ThinkPad X280 Platform Specifications

**Processor**
- 7th Generation Intel® Core™ i3 / i5 Processor
  - *i3-7130U is NOT available in US and EMEA; i5-7200U is NOT available in US*

<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>i3-7020U</td>
<td>2</td>
<td>4</td>
<td>2.3 GHz</td>
<td>-</td>
<td>3MB</td>
<td>DDR4-2133</td>
<td>Intel HD Graphics 620</td>
</tr>
<tr>
<td>i3-7130U</td>
<td>2</td>
<td>4</td>
<td>2.7 GHz</td>
<td>-</td>
<td>3MB</td>
<td>DDR4-2133</td>
<td>Intel HD Graphics 620</td>
</tr>
<tr>
<td>i5-7200U</td>
<td>4</td>
<td>8</td>
<td>2.5 GHz</td>
<td>3.1 GHz</td>
<td>3MB</td>
<td>DDR4-2133</td>
<td>Intel HD Graphics 620</td>
</tr>
<tr>
<td>i5-7300U</td>
<td>4</td>
<td>8</td>
<td>2.6 GHz</td>
<td>3.5 GHz</td>
<td>3MB</td>
<td>DDR4-2133</td>
<td>Intel HD Graphics 620</td>
</tr>
</tbody>
</table>

- or 8th Generation Intel Core™ i3 / i5 / i7 Processor

<table>
<thead>
<tr>
<th>Processor Number</th>
<th># of Cores</th>
<th># of Threads</th>
<th>Base Frequency</th>
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<th>Cache</th>
<th>Memory Types</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>i3-8130U</td>
<td>2</td>
<td>4</td>
<td>2.2 GHz</td>
<td>3.4 GHz</td>
<td>4MB</td>
<td>DDR4-2400</td>
<td>Intel UHD Graphics 620</td>
</tr>
<tr>
<td>i5-8250U</td>
<td>4</td>
<td>8</td>
<td>1.6 GHz</td>
<td>3.4 GHz</td>
<td>6MB</td>
<td>DDR4-2400</td>
<td>Intel UHD Graphics 620</td>
</tr>
<tr>
<td>i7-8550U</td>
<td>8</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>i7-8650U</td>
<td>8</td>
<td>8</td>
<td>1.9 GHz</td>
<td>4.0 GHz</td>
<td>8MB</td>
<td>DDR4-2400</td>
<td>Intel UHD Graphics 620</td>
</tr>
</tbody>
</table>

**Graphics**
- Intel HD Graphics 620 or Intel UHD Graphics 620 in processor;
- 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
- 4GB, 8GB, or 16GB / 2400MHz DDR4 / soldered to systemboard, no sockets
- * 4GB memory is NOT available in US and EMEA
- * System clocks down for processors with lower memory controller

**Memory**
- 8GB, 16GB / 2400MHz DDR4 / soldered to systemboard, no sockets
- Intel XMM 7360 (Fibocom L850-GL), M.2 card
  - * For non-WWAN model, it means the model is NOT WWAN upgradable
  - Nano-SIM card slot, in the combo slot with microSD card reader, optional Verizon LTE (US) SIM card

**Display**
- 12.5” (317.5mm) HD (1366x768), anti-glare, LED backlight,
  - 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, 170° viewing angle

**Multi-touch (opt)**
- On-cell touch, supports 10-finger gesture (HDF only)
- * HDF non-touch model is NOT available in US

**Storage**
- One of the following, configurable by model:
  - M.2 SSD / SATA 6.0Gb/s (e.g. xxxGB SSD M.2)
  - M.2 SSD / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s (e.g. xxxGB SSD M.2 PCIe NVMe)
  - None

**Optical**
- Native Intel Ethernet Connection I219-V (Non-vPro) or I219-LM (vPro)
  - via optional ThinkPad Ethernet Extension Adapter Gen 2

**Ethernet**
- Intel Dual Band Wireless-AC 8265, Wi-Fi 2x2 802.11ac + Bluetooth 4.1, M.2 card
- Bluetooth 4.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter

**WWAN (opt)**
- Wireless WAN upgradable (special bid only)
  - Integrated Mobile Broadband 4G LTE, Intel XMM™ 7362 (Fibocom L830-EB), M.2 card (EMEA only)
  - Integrated Mobile Broadband 4G LTE-A, Intel XMM™ 7360 (Fibocom L850-GL), M.2 card

**SIM card (opt)**
- 8GB, 16GB / 2400MHz DDR4 / soldered to systemboard, no sockets
- * For non-WWAN model, it means the model is NOT WWAN upgradable
  - Nano-SIM card slot, in the combo slot with microSD card reader, optional Verizon LTE (US) SIM card

**Case color**
- None

**Case material**
- Display cover: Carbon Fiber (HDF non-touch model) or Glass Fiber (HDF & FHD multi-touch model); Bottom: Magnesium/Aluminum

**Media reader**
- Optional: Smart card reader

**Ports**
- MicroSD card reader, in the combo slot with nano-SIM card
- Two USB 3.1 Gen 1 (one Always On),
  - one USB 3.1 Type-C Gen 2 / Thunderbolt 3 (with the function of PD and DP),
  - HDMI 1.4b, Ethernet extension connector,
  - combo slot of nano-SIM card (WWAN models) and microSD card reader,
  - headphone / microphone combo jack, optional smart card reader,
  - side docking connector, security keyhole

**Keyboard**
- UltraNav™ TrackPoint® pointing device and buttonless Mylar surface multi-touch touchpad

**Audio**
- ALC3287 codec / Mic: 220 nits, 16:9 aspect ratio, 400:1 contrast ratio

**Security**
- Power-on password, hard disk password, supervisor password, security keyhole
- Discrete TPM 2.0, TCG Certified (may be disabled in some region)
- Intel vPro Technology
- Touch style match on chip fingerprint reader on the palm rest, anti-spoofing technology

**Battery**
- Integrated Li-ion 48Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter
- MobileMark® 2014: 16.6 hr
  - * Battery life varies significantly with hardware configurations, settings, usage, & other factors

**Limited warranty**
- One of the following, configurable by model:
  - 1-year depot repair service
  - 1-year depot repair service with 2-year system board repair service
  - 1-year/3-yr battery depot repair service
  - 1-year/6-yr battery depot repair service
  - 3-year/6-yr battery depot repair service
  - 3-year/3-yr battery limited onsite service
  - 3-year/3-yr battery limited onsite service

**Environmental**
- MIL-STD-810G military testing
- EPEAT™ Gold (US only); ENERGY STAR® 6.1; RoHS-compliant

Note: The specifications above may not be available in all regions and might change by regions.

Lenovo
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