

# 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	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 ( <i>optional</i> )	HD720p resolution, low light sensitive, fixed focus														
i7-6600U	2.6 GHz			3.4 GHz	4MB	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 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 <sup>7</sup> / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two DDR3L SO-DIMM sockets								Security chip ThinkEngine	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														
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								vPro ( <i>optional</i> )	Intel vPro Technology														
Multi-touch ( <i>opt</i> )	In-cell touch, supports 10-finger gesture								Fingerprint reader	<i>Optional</i> : Swipe style fingerprint reader on the palm rest														
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								Internal battery	<i>Optional</i> : 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	<i>Non-vPro model</i> : Intel Ethernet Connection I219-V (Jacksonville) <i>vPro model</i> : Intel Ethernet Connection I219-LM (Jacksonville)								Max battery life <sup>10</sup> ( <i>MobileMark® 2014</i> )	<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>	<i>One of the following, configurable by model</i> : <ul style="list-style-type: none"><li>• 11ac+BT, Broadcom BCM4356, 2x2, M.2 card</li><li>• 11ac+BT, Intel Dual Band Wireless-AC 8260, 2x2, M.2 card</li></ul>								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 <ul style="list-style-type: none"><li>• Lenovo Solution Center</li><li>• ThinkVantage Product Recovery</li><li>• Rescue and Recovery™</li><li>• ThinkVantage System Update</li><li>• Adobe® Reader®</li><li>• Microsoft® Office preloaded; purchase a product key to activate</li><li>• McAfee® LiveSafe™ (30-day trial)</li></ul> <i>For ISV certifications, please visit <a href="http://www.lenovo.com/support/ISV">www.lenovo.com/support/ISV</a></i>														
WWAN ( <i>optional</i> )	<i>One of the following, configurable by model</i> : <ul style="list-style-type: none"><li>• Wireless WAN upgradable</li><li>• Wireless WAN, Sierra Wireless EM7455, Qualcomm® 4G LTE-Advanced/DC-HSPA+/HSPA+/HSPA/UMTS/GNSS, M.2 card</li><li>• Wireless WAN, HUAWEI ME906S, HUAWEI 4G LTE/WCDMA/HSPA/GSM/GPRS/EDGE/GNSS, M.2 card (WE only)</li></ul>								Limited warranty <sup>12</sup>	<i>One of the following, configurable by model</i> : <ul style="list-style-type: none"><li>• 3-year/1-yr battery depot repair service</li><li>• 3-year/1-yr battery limited onsite service<sup>24</sup></li><li>• 3-year/1-yr battery limited onsite service, OID (Onsite International Delivery)</li></ul>														
SIM card ( <i>opt</i> )	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	Case material	Display cover: PPS; Bottom: Glass-Fiber Reinforced Plastic		
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Model	20FK000J++
Product	ThinkPad P50s
Region	EMEA
Machine Type	20FK
TopSeller	No
Processor	Core i7-6600U (2C, 2.6 / 3.4GHz, 4MB)
vPro	vPro
Graphics	NVIDIA Quadro M500M 2GB
Memory	16GBx1
Display	15.6" FHD (1920x1080) IPS
Multi-touch	None
Storage	512GB SSD Opal2
Optical	None
WLAN + Bluetooth	Intel 8260 ac, 2x2 + BT4.1
WWAN	WWAN Upgradable
SIM Card	None
Smart Card Reader	None
Camera	720p
Keyboard	Backlit
Fingerprint Reader	Fingerprint Reader
Battery	3-cell (44Wh) + 3-cell (23Wh)
Power Adapter	65W
Operating System	Windows 10 Pro 64
Warranty	3-year, Onsite
Global	No
Ann Date (mm/yy)	04/16





