chip	Power-on password, hard disk password, supervisor password, security keyhole													
Fingerprint reader	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													

See footnotes for more detailed information

WE model(s) announced October 4, 2011 or January 17, 2012

WE model(s) withdrawn effective December 2012

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(G-KN3-6) February 2013

ThinkPad® T520 4240 (Optimus) - TopSeller - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ³ rpm	PCIe Mini Card WLAN	PCIe Mini Card WWAN/mSATA	Carrier	Modem	Smart Card Reader	Finger print reader	Blue-tooth	Bat-tery cells	Intel vPro	Preload
4240-5BG	i5-2430M	4GBx1	15.6" HD+	720p	500G 7200	Intel 1000	Ericsson	selectable	None		Finger	Blue	6	No	Pro 64
4240-6AG	i5-2450M	4GBx1	15.6" HD+	720p	500G 7200	Intel 1000	Ericsson	selectable	None	Smart	Finger	Blue	6	No	Pro 64
<ul style="list-style-type: none">• Small and medium business (SMB) model(s), part of the WE TopSeller™ Program• A depot repair service 3-year limited warranty• Microsoft® Office 2010 Product Key Ready (O10PKR)															
Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5-2430M processor (dual-core, 2.40GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.0GHz), HT technology Intel Core i5-2450M processor (dual-core, 2.50GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology									Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Fingerprint Software (fingerprint models)• Password Manager (fingerprint models)• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Lenovo SimpleTap Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none">• Norton™ Internet Security 2011 (30 days of virus definitions)• Adobe® Reader®• Skype™ for Windows• Windows Live™ Essentials• Microsoft Office 2010 preloaded; purchase product key to activate• Corel® WinDVD® (DVD±RW)• Corel Burn.Now™ Lenovo Edition (DVD±RW)• Corel DVD MovieFactory® Lenovo Edition (DVD±RW)					
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets														
Optical Ultrabay SATA disk	DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive														
mSATA™ SSD	None														
Widescreen display	15.6" (396mm) HD+ (1600x900) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut														
Camera	HD720p resolution, wider view angle, low light sensitive, fixed focus														
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 3000 in processor, and NVIDIA NVS™ 4200M , 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 optional cable); supports three independent displays; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via optional cable)														
Keyboard TrackPoint® Touchpad ThinkLight™	7 row, 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 & HD+:</i> 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>FHD:</i> 14.68" x 9.65" x 1.29-1.44"; 372.8mm x 245.1mm x 32.8-36.6mm														
Weight ²	<i>6-cell:</i> starting at 5.67 lb (2.57kg); <i>9-cell:</i> starting at 6.02 lb (2.73kg)														
Case material	<i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint														
Battery - type	Lithium Ion 6-cell or 9-cell, support optional Slice battery as 2nd battery at bottom														
Battery - life ¹⁰	<i>6-cell (57Whr):</i> up to 7.6 hr; <i>9-cell (94Whr):</i> up to 12.6 hr; <i>9-cell plus slice battery:</i> up to 25.3 hr														
Chipset	Mobile Intel QM67 Express Chipset														
ExpressCard	One slot (ExpressCard/34)														
Smart Card Read	<i>Some:</i> Smart Card reader														
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)														
Ports	<i>Integrated model:</i> Four USB 2.0 (one powered), <i>Optimus model:</i> Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)														
PCIe Mini Card WLAN ⁴	Two PCI Express Mini Card slots														
WWAN	11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2 Wireless WAN, Ericsson® F5521gw Mobile Broadband Module, PCIe Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS														
Carrier	User selectable, contract required with service provider														
Modem	None														
Bluetooth™	Bluetooth 3.0 wireless, LED indicator									Supports ThinkVantage® technologies					
Ethernet	Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1														
Intel AMT	None														
Audio support	High Definition (HD) Audio, Conexant 20672 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, 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					
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 more detailed information
 WE model(s) announced October 4, 2011 or January 17, 2012
 WE model(s) withdrawn effective December 2012

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 (G-KN3-7) February 2013

ThinkPad® T520 4241 - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁵ rpm	PCIe Mini Card WLAN	PCIe Mini Card WWAN/mSATA	Modem	Finger print reader	Blue-tooth	Battery cells	Intel vPro	Preload
4241-48G	i5-2520M	2GBx2	15.6" HD	None	320G 7200	Intel 1000	WWAN upg	Modem	None	Blue	6	None	Pro 64

• Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5-2520M processor (dual-core, 2.50GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology			Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Fingerprint Software (fingerprint models)• Password Manager (fingerprint models)• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Lenovo SimpleTap Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none">• Norton™ Internet Security 2011 (30 days of virus definitions)• Adobe® Reader®• Skype™ for Windows• Windows Live™ Essentials• Microsoft Office 2010 preloaded; purchase product key to activate• Corel® WinDVD® (DVD±RW)• Corel Burn.Now™ Lenovo Edition (DVD±RW)• Corel DVD MovieFactory® Lenovo Edition (DVD±RW)
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets			
Optical Ultrabay SATA disk	DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive			
mSATA™ SSD	None			
Widescreen display	15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut			
Camera	None			
Graphics	Intel HD Graphics 3000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via optional cable); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via optional cable)			
Keyboard	7 row, 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 keyboard, Tap Zones, scrolling regions label, multi-touch			
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions			
Dimensions (WxDxH) ³	<i>HD & HD+:</i> 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>FHD:</i> 14.68" x 9.65" x 1.29-1.44"; 372.8mm x 245.1mm x 32.8-36.6mm			
Weight ²	<i>6-cell:</i> starting at 5.54 lb (2.51kg); <i>9-cell:</i> starting at 5.89 lb (2.67kg)			
Case material	<i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint			
Battery - type	Lithium Ion 6-cell or 9-cell, support optional Slice battery as 2nd battery at bottom			
Battery - life ¹⁰	<i>6-cell (57Whr):</i> up to 7.7 hr; <i>9-cell (94Whr):</i> up to 12.8 hr; <i>9-cell plus slice battery:</i> up to 25.6 hr			
Chipset	Mobile Intel QM67 Express Chipset			
ExpressCard	One slot (ExpressCard/34)			
Smart Card Read	None			
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)			
Ports	<i>Integrated model:</i> Four USB 2.0 (one powered), <i>Optimus model:</i> Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)			
PCIe Mini Card	Two PCI Express Mini Card slots			
WLAN ⁴	11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 1000, 1x2			
WWAN	Wireless WAN upgradable			
Carrier	None			
Modem	56K V.92 ⁶ modem			
Bluetooth™	Bluetooth 3.0 wireless, LED indicator			
Ethernet	Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1			
Intel AMT	None			
Audio support	High Definition (HD) Audio, Conexant 20672 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, 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	None			
Limited warranty ¹²	1-year - depot repair service / 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

