ThinkPad P53 Platform Specifications

Processor	9th Generation Intel® Core™ i5 / i7 / i9 Processor or Intel Xeon® E Processor

Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics
i5-9400H	4	8	2.5 GHz	4.3 GHz	8MB	DDR4-2666	Intel UHD Graphics 630
i7-9750H	6	12	2.6 GHz	4.5 GHz	12MB		
i7-9850H	6	12	2.6 GHz	4.6 GHz	12MB		
i9-9880H	8	16	2.3 GHz	4.8 GHz	16MB		
E-2276M	6	12	2.8 GHz	4.7 GHz	12MB		Intel UHD Graphics P630

Graphics
Intel UHD Graphics 630 or P630 in processor and
NVIDIA® Quadro® T1000 (4GB GDDR5), T2000 (4GB GDDR5),
RTX 3000 (6GB GDDR6, VR ready), RTX 4000 Max-Q (8GB GDDR6, VR ready),
or RTX 5000 Max-Q (16GB GDDR6, VR ready);
supports external digital monitor via HDMI, Mini DisplayPort, or Thunderbolt™;
supports five independent displays;
Max resolution: 5K@60Hz (Thunderbolt); 4K@60Hz (USB-C or HDMI)

Chipset
Mobile Intel CM246 Chipset
Memory
128GB max / 2666MHz DDR4 (ECC function supported only on Xeon processor),
dual-channel capable, four DDR4 SO-DIMM sockets

Display

Size	Resolution	Type	Surface	Brightness	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle
15.6"	FHD (1920x1080)	IPS	Anti-glare	300 nits	16:9	700:1	72%	160°
15.6"	FHD (1920x1080) HDR 400, Dolby Vision™	IPS	Anti-glare	500 nits	16:9	1200:1	72%	160°
15.6"	UHD (3840x2160) HDR 400, Dolby Vision	IPS	Anti-glare	500 nits	16:9	1200:1	100%	170°
15.6"	UHD (3840x2160) HDR 500 True Black, Dolby Vision, Multi-touch	OLED	AR, AS	350 nits (peak 400 nits)	16:9	100000:1	100% DCI-P3	170°

Multi-touch (opt)
Capacitive-type multi-touch, supports 10-finger gesture (UHD only),
anti-reflection (AR), anti-smudge (AS) coating
Pen
Supports pen accessory, please see the accessory compatibility for details

Storage
Up to 3 drives
• HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, Active Protection System™
• M.2 2280 SSD / PCIe NVMe, PCIe 3.0 x 4

Optane™ memory *Optional:* Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2
RAID (optional) RAID 0/1/5 support
Optical None

Ethernet
Non-vPro model: Intel Ethernet Connection I219-V (Jacksonville)
vPro model: Intel Ethernet Connection I219-LM (Jacksonville)

WLAN (optional) Intel Wi-Fi 6 AX200, Wi-Fi 2x2 802.11ax + Bluetooth 5.0
Bluetooth™ (opt) Bluetooth 5.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter

WWAN (optional)
One of the following, configurable by model:
• Wireless WAN upgradable
• Integrated Mobile Broadband 4G LTE-A, Fibocom L850-GL, M.2 card
* For non-WWAN model, it means the model is NOT WWAN upgradable
SIM card (opt) Nano-SIM card slot, optional Verizon LTE (US) SIM card

Dimensions
WxDxH (non-touch): 14.86" x 9.93" x 0.96-1.16";
    377.4mm x 252.3mm x 24.5-29.4mm
WxDxH (multi-touch): 14.86" x 9.93" x 1.02-1.21";
    377.4mm x 252.3mm x 25.8-30.7mm
Weight
Non-touch model: starting at 5.51 lb / 2.5 kg;
Multi-touch model: starting at 6.4 lb / 2.9 kg
Case color Black
Case material *Display cover:* Glass-Fiber Reinforced Plastic;
    Bottom: Magnesium/Aluminum

Smart card reader *Optional:* Smart card reader
ExpressCard None
Media reader 4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card
Ports
Two USB 3.1 Gen 1 (one Always On),
one USB 3.1 Type-C Gen 1 (with the function of Power Delivery and DisplayPort),
two USB 3.1 Type-C Gen 2 / Thunderbolt 3 (with the function of PD and DP),
HDMI 2.0, Ethernet (RJ-45), nano-SIM card slot (WWAN models),
headphone / microphone combo jack, optional smart card reader,
4-in-1 reader (MMC, SD, SDHC, SDXC), security keyhole
* Power Delivery only supports power-out for charging peripherals
* USB-C Dock is not supported in right-side USB-C port
* Depending on many factors, actual data transfer speed may be lower than theoretical speed

Monitor cable *HDMI to VGA:* Lenovo HDMI to VGA Monitor Adapter
(optional) *USB-C to VGA:* Lenovo USB-C to VGA Adapter
USB-C to DP: Lenovo USB-C to DisplayPort Adapter
Bundled Accy None

Camera (optional) *One of the following, configurable by model:*
• HD720p camera with ThinkShutter camera privacy, fixed focus
• IR camera and HD720p camera with ThinkShutter camera privacy, fixed focus
Audio support HD Audio, Synaptic® CX11880 codec / stereo speakers, 2W x 2 /
dual array far-field microphone, headphone / microphone combo jack,
Dolby Atmos® sound system

Keyboard 6-row, spill-resistant, multimedia Fn keys, numeric keypad, LED backlight
UltraNav™ 3-button TrackPoint® pointing device and
3-button Mylar surface multi-touch touchpad

Security Power-on password, hard disk password, supervisor password, security keyhole
Security chip Discrete TPM 2.0, TCG Certified
vPro (optional) Intel vPro Technology
Fingerprint reader Touch style match on chip fingerprint reader on the palm rest
Color calibration *Optional:* X-Rite Pantone factory color calibration (UHD model only)
NFC (optional) Near Field Communication

Battery Integrated Li-ion 90Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
Max battery life *Discrete mode:* 8 hr; *Hybrid mode:* 13 hr
(MobileMark® 2014) ** Battery life varies significantly with settings, usage, & other factors*
AC adapter 170W or 230W slim tip AC adapter

Preload *One of the following, configurable by model:*
• Windows® 10 Home 64
• Windows 10 Pro 64
• Windows 10 Pro 64 for Workstations

Limited warranty *One of the following, configurable by model:*
• 1-year depot repair service
• 3-year/1-yr battery depot repair service
• 3-year/1-yr battery limited onsite service

Mil-Spec test MIL-STD-810G military testing

Environment EPEAT™ Silver; ENERGY STAR® 7.1; RoHS-compliant

Note: The specifications above may not be available in all regions.