

ThinkPad P51 Platform Specifications

Product Specifications Reference (PSREF)

Processor	7th Generation Intel® Core™ i7 Processor or Intel Xeon® Processor E3 v6 Family							Dimensions <i>WxDxH:</i> 14.86" x 9.93" x 0.96-1.16"; 377.4mm x 252.3mm x 24.5-29.4mm <i>WxDxH(Touch):</i> 14.86" x 9.93" x 1.02-1.21"; 377.4mm x 252.3mm x 25.8-30.7mm										
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types		Weight <table border="1"> <thead> <tr> <th>Models</th> <th>4-cell</th> <th>6-cell</th> </tr> </thead> <tbody> <tr> <td><i>Non-touch</i></td> <td>5.6 lb / 2.55kg</td> <td>5.9 lb / 2.67kg</td> </tr> <tr> <td><i>Multi-touch</i></td> <td>6.2 lb / 2.82kg</td> <td>6.4 lb / 2.90kg</td> </tr> </tbody> </table>	Models	4-cell	6-cell	<i>Non-touch</i>	5.6 lb / 2.55kg	5.9 lb / 2.67kg	<i>Multi-touch</i>	6.2 lb / 2.82kg	6.4 lb / 2.90kg
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i7-7700HQ	4	8	2.8 GHz	3.8 GHz	6MB	DDR4-2400	Intel HD Graphics 630											
i7-7820HQ			2.9 GHz	3.9 GHz			Intel HD Graphics P630											
E3-1505M v6			3.0 GHz	4.0 GHz	8MB		Intel HD Graphics P630											
E3-1535M v6			3.1 GHz	4.2 GHz														
Graphics	Intel HD Graphics 630 or P630 in processor and NVIDIA Quadro® M1200M or M2200M, 4GB memory; supports external digital monitor via HDMI, Mini DisplayPort, or Thunderbolt™; supports four independent displays; Max resolution: 3840x2160@60Hz (DisplayPort via Mini DisplayPort cable); 3840x2160@60Hz (Thunderbolt); 4096x2160@24Hz (HDMI)							Case color Case material										
Chipset	Mobile Intel CM238 Chipset							Smart card reader										
Memory	64GB max ⁷ / 2400MHz DDR4, ECC or non-ECC (ECC function supported only on Xeon processor), dual-channel capable, four DDR4 SO-DIMM sockets							ExpressCard										
Display	<i>Some:</i> 15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, IPS, 250 nits, 16:9 aspect ratio, 700:1 contrast ratio, 160° viewing angle <i>Some:</i> 15.6" (396mm) 4K (3840x2160), anti-glare, LED backlight, IPS, 300 nits, 16:9 aspect ratio, 1000:1 contrast ratio, 100% gamut, 170° viewing angle							Media reader										
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 220 nits (FHD only)							Ports										
Pen (optional)	ThinkPad Pen Pro, active pen for multi-touch display							Camera (optional)										
Storage	<i>Up to 3 drives (two M.2 SSD and one HDD)</i> <i>Some:</i> M.2 SSD / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, Active Protection System™							Audio support										
Optical	None							Keyboard										
Ethernet	<i>Non-vPro model:</i> Intel Ethernet Connection I219-V (Jacksonville) <i>vPro model:</i> Intel Ethernet Connection I219-LM (Jacksonville)							UltraNav™										
WLAN	Intel Dual Band Wireless-AC 8265, Wi-Fi 2x2 802.11ac + BT4.1, M.2 card							Security										
Bluetooth™	Bluetooth 4.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter							Security chip										
	* Intel 8265ac card support BT4.2 but is limited to BT4.1 by Windows OS							vPro (optional)										
WWAN (optional)	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> Wireless WAN upgradable Integrated Mobile Broadband 4G LTE-A, Qualcomm® Snapdragon™ X7 LTE-A (Sierra Wireless EM7455), M.2 card 							Fingerprint reader										
SIM card (opt)	Micro-SIM card slot, opt Verizon LTE (US) or Lenovo® Connect (EMEA) SIM card							Color calibration										
								NFC										
								Battery										
								Max battery life ¹⁰										
								(MobileMark® 2014)										
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								Mil-Spec test										
								Environment										