See footnotes for more detailed information

WE model(s) announced March 1, 2011

WE model(s) withdrawn effective December 2012

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(G-KN3-1) February 2013

ThinkPad® T520 4242 - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Disk SATA GB ³ rpm	PCle Mini Card WLAN	PCle Mini Card WWAN/mSATA	Carrier	Modem	Smart Card Reader	Finger print reader	Battery cells	Intel vPro	Global (G) GMP (P)	Pre-load
4242-5AG	i5-2520M	4GBx1	15.6" HD+	320G 7200	Intel 6205 ²⁸	Ericsson	selectable	Modem	Smart	Finger	6	vPro		Pro 64
4242-4WG	i5-2520M	4GBx1	15.6" HD	500G 7200	Intel 6205	WWAN upg		Modem		Finger	6	vPro	G	Pro 64
4242-3MG	i5-2520M	2GBx1	15.6" HD	320G 7200	Intel 6205	WWAN upg		Modem			6	vPro		Pro 64
4242-29G	i5-2520M	2GBx2	15.6" HD	320G 7200	Intel 6205	WWAN upg					6	vPro	G	Pro 64
4242-5ZG	i5-2520M	4GBx1	15.6" HD	160G SSD	Intel 6205	WWAN upg				Finger	6	vPro	G	Pro 64
<ul style="list-style-type: none">• A depot repair service 3-year limited warranty• Microsoft® Office 2010 Product Key Ready (O10PKR)														
Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5-2520M processor (dual-core, 2.50GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology								Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64					
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								Ready to install applications¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Fingerprint Software (fingerprint models)• Password Manager (fingerprint models)• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Lenovo SimpleTap					
Optical Ultrabay	DVD burner, 12.7mm Ultrabay Enhanced, removable								Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none">• Norton™ Internet Security 2011 (30 days of virus definitions)• Adobe® Reader®• Skype™ for Windows• Windows Live™ Essentials• Microsoft Office 2010 preloaded; purchase product key to activate• Corel® WinDVD® (DVD±RW)• Corel Burn.Now™ Lenovo Edition (DVD±RW)• Corel DVD MovieFactory® Lenovo Edition (DVD±RW)					
SATA disk	One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive													
mSATA™ SSD	None													
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													
Camera	HD720p resolution, wider view angle, low light sensitive, fixed focus													
Graphics	Intel HD Graphics 3000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via optional cable); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via optional cable)													
Keyboard	7 row, 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 keyboard, Tap Zones, scrolling regions label, multi-touch													
ThinkLight™	Illuminates the keyboard to improve visibility in low-light conditions													
Dimensions (WxDxH) ³	<i>HD & HD+:</i> 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>FHD:</i> 14.68" x 9.65" x 1.29-1.44"; 372.8mm x 245.1mm x 32.8-36.6mm													
Weight ²	6-cell: starting at 5.54 lb (2.51kg); 9-cell: starting at 5.89 lb (2.67kg)													
Case material	<i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint													
Battery - type	Lithium Ion 6-cell or 9-cell, support optional Slice battery as 2nd battery at bottom													
Battery - life ¹⁰	6-cell (57Whr): up to 7.7 hr; 9-cell (94Whr): up to 12.8 hr; 9-cell plus slice battery: up to 25.6 hr													
Chipset	Mobile Intel QM67 Express Chipset													
ExpressCard	One slot (ExpressCard/34)													
Smart Card Read	<i>Some:</i> Smart Card reader													
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)													
Ports	<i>Integrated model:</i> Four USB 2.0 (one powered), <i>Optimus model:</i> Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)													
PCle Mini Card WLAN ⁴	Two PCI Express Mini Card slots													
WWAN	11a/b/g/n, PCle Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® F5521gw Mobile Broadband Module, PCle Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS													
Carrier	<i>Some:</i> User selectable, contract required with service provider													
Modem	<i>Some:</i> 56K V.92 ⁶ modem													
Bluetooth™	Bluetooth 3.0 wireless, LED indicator													
Ethernet	Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCle x1													
Intel AMT	Intel Active Management Technology (iAMT)													
Audio support	High Definition (HD) Audio, Conexant 20672 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, 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	<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 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				

See footnotes for more detailed information

WE model(s) announced February 22 or April 19, 2011, or January 3, 2012

WE model(s) withdrawn effective December 2012

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(G-KN3-2) February 2013

ThinkPad® T520 4242 (Optimus) - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ³ rpm	PCIe Mini Card WLAN	PCIe Mini Card WWAN/mSATA	Modem	Finger print reader	Blue-tooth	Bat-tery cells	Intel vPro	Global (G) GMP (P)	Pre-load
4242-4VG	i5-2520M	4GBx1	15.6" HD	720p	500G 7200	Intel 6205 ²⁸	WWAN upg	Modem	Finger	Blue	9	vPro	G	Pro 64
4242-27G	i5-2520M	2GBx1	15.6" HD	720p	320G 7200	Intel 6205	WWAN upg				9	vPro	G	Pro 64
4242-28G	i5-2540M	2GBx2	15.6" HD+	720p	500G 7200	Intel 6205	WWAN upg		Finger	Blue	9	vPro	G	Pro 64
4242-5UG	i7-2640M	4GBx1	15.6" HD+	720p	500G 7200	Intel 6205	WWAN upg	Modem	Finger	Blue	9	vPro	G	Pro 64

