## OVERVIEW

1. Ethernet (RJ-45)
2. Thunderbolt 4
3. Thunderbolt 4
4. HDMI 2.1 TMDS
5. USB 3.2 Gen 1 (one Always On)
6. Headphone / microphone combo jack (3.5mm)
7. Smart card reader *
8. USB 3.2 Gen 1
9. Security keyhole

Notes:
- Ports with * are only available on selected models
PERFORMANCE

Processor

Processor Family
12th Generation P series Intel® Core™ i5 / i7 processor, supports processors up to 14 cores; up to 4.8 GHz; up to 28W TDP

<table>
<thead>
<tr>
<th>Processor Name</th>
<th>Cores</th>
<th>Threads</th>
<th>Base Frequency</th>
<th>Max Frequency</th>
<th>Cache</th>
<th>Memory Support</th>
<th>Processor Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i5-1240P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>DDR4-3200</td>
<td>Intel Iris Xe Graphics</td>
</tr>
<tr>
<td>Core i5-1250P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 1.7GHz / E-core 1.2GHz</td>
<td>P-core 4.4GHz / E-core 3.3GHz</td>
<td>12MB</td>
<td>DDR4-3200</td>
<td>Intel Iris Xe Graphics</td>
</tr>
<tr>
<td>Core i7-1260P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.1GHz / E-core 1.5GHz</td>
<td>P-core 4.7GHz / E-core 3.4GHz</td>
<td>18MB</td>
<td>DDR4-3200</td>
<td>Intel Iris Xe Graphics</td>
</tr>
<tr>
<td>Core i7-1270P</td>
<td>12 (4 P-core + 8 E-core)</td>
<td>16</td>
<td>P-core 2.2GHz / E-core 1.6GHz</td>
<td>P-core 4.8GHz / E-core 3.5GHz</td>
<td>18MB</td>
<td>DDR4-3200</td>
<td>Intel Iris Xe Graphics</td>
</tr>
<tr>
<td>Core i7-1280P</td>
<td>14 (6 P-core + 8 E-core)</td>
<td>20</td>
<td>P-core 1.8GHz / E-core 1.3GHz</td>
<td>P-core 4.8GHz / E-core 3.6GHz</td>
<td>24MB</td>
<td>DDR4-3200</td>
<td>Intel Iris Xe Graphics</td>
</tr>
</tbody>
</table>

Operating System

Operating System**
- Windows® 11 Pro 64
- Windows 11 Home 64
- Windows 11 DG Windows 10 Pro 64
- Ubuntu Linux
- Red Hat Enterprise Linux (certified only)

Graphics

Graphics**[1]

<table>
<thead>
<tr>
<th>Graphics Type</th>
<th>Type</th>
<th>Memory</th>
<th>Boost Clock</th>
<th>TGP</th>
<th>Connector</th>
<th>Max Resolution</th>
<th>Key Features</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel Iris Xe Graphics</td>
<td>Integrated</td>
<td>Shared</td>
<td>-</td>
<td>Share CPU TDP</td>
<td>-</td>
<td>-</td>
<td>DirectX® 12.1</td>
<td>-</td>
</tr>
<tr>
<td>NVIDIA® T550 Laptop GPU</td>
<td>Discrete</td>
<td>4GB GDDR6</td>
<td>-</td>
<td>30W</td>
<td>-</td>
<td>-</td>
<td>DirectX 12</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes:
1. Intel Iris Xe Graphics requires dual-channel memory. On models with single-channel memory, Intel Iris Xe Graphics will function as Intel UHD graphics.

Monitor Support

Monitor Support
Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and Thunderbolt™)
- HDMI supports up to 3840x2160@60Hz
- Thunderbolt supports up to 7680x4320@60Hz

Chipset

Chipset
Intel SoC (System on Chip) platform

Memory

Max Memory[1]
- Up to 40GB (8GB soldered + 32GB SO-DIMM) DDR4-3200
- Up to 48GB (16GB soldered + 32GB SO-DIMM) DDR4-3200

Memory Slots
One memory soldered to system board, one DDR4 SO-DIMM slot, dual-channel capable

**Memory Type**

DDR4-3200 non-ECC

**Notes:**

1. The max memory is based on the test results with current Lenovo® memory offerings. The system may support more memory as the technology develops.

