

ThinkPad P50 20EQ0022++

Region
EMEA

Machine Type
20EQ

TopSeller
No

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

vPro
vPro

Graphics
NVIDIA Quadro M2000M 4GB

Chipset
Intel CM236

Memory
16GBx2 non-ECC

Display
15.6" FHD (1920x1080) IPS

Multi-touch
None

Pen
None

Storage
512GB SSD M.2 PCIe NVMe

RAID
No

Optical
None

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

WWAN
None

SIM Card
None

Smart Card Reader
None

Camera
720p

Keyboard
Backlit

Fingerprint Reader
Fingerprint Reader

Color Calibrator
None

Battery
6-cell (90Wh)

Power Adapter
170W Slim Tip

Operating System
Windows 10 Pro 64

Warranty
3-year, Onsite

End of Support
May 5, 2022

Ann Date (mm/yy)
04/16

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 ExpressCard Media reader Ports	Optional: Smart card reader One slot (ExpressCard/34) 4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card Four USB 3.0 (one Always On), USB Type-C / Thunderbolt 3, Mini DisplayPort, HDMI, Ethernet (RJ-45), Dock connector									
	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												
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 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 chip ThinkEngine	Power-on password, hard disk password, supervisor password, security keyhole									
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 chip	Discrete TPM 1.2 TCG Certified and Firmware TPM 2.0 integrated in chipset									
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	Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures									
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 220 nits							vPro (optional)	Intel vPro Technology									
Pen (optional)	ThinkPad Pen Pro, active pen for multi-touch display							Fingerprint reader	Touch style fingerprint reader on the palm rest									
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)							Color calibration	Optional: Pantone® color calibrator by X-Rite® color calibration sensor in palm rest									
Optical	None							Battery	Lithium Polymer 4-cell (66Wh) or 6-cell (90Wh)									
Ethernet	Non-vPro model: Intel Ethernet Connection I219-V (Jacksonville) vPro model: Intel Ethernet Connection I219-LM (Jacksonville)							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																
WLAN ⁴	11ac+BT, Intel Dual Band Wireless-AC 8260, 2x2, M.2 card							AC adapter	170W slim tip AC adapter									
Bluetooth™	Bluetooth 4.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter							Preload	Some: Genuine Windows® 7 Professional 64 Some: Windows 7 Professional 64 preinstalled through downgrade rights in Windows 10 Pro 64									
WWAN (optional)	Wireless WAN, Sierra Wireless EM7455, Qualcomm® 4G LTE-Advanced/DC-HSPA+/HSPA+/HSPA/UMTS/GNSS, M.2 card								- 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)									
SIM card	Micro-SIM card slot								- 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)									
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								For ISV certifications, please visit www.lenovo.com/support/ISV									
Weight ²	<table><tr><th>Models</th><th>4-cell</th><th>6-cell</th></tr><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></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	Limited warranty ¹²	One of the following, configurable by model: 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)
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							Mil-Spec test	MIL-STD-810G military certification									
								Environment	EPEAT™ Gold (US only); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant									

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