ThinkPad T540p Platform Specifications

Positioning	*Premiere performance; two spindles*
Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor

Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics
i3-4000M			2.4 GHz	-	3MB		
i3-4100M			2.5 GHz	-	3MB		
i5-4200M			2.5 GHz	3.1 GHz	3MB		
i5-4210M	2	4	2.6 GHz	3.2 GHz	3MB		
i5-4300M			2.6 GHz	3.3 GHz	3MB		
i5-4330M			2.8 GHz	3.5 GHz	3MB	DDR3L-1600	Intel HD Graphics 4600
i7-4600M			2.9 GHz	3.6 GHz	4MB		
i7-4700MQ			2.4 GHz	3.4 GHz	6MB		
i7-4710MQ	4	8	2.5 GHz	3.5 GHz	6MB		
i7-4800MQ			2.7 GHz	3.7 GHz	6MB		
i7-4900MQ			2.8 GHz	3.8 GHz	8MB		

Memory	16GB max[7] / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets
Optical Ultrabay	DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high, bottom access
Storage M.2 SSD	*Some:* Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high *Some:* Hard Disk Drive (HDD) / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™ *All:* removable, upgradable, supports the second disk, Shock Mounted *Some:* M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card
Widescreen display Camera *(optional)*	*Some:* 15.6" (396mm) **HD (1366x768)**, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 400:1 contrast ratio *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** HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus
Graphics	**Intel HD Graphics 4600** in processor only, or **Intel HD Graphics 4600** in processor and **NVIDIA GeForce® GT 730M**, PCI Express® x8, **1GB** memory, NVIDIA® Optimus™ technology; supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; *Max resolution:* 1920x1200@60Hz (VGA); 3840x2160@60Hz (DP via mDP cable)
Keyboard UltraNav™ ThinkLight™	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch None
Dimensions[3]	HD (WxDxH): 14.83" x 9.77" x 1.18-1.33"; 376.6mm x 248.1mm x 29.9-33.9mm FHD / 3K: 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm

Weight[2]		
Models	6-cell	9-cell
Integrated	5.31 lb / 2.41kg	5.65 lb / 2.56kg
Optimus	5.43 lb / 2.46kg	5.80 lb / 2.63kg

Case material	Glass-Fiber Reinforced Plastic
Battery type Max battery life[10]	Li-Ion 6-cell *(56Wh)* or 9-cell *(99.9Wh)*, HW Authentication

Models	6-cell	9-cell
Integrated	7 hr	12.5 hr
Optimus	6.2 hr	11 hr

AC adapter	65-watt, 90-watt, or 135-watt AC adapter
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack

Bluetooth™ Ethernet NFC	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter Intel Ethernet Connection I217-LM (Clarkville) *Optional:* Near Field Communication
Chipset ExpressCard Smart card reader Media reader Ports	**Mobile Intel QM87 Express Chipset** One slot (ExpressCard/34) *Optional:* Smart card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector
WLAN[4]	*One of the following, configurable by model:* • ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card • Intel Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card • Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card • Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card
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)
SIM card *(optional)*	*One of the following, configurable by model:* • AT&T® or Verizon® LTE (4G), contract required with service provider (US models) • Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required (WE models) • User selectable, contract required with service provider
Security Security chip vPro *(optional)* Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology *Optional:* Fingerprint reader on the palm rest, swipe sensor
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)
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) *Some:* Windows 8 / 8.1 64-bit *Some:* Windows 8 / 8.1 Pro 64-bit *Some:* Windows 10 Pro 64 • Lenovo Solution Center • Lenovo SHAREit • Lenovo REACHit • Lenovo Companion • Microsoft Office preloaded; purchase a product key to activate • Norton Internet Security (30 days of virus definitions, Win8 w/o i5/i7 model) • McAfee® LiveSafe™ (30-day trial, Win8 i5/i7 and Win10 model)
Mil-Spec test	MIL-STD-810G military certification
Environment	EPEAT™ Gold; ENERGY STAR® 6.0; GREENGUARD®; RoHS-compliant

Model	20BF005U++
Product	T540p
Region	WE
Machine Type	20BF
TopSeller	No
Processor	i5-4300M (2C, 2.6 / 3.3GHz, 3MB, 1600MHz)
vPro	vPro
Graphics	Intel HD Graphics 4600
Memory	4GBx1
Display	15.6" HD (1366x768)
Storage	500GB 7200rpm
Optical	DVD±RW
WLAN &Bluetooth	Intel 7260 a/b/g/n + BT4.0
WWAN / M.2 SSD	WWAN upgradable
SIM Card	None
Smart Card Reader	None
Express Card	ExpressCard/34
Camera	720p
Backlit Keyboard	None
Numeric Keypad	Numeric Keypad
Fingerprint Reader	Fingerprint Reader
NFC	None
Battery Cells	6-cell (56Wh)
Power Adapter (watt)	65W
Preload	Windows 8.1 DG Windows 7 Pro 64
Base Warranty	1-year depot
Global	Yes
Ann Date (mm/yy)	04/14