ThinkPad P53 Platform Specifications

**Processor**

<table>
<thead>
<tr>
<th>Processor</th>
<th>9th Generation Intel® Core™ i5 / i7 / i9 Processor or Intel Xeon® E Processor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor Number</td>
<td># of Cores</td>
</tr>
<tr>
<td>5-9400H</td>
<td>4</td>
</tr>
<tr>
<td>7-9750H</td>
<td>6</td>
</tr>
<tr>
<td>7-9850H</td>
<td>6</td>
</tr>
<tr>
<td>9-9880H</td>
<td>8</td>
</tr>
<tr>
<td>E-2276M</td>
<td>6</td>
</tr>
</tbody>
</table>

**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 (8GB GDDR6, VR ready), or RTX 5000 (16GB GDDR6, VR ready);
- supports external digital monitor via HDMI or Thunderbolt™;
- Up to 5 displays with 4 external monitors plus system LCD screen.
- Max resolution: 5K@60Hz (Thunderbolt™), 4K@60Hz (USB-C or HDMI)
- Intel UHD Graphics 4, 2.8 GHz
- 700:1
- Anti-glare

**Chipset**

- Mobile Intel CM246 Chipset
- Mobile Intel UHD Graphics 630
- Mobile 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);
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- RTX 5000 (16GB GDDR6, VR ready);
- supports external digital monitor via HDMI or Thunderbolt™;
- Up to 5 displays with 4 external monitors plus system LCD screen.
- Max resolution: 5K@60Hz (Thunderbolt™), 4K@60Hz (USB-C or HDMI)

**Display**

<table>
<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&quot;</td>
<td>FHD (1920x1080)</td>
<td>IPS</td>
<td>Anti-glare</td>
<td>300 nits</td>
<td>16:9</td>
<td>1000:1</td>
<td>70% (peak)</td>
<td>120°</td>
</tr>
<tr>
<td>15.6&quot;</td>
<td>FHD (1920x1080)</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&quot;</td>
<td>UHD (3840x2160)</td>
<td>IPS</td>
<td>Anti-glare</td>
<td>500 nits</td>
<td>16:9</td>
<td>1200:1</td>
<td>72%</td>
<td>170°</td>
</tr>
<tr>
<td>15.6&quot;</td>
<td>UHD (3840x2160)</td>
<td>OLED</td>
<td>Anti-reflection/ Anti-smudge</td>
<td>SDR 400nit, HDR 500nit</td>
<td>16:9</td>
<td>10000:1:1</td>
<td>100% DCI-P3</td>
<td>170°</td>
</tr>
</tbody>
</table>

**Multi-touch (opt)-bootstrap only**

- Capacitive-type multi-touch, supports 10-finger gesture (UHD only), anti-reflection (AR), anti-smudge (AS) coating
- Lenovo Pen Pro (special bid only)

**Storage**

- Up to 3 drives (3x M.2 SSD or 1x HDD + 2x M.2 SSD), supports single sided M.2 2280 drives only
  - HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, Active Protection System™
  - M.2 2280 SSD / PCIe NVMe, PCIe 3.0 x 4
  - * HDD is only available for T1000 and T2000 graphics model
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**Optane™ memory (Optinal)**

- Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2
- RAID 0/1/5 support
- Intel UHD Graphics 620, 4.3 GHz
- 16:9
- Anti-glare

**Optical (optional)**

- Lenovo Pen Pro (special bid only)
- Intel Ethernet Connection I219-V (Jacksonville)
- Intel Ethernet Connection I219-LM (Jacksonville)
- Intel vPro Technology

**WLAN (optional)**

- Intel Wi-Fi 6 AX200, Wi-Fi 2x2 802.11ax + Bluetooth 5.1
- Bluetooth 5.1, wireless, integrated in Wi-Fi + Bluetooth combo adapter
- Integrated Mobile Broadband 4G LTE-A, Fibocom L850-GL, M.2 card
- One of the following, configurable by model:
  - Wireless LAN upgradable (special bid only in EMEA)
  - Integrated Mobile Broadband 4G LTE-A, Fibocom L850-GL, M.2 card
- One of the following, configurable by model:
  - Wireless LAN upgradable (special bid only in EMEA)
  - 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
- 2.5 GHz
- 12MB
- 10000:1

**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

**Smart card reader**

- Optional: Smart card reader

**ExpressCard**

- None

**Media reader**

- 4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card
- 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), secure 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 (optional)**

- HDMI to VGA: Lenovo HDMI to VGA Monitor Adapter
- USB-C to VGA: Lenovo USB-C to VGA Adapter
- USB-C to DP: Lenovo USB-C to DisplayPort Adapter

**Bundled Accy (optional)**

- None

**Audio support**

- 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
  - HD Audio, Synaptic CX11880 codec / stereo speakers, 2W x 2 / optional 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
- 3-button TrackPoint® pointing device and 3-button Mylar surface multi-touch touchpad

**Security**

- Power-on password, hard disk password, supervisor password, security keyhole
- Discrete TPM 2.0, TCG Certified
- 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-Polymer 90Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
- Discrete mode: 8 hr; Hybrid mode: 13 hr
- AC adapter
  - * Battery life varies significantly with hardware configurations, settings, usage, & other factors
  - 170W or 230W slim tip AC adapter

**Operating system**

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

**Limited warranty**

- One of the following, configurable by model:
  - 1-year depot repair service
  - 3-year/1-year battery depot repair service
  - 3-year/1-year 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.