

ThinkPad P50 20EN0049++

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
WWAN Upgradable

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

Operating System
Windows 10 DG Windows 7 Pro 64

Warranty
3-year, Onsite

End of Support
Jan 31, 2022

Ann Date (mm/yy)
01/17

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											
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics	Optional: Smart card reader	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		Intel HD Graphics P530	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 UltraNav™	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight 3-button TrackPoint® pointing device and 3-button crystal silk surface multi-touch touchpad										
Chipset	Mobile Intel CM236 Chipset (Intel GL82CM236 PCH)								Security Security chip ThinkEngine	Power-on password, hard disk password, supervisor password, security keyhole 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										
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								vPro (optional) Fingerprint reader	Intel vPro Technology Touch style fingerprint reader on the palm rest										
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								Color calibration	<i>Optional:</i> Pantone® color calibrator by X-Rite® color calibration sensor in palm rest										
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 220 nits								Battery	Lithium Polymer 4-cell (66Wh) or 6-cell (90Wh)										
Pen (optional)	ThinkPad Pen Pro, active pen for multi-touch display								Max battery life ¹⁰ (MobileMark® 2014)	<table><tr><th>Model</th><th>4-cell</th><th>6-cell</th></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																		
Storage	<i>Up to 3 drives (two M.2 SSD and one HDD)</i> <ul style="list-style-type: none">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)								AC adapter	170W AC adapter										
Optical	None								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										
Ethernet	<i>Non-vPro model:</i> Intel Ethernet Connection I219-V (Jacksonville) <i>vPro model:</i> Intel Ethernet Connection I219-LM (Jacksonville)								<ul style="list-style-type: none">Lenovo Solution CenterLenovo SHAREitThinkVantage Product RecoveryRescue and Recovery™ThinkVantage System UpdateAdobe® Reader®Microsoft® Office preloaded; purchase a product key to activateMcAfee® LiveSafe™ (30-day trial)											
WLAN ⁴	11ac+BT, Intel Dual Band Wireless-AC 8260, 2x2, M.2 card								<ul style="list-style-type: none">Lenovo Solution CenterLenovo SHAREitThinkVantage Product RecoveryRescue and Recovery™ThinkVantage System UpdateAdobe® Reader®Microsoft® Office preloaded; purchase a product key to activateMcAfee® LiveSafe™ (30-day trial) <i>For ISV certifications, please visit www.lenovo.com/support/ISV</i>											
Bluetooth™	Bluetooth 4.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter																			
WWAN (optional)	Wireless WAN, Sierra Wireless EM7455, Qualcomm® 4G LTE-Advanced/DC-HSPA+/HSPA+/HSPA/UMTS/GNSS, M.2 card								Limited warranty ¹² One of the following, configurable by model: <ul style="list-style-type: none">3-year/1-yr battery depot repair service3-year/1-yr battery limited onsite service²⁴3-year/1-yr battery limited onsite service, OID (Onsite International Delivery)											
SIM card	Micro-SIM card slot								Mil-Spec test MIL-STD-810G military certification											
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								Environment EPEAT™ Gold (US only); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant											
Weight ²	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	<i>Display cover:</i> Glass-Fiber Reinforced Plastic; <i>Bottom:</i> Magnesium/Aluminum																			

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