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

Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i5-2520M processor (dual-core, 2.50GHz, 3MB Cache) , DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-2540M processor (dual-core, 2.60GHz, 3MB Cache) , DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-2640M processor (dual-core, 2.80GHz, 4MB Cache) , DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.50GHz), HT technology		Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 64 Ready to install applications ¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Fingerprint Software (fingerprint models) • Password Manager (fingerprint models) • ThinkVantage System Update • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo SimpleTap Preloaded applications ¹⁴ (only some listed) • Norton™ Internet Security 2011 (30 days of virus definitions) • Adobe® Reader® • Skype™ for Windows • Windows Live™ Essentials • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW) • Corel DVD MovieFactory® Lenovo Edition (DVD±RW)
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets		
Optical Ultrabay SATA disk	DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive		
mSATA™ SSD	None		
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		
Camera	HD720p resolution, wider view angle, low light sensitive, fixed focus		
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 3000 in processor, and NVIDIA NVS™ 4200M , 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 optional cable); supports three independent displays; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via optional cable)		
Keyboard TrackPoint® Touchpad ThinkLight™	7 row, 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 & HD+:</i> 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>FHD:</i> 14.68" x 9.65" x 1.29-1.44"; 372.8mm x 245.1mm x 32.8-36.6mm		
Weight ²	<i>6-cell:</i> starting at 5.67 lb (2.57kg); <i>9-cell:</i> starting at 6.02 lb (2.73kg)		
Case material	<i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint		
Battery - type	Lithium Ion 6-cell or 9-cell, support optional Slice battery as 2nd battery at bottom		
Battery - life ¹⁰	<i>6-cell (57Whr):</i> up to 7.6 hr; <i>9-cell (94Whr):</i> up to 12.6 hr; <i>9-cell plus slice battery:</i> up to 25.3 hr		
Chipset	Mobile Intel QM67 Express Chipset		
ExpressCard	One slot (ExpressCard/34)		
Smart Card Read	None		
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)		
Ports	<i>Integrated model:</i> Four USB 2.0 (one powered), <i>Optimus model:</i> Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)		
PCIe Mini Card	Two PCI Express Mini Card slots		
WLAN ⁴	11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2		
WWAN	Wireless WAN upgradable		
Carrier	None		
Modem	<i>Some:</i> 56K V.92 ⁶ modem		
Bluetooth™	<i>Some:</i> Bluetooth 3.0 wireless, LED indicator		
Ethernet	Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1		
Intel AMT	Intel Active Management Technology (iAMT)		
Audio support	High Definition (HD) Audio, Conexant 20672 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, 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	<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		
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			

See footnotes for more detailed information
 WE model(s) announced February 22 or October 11, 2011
 WE model(s) withdrawn effective December 2012

