## ThinkPad T480 Platform Specifications

Processor	7th Generation Intel® Core™ i5 Processor								Dimensions	WxDxH: 13.25" x 9.15" x 0.79"; 336.6mm x 232.5mm x 19.95mm			
	Processor # of # of Base Max Turbo Cache Memory Processor								Weight	Models		24Wh or 24Wh + 24Wh	48Wh, 72Wh, or 24Wh + 48Wh / 72Wh
	Number	Cores	Threads	Frequency	Frequency	3MB	Types DDR4-2133	Graphics Intel HD Graphics 620		Integrated Mag	gnesium	3.49 lb / 1.58 kg	3.92 lb / 1.78 kg
	i5-7200U	2	4	2.5 GHz	3.1 GHz					Integrated PPS		3.63 lb / 1.65 kg	4.08 lb / 1.85 kg
	i5-7300U		7	2.6 GHz	3.5 GHz	3MB	BB111 2100			Discrete Magn		3.53 lb / 1.60 kg	3.97 lb / 1.80 kg
	or 8th Generation Intel Core i5 / i7 Processor									Discrete PPS 3.68 lb / 1.67 kg 4.12 lb / 1.87 kg			
	Processor Number	nber Cores Threads Frequency Frequency Cache				Memory Types		Case color Case material	Black  Display cover: Magnesium Hybrid or PPS;  Bottom: Glass-Fiber Reinforced Plastic				
	i3-8130U i5-8250U i5-8350U i7-8550U i7-8650U	4	8	2.2 GHz 1.6 GHz 1.7 GHz 1.8 GHz 1.9 GHz	3.4 GHz 3.4 GHz 3.6 GHz 4.0 GHz 4.2 GHz	4MB 6MB 6MB 8MB	DDR4-2400	Intel UHD Graphics 620		r Optional: Smart card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.1 Gen 1 (one Always On), USB 3.1 Type-C Gen 1, USB 3.1 Type-C Gen 2 / Thunderbolt 3, HDMI 1.4b, Ethernet (RJ-45), nano-SIM card slot (WWAN models), headphone / microphone combo jack,			
Graphics	Intel HD Graphics 620 or Intel UHD Graphics 620 in processor only or Intel HD Graphics 620 or Intel UHD Graphics 620 in processor and NVIDIA® GeForce® MX150, 2GB GDDR5 memory; supports external digital monitor via HDMI or USB Type-C; supports three independent displays;								Monitor cable (optional) Camera (optional)	optional smart card reader, 4-in-1 reader (MMC, SD, SDHC, SDXC), side docking connector, security keyhole USB-C to VGA: Lenovo USB-C to VGA Adapter USB-C to DP: Lenovo USB-C to DisplayPort Adapter  One of the following, configurable by model:			
Chipset Memory	Max resolution: 4096x2304@60Hz (USB Type-C); 4096x2160@30Hz (HDMI)  Intel SoC (System on Chip) platform 32GB max / 2400MHz DDR4, dual-channel capable, two DDR4 SO-DIMM sockets * System clocks down for processors with lower memory controller								Audio support	<ul> <li>HD720p camera with ThinkShutter camera privacy, fixed focus</li> <li>IR camera and HD720p camera, fixed focus</li> <li>HD Audio, Realtek® ALC3287 codec, Dolby® Audio™ Premium / stereo speakers, 2W x 2 / dual array microphone, headphone / microphone combo jack</li> </ul>			
Display	Some: 14.0" (355mm) HD (1366x768), anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 400:1 contrast ratio  Some: 14.0" (355mm) FHD (1920x1080), anti-glare, LED backlight, IPS, 250 nits, 16:9 aspect ratio, 700:1 contrast ratio, 170° viewing angle  Some: 14.0" (355mm) WQHD (2560x1440), anti-glare, LED backlight, IPS, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, 72% gamut, 170° viewing angle  On-cell touch, supports 10-finger gesture (FHD only)								Keyboard UltraNav™	6-row, spill-re TrackPoint®p	esistant, r ointing d	multimedia Fn keys, opt evice and buttonless My	onal LED backlight rlar surface multi-touch touchpad
Multi-touch (opt)									Security Power-on password, hard disk password, supervisor password, security keyhole Security chip vPro (optional) Intel vPro Technology Fingerprint reader Optional: Touch style match on chip fingerprint reader on the keyboard bezel, anti-spoofing technology NFC (optional) Near Field Communication				
Storage	System has one HDD slot or one M.2 2280 slot exclusively for storage  Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, Active Protection System™  Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high (e.g. xxxGB SSD)  Some: M.2 SSD / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s								Battery  Max battery life (MobileMark® 2014)	external Li-lo	on 24Wh, 24W		
	<ul> <li>Some: 128GB M.2 SSD / PCIe NVMe, PCIe 3.0 x 2, 16Gb/s, in WWAN slot as 2nd Storage, mutually exclusive with WWAN</li> <li>Some: 16GB Intel Optane™ memory, PCIe NVMe, PCIe 3.0 x 2, 16Gb/s, in WWAN slot as storage cache for HDD, mutually exclusive with WWAN</li> </ul>								AC adapter	discrete mode  * Battery life	6.6 h		3.6 hr 19.8 hr 26.4 hr
Optical	None					•	•		Preload	Windows® 10	Home 6	4 or Windows 10 Pro 64	1
Ethernet	Non-vPro model: Intel Ethernet Connection I219-V (Jacksonville) vPro model: Intel Ethernet Connection I219-LM (Jacksonville)							)	Limited warranty	One of the following, configurable by model:  1-year depot repair service			
WLAN + Bluetooth™	Intel Dual Band Wireless-AC 8265, Wi-Fi 2x2 802.11ac + Bluetooth 4.1, M.2 card * Intel 8265ac card supports BT4.2 but is limited to BT4.1 by Windows OS						ows OS		<ul> <li>3-year/1-yr battery depot repair service</li> <li>3-year/1-yr battery limited onsite service</li> </ul>				
WWAN (optional)	- Interveted Makile Dysadlessed 40 LTC								Mil-Spec test	MIL-STD-810	OG militar	ry certification	
CIM cord (ont)									Environment	ronment EPEAT™ Gold; ENERGY STAR® 6.1; RoHS-compliant			
SIM card (opt)	ivano-SIN	card s	iot, optio	ınaı verizon	ILIE (US) S	olivi ca	ra						