

ThinkPad P50 20EN0005++

Region
EMEA

Machine Type
20EN

TopSeller
TopSeller

Processor
Core i7-6700HQ (4C, 2.6 / 3.5GHz, 6MB)

vPro
No

Graphics
NVIDIA Quadro M1000M 2GB

Chipset
Intel CM236

Memory
8GBx1 non-ECC

Display
15.6" FHD (1920x1080) IPS

Multi-touch
None

Pen
None

Storage
256GB SSD M.2 Opal2

RAID
No

Optical
None

WLAN + Bluetooth
Intel 8260 ac, 2x2 + BT4.1

WWAN
None

SIM Card
None

Smart Card Reader
Smart Card Reader

Camera
720p

Keyboard
Backlit

Fingerprint Reader
Fingerprint Reader

Color Calibrator
None

Battery
6-cell (90Wh)

Power Adapter
170W Slim Tip

Operating System
Windows 10 DG Windows 7 Pro 64

Warranty
3-year, Onsite

End of Support
Nov 17, 2020

Ann Date (mm/yy)
11/15

Note:

Country Code "US" is for United States, "++" is for EMEA countries (e.g. AD - Saudi, Arabia, AT - Austria, BM - Bulgaria, etc.), "xx" is for EAST countries (e.g. BM - Bulgaria, CX - Hungary, CY - Cyprus, etc.), and "***" is for MEA countries (e.g. AD - Saudi, Arabia, ED - Egypt, EQ - Sweden, etc.). Please be aware that the EMEA/ EAST/MEA models listed above might not be available in all countries

 www.lenovo.com

This publication was developed for products and services offered in the United States and E.M.E.A countries. Lenovo may not offer the products, services or features discussed in this document in other countries. Lenovo may withdraw an offering at any time. Information is subject to change without notice. Consult your local representative for information on offerings available in your area. Lenovo reserves the right to change specifications or other product information without notice. Lenovo is not responsible for photographic or typographical errors. Lenovo provides this publication "as is" without warranty of any kind, either express or implied, including the implied warranties of merchantability or fitness for a particular purpose.



<http://psref.lenovo.com>

Visit psref website for the latest version of Product Specifications Reference.

© Lenovo, 2018. All rights reserved.



Lenovo™

ThinkPad P50 Platform Specifications

Product Specifications Reference (PSREF)



