

ThinkPad W541 Platform Specifications

Product Specifications Reference (PSREF)

Processor	4th Generation Intel® Core™ i5 / i7 / i7 Extreme Processor								Dimensions ³	15.6" (WxDxH): 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm			
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	Weight ²	6-cell: starting at 5.57 lb (2.53 kg); 9-cell: starting at 5.95 lb (2.70 kg)			
	i5-4210M	2	4	2.6 GHz	3.2 GHz	3MB	DDR3L-1600	Intel HD Graphics 4600	Case material	Glass-Fiber Reinforced Plastic			
	i5-4340M			2.9 GHz	3.6 GHz	3MB			Smart card reader	Optional: Smart card reader			
	i7-4600M			2.9 GHz	3.6 GHz	4MB			ExpressCard	One slot (ExpressCard/34)			
	i7-4710MQ	4	8	2.5 GHz	3.5 GHz	6MB			Media reader	4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card			
	i7-4810MQ			2.8 GHz	3.8 GHz	6MB			Ports	Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort / Thunderbolt, Ethernet (RJ-45), Dock connector			
	i7-4910MQ			2.9 GHz	3.9 GHz	8MB			Camera (optional)	HD720p resolution, low light sensitive, fixed focus			
i7-4940MX	3.1 GHz			4 GHz	8MB	Audio support			HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack				
Graphics	Intel HD Graphics 4600 in processor and NVIDIA Quadro® K1100M or K2100M, 2GB memory; supports external analog monitor via VGA and digital monitor via Mini DisplayPort / Thunderbolt™; supports three independent displays; Max resolution: 3840x2160@60Hz (DisplayPort via Mini DisplayPort cable); 3840x2160@60Hz (Thunderbolt); 1920x1200@60Hz (VGA)								Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight			
Chipset	Mobile Intel QM87 Express Chipset								UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch			
Memory	dual-core model: 16GB max ⁷ , two 204-pin SO-DIMM sockets quad-core model: 32GB max, four 204-pin SO-DIMM sockets, only 4+4, 8+8, 4+4+4+4, and 8+8+8+8 combinations supported All: PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable								Security	Power-on password, hard disk password, supervisor password, security keyhole			
Display	Some: 15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), anti-glare, LED backlight, 350 nits, 16:9 aspect ratio, 1000:1 contrast ratio, IPS								Security chip	Trusted Platform Module, TCG 1.2-compliant			
Multi-touch	None								ThinkEngine	Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures			
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Shock Mounted Hard Drive, Active Protection System™ All: removable, upgradable, supports the second disk								vPro (optional)	Intel vPro Technology			
M.2 SSD (opt)	16GB M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card								Fingerprint reader	Optional: Fingerprint reader on the palm rest, swipe sensor			
Optical (optional)	DVD burner, 9.5mm Ultrabay slim, removable								Color calibration	Optional: Pantone® color calibrator by X-Rite® color calibration sensor in palm rest, LED indicator			
Ultrabay	One modular bay for removable devices (right side, cold swap), 9.5mm high, bottom access								Battery type	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication			
Ethernet	Intel Ethernet Connection I217-LM (Clarkville)								Max battery life ¹⁰	6-cell: up to 6.2 hr; 9-cell: up to 11.1 hr			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								AC adapter	dual-core: 135W AC adapter; quad-core: 170W AC adapter			
WLAN ⁴	One of the following, configurable by model: • 11b/g/n, ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card • 11b/g/n, Intel Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card • 11a/b/g/n, Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT adapter, M.2 card • 11ac, Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT adapter, M.2 card								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit or Windows 10 Pro 64 • Lenovo Solution Center • ThinkVantage Product Recovery • Rescue and Recovery™ • ThinkVantage System Update • Lenovo Cloud Storage by SugarSync • PC Device Stage • Adobe® Reader® • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) • Cyberlink PowerDVD (DVD±RW) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) For ISV certifications, please visit www.lenovo.com/support/ISV			
WWAN (optional)	One of the following, configurable by model (mutually exclusive with M.2 SSD): • Wireless WAN upgradable • Wireless WAN, Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS, M.2 card (US models) • Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE models) • Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card (WE models)								Limited warranty ¹²	One of the following, configurable by model: • 1-year depot repair service • 3-year/1-yr battery depot repair service • 3-year/1-yr battery limited onsite service ²⁴ • 3-year/1-yr battery limited onsite service, OID (Onsite International Delivery)			
SIM card (optional)	One of the following, configurable by model: • AT&T® or Verizon® LTE (4G), contract required with service provider • User selectable, contract required with service provider								Mil-Spec test	MIL-STD-810G military certification			
									Environment	EPEAT™ Gold; ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant			

Model	20EF0011++
Product	W541
Region	WE
Machine Type	20EF
TopSeller	TopSeller
Processor	i7-4710MQ (4C, 2.5 / 3.5GHz, 6MB, 1600MHz)
vPro	No
Graphics	NVIDIA Quadro K1100M
Memory	4GBx1
Display	15.6" FHD (1920x1080)
Storage	500GB 7200rpm
RAID	No
Optical	DVD±RW
WLAN &Bluetooth	Intel 7260 ac + BT4.0
WWAN / M.2 SSD	WWAN upgradable
SIM Card	None
Smart Card Reader	Smart Card Reader
Camera	720p
Backlit Keyboard	Backlit Keyboard
Numeric Keypad	Numeric Keypad
Fingerprint Reader	Fingerprint Reader
NFC	None
Color Calibrator	None
Battery Cells	9-cell (99.9Wh)
Power Adapter (watt)	170W
Preload	Windows 8.1 DG Windows 7 Pro 64
Base Warranty	3-year onsite
Global	No
Ann Date (mm/yy)	01/15



