



# ThinkPad T580 Platform Specifications

Product Specifications Reference (PSREF)

Processor	7th Generation Intel® Core™ i5 Processor								Dimensions Weight	WxDxH: 14.40" x 9.95" x 0.79-0.80"; 365.8mm x 252.8mm x 19.95-20.2mm																				
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics		<i>Integrated model:</i> starting at 4.29 lb / 1.95 kg; <i>Discrete model:</i> starting at 4.39 lb / 1.99 kg																				
	i5-7200U	2	4	2.5 GHz	3.1 GHz	3MB	DDR4-2133	Intel HD Graphics 620		Black																				
	i5-7300U			2.6 GHz	3.5 GHz	3MB				<i>Display cover:</i> Glass-Fiber Reinforced Plastic (PPS); <i>Bottom:</i> Glass-Fiber Reinforced Plastic																				
	or 8th Generation Intel Core i5 / i7 Processor																													
Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics	Smart card reader	<i>Optional:</i> Smart card reader																					
i5-8250U	4	8	1.6 GHz	3.4 GHz	6MB	DDR4-2400	Intel UHD Graphics 620	Media reader	4-in-1 reader (MMC, SD, SDHC, SDXC)																					
i5-8350U			1.7 GHz	3.6 GHz	6MB			Ports	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, optional smart card reader, 4-in-1 reader (MMC, SD, SDHC, SDXC), side docking connector, security keyhole																					
i7-8550U			1.8 GHz	4.0 GHz	8MB			<i>HDMI to VGA:</i> Lenovo HDMI to VGA Monitor Adapter																						
i7-8650U			1.9 GHz	4.2 GHz	8MB			<i>USB-C to DP:</i> Lenovo USB-C to DisplayPort Adapter																						
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; Max resolution: 4096x2304@60Hz (USB Type-C); 4096x2160@30Hz (HDMI)								Monitor cable <i>(optional)</i>																					
Chipset	Intel SoC (System on Chip) platform								Camera <i>(optional)</i>	<i>One of the following, configurable by model:</i>																				
Memory	32GB max / 2400MHz DDR4, dual-channel capable, two DDR4 SO-DIMM sockets * System clocks down for processors with lower memory controller								Audio support	<ul style="list-style-type: none"><li>• HD720p camera with ThinkShutter camera privacy, fixed focus</li><li>• IR camera and HD720p camera, fixed focus</li></ul> HD Audio, Realtek® ALC3287 codec, Dolby® Audio™ Premium / stereo speakers, 2W x 2 / dual array microphone, headphone / microphone combo jack																				
Display	<i>Some:</i> 15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, IPS, 250 nits, 16:9 aspect ratio, 700:1 contrast ratio, 170° viewing angle <i>Some:</i> 15.6" (396mm) UHD (3840x2160), anti-glare, LED backlight, IPS, 300 nits, 16:9 aspect ratio, 1000:1 contrast ratio, 72% gamut, 170° viewing angle								Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight																				
Multi-touch <i>(opt)</i>	On-cell touch, supports 10-finger gesture (FHD only)								UltraNav™	TrackPoint® pointing device and buttonless Mylar surface multi-touch touchpad																				
Storage	<i>System has one HDD slot or one M.2 2280 slot exclusively for storage</i> <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high (e.g. xxxGB SSD) <i>Some:</i> M.2 SSD / PCIe NVMe, PCIe 3.0 x4, 32Gb/s <i>Some:</i> 128GB M.2 SSD / PCIe NVMe, PCIe 3.0 x 2, 16Gb/s, in WWAN slot as 2nd Storage, mutually exclusive with WWAN <i>Some:</i> 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								Security	Power-on password, hard disk password, supervisor password, security keyhole																				
Optical	None								Security chip	Discrete TPM 2.0, TCG Certified																				
Ethernet	<i>Non-vPro model:</i> Intel Ethernet Connection I219-V (Jacksonville) <i>vPro model:</i> Intel Ethernet Connection I219-LM (Jacksonville)								vPro <i>(optional)</i>	Intel vPro Technology																				
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								Fingerprint reader	<i>Optional:</i> Touch style match on chip fingerprint reader on the palm rest, anti-spoofing technology																				
WWAN <i>(optional)</i>	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"><li>• Integrated Mobile Broadband 4G LTE, Intel XMM™ 7262 (Fibocom L830-EB), M.2 card (EMEA only)</li><li>• Integrated Mobile Broadband 4G LTE-A, Intel XMM™ 7360 (Fibocom L850-GL), M.2 card</li></ul> Nano-SIM card slot, optional Verizon LTE (US) SIM card								NFC <i>(optional)</i>	Near Field Communication																				
SIM card <i>(opt)</i>									Battery	Optional integrated Li-Ion 32Wh battery and external Li-Ion 24Wh, 48Wh, or 72Wh battery																				
									Max battery life <i>(MobileMark® 2014)</i>	<table><tr><td><i>Models</i></td><td><i>24Wh</i></td><td><i>48Wh</i></td><td><i>72Wh</i></td><td><i>32Wh + 24Wh</i></td><td><i>32Wh + 48Wh</i></td><td><i>32Wh + 72Wh</i></td></tr><tr><td><i>Max battery life</i></td><td>5.8 hr</td><td>12.5 hr</td><td>18.1 hr</td><td>13.8 hr</td><td>20.3 hr</td><td>26.1 hr</td></tr></table> * Battery life varies significantly with settings, usage, & other factors							<i>Models</i>	<i>24Wh</i>	<i>48Wh</i>	<i>72Wh</i>	<i>32Wh + 24Wh</i>	<i>32Wh + 48Wh</i>	<i>32Wh + 72Wh</i>	<i>Max battery life</i>	5.8 hr	12.5 hr	18.1 hr	13.8 hr	20.3 hr	26.1 hr
<i>Models</i>	<i>24Wh</i>	<i>48Wh</i>	<i>72Wh</i>	<i>32Wh + 24Wh</i>	<i>32Wh + 48Wh</i>	<i>32Wh + 72Wh</i>																								
<i>Max battery life</i>	5.8 hr	12.5 hr	18.1 hr	13.8 hr	20.3 hr	26.1 hr																								
									AC adapter	45W or 65W USB Type-C AC adapter																				
									Preload	Windows® 10 Home 64 or Windows 10 Pro 64																				
									Limited warranty	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"><li>• 1-year depot repair service</li><li>• 3-year/1-yr battery depot repair service</li><li>• 3-year/1-yr battery limited onsite service</li></ul>																				
									Mil-Spec test	MIL-STD-810G military certification																				
									Environment	EPEAT™ Gold; ENERGY STAR® 6.1; RoHS-compliant																				