Processor	6th Generation Intel® Core™ i7 Processor or Intel Xeon® Processor E3 v5 Family							Smart card reader	Optional: Smart card reader									
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics	ExpressCard	One slot (ExpressCard/34)								
	i7-6700HQ	4	8	2.6 GHz	3.5 GHz	6MB	DDR4-2133	Intel HD Graphics 530	Media reader	4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card								
	i7-6820HQ			2.7 GHz	3.6 GHz	8MB			Ports	Four USB 3.0 (one Always On), USB Type-C / Thunderbolt 3, Mini DisplayPort, HDMI, Ethernet (RJ-45), Dock connector								
	E3-1505M v5			2.8 GHz	3.7 GHz	8MB			Camera (optional)	HD720p resolution, low light sensitive, fixed focus								
E3-1535M v5	2.9 GHz			3.8 GHz	8MB	Audio support			HD Audio, Realtek® ALC3268 codec / stereo speakers, 1.5W x 2 / dual array microphone, combo audio/microphone jack									
Graphics	Intel HD Graphics 530 or P530 in processor and NVIDIA Quadro® M1000M (2GB or 4GB memory) or M2000M (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); 3840x2160@30Hz (HDMI)							Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight									
Chipset	Mobile Intel CM236 Chipset (Intel GL82CM236 PCH)							UltraNav™	3-button TrackPoint® pointing device and 3-button crystal silk surface multi-touch touchpad									
Memory	64GB max / 2133MHz DDR4, ECC or non-ECC (ECC function supported only on Xeon processor), dual-channel capable, four DDR4 SO-DIMM sockets							Security	Power-on password, hard disk password, supervisor password, security keyhole									
Display	Some: 15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, IPS, 250 nits, 16:9 aspect ratio, 600:1 contrast ratio, 45% gamut, 160° viewing angle Some: 15.6" (396mm) 4K (3840x2160), anti-glare, LED backlight, IPS, 300 nits, 16:9 aspect ratio, 1000:1 contrast ratio, 100% gamut, 178° viewing angle							Security chip	Discrete TPM 1.2 TCG Certified and Firmware TPM 2.0 integrated in chipset									
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 220 nits							ThinkEngine	Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures									
Pen (optional)	ThinkPad Pen Pro, active pen for multi-touch display							vPro (optional)	Intel vPro Technology									
Storage	Up to 3 drives (two M.2 SSD and one HDD) • HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, Shock Mounted Hard Drive, Active Protection System™ • M.2 SSD / SATA 6.0Gb/s (e.g. xxxGB SSD M.2) • M.2 SSD / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s (e.g. xxxGB SSD M.2 PCIe NVMe)							Fingerprint reader	Touch style fingerprint reader on the palm rest									
Optical	None							Color calibration	Optional: Pantone® color calibrator by X-Rite® color calibration sensor in palm rest									
Ethernet	Non-vPro model: Intel Ethernet Connection I219-V (Jacksonville) vPro model: Intel Ethernet Connection I219-LM (Jacksonville)							Battery	Lithium Polymer 4-cell (66Wh) or 6-cell (90Wh)									
WLAN ⁴	11ac+BT, Intel Dual Band Wireless-AC 8260, 2x2, M.2 card							Max battery life ¹⁰	(MobileMark® 2014)									
Bluetooth™	Bluetooth 4.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter							<table border="1"> <thead> <tr> <th>Model</th> <th>4-cell</th> <th>6-cell</th> </tr> </thead> <tbody> <tr> <td>Discrete Graphics</td> <td>7.1 hr</td> <td>9.7 hr</td> </tr> <tr> <td>Hybrid Graphics</td> <td>9.6 hr</td> <td>13.2 hr</td> </tr> </tbody> </table>		Model	4-cell	6-cell	Discrete Graphics	7.1 hr	9.7 hr	Hybrid Graphics	9.6 hr	13.2 hr
Model	4-cell	6-cell																
Discrete Graphics	7.1 hr	9.7 hr																
Hybrid Graphics	9.6 hr	13.2 hr																
WWAN (optional)	Wireless WAN, Sierra Wireless EM7455, Qualcomm® 4G LTE-Advanced/DC-HSPA+/HSPA/HSPA/UMTS/GNSS, M.2 card							AC adapter	170W slim tip AC adapter									
SIM card	Micro-SIM card slot							Preload	<p>Some: Genuine Windows® 7 Professional 64</p> <p>Some: Windows 7 Professional 64 preinstalled through downgrade rights in Windows 10 Pro 64</p> <ul style="list-style-type: none"> Lenovo Solution Center Lenovo SHAREit 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) <p>For ISV certifications, please visit www.lenovo.com/support/ISV</p>									
Dimensions ³	WxDxH: 14.86" x 9.93" x 0.96-1.16"; 377.4mm x 252.3mm x 24.5-29.4mm WxDxH(Touch): 14.86" x 9.93" x 1.02-1.21"; 377.4mm x 252.3mm x 25.8-30.7mm							Limited warranty ¹²	One of the following, configurable by model: <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>4-cell</th> <th>6-cell</th> </tr> </thead> <tbody> <tr> <td>Non-touch</td> <td>5.6 lb / 2.55kg</td> <td>5.9 lb / 2.67kg</td> </tr> <tr> <td>Multi-touch</td> <td>6.2 lb / 2.82kg</td> <td>6.4 lb / 2.90kg</td> </tr> </tbody> </table>							Models	4-cell	6-cell	Non-touch	5.6 lb / 2.55kg	5.9 lb / 2.67kg	Multi-touch	6.2 lb / 2.82kg	6.4 lb / 2.90kg	Mil-Spec test	MIL-STD-810G military certification
Models	4-cell	6-cell																
Non-touch	5.6 lb / 2.55kg	5.9 lb / 2.67kg																
Multi-touch	6.2 lb / 2.82kg	6.4 lb / 2.90kg																
Case material	Display cover: Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum							Environment	EPEAT™ Gold (US only); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant									

ThinkPad P50

