### ThinkPad T450 Platform Specifications

#### Processor

<table>
<thead>
<tr>
<th>Processor Type</th>
<th>Core(s)</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Turbo Frequency</th>
<th>Cache</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-4030U</td>
<td>3/4</td>
<td>4/4</td>
<td>1.9 GHz</td>
<td>2.9 GHz</td>
<td>3MB</td>
<td>Intel HD Graphics 4400</td>
</tr>
<tr>
<td>5-5010U</td>
<td>3/4</td>
<td>4/4</td>
<td>2.1 GHz</td>
<td>2.7 GHz</td>
<td>3MB</td>
<td>Intel HD Graphics 5500</td>
</tr>
<tr>
<td>5-5300U</td>
<td>3/4</td>
<td>4/4</td>
<td>2.3 GHz</td>
<td>2.9 GHz</td>
<td>4MB</td>
<td></td>
</tr>
<tr>
<td>7-5500U</td>
<td>4/4</td>
<td>4/4</td>
<td>2.4 GHz</td>
<td>3 GHz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7-5600U</td>
<td>4/4</td>
<td>4/4</td>
<td>2.6 GHz</td>
<td>3.2 GHz</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Graphics

- Intel HD Graphics 4400 or 5500 in processor.
- Supports external analog monitor via VGA and digital monitor via Mini DisplayPort.
- Supports three independent displays.
- Max resolution: 3840x2160@60Hz (DP via miniDP cable); 1920x1200@60Hz (VGA)

#### Chipset Memory

- Intel SoC (System on Chip) platform with Intel HD Graphics 4400 or 5500 in processor.
- Supports external analog monitor via VGA and digital monitor via Mini DisplayPort.
- Supports three independent displays.
- Max resolution: 3840x2160@60Hz (DP via miniDP cable); 1920x1200@60Hz (VGA)

#### Display

- **Some (355mm):** HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 350:1 contrast ratio
- **Some:** HD+ (1600x900), anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio
- **Some (355mm):** FHD (1920x1080), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS
- **Some:** HD+ (1920x1080), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS
- **Some:** HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 350:1 contrast ratio

#### Storage

- ** SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable:**
- ** HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradeable:**
- ** Shock Mounted Hard Drive, Active Protection System™:**
- ** SSDH with 8GB NAND flash memory:**
- ** Single-sided M.2 SSD, via M.2 card slot:**

#### Ethernet

- **Non-vPro model:** Intel Ethernet Connection I218-V (Clarkville)
- **vPro model:** Intel Ethernet Connection I218-LM (Clarkville)

#### Bluetooth™

- Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter

#### WWAN (optional)

- **One of the following, configurable by model:**
  - 11b/g/n, ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card
  - 11b/g/n, Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card (WE only)
  - 11b/g/n, Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card (WE only)
  - 11ac, Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT adapter, M.2 card

#### SIM card (optional)

- AT&T® or Verizon™ LTE (4G), contract required with service provider

### Product Specifications Reference (PSREF)

#### Processor

<table>
<thead>
<tr>
<th>Processor Type</th>
<th>No + 3-cell</th>
<th>3-cell + 3-cell</th>
<th>3-cell + 6-cell</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-4030U</td>
<td>Non-touch</td>
<td>Multi-touch</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.58 lb / 1.63 kg</td>
<td>3.81 lb / 1.73 kg</td>
<td>4.21 lb / 1.91 kg</td>
</tr>
<tr>
<td></td>
<td>Multi-touch</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.89 lb / 1.76 kg</td>
<td>4.11 lb / 1.87 kg</td>
<td>4.52 lb / 2.05 kg</td>
</tr>
</tbody>
</table>

#### Display

- **Cover:** Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model);
- **Bottom:** Glass-Fiber Reinforced Plastic

#### Security

- **Security chip:**
  - ThinkEngine
  - Intel vPro Technology
- **Power-on password, hard disk password, supervisor password, security keyhole:**
- **Trusted Platform Module, TCG 1.2-compliant:**
- **Intel vPro Technology:**
- **Integrated Li-Ion-Polymer 3-cell (23Wh):**
- **Lenovo Solution Center:**
- **Lenovo SHAREit:**
- **Lenovo Companion:**
- **Microsoft Office preloaded; purchase a product key to activate:**
- **Norton Internet Security:**
- **McAfee® LiveSafe™:**
- **Limited warranty:**
  - **One year depot repair service:**
  - **Three-year/one-year battery limited onsite service:**
  - **Three-year/one-year battery limited onsite service, OID (Onsite International Delivery):**
- **Environment:**
  - **EPEAT® Gold (US) or EPEAT Silver (WE):**
  - **ENERGY STAR® 6.1, GREENGUARD®:**
  - **RoHS-compliant:**