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ThinkPad® T520 4243 (Onsite) - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCle Mini Card WLAN	PCle Mini Card WWAN/mSATA	Carrier	Modem	Smart Card Reader	Finger print reader	Bat- tery Adapter (watt)	Power Intel vPro	Global (G) GMP (P)	Pre-load
4243-4YG	i5-2520M	2GBx2	15.6" HD	720p	320G 7200	Intel 6205 ²⁸	Ericsson	selectable	Modem		Finger	6	65W vPro		Pro 64
4243-3WG	i5-2520M	4GBx1	15.6" FHD		320G 7200	Intel 6205	upg		Modem	Smart	Finger	6	65W vPro		Pro 64
4243-3RG	i5-2540M	4GBx1	15.6" HD	720p	250G 5400	Intel 6205	Ericsson	selectable	Modem		Finger	6	65W vPro		Pro 64
4243-4WG	i5-2520M	4GBx1	15.6" HD	720p	500G 7200	Intel 6205	upg		Modem		Finger	6	65W vPro	G P	Pro 64
4243-29G	i5-2520M	2GBx2	15.6" HD	720p	320G 7200	Intel 6205	upg					6	65W vPro	G P	Pro 64
4243-5JG	i7-2640M	4GBx1	15.6" HD+	720p	500G 7200	Intel 6300 ²⁸	Ericsson	selectable			Finger	6	90W vPro		Pro 64
4243-5ZG	i5-2520M	4GBx1	15.6" HD	720p	160G SSD	Intel 6205	upg				Finger	6	65W vPro	G P	Pro 64
<ul style="list-style-type: none">• Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty• Microsoft[®] Office 2010 Product Key Ready (O10PKR)															
Positioning Processor	<i>Premiere performance; two spindles</i> Intel[®] Core[™] i5-2520M processor (dual-core, 2.50GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-2540M processor (dual-core, 2.60GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-2640M processor (dual-core, 2.80GHz, 4MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.50GHz), HT technology										Preloaded operating system²⁰ - Genuine Windows [®] 7 Professional 64 Ready to install applications¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery[™]• Access Connections[™]• Fingerprnt Software (fingerprint models)• Password Manager (fingerprint models)• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Lenovo SimpleTap				
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets														
Optical Ultrabay SATA disk	DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System [™] <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive														
mSATA [™] SSD	None														
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 <i>Some:</i> 15.6" (396mm) FHD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut										Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none">• Norton[™] Internet Security 2011 (30 days of virus definitions)• Adobe[®] Reader[®]• Skype[™] for Windows• Windows Live[™] Essentials• Microsoft Office 2010 preloaded; purchase product key to activate• Corel[®] WinDVD[®] (DVD±RW)• Corel Burn.Now[™] Lenovo Edition (DVD±RW)• Corel DVD MovieFactory[®] Lenovo Edition (DVD±RW)				
Camera	<i>Some:</i> HD720p resolution, wider view angle, low light sensitive, fixed focus														
Graphics	Intel HD Graphics 3000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via optional cable); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via optional cable)														
Keyboard TrackPoint [®] Touchpad ThinkLight [™]	7 row, 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 & HD+:</i> 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>FHD:</i> 14.68" x 9.65" x 1.29-1.44"; 372.8mm x 245.1mm x 32.8-36.6mm														
Weight ¹²	<i>6-cell:</i> starting at 5.54 lb (2.51kg); <i>9-cell:</i> starting at 5.89 lb (2.67kg)														
Case material	<i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint														
Battery - type	Lithium Ion 6-cell or 9-cell, support optional Slice battery as 2nd battery at bottom														
Battery - life ¹⁰	<i>6-cell (57Whr):</i> up to 7.7 hr; <i>9-cell (94Whr):</i> up to 12.8 hr; <i>9-cell plus slice battery:</i> up to 25.6 hr														
Chipset ExpressCard Smart Card Read Multicard Reader Ports	Mobile Intel QM67 Express Chipset One slot (ExpressCard/34) <i>Some:</i> Smart Card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) <i>Integrated model:</i> Four USB 2.0 (one powered), <i>Optimus model:</i> Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)														
PCle Mini Card WLAN ⁴	Two PCI Express Mini Card slots <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino [®] Advanced-N 6205, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Ultimate-N 6300, 3x3 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson [®] F5521gw Mobile Broadband Module, PCIe Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS														
WWAN	<i>Some:</i> User selectable, contract required with service provider														
Carrier Modem	<i>Some:</i> 56K V.92 ⁶ modem														
Bluetooth [™]	Bluetooth 3.0 wireless, LED indicator														
Ethernet	Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1														
Intel AMT	Intel Active Management Technology (iAMT)										Supports ThinkVantage [®] technologies				
Audio support	High Definition (HD) Audio, Conexant 20672 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack										65-watt or 90-watt AC adapter ThinkPad Roll Cage (one-piece magnesium frame) EPEAT [™] Gold rating ENERGY STAR [®] 5.0-compliant RoHS-compliant				
Security Security chip	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant										International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²				
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-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available														

See footnotes for more detailed information
WE model(s) announced February 22, March 1, or August 2, 2011, or January 3, 2012
WE model(s) withdrawn effective December 2012

