ThinkPad X1 Carbon (7th Gen) 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>i5-8265U</td>
<td>4</td>
<td>8</td>
<td>1.6 GHz</td>
<td>3.9 GHz</td>
<td>6MB</td>
<td>LPDDR3-2133</td>
<td>Intel UHD Graphics 620</td>
</tr>
<tr>
<td>i5-8365U</td>
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<td>8</td>
<td>1.6 GHz</td>
<td>4.1 GHz</td>
<td>6MB</td>
<td>LPDDR3-2133</td>
<td>Intel UHD Graphics 620</td>
</tr>
<tr>
<td>7-8665U</td>
<td>4</td>
<td>8</td>
<td>1.9 GHz</td>
<td>4.9 GHz</td>
<td>8MB</td>
<td>LPDDR3-2133</td>
<td>Intel UHD Graphics 620</td>
</tr>
<tr>
<td>7-9000U</td>
<td>6</td>
<td>12</td>
<td>1.1 GHz</td>
<td>4.7 GHz</td>
<td>12MB</td>
<td>LPDDR3-2133</td>
<td>Intel UHD Graphics 620</td>
</tr>
</tbody>
</table>

or 10th Generation Intel Core i5 / i7 Processor (NOT available in EMEA)

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<tr>
<th>Processor Number</th>
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</tr>
</thead>
<tbody>
<tr>
<td>5-10210U</td>
<td>4</td>
<td>8</td>
<td>1.6 GHz</td>
<td>4.2 GHz</td>
<td>6MB</td>
<td>LPDDR3-2133</td>
<td>Intel UHD Graphics 620</td>
</tr>
<tr>
<td>7-10510U</td>
<td>4</td>
<td>8</td>
<td>1.6 GHz</td>
<td>4.9 GHz</td>
<td>8MB</td>
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<td>12MB</td>
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</tr>
</tbody>
</table>

Graphics

Intel UHD Graphics 620 or Intel UHD Graphics in processor; supports external digital monitor via HDMI or USB Type-C / Thunderbolt; supports three independent displays; Max resolution: 5K@60Hz (Thunderbolt); 4K@24Hz (HDMI);

Chipset

Intel SoC (System on Chip) platform 8GB or 16GB / 2133MHz LPDDR3 / soldered to system board, no sockets

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>14.0&quot; (1920x1080) Multi-touch</td>
<td>IPS</td>
<td>Anti-reflection Anti-smudge</td>
<td>300 nits</td>
<td>16:9</td>
<td>700:1</td>
<td>72%</td>
<td>170°</td>
<td></td>
</tr>
<tr>
<td>14.0&quot; (1920x1080) Low Power</td>
<td>IPS</td>
<td>Anti-glide</td>
<td>400 nits</td>
<td>16:9</td>
<td>800:1</td>
<td>72%</td>
<td>170°</td>
<td></td>
</tr>
<tr>
<td>14.0&quot; (1920x1080) ThinkPad Privacy Guard</td>
<td>IPS</td>
<td>Anti-glide</td>
<td>400 nits</td>
<td>16:9</td>
<td>1000:1</td>
<td>72%</td>
<td>170°</td>
<td></td>
</tr>
<tr>
<td>14.0&quot; WQHD (2560x1440)</td>
<td>IPS</td>
<td>Anti-glide</td>
<td>300 nits</td>
<td>16:9</td>
<td>700:1</td>
<td>72%</td>
<td>170°</td>
<td></td>
</tr>
<tr>
<td>14.0&quot; UHD (3840x2160) HDR 400, Dolby Vision</td>
<td>IPS</td>
<td>Glossy</td>
<td>500 nits</td>
<td>16:9</td>
<td>1400:1</td>
<td>90%</td>
<td>170°</td>
<td></td>
</tr>
</tbody>
</table>

Multi-touch (opt)

Capacitive-type multi-touch, supports 10-finger gesture (FHD only), anti-reflection (AR) / anti-smudge (AS) coating

Storage

One of the following, configurable by model:
- M.2 2280 SSD / SATA 6.0Gb/s
- M.2 2280 SSD / PCIe NVMe 3.0 x 4
- Intel Optane™ Memory H10 with Solid State Storage, M.2 2280, PCIe NVMe 3.0 x 4

Optical

None

Ethernet

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

WLAN + Bluetooth™

One of the following, configurable by model:
- Intel Wireless-AC 9560, Wi-Fi 2x2 802.11ac + Bluetooth 5.0
- Intel Wi-Fi 6 AX201, Wi-Fi 2x2 802.11ax + Bluetooth 5.0 (AX201 for 10th Gen processor only and NOT available in AP)

WWAN (optional)
One of the following, configurable by model:
- Integrated Mobile Broadband 4G LTE-A, Fibocom L850-GL, M.2 card
- Integrated Mobile Broadband 4G LTE-A, Fibocom L860-GL, MIM0 2x2, M.2 card

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

Dimensions
WxDxH (Privacy Guard): 12.72" x 8.54" x 0.61"; 323mm x 217mm x 15.4mm
WxDxH (other model): 12.72" x 8.54" x 0.59"; 323mm x 217mm x 14.95mm

Weight
- Privacy Guard model: starting at 2.66 lb / 1.21 kg
- Other model: starting at 2.4 lb / 1.09 kg

Case color
Black paint or black weave

Case material
Display cover: Carbon Fiber;
Bottom: magnesium alloy

Smart card reader
None

Media reader
None

Ports
Two USB 3.1 Gen 1 (one Always On), two USB 3.1 Type-C Gen 2 / Thunderbolt 3 (with the function of Power Delivery and DisplayPort), HDMI 1.4b, Ethernet extension connector, nano-SIM card slot (WWAN models), headphone / microphone combo jack, side docking connector, security keyhole

Camera (optional)
One of the following, configurable by model:
- HD720p camera with ThinkShutter camera privacy, fixed focus
- 10 Home 64 or Windows 10 Pro 64

Audio support
UltraNav™ TrackPoint® pointing device and buttonless glass surface multi-touch touchpad

Keyboard
6-row, spill-resistant, multimedia Fn keys, LED backlight

Security chip
Discrete TPM 2.0, TCG Certified

System Mgt (opt)
Intel vPro Technology

Fingerprint reader
Touch style match on chip fingerprint reader on the palm rest

Battery
Integrated Li-ion 51Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Max battery life
MobileMark® 2014: 18.3 hr

AC adapter
45W, 65W, or 65W slim USB-C AC adapter

Operating system
Optional: 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

Mil-Spec test
MIL-STD-810G military testing

Near Field Communication

Data transfer speed may be lower than theoretical speed

Dolby Atmos® speaker system, 2W x 2, 0.8 x 2 / four 360° far-field microphones, headphone / microphone combo jack

Near Field Communication

EPEAT™ Gold; ENERGY STAR® 7.1; RoHS-compliant

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

Lenovo
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