

# ThinkPad P53 20QN000FUK

**Product**

ThinkPad P53

**Region**

WE

**Country/Region**

UK

**Machine Type**

20QN

**TopSeller**

TopSeller

**Processor**

Intel Core i7-9750H (6C / 12T, 2.6 / 4.5GHz, 12MB)

**Graphics**

NVIDIA Quadro T1000 4GB GDDR5

**Chipset**

Intel CM246

**Memory**

2x 8GB DIMM DDR4-2666 non-ECC

**Display**

15.6" FHD (1920x1080) IPS 300nits Anti-glare

**Multi-touch**

None

**Storage**

512GB SSD M.2 2280 PCIe NVMe Opal2

**Optane Memory**

None

**RAID**

No

**Optical**

None

**WLAN + Bluetooth**

Intel AX200 11ax, 2x2 + BT5.0

**WWAN**

None

**SIM Card**

None

**Smart Card Reader**

Smart Card Reader

**Monitor Cable**

None

**Bundled Accessories**

None

**Color**

Black

**Camera**

720p with ThinkShutter

**Keyboard**

Backlit, English (UK)

**Pen**

None

**Fingerprint Reader**

Touch Style, Match-on-Chip

**NFC**

None

**Color Calibrator**

None

**TPM**

Discrete TPM 2.0

**Battery**

Integrated 90Wh

**Power Adapter**

170W Slim Tip

**System Management**

None

**Operating System**

Windows 10 Pro 64, English

**Bundled Software**

None

**Base Warranty**

3-year, Depot

**Bundled Service**

None

**End of Support**

2025-08-23

**Announce Date**

2019-07-23

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**Recommended Services****Best**

5Y Premier Support Upgrade from 3Y Depot/CCI (5WS0V07061)

**Better**

4Y Premier Support Upgrade from 3Y Depot/CCI (5WS0V07067)

**Good**

3Y Premier Support Upgrade from 3Y Depot/CCI (5WS0V07092)

**Notes:**

**Battery life** is an estimated maximum. Actual battery life may vary based on many factors, including screen brightness, active applications, features, power management settings, battery age and conditioning, and other customer preferences.

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# ThinkPad P53 Platform Specifications

Product Specifications Reference (PSREF)