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ThinkPad® T520 4243 (Optimus) - Onsite - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Disk SATA GB ⁹ rpm	PCIe Mini Card WLAN	PCIe Mini Card WWAN/mSATA	Carrier	Modem	Finger print reader	Blue-tooth	Bat-tery cells	Power Adapter (watt)	Global (G) Intel vPro GMP (P)	Pre-load
4243-4VG	i5-2520M	4GBx1	15.6" HD	500G 7200	Intel 6205 ²⁸	WWAN upg		Modem	Finger	Blue	9	90W	vPro G P	Pro 64
4243-28G	i5-2540M	2GBx2	15.6" HD+	500G 7200	Intel 6205	WWAN upg				Blue	9	90W	vPro G P	Pro 64
4243-27G	i5-2520M	2GBx1	15.6" HD	320G 7200	Intel 6205	WWAN upg					9	90W	vPro G P	Pro 64
4243-3UG	i7-2720QM	4GBx1	15.6" FHD	500G 7200	Intel 6300 ²⁸	Ericsson	selectable	Modem	Finger	Blue	9	135W	vPro	Pro 64
<ul style="list-style-type: none">Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warrantyMicrosoft® Office 2010 Product Key Ready (O10PKR)														
Positioning Processor	Premiere performance; two spindles Intel® Core™ i5-2520M processor (dual-core, 2.50GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i5-2540M processor (dual-core, 2.60GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology Intel Core i7-2720QM processor (quad-core, 2.20GHz, 6MB Cache), DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology										Preloaded operating system ²⁰ - Genuine Windows® 7 Professional 64 Ready to install applications ¹⁴ (only some listed) <ul style="list-style-type: none">Rescue and Recovery™Access Connections™Fingerprint Software (fingerprint models)Password Manager (fingerprint models)ThinkVantage System UpdateThinkVantage Power ManagerThinkVantage ToolboxLenovo SimpleTap			
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets										Preloaded applications ¹⁴ (only some listed) <ul style="list-style-type: none">Norton™ Internet Security 2011 (30 days of virus definitions)Adobe® Reader®Skype™ for WindowsWindows Live™ EssentialsMicrosoft Office 2010 preloaded; purchase product key to activateCorel® WinDVD® (DVD±RW)Corel Burn.Now™ Lenovo Edition (DVD±RW)Corel DVD MovieFactory® Lenovo Edition (DVD±RW)			
Optical Ultrabay SATA disk	DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access Some: Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ All: removable, upgradable, supports the second disk, Shock Mounted Hard Drive													
mSATA™ SSD	None													
Widescreen display	Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut Some: 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio, 60% Gamut Some: 15.6" (396mm) FHD (1920x1080) color, anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut													
Camera	HD720p resolution, wider view angle, low light sensitive, fixed focus													
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, and Intel HD Graphics 3000 in processor, and NVIDIA NVS™ 4200M, 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 optional cable); supports three independent displays; Maximum external resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via optional cable)													
Keyboard TrackPoint® Touchpad ThinkLight™	7 row, 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	HD & HD+: 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm FHD: 14.68" x 9.65" x 1.29-1.44"; 372.8mm x 245.1mm x 32.8-36.6mm													
Weight ²	6-cell: starting at 5.67 lb (2.57kg); 9-cell: starting at 6.02 lb (2.73kg)													
Case material	Display cover: Carbon-fiber / Glass-fiber hybrid; Bottom: Glass-fiber reinforced plastic without paint													
Battery - type	Lithium Ion 6-cell or 9-cell, support optional Slice battery as 2nd battery at bottom													
Battery - life ¹⁰	6-cell (57Whr): up to 7.6 hr; 9-cell (94Whr): up to 12.6 hr; 9-cell plus slice battery: up to 25.3 hr													
Chipset ExpressCard Smart Card Read Multicard Reader Ports	Mobile Intel QM67 Express Chipset One slot (ExpressCard/34) None 4-in-1 reader (MMC, SD, SDHC, SDXC) Integrated model: Four USB 2.0 (one powered), Optimus model: Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)													
PCIe Mini Card WLAN ⁴	Two PCI Express Mini Card slots Some: 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Some: 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Ultimate-N 6300, 3x3													
WWAN	Some: Wireless WAN upgradable Some: Wireless WAN, Ericsson® F5521gw Mobile Broadband Module, PCIe Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS													
Carrier	Some: User selectable, contract required with service provider													
Modem	Some: 56K V.92 ⁶ modem													
Bluetooth™	Some: Bluetooth 3.0 wireless, LED indicator													
Ethernet	Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1													
Intel AMT	Intel Active Management Technology (iAMT)										Supports ThinkVantage® technologies			
Audio support	High Definition (HD) Audio, Conexant 20672 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, mic mute button, combo audio/mic jack										90-watt or 135-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			
Security	Power-on password, hard disk password, supervisor password, security keyhole													
Security chip	Trusted Platform Module, TCG 1.2-compliant													
Fingerprint reader	Some: 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 service ²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available													

See footnotes for more detailed information
 WE model(s) announced February 22, 2011
 WE model(s) withdrawn effective December 2012

