

ThinkPad P50 20EN0037++

Region
EMEA

Machine Type
20EN

TopSeller
TopSeller

Processor
Core i7-6820HQ (4C, 2.7 / 3.6GHz, 8MB)

vPro
vPro

Graphics
NVIDIA Quadro M2000M 4GB

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
X-Rite

Battery
6-cell (90Wh)

Power Adapter
170W Slim Tip

Operating System
Windows 10 Pro 64

Warranty
3-year, Onsite

End of Support
May 3, 2021

Ann Date (mm/yy)
05/16

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



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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		Intel HD Graphics P530	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																	
E3-1535M v5	2.9 GHz			3.8 GHz	8MB																		
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 ⁷ / 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	<i>Some:</i> 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 <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, 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	<i>Up to 3 drives (two M.2 SSD and one HDD)</i> - 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	<i>Non-vPro model:</i> Intel Ethernet Connection I219-V (Jacksonville) <i>vPro model:</i> 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	<table><tr><td>Model</td><td>4-cell</td><td>6-cell</td></tr><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></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																					
Bluetooth™	Bluetooth 4.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter								(MobileMark® 2014)														
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	<i>Some:</i> Genuine Windows® 7 Professional 64 <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 10 Pro 64													
Dimensions ³	<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								- 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)														
Weight ²	Models		4-cell		6-cell		For ISV certifications, please visit www.lenovo.com/support/ISV																
	Non-touch		5.6 lb / 2.55kg		5.9 lb / 2.67kg		Limited warranty ¹² One of the following, configurable by model:																
	Multi-touch		6.2 lb / 2.82kg		6.4 lb / 2.90kg		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)																
Case material	<i>Display cover:</i> Glass-Fiber Reinforced Plastic; <i>Bottom:</i> Magnesium/Aluminum								Mil-Spec test	MIL-STD-810G military certification													
									Environment	EPEAT™ Gold (US only); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant													

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