

# ThinkPad P52s Platform Specifications

Product Specifications Reference (PSREF)

Processor	8th Generation Intel® Core™ i5 / i7 Processor								Dimensions Weight Case color Case material	<i>WxDxH:</i> 14.40" x 9.95" x 0.79-0.80"; 365.8mm x 252.8mm x 19.95-20.2mm starting at 4.39 lb / 1.99 kg Black <i>Display cover:</i> GFRP + PPS; <i>Bottom:</i> GFRP											
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics													
	i5-8350U	4	8	1.7 GHz	3.6 GHz	6MB	DDR4-2400	Intel UHD Graphics 620													
	i7-8550U			1.8 GHz	4.0 GHz	8MB															
i7-8650U	1.9 GHz			4.2 GHz	8MB																
Graphics	Intel UHD Graphics 620 in processor and NVIDIA Quadro® P500, 2GB GDDR5 memory; supports external digital monitor via HDMI or USB Type-C; Up to 3 displays with 2 external monitors plus system LCD screen. Max resolution: 4096x2304@60Hz (USB Type-C); 4096x2160@30Hz (HDMI)								Smart card reader Media reader Ports Monitor cable (optional) Camera (optional) Audio support Keyboard UltraNav™ Security Security chip vPro (optional) Fingerprint reader NFC (optional) Battery Max battery life (MobileMark® 2014) AC adapter Operating system Limited warranty Mil-Spec test Environment												
Chipset	Intel SoC (System on Chip) platform																				
Memory	32GB max / 2400MHz DDR4, dual-channel capable, two DDR4 SO-DIMM sockets * System clocks down for processors with lower memory controller																				
Display	<i>Some:</i> 15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, WVA, 250 nits, 16:9 aspect ratio, 700:1 contrast ratio, 45% gamut, 170° viewing angle <i>Some:</i> 15.6" (396mm) UHD (3840x2160), anti-glare, LED backlight, WVA, 300 nits, 16:9 aspect ratio, 1000:1 contrast ratio, 72% gamut, 170° viewing angle																				
Multi-touch (opt) Pen	On-cell touch, supports 10-finger gesture (FHD only) None								<i>Optional:</i> Smart card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.1 Gen 1 (one Always On), one USB 3.1 Type-C Gen 1 (with the function of Power Delivery and DisplayPort), one USB 3.1 Type-C Gen 2 / Thunderbolt 3 (with the function of PD and DP), 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 * Depending on many factors, actual data transfer speed may be lower than theoretical speed <i>HDMI to VGA:</i> Lenovo HDMI to VGA Monitor Adapter <i>USB-C to DP:</i> Lenovo USB-C to DisplayPort Adapter One of the following, configurable by model: • HD720p camera with ThinkShutter camera privacy, fixed focus • IR camera and HD720p camera, fixed focus HD Audio, Realtek® ALC3287 codec / stereo speakers, 2W x 2, Dolby® Audio™ Premium / optional dual array microphone, headphone / microphone combo jack 6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight TrackPoint® pointing device and buttonless Mylar surface multi-touch touchpad Power-on password, hard disk password, supervisor password, security keyhole Discrete TPM 2.0, TCG Certified Intel vPro Technology <i>Optional:</i> Touch style match on chip fingerprint reader on the palm rest anti-spoofing technology Near Field Communication Optional integrated Li-ion 32Wh battery and swappable Li-ion 24Wh, 48Wh, or 72Wh battery <table border="1"> <thead> <tr> <th>Models</th> <th>48Wh</th> <th>72Wh</th> <th>32Wh + 24Wh</th> <th>32Wh + 48Wh</th> <th>32Wh + 72Wh</th> </tr> </thead> <tbody> <tr> <td>Max battery life</td> <td>12.2 hr</td> <td>18.5 hr</td> <td>13.5 hr</td> <td>20.1 hr</td> <td>26.3 hr</td> </tr> </tbody> </table> * Battery life varies significantly with hardware configurations, settings, usage, & other factors 65W USB Type-C AC adapter Windows® 10 Home 64 or Windows 10 Pro 64 One of the following, configurable by model: • 1-year depot repair service • 1-year depot with 2-year system board repair service • 3-year/1-yr battery depot repair service • 3-year/1-yr battery limited onsite service • 3-year (including battery) limited onsite service MIL-STD-810G military testing EPEAT™ Silver; ENERGY STAR® 6.1; RoHS-compliant	Models	48Wh	72Wh	32Wh + 24Wh	32Wh + 48Wh	32Wh + 72Wh	Max battery life	12.2 hr	18.5 hr	13.5 hr	20.1 hr	26.3 hr
Models	48Wh	72Wh	32Wh + 24Wh	32Wh + 48Wh	32Wh + 72Wh																
Max battery life	12.2 hr	18.5 hr	13.5 hr	20.1 hr	26.3 hr																
Storage	System has one HDD slot or one M.2 2280 slot exclusively for storage, and supports single sided M.2 2280 drives only <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 x 2, 16Gb/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																				
Optane™ memory Optical	<i>Optional:</i> Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2 None																				
Ethernet	<i>Non-vPro model:</i> Intel Ethernet Connection I219-V (Jacksonville) <i>vPro model:</i> Intel Ethernet Connection I219-LM (Jacksonville)																				
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																				
WWAN (optional)	One of the following, configurable by model: • Wireless WAN upgradable • Integrated Mobile Broadband 4G LTE, Intel XMM™ 7262 (Fibocom L830-EB), M.2 card (EMEA only) • Integrated Mobile Broadband 4G LTE-A, Intel XMM™ 7360 (Fibocom L850-GL), M.2 card * For non-WWAN model, it means the model is NOT WWAN upgradable																				
SIM card (opt)	Nano-SIM card slot, optional Verizon LTE (US) SIM card																				

Note: The specifications above may not be available in all regions.

Lenovo  
November 2019