

ThinkPad P50 20EN0049++

Region	Camera
EMEA	720p
Machine Type	Keyboard
20EN	Backlit
TopSeller	Fingerprint Reader
TopSeller	Fingerprint Reader
Processor	Color Calibrator
Core i7-6820HQ (4C, 2.7 / 3.6GHz, 8MB)	X-Rite
vPro	Battery
vPro	6-cell (90Wh)
Graphics	Power Adapter
NVIDIA Quadro M2000M 4GB	170W
Chipset	Operating System
Intel CM236	Windows 10 DG Windows 7 Pro 64
Memory	Warranty
8GBx1 non-ECC	3-year, Onsite
Display	End of Support
15.6" FHD (1920x1080) IPS	Jan 31, 2022
Multi-touch	Ann Date (mm/yy)
None	01/17
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	

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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																
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics									
	i7-6700HQ	4	8	2.6 GHz	3.5 GHz	6MB	DDR4-2133	Intel HD Graphics 530									
	i7-6820HQ			2.7 GHz	3.6 GHz	8MB		Intel HD Graphics P530									
	E3-1505M v5			2.8 GHz	3.7 GHz	8MB	DDR4-2133	Intel HD Graphics P530									
	E3-1535M v5			2.9 GHz	3.8 GHz	8MB		Intel HD Graphics P530									
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)																
Chipset Memory	Mobile Intel CM236 Chipset (Intel GL82CM236 PCH) 64GB max ⁷ / 2133MHz DDR4, ECC or non-ECC (ECC function supported only on Xeon processor), dual-channel capable, four DDR4 SO-DIMM sockets																
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																
Multi-touch (opt) Pen (optional)	Capacitive-type multi-touch, supports 10-finger gesture, 220 nits ThinkPad Pen Pro, active pen for multi-touch display																
Storage	Up to 3 drives (two M.2 SSD and one HDD) <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)																
Optical	None																
Ethernet	Non-vPro model: Intel Ethernet Connection I219-V (Jacksonville) vPro model: Intel Ethernet Connection I219-LM (Jacksonville)																
WLAN ⁴ Bluetooth™	11ac+BT, Intel Dual Band Wireless-AC 8260, 2x2, M.2 card 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+/UMTS/GNSS, M.2 card																
SIM card	Micro-SIM card slot																
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																
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
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Case material	Display cover: Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum																
	Smart card reader <i>Optional:</i> Smart card reader ExpressCard One slot (ExpressCard/34) Media reader 4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card Ports Four USB 3.0 (one Always On), USB Type-C / Thunderbolt 3, Mini DisplayPort, HDMI, Ethernet (RJ-45), Dock connector																
	Camera (optional) HD720p resolution, low light sensitive, fixed focus Audio support HD Audio, Realtek® ALC3268 codec / stereo speakers, 1.5W x 2 / dual array microphone, combo audio/microphone jack																
	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																
	Security Security chip Power-on password, hard disk password, supervisor password, security keyhole ThinkEngine 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																
	vPro (optional) Intel vPro Technology Fingerprint reader Touch style fingerprint reader on the palm rest																
	Color calibration <i>Optional:</i> Pantone® color calibrator by X-Rite® color calibration sensor in palm rest																
	Battery Lithium Polymer 4-cell (66Wh) or 6-cell (90Wh) Max battery life ¹⁰ (MobileMark® 2014)																
	<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
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	AC adapter 170W AC adapter																
	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 <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) 																
	For ISV certifications, please visit www.lenovo.com/support/ISV																
	Limited warranty ¹² <i>One of the following, configurable by model:</i> <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) 																
	Mil-Spec test MIL-STD-810G military certification																
	Environment EPEAT™ Gold (US only); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant																

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