

ThinkPad P50s Platform Specifications

Product Specifications Reference (PSREF)

Processor	6th Generation Intel® Core™ i5 / i7 Processor							Smart card reader <i>Optional</i> : Smart card reader													
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics													
	i5-6300U	2	4	2.4 GHz	3 GHz	3MB	DDR3L-1600	Intel HD Graphics 520													
	i7-6500U			2.5 GHz	3.1 GHz	4MB															
i7-6600U	2.6 GHz			3.4 GHz	4MB																
Media reader	4-in-1 reader (MMC, SD, SDHC, SDXC)							Ports	Three USB 3.0 (one Always On), MiniDP, HDMI, Ethernet (RJ-45), Dock connector												
Camera <i>(optional)</i>	HD720p resolution, low light sensitive, fixed focus							Audio support	HD Audio, Realtek® ALC3245 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack												
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	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight												
Chipset	Intel SoC (System on Chip) platform							UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch												
Memory	32GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two DDR3L SO-DIMM sockets							Security	Power-on password, hard disk password, supervisor password, security keyhole												
Display	<i>Some</i> : 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 <i>Some</i> : 15.5" (394mm) 3K (2880x1620), anti-glare, LED backlight, IPS, 350 nits, 16:9 aspect ratio, 1000:1 contrast ratio, 160° viewing angle							Security chip	Discrete TPM 1.2 TCG Certified and Firmware TPM 2.0 integrated in chipset												
Multi-touch <i>(opt)</i>	In-cell touch, supports 10-finger gesture							ThinkEngine	Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures												
Storage	<i>Some</i> : SSD / SATA 6.0Gb/s (e.g. xxxG SSD) <i>Some</i> : SSD / PCIe NVMe, PCIe 3.0 x 2, 16Gb/s (e.g. xxxG SSD PCIe NVMe) <i>Some</i> : HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, Shock Mounted Hard Drive, Active Protection System™ <i>Some</i> : SSHD with 8GB NAND flash memory							vPro <i>(optional)</i>	Intel vPro Technology												
Optical	None							Fingerprint reader	<i>Optional</i> : Swipe style fingerprint reader on the palm rest												
Ethernet	<i>Non-vPro model</i> : Intel Ethernet Connection I219-V (Jacksonville) <i>vPro model</i> : Intel Ethernet Connection I219-LM (Jacksonville)							Internal battery	<i>Optional</i> : Integrated Li-Polymer 3-cell (44Wh)												
WLAN ⁴	<i>One of the following, configurable by model</i> : <ul style="list-style-type: none"> 11ac+BT, Broadcom BCM4356, 2x2, M.2 card 11ac+BT, Intel Dual Band Wireless-AC 8260, 2x2, M.2 card 							External battery	Li-Ion or Li-Polymer 3-cell (23Wh) or Li-Ion 6-cell (48Wh or 72Wh)												
Bluetooth™	Bluetooth 4.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter							Max battery life ¹⁰	<table border="1"> <thead> <tr> <th>Models</th> <th>3 + 3-cell</th> <th>3 + 6-cell 48Wh</th> <th>3 + 6-cell 72Wh</th> </tr> </thead> <tbody> <tr> <td>Max battery life</td> <td>12.0 hr</td> <td>16.3 hr</td> <td>20.5 hr</td> </tr> </tbody> </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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WWAN <i>(optional)</i>	<i>One of the following, configurable by model</i> : <ul style="list-style-type: none"> Wireless WAN upgradable 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) 							AC adapter	65W Slim AC adapter or 65W AC adapter												
SIM card <i>(opt)</i>	Micro-SIM card slot, optional Verizon LTE (US) or Lenovo Connect (WE) SIM card							Preload	Windows 7 Professional 64 preinstalled through downgrade rights in Windows 10 Pro 64 <ul style="list-style-type: none"> Lenovo Solution Center Lenovo Companion Lenovo Setting ThinkVantage Product Recovery Microsoft Office preloaded; purchase a product key to activate Rescue and Recovery™ ThinkVantage System Update Adobe® Reader® McAfee® LiveSafe™ (30-day trial) 												
Dimensions ³	WxDxH: 14.98" x 10.17" x 0.88"; 380.6mm x 258.2mm x 22.45mm							Limited warranty ¹²	<i>One of the following, configurable by model</i> : <ul style="list-style-type: none"> 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) 												
Weight ²	<table border="1"> <thead> <tr> <th>Models</th> <th>No + 6-cell</th> <th>3-cell + 3-cell</th> <th>3-cell + 6-cell</th> </tr> </thead> <tbody> <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> </tbody> </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	Mil-Spec test	MIL-STD-810G military certification
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Case material	Display cover: PPS; Bottom: Glass-Fiber Reinforced Plastic							Environment	EPEAT™ Gold (US only); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant												