## ThinkPad P52s Platform Specifications

### Processor

<table>
<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>8th Generation Intel® Core™ i5 / i7 Processor</td>
<td>4</td>
<td>8</td>
<td>1.7 GHz</td>
<td>3.6 GHz</td>
<td>6MB</td>
<td>DDR4-2400</td>
<td>Intel UHD Graphics 620</td>
</tr>
<tr>
<td>8th Generation Intel® Core™ i5 / i7 Processor</td>
<td>7-8550U</td>
<td>7-8650U</td>
<td>1.6 GHz</td>
<td>4.0 GHz</td>
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</tr>
<tr>
<td>8th Generation Intel® Core™ i5 / i7 Processor</td>
<td>7-8750U</td>
<td>1.9 GHz</td>
<td>4.2 GHz</td>
<td>8MB</td>
<td>DDR4-2400</td>
<td>Intel UHD Graphics 620</td>
<td></td>
</tr>
</tbody>
</table>

### Graphics

Intel UHD Graphics 620 in processor and NVIDIA Quadro® P500, 2GB GDDR5 memory; supports external digital monitor via HDMI or USB Type-C; Up to 3 displays with 2 external monitors plus system LCD screen.

Max resolution: 4096x2304@60Hz (USB Type-C); 4096x2160@30Hz (HDMI)

### Chipset Memory

Intel SoC (System on Chip) platform

* System locks down for processors with lower memory controller

### Display

**Some:** 15.6” (396mm) FHD (1920x1080), anti-glare, LED backlight, WVA, 250 nits, 16:9 aspect ratio, 100:1 contrast ratio, 45% gamut, 170° viewing angle

**Some:** 15.6” (396mm) UHD(3840x2160), anti-glare, LED backlight, WVA, 300 nits, 16:9 aspect ratio, 100:1 contrast ratio, 72% gamut, 170° viewing angle

### Multi-touch (opt) Pen

On-cell touch, supports 10-finger gesture (FHD only)

### Storage

System has one HDD slot or one M.2 2280 slot exclusively for storage, and supports single sided M.2 2280 drives only

**Some:** HDD / SATA 6.0Gb/s, 2.5” wide, 7mm high, Active Protection System™

**Some:** SSD / SATA 6.0Gb/s, 2.5” wide, 7mm high (e.g. xxxGB SSD)

**Some:** M.2 SSD / PCIe NVMe, PCIe 3.0 x 2, 16Gb/s

In WWAN slot as 2nd Storage, mutually exclusive with WWAN

### Optane™ memory (opt)

Optional: Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2

### Ethernet

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

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

### WLAN + Bluetooth™

Intel Dual Band Wireless-AC 8265, Wi-Fi 2x2 802.11ac + Bluetooth 4.1, M.2 card

* Intel 8265ac card supports BT4.2 but is limited to BT4.1 by Windows OS

### WWAN (optional)

One of the following, configurable by model:

- Wireless WAN upgradeable
- Integrated Mobile Broadband 4G LTE, Intel XMM™ 7760 (Fibocom L8250-EB), M.2 card (EMEA only)
- Integrated Mobile Broadband 4G LTE, Intel XMM™ 7760 (Fibocom L8250-GL), M.2 card

* For non-WWAN model, it means the model is NOT WWAN upgradeable

### SIM card (opt)

Nano-SIM card slot, optional Verizon LTE (US) SIM card

### Media reader

4-in-1 reader (MMC, SD, SDHC, SDXC)

### Ports

Two USB 3.1 Gen 1 (one Always On!), one USB 3.1 Type-C Gen 2 (with the function of Power Delivery and DisplayPort), one USB 3.1 Type-C Gen 2 / Thunderbolt 3 (with the function of PD and DP), HDMI 1.4b, 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), side docking connector, security keyhole

* Depending on many factors, actual data transfer speed may be lower than theoretical speed

### Battery

Optional integrated Li-ion 32Wh battery and swappable Li-ion 24Wh, 48Wh, or 72Wh battery

### Operating system

Windows® 10 Home 64 or Windows 10 Pro 64

### Limited warranty

One of the following, configurable by model:

- 1-year depot repair service
- 1-year depot with 2-year system board repair service
- 3-year/1-yr battery depot repair service
- 3-year/1-yr battery limited onsite service
- 3-year (including battery) limited onsite service

### Mil-Spec test

MIL-STD-810G military testing

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

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Lenovo

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