ThinkPad P52s Platform Specifications

Product Specifications Reference (PSREF)

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>i5-8350U</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>i7-8550U</td>
<td>4</td>
<td>8</td>
<td>1.6 GHz</td>
<td>4.0 GHz</td>
<td>8MB</td>
<td>DDR4-2400</td>
<td>Intel UHD Graphics 620</td>
</tr>
<tr>
<td>i7-8650U</td>
<td>4</td>
<td>8</td>
<td>1.9 GHz</td>
<td>4.2 GHz</td>
<td>8MB</td>
<td>DDR4-2400</td>
<td>Intel UHD Graphics 620</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; supports three independent displays; Max resolution: 4096x2304@60Hz (USB Type-C); 4096x2160@30Hz (HDMI)

Chipset

Intel SoC (System on Chip) platform

Storage

System has one HDD slot or one M.2 2280 slot exclusively for storage

- **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
- **Some:** 128GB M.2 SSD / PCIe NVMe, PCIe 3.0 x 2, 16Gb/s, in WWAN slot as 2nd Storage, mutually exclusive with WWAN

Optane™ memory

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-L (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 upgradable**
- **Integrated Mobile Broadband 4G LTE, Intel XMM™ 7360 (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: 14.40" x 9.95" x 0.79-0.80"; 365.8mm x 252.8mm x 19.95-20.2mm

Weight

starting at 4.39 lb / 1.99 kg

Case color

Black

Case material

Display cover: Glass-Fiber Reinforced Plastic (PPS);
Bottom: Glass-Fiber Reinforced Plastic

Smart card reader

Optional: Smart card reader

Media reader

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

Ports

Two USB 3.1 Gen 1 (one Always On)

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

Audio support

UltraNav™

6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight

Security

Power-on password, hard disk password, supervisor password, security keyhole

Fingerprint reader

Optional: Touch style match on chip fingerprint reader on the palm rest

Battery

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

Max battery life

(MobileMark® 2014)

<table>
<thead>
<tr>
<th>Models</th>
<th>48Wh</th>
<th>72Wh</th>
<th>32Wh + 24Wh</th>
<th>32Wh + 48Wh</th>
<th>32Wh + 72Wh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max battery life</td>
<td>12.2 hr</td>
<td>18.5 hr</td>
<td>13.5 hr</td>
<td>20.1 hr</td>
<td>26.3 hr</td>
</tr>
</tbody>
</table>

AC adapter

65W USB Type-C AC adapter

Preload

Windows® 10 Home 64 or Windows 10 Pro 64

Limited warranty

One of the following, configurable by model:

- **1-year depot repair service**
- **3-year/1yr battery depot repair service**
- **3-year/1-year battery limited onsite service**

Mil-Spec test

MIL-STD-810G military testing

Environment

EPEAT® Gold (US only); ENERGY STAR® 6.1; RoHS-compliant

Lenovo

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