

ThinkPad P50s Platform Specifications Product Specifications Reference (PSREF)

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Processor	6th Generation Intel® Core™ i5 / i7 Processor								Smart card reader	Optional: Smart card reader													
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics	Media reader	4-in-1 reader (MMC, SD, SDHC, SDXC)													
	i5-6300U	2	4	2.4 GHz	3 GHz	3MB	DDR3L-1600	Intel HD Graphics 520	Ports	Three USB 3.0 (one Always On), MiniDP, HDMI, Ethernet (RJ-45), Dock connector													
	i7-6500U			2.5 GHz	3.1 GHz	4MB			Camera (optional)HD720p resolution, low light sensitive, fixed focus Audio supportHD Audio, Realtek® ALC3245 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack														
i7-6600U	2.6 GHz			3.4 GHz	4MB																		
Graphics	Intel HD Graphics 520 in processor and NVIDIA Quadro® M500M (2GB memory); supports external digital monitor via HDMI or Mini DisplayPort; supports three independent displays; Max resolution: 3840x2160@60Hz (DisplayPort via Mini DisplayPort cable); 4096x2160@24Hz (HDMI)								Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch													
Chipset	Intel SoC (System on Chip) platform								Security	Power-on password, hard disk password, supervisor password, security keyhole													
Memory	32GB max / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two DDR3L SO-DIMM sockets								Security chip	Trusted Platform Module, TCG 1.2-compliant													
Display	Some: 15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, IPS, 250 nits, 16:9 aspect ratio, 400:1 or 500:1 contrast ratio, 160° viewing angle								ThinkEngine	Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures													
	Some: 15.5" (394mm) 3K (2880x1620), anti-glare, LED backlight, IPS, 350 nits, 16:9 aspect ratio, 1000:1 contrast ratio, 160° viewing angle								vPro (optional)	Intel vPro Technology													
Multi-touch (opt)	In-cell touch, supports 10-finger gesture								Fingerprint reader	Optional: Swipe style fingerprint reader on the palm rest													
Storage	Some: SSD / SATA 6.0Gb/s (e.g. xxxG SSD) Some: SSD / PCIe NVMe, PCIe 3.0 x 2, 16Gb/s (e.g. xxxG SSD PCIe NVMe) Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, Shock Mounted Hard Drive, Active Protection System™ Some: SSHD with 8GB NAND flash memory								Internal battery	Optional: Integrated Li-Polymer 3-cell (44Wh)													
Optical	None								External battery	Li-Ion or Li-Polymer 3-cell (23Wh) or Li-Ion 6-cell (48Wh or 72Wh)													
Ethernet	Non-vPro model: Intel Ethernet Connection I219-V (Jacksonville) vPro model: Intel Ethernet Connection I219-LM (Jacksonville)								Max battery life <sup>10</sup> (MobileMark® 2014)	<table><tr><td>Models</td><td>3 + 3-cell</td><td>3 + 6-cell 48Wh</td><td>3 + 6-cell 72Wh</td></tr><tr><td>Max battery life</td><td>12.0 hr</td><td>16.3 hr</td><td>20.5 hr</td></tr></table>	Models	3 + 3-cell	3 + 6-cell 48Wh	3 + 6-cell 72Wh	Max battery life	12.0 hr	16.3 hr	20.5 hr					
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WLAN <sup>4</sup>	One of the following, configurable by model: • 11ac+BT, Broadcom BCM4356, 2x2, M.2 card • 11ac+BT, Intel Dual Band Wireless-AC 8260, 2x2, M.2 card								AC adapter	65W Slim AC adapter or 65W AC adapter													
Bluetooth™	Bluetooth 4.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter								Preload	Windows 7 Professional 64 preinstalled through downgrade rights in Windows 10 Pro 64 • Lenovo Solution Center • Lenovo Companion • Lenovo Setting • ThinkVantage Product Recovery • Rescue and Recovery™ • ThinkVantage System Update • Adobe® Reader® • Microsoft® Office preloaded; purchase a product key to activate • McAfee® LiveSafe™ (30-day trial) For ISV certifications, please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a>													
WWAN (optional)	One of the following, configurable by model: • Wireless WAN upgradeable • Wireless WAN, Sierra Wireless EM7455, Qualcomm® 4G LTE-Advanced/DC-HSPA+/HSPA+/HSPA/UMTS/GNSS, M.2 card • Wireless WAN, HUAWEI ME906S, HUAWEI 4G LTE/WCDMA/HSPA/GSM/GPRS/EDGE/GNSS, M.2 card (WE only)								Limited warranty <sup>12</sup>	One of the following, configurable by model: • 3-year/1-yr battery depot repair service • 3-year/1-yr battery limited onsite service <sup>24</sup> • 3-year/1-yr battery limited onsite service, OID (Onsite International Delivery)													
SIM card (opt)	Micro-SIM card slot, optional Verizon LTE (US) or Lenovo Connect (WE) SIM card								Mil-Spec test	MIL-STD-810G military certification													
Dimensions <sup>3</sup>	WxDxH: 14.98" x 10.17" x 0.88"; 380.6mm x 258.2mm x 22.45mm								Environment	EPEAT™ Gold (US only); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant													
Weight <sup>2</sup>	<table><tr><td>Models</td><td>No + 6-cell</td><td>3-cell + 3-cell</td><td>3-cell + 6-cell</td></tr><tr><td>Non-touch</td><td>5.27 lb / 2.39 kg</td><td>4.97 lb / 2.25 kg</td><td>5.44 lb / 2.47 kg</td></tr><tr><td>Multi-touch</td><td>-</td><td>5.00 lb / 2.27 kg</td><td>5.42 lb / 2.46 kg</td></tr></table>								Models	No + 6-cell	3-cell + 3-cell	3-cell + 6-cell	Non-touch	5.27 lb / 2.39 kg	4.97 lb / 2.25 kg	5.44 lb / 2.47 kg	Multi-touch	-	5.00 lb / 2.27 kg	5.42 lb / 2.46 kg			
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Case material	Display cover: PPS; Bottom: Glass-Fiber Reinforced Plastic																						