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ThinkPad® T520 4243 (Optimus) - Onsite (October 2011) - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Disk SATA GB ³ rpm	PCIe Mini Card WLAN	PCIe Mini Card WWAN/msATA	Carrier	Modem	Finger print reader	Bat- tery Adapter (watt)	Intel AMT	Intel vPro	Global (G) GMP (P)	Pre-load
4243-5UG	i7-2640M	4GBx1	15.6" HD+	500G 7200	Intel 6205 ²⁸	WWAN upg		Modem	Finger	9 90W	iAMT	vPro	G P	Pro 64
4243-5HG	i7-2670QM	4GBx1	15.6" HD+	500G 7200	Intel 6300 ²⁸	Ericsson	selectable		Finger	9 135W				Pro 64
4243-5GG	i7-2670QM	4GBx1	15.6" FHD	160G SSD	Intel 6300	Ericsson	selectable		Finger	9 135W				Pro 64
<ul style="list-style-type: none">• Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty• Microsoft® Office 2010 Product Key Ready (O10PKR)														
Positioning Processor	<i>Premiere performance; two spindles</i> Intel® Core™ i7-2640M processor (dual-core, 2.80GHz, 4MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.50GHz), HT technology Intel Core i7-2670QM processor (quad-core, 2.20GHz, 6MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology									Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Fingerprint Software (fingerprint models)• Password Manager (fingerprint models)• ThinkVantage System Update• ThinkVantage Power Manager• ThinkVantage Toolbox• Lenovo SimpleTap Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none">• Norton™ Internet Security 2011 (30 days of virus definitions)• Adobe® Reader®• Skype™ for Windows• Windows Live™ Essentials• Microsoft Office 2010 preloaded; purchase product key to activate• Corel® WinDVD® (DVD±RW)• Corel Burn.Now™ Lenovo Edition (DVD±RW)• Corel DVD MovieFactory® Lenovo Edition (DVD±RW)				
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets													
Optical Ultrabay SATA disk	DVD burner, 12.7mm Ultrabay Enhanced, removable One bay for removable devices, Ultrabay Slim-compatible, 12.7mm high, bottom access <i>Some:</i> Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ <i>All:</i> removable, upgradable, supports the second disk, Shock Mounted Hard Drive													
mSATA™ SSD	None													
Widescreen display	<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 <i>Some:</i> 15.6" (396mm) FHD (1920x1080) color , anti-glare, LED backlight, 270 nits, 16:9 aspect ratio, 500:1 contrast ratio, 95% Gamut													
Camera	HD720p resolution, wider view angle, low light sensitive, fixed focus													
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 3000 in processor, and NVIDIA NVS™ 4200M , 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 optional cable); supports three independent displays; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz; 1920x1200 @60Hz (single-link DVI-D via optional cable)													
Keyboard TrackPoint® Touchpad ThinkLight™	7 row, 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 & HD+:</i> 14.68" x 9.65" x 1.25-1.40"; 372.8mm x 245.1mm x 31.8-35.6mm <i>FHD:</i> 14.68" x 9.65" x 1.29-1.44"; 372.8mm x 245.1mm x 32.8-36.6mm													
Weight ²	<i>6-cell:</i> starting at 5.67 lb (2.57kg); <i>9-cell:</i> starting at 6.02 lb (2.73kg)													
Case material	<i>Display cover:</i> Carbon-fiber / Glass-fiber hybrid; <i>Bottom:</i> Glass-fiber reinforced plastic without paint													
Battery - type	Lithium Ion 6-cell or 9-cell, support optional Slice battery as 2nd battery at bottom													
Battery - life ¹⁰	<i>6-cell (57Whr):</i> up to 7.6 hr; <i>9-cell (94Whr):</i> up to 12.6 hr; <i>9-cell plus slice battery:</i> up to 25.3 hr													
Chipset	Mobile Intel QM67 Express Chipset													
ExpressCard	One slot (ExpressCard/34)													
Smart Card Read	None													
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)													
Ports	<i>Integrated model:</i> Four USB 2.0 (one powered), <i>Optimus model:</i> Three USB 2.0 (one powered), one USB 2.0/eSATA combo port, external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45), IEEE 1394 FireWire 400 (4-pin connector; 1394a-2000 standard)													
PCIe Mini Card WLAN ⁴	Two PCI Express Mini Card slots <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Ultimate-N 6300, 3x3													
WWAN	<i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® F5521gw Mobile Broadband Module, PCIe Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS													
Carrier	<i>Some:</i> User selectable, contract required with service provider													
Modem	<i>Some:</i> 56K V.92 ⁶ modem													
Bluetooth™	Bluetooth 3.0 wireless, LED indicator													
Ethernet	Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1													
Intel AMT	<i>Some:</i> Intel Active Management Technology (iAMT)													
Audio support	High Definition (HD) Audio, Conexant 20672 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array mic, 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-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available									Supports ThinkVantage® technologies 90-watt or 135-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				

See footnotes for more detailed information

WE model(s) announced August 2 or October 11, 2011

WE model(s) withdrawn effective December 2012

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