<p><b>Processor</b> 9th Generation Intel® Core™ i5 / i7 / i9 Processor or Intel Xeon® E Processor</p> <table border="1"> <thead> <tr> <th>Processor Number</th> <th># of Cores</th> <th># of Threads</th> <th>Base Frequency</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory Types</th> <th>Processor Graphics</th> </tr> </thead> <tbody> <tr> <td>i5-9400H</td> <td>4</td> <td>8</td> <td>2.5 GHz</td> <td>4.3 GHz</td> <td>8MB</td> <td rowspan="4">DDR4-2666</td> <td rowspan="4">Intel UHD Graphics 630</td> </tr> <tr> <td>i7-9750H</td> <td>6</td> <td>12</td> <td>2.6 GHz</td> <td>4.5 GHz</td> <td>12MB</td> </tr> <tr> <td>i7-9850H</td> <td>6</td> <td>12</td> <td>2.6 GHz</td> <td>4.6 GHz</td> <td>12MB</td> </tr> <tr> <td>i9-9880H</td> <td>8</td> <td>16</td> <td>2.3 GHz</td> <td>4.8 GHz</td> <td>16MB</td> </tr> <tr> <td>E-2276M</td> <td>6</td> <td>12</td> <td>2.8 GHz</td> <td>4.7 GHz</td> <td>12MB</td> <td></td> <td>Intel UHD Graphics P630</td> </tr> </tbody> </table>	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	<p><b>Dimensions</b> <i>WxDxH (non-touch):</i> 14.86" x 9.93" x 0.96-1.16"; 377.4mm x 252.3mm x 24.5-29.4mm <i>WxDxH (multi-touch):</i> 14.86" x 9.93" x 1.02-1.21"; 377.4mm x 252.3mm x 25.8-30.7mm</p> <p><b>Weight</b> <i>Non-touch model:</i> starting at 5.51 lb / 2.5 kg; <i>Multi-touch model:</i> starting at 6.4 lb / 2.9 kg</p> <p><b>Case color</b> Black</p> <p><b>Case material</b> <i>Display cover:</i> Glass-Fiber Reinforced Plastic; <i>Bottom:</i> Magnesium/Aluminum</p> <p><b>Smart card reader</b> <i>Optional:</i> Smart card reader</p> <p><b>ExpressCard</b> None</p> <p><b>Media reader</b> 4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card</p> <p><b>Ports</b> 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 <i>* Power Delivery only supports power-out for charging peripherals</i> <i>* USB-C Dock is not supported in right-side USB-C port</i> <i>* Depending on many factors, actual data transfer speed may be lower than theoretical speed</i></p> <p><b>Monitor cable (optional)</b> <i>HDMI to VGA:</i> Lenovo HDMI to VGA Monitor Adapter <i>USB-C to VGA:</i> Lenovo USB-C to VGA Adapter <i>USB-C to DP:</i> Lenovo USB-C to DisplayPort Adapter</p> <p><b>Bundled Accy</b> None</p> <p><b>Camera (optional)</b> <i>One of the following, configurable by model:</i> • HD720p camera with ThinkShutter camera privacy, fixed focus • IR camera and HD720p camera with ThinkShutter camera privacy, fixed focus</p> <p><b>Audio support</b> HD Audio, Synaptic® CX11880 codec / stereo speakers, 2W x 2 / dual array far-field microphone, headphone / microphone combo jack, Dolby Atmos® sound system</p> <p><b>Keyboard</b> 6-row, spill-resistant, multimedia Fn keys, numeric keypad, LED backlight</p> <p><b>UltraNav™</b> 3-button TrackPoint® pointing device and 3-button Mylar surface multi-touch touchpad</p> <p><b>Security</b> Power-on password, hard disk password, supervisor password, security keyhole</p> <p><b>Security chip</b> Discrete TPM 2.0, TCG Certified</p> <p><b>vPro (optional)</b> Intel vPro Technology</p> <p><b>Fingerprint reader</b> Touch style match on chip fingerprint reader on the palm rest</p> <p><b>Color calibration</b> <i>Optional:</i> X-Rite Pantone factory color calibration (UHD model only)</p> <p><b>NFC (optional)</b> Near Field Communication</p> <p><b>Battery</b> Integrated Li-ion 90Wh battery, supports Rapid Charge (charge up to 80% in 1hr)</p> <p><b>Max battery life</b> <i>Discrete mode:</i> 8 hr; <i>Hybrid mode:</i> 13 hr <i>(MobileMark® 2014) * Battery life varies significantly with settings, usage, &amp; other factors</i></p> <p><b>AC adapter</b> 170W or 230W slim tip AC adapter</p> <p><b>Operating system</b> <i>One of the following, configurable by model:</i> • Windows® 10 Home 64 • Windows 10 Pro 64 • Windows 10 Pro 64 for Workstations</p> <p><b>Limited warranty</b> <i>One of the following, configurable by model:</i> • 1-year depot repair service • 3-year/1-yr battery depot repair service • 3-year/1-yr battery limited onsite service</p> <p><b>Mil-Spec test</b> MIL-STD-810G military testing</p> <p><b>Environment</b> EPEAT™ Silver; ENERGY STAR® 7.1; RoHS-compliant</p>			
