

ThinkPad P50s Platform Specifications

Product Specifications Reference (PSREF)

Processor	6th Generation Intel® Core™ i5 / i7 Processor							Smart card reader Media reader Ports Camera (optional) Audio support	Optional: Smart card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Three USB 3.0 (one Always On), MiniDP, HDMI, Ethernet (RJ-45), Dock connector HD720p resolution, low light sensitive, fixed focus HD Audio, Realtek® ALC3245 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack												
	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																
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™ Security Security chip ThinkEngine	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch Power-on password, hard disk password, supervisor password, security keyhole Discrete TPM 1.2 TCG Certified and Firmware TPM 2.0 integrated in chipset Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures												
Chipset Memory	Intel SoC (System on Chip) platform 32GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two DDR3L SO-DIMM sockets							vPro (optional) Fingerprint reader	Intel vPro Technology Optional: Swipe style fingerprint reader on the palm rest												
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 Some: 15.5" (394mm) 3K (2880x1620), anti-glare, LED backlight, IPS, 350 nits, 16:9 aspect ratio, 1000:1 contrast ratio, 160° viewing angle							Internal battery External battery Max battery life ¹⁰ (MobileMark® 2014)	Optional: Integrated Li-Polymer 3-cell (44Wh) Li-Ion or Li-Polymer 3-cell (23Wh) or Li-Ion 6-cell (48Wh or 72Wh) <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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Multi-touch (opt)	In-cell touch, supports 10-finger gesture							AC adapter	65W Slim AC adapter or 65W AC adapter												
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							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 www.lenovo.com/support/ISV												
Optical	None							Limited warranty ¹²	One of the following, configurable by model: • 3-year/1-yr battery depot repair service • 3-year/1-yr battery limited onsite service ²⁴ • 3-year/1-yr battery limited onsite service, OID (Onsite International Delivery)												
Ethernet	Non-vPro model: Intel Ethernet Connection I219-V (Jacksonville) vPro model: Intel Ethernet Connection I219-LM (Jacksonville)							Mil-Spec test	MIL-STD-810G military certification												
WLAN ⁴	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							Environment	EPEAT™ Gold (US only); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant												
Bluetooth™	Bluetooth 4.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter																				
WWAN (optional)	One of the following, configurable by model: • 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)																				
SIM card (opt)	Micro-SIM card slot, optional Verizon LTE (US) or Lenovo Connect (WE) SIM card																				
Dimensions ³ Weight ²	WxDxH: 14.98" x 10.17" x 0.88"; 380.6mm x 258.2mm x 22.45mm <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		
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Case material	Display cover: PPS; Bottom: Glass-Fiber Reinforced Plastic																				