ThinkPad T450 Platform Specifications

Product Specifications Reference (PSREF)

Processor	4th Generation Intel [®] Core™ i3 / i5 or 5th Generation Intel Core i3 / i5 / i7 Processor								Dimensions ³	<i>14.0" (WxDxH):</i> 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm				
	Processor	# of	_ # of	Base	Max Turbo	Cache	Memory	Processor	Weight ²	14.0" Touch Models	(WxDxH): 13.35" x 9 No + 3-cell	9.15" x 0.91"; 339m 3-cell + 3-cell	m x 232.5mm x 23mm 3-cell + 6-cell	
	Number	Cores	Threads		Frequency		Types	Graphics	, toight	Non-touch	3.58 lb / 1.63 kg	3.81 lb / 1.73 kg	4.21 lb / 1.91 kg	
	i3-4030U i5-4300U			1.9 GHz 1.9 GHz	- 2.9 GHz	3MB		Intel HD Graphics 4400		Multi-touch	3.89 lb / 1.76 kg	4.11 lb / 1.87 kg	4.52 lb / 2.05 kg	
	i3-5010U			2.1 GHz	2.9 GHZ			4400	Case material	Display cove	<u> </u>	forced Plastic (non-t	<u> </u>	
	i5-5200U i5-5300U	2	4	2.2 GHz 2.3 GHz	2.7 GHz 3MB 2.9 GHz	3MB	DDR3L-1600	Intel HD Graphics		Bottom:		inforced Plastic (mul		
	i7-5500U			2.3 GHz	3 GHz			5500	Smart card reade					
	i7-5600U			2.6 GHz	3.2 GHz	4MB			Media reader Ports	4-in-1 reader (MMC, SD, SDHC, SDXC) Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45),				
Graphics	Intel HD Graphics 4400 or 5500 in processor,								FUIS	Dock connector (integrated models only)				
	supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; Max resolution: 3840x2160@60Hz (DP via mDP cable); 1920x1200@60Hz (VGA)								Camera Audio support	HD720p resolution, low light sensitive, fixed focus HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack				
Chipset Memory	Intel SoC (System on Chip) platform 16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity,								Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch				
Display	dual-channel capable, two 204-pin SO-DIMM sockets Some: 14.0" (355mm) HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 350:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), anti-glare, LED backlight,								Security Security chip ThinkEngine vPro (optional) Fingerprint reade	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures Intel vPro Technology or <i>Optional:</i> Fingerprint reader on the keyboard bezel, swipe sensor				
Multi-touch (opt)	300 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS Capacitive-type multi-touch, supports 10-finger gesture, 212.5 nits								Internal battery External battery Max battery life ¹⁰	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)				
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable										<u>(23Wh)</u> or 6-cell (48	/		
Slolage	Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, upgradable, Shock Mounted Hard Drive, Active Protection System™									Models Battery life	<i>3-cell + 3-cell</i> 10.08 hr	<i>3-cell + 6-cell 48Wh</i> 14.78 hr	<i>3-cell + 6-cell 72Wh</i> 19.78 hr	
	Some: SSHD with 8GB NAND flash memory								AC adapter	45W AC ada	pter, 65W Slim AC a	dapter, or 65W AC a	dapter	
M.2 SSD <i>(opt)</i> Optical	Single-sided M.2 SSD, via M.2 card slot								Preload	Windows [®] 7 Professional 64 preinstalled <i>Some:</i> Windows 8.1 64-bit through downgrade rights in <i>Some:</i> Windows 8.1 Pro 64-bit				
Ethernet					nection I218					Windows 8.1	Pro 64-bit or		lows 10 Pro 64	
Bluetooth™	 vPro model: Intel Ethernet Connection I218-LM (Clarkville) Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter 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 7265, 2x2, Wi-Fi + BT, M.2 card (WE only) 11a/b/g/n, Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT adapter, M.2 card 									 Windows 10 Pro 64 Lenovo Solution Center Lenovo SHAREit Lenovo SHAREit Lenovo REACHit Lenovo Companion Microsoft Office preloaded; purchase a product key to activate Norton™ Internet Security (30 days of virus definitions) Lenovo Solution Center Lenovo SHAREit Lenovo Companion Microsoft Office preloaded; purchase a product key to activate Norton Internet Security (30 days of virus definitions) Lenovo Solution Center Lenovo SHAREit Lenovo Companion Microsoft Office preloaded; purchase a product key to activate Norton Internet Security (30 days of virus definitions) Microsoft Office preloaded; purchase a product key to activate Norton Internet Security (30 days of virus definitions) 				
WLAN ⁴														
WWAN (optional)	 One of the following, configurable by model: Wireless WAN upgradable Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE only) Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card]					
									Limited warranty ¹² One of the following, configurable by model: • 1-year depot repair service					
SIM card (opt)	AT&T [®] or Verizon [®] LTE (4G), contract required with service provider]	 3-year/1-yr battery depot repair service 3-year/1-yr battery limited onsite service²⁴ 3-year/1-yr battery limited onsite service, OID (Onsite International Delivery) 				
									Environment		ld (US) or EPEAT Sil IAR® 6.1; GREENGU		ant	