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<p><b>Graphics</b> 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 (8GB GDDR6, VR ready), or RTX 5000 (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)</p>																																														
<p><b>Chipset</b> Mobile Intel CM246 Chipset</p> <p><b>Memory</b> 128GB max / 2666MHz DDR4 (ECC function supported only on Xeon processor), dual-channel capable, four DDR4 SO-DIMM sockets</p>																																														
<p><b>Display</b></p> <table border="1"> <thead> <tr> <th>Size</th> <th>Resolution</th> <th>Type</th> <th>Surface</th> <th>Brightness</th> <th>Aspect Ratio</th> <th>Contrast Ratio</th> <th>Color Gamut</th> <th>Viewing Angle</th> </tr> </thead> <tbody> <tr> <td>15.6"</td> <td>FHD (1920x1080)</td> <td>IPS</td> <td>Anti-glare</td> <td>300 nits</td> <td>16:9</td> <td>700:1</td> <td>72%</td> <td>160°</td> </tr> <tr> <td>15.6"</td> <td>FHD (1920x1080) Dolby Vision™ HDR</td> <td>IPS</td> <td>Anti-glare</td> <td>500 nits</td> <td>16:9</td> <td>1200:1</td> <td>72%</td> <td>160°</td> </tr> <tr> <td>15.6"</td> <td>UHD (3840x2160) Dolby Vision HDR</td> <td>IPS</td> <td>Anti-glare</td> <td>500 nits</td> <td>16:9</td> <td>1200:1</td> <td>100%</td> <td>170°</td> </tr> <tr> <td>15.6"</td> <td>UHD (3840x2160) Dolby Vision HDR, Multi-touch</td> <td>OLED</td> <td>Anti-reflection Anti-smudge</td> <td>SDR 400nit, HDR 500nit (peak)</td> <td>16:9</td> <td>100000:1</td> <td>100% DCI-P3</td> <td>170°</td> </tr> </tbody> </table>	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) Dolby Vision™ HDR	IPS	Anti-glare	500 nits	16:9	1200:1	72%	160°	15.6"	UHD (3840x2160) Dolby Vision HDR	IPS	Anti-glare	500 nits	16:9	1200:1	100%	170°	15.6"	UHD (3840x2160) Dolby Vision HDR, Multi-touch	OLED	Anti-reflection Anti-smudge	SDR 400nit, HDR 500nit (peak)	16:9	100000:1	100% DCI-P3	170°	
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<p><b>Multi-touch (opt)</b> Capacitive-type multi-touch, supports 10-finger gesture (UHD only), anti-reflection (AR), anti-smudge (AS) coating</p>																																														
<p><b>Pen</b> Supports pen accessory, please see the accessory compatibility for details</p>																																														
<p><b>Storage</b> <i>Up to 3 drives (3x M.2 SSD or 1x HDD + 2x M.2 SSD)</i> • HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ • M.2 2280 SSD / PCIe NVMe, PCIe 3.0 x 4 <i>* HDD is only available for T1000 and T2000 graphics model</i></p>																																														
<p><b>Optane™ memory</b> <i>Optional:</i> Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2</p>																																														
<p><b>RAID (optional)</b> RAID 0/1/5 support</p>																																														
<p><b>Optical</b> None</p>																																														
<p><b>Ethernet</b> <i>Non-vPro model:</i> Intel Ethernet Connection I219-V (Jacksonville) <i>vPro model:</i> Intel Ethernet Connection I219-LM (Jacksonville)</p>																																														
<p><b>WLAN (optional)</b> Intel Wi-Fi 6 AX200, Wi-Fi 2x2 802.11ax + Bluetooth 5.0</p> <p><b>Bluetooth™ (opt)</b> Bluetooth 5.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter</p>																																														
<p><b>WWAN (optional)</b> <i>One of the following, configurable by model:</i> • Wireless WAN upgradable • Integrated Mobile Broadband 4G LTE-A, Fibocom L850-GL, M.2 card <i>* For non-WWAN model, it means the model is NOT WWAN upgradable</i></p>																																														
<p><b>SIM card (opt)</b> Nano-SIM card slot, optional Verizon LTE (US) SIM card</p>																																														

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

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