**Storage**

**Storage Support**

One drive, up to 2TB M.2 2280 SSD

**Storage Slot**

One M.2 2280 PCIe® Gen 4x4 slot, supports M.2 2280 SSD

**Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
<th>Offering</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe NVMe*, PCIe 4.0 x4 Performance</td>
<td>-</td>
<td>512GB / 1TB / 2TB</td>
<td>Opal2</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe NVMe, PCIe x4</td>
<td>-</td>
<td>256GB / 512GB / 1TB</td>
<td>Opal2</td>
</tr>
</tbody>
</table>

**Notes:**

1. The storage capacity supported is based on the test results with current Lenovo storage offerings. The system may support larger storage as the technology develops.
2. PCIe x4 SSD may be PCIe 3.0 x4 or PCIe 4.0 x4 as substitution.

**Removable Storage**

**Optical**

None

**Card Reader**

No card reader

**Multi-Media**

**Audio Chip**

High Definition (HD) Audio, Realtek® ALC3287 codec

**Speakers**

Stereo speakers, Dolby® Audio™

**Microphone**

- Dual array microphone, Dolby Voice
- No microphone

**Camera**

- HD 720p, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- IR & FHD 1080p hybrid, with privacy shutter, fixed focus
- No camera

**Battery**

**Battery**

- Integrated Li-Polymer 52.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr)
- Integrated Li-Polymer 86Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 135W AC adapter

**Power Adapter**

**Power Adapter**

- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 100W USB-C slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
ThinkPad P16s Gen 1 (Intel)

- 135W USB-C slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- No power adapter

Notes:
1. AC adapter offerings depend on the country.

**DESIGN**

**Display**

**Display**

<table>
<thead>
<tr>
<th>Size</th>
<th>Resolution</th>
<th>Touch</th>
<th>Type</th>
<th>Brightness</th>
<th>Surface</th>
<th>Aspect Ratio</th>
<th>Contrast Ratio</th>
<th>Color Gamut</th>
<th>Viewing Angle</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.0&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>300 nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>170°</td>
<td>DC dimming, ICC Template color calibration, Low power, Low blue light, TUV Eye Comfort, DC dimming</td>
</tr>
<tr>
<td>16.0&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>None</td>
<td>IPS</td>
<td>400 nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>178°</td>
<td>Low power, Low blue light, TUV Eye Comfort, DC dimming</td>
</tr>
<tr>
<td>16.0&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>300 nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>800:1</td>
<td>45% NTSC</td>
<td>170°</td>
<td>DC dimming</td>
</tr>
<tr>
<td>16.0&quot;</td>
<td>WUXGA (1920x1200)</td>
<td>Multi-touch</td>
<td>IPS</td>
<td>500 nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1000:1</td>
<td>100% sRGB</td>
<td>170°</td>
<td>ThinkPad® Privacy Guard, Low Blue Light, TUV Eye Comfort, DC dimming</td>
</tr>
<tr>
<td>16.0&quot;</td>
<td>WQXGA (2560x1600)</td>
<td>None</td>
<td>IPS</td>
<td>400 nits</td>
<td>Anti-glare</td>
<td>16:10</td>
<td>1200:1</td>
<td>100% sRGB</td>
<td>170°</td>
<td>Dolby Vision™, X-Rite® Pantone® Factory Color Calibration ($\Delta E&lt;2$), Low blue light, TUV Eye Comfort, DC dimming</td>
</tr>
</tbody>
</table>

**Color Calibration**

- X-Rite Pantone factory color calibration (WQXGA display)
- ICC Template color calibration (selected WUXGA display)
- No color calibration

**Touchscreen**

- On-cell touch, supports 10-point touch
- Non-touch

Notes:
1. California Electronic Waste Recycling Fee
   - In California, per state law, Lenovo charges an electronic waste recycling fee on this covered device at the time of sale of the product.
   - For more information, go to https://www.calrecycle.ca.gov/Electronics/Consumer

**Input Device**

**Keyboard**

6-row, spill-resistant, multimedia Fn keys with Unified Communications controls

**Keyboard Backlight**

- LED backlight
- Non-backlight

**UltraNav™**

3-button TrackPoint® pointing device and glass-like Mylar® surface multi-touch touchpad, 67 x 115 mm (2.64 x 4.53 inches)

**Mechanical**

**Dimensions (WxDxH)**

<table>
<thead>
<tr>
<th>Models</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated graphics models</td>
<td>361.98 x 255.5 x 20.5 mm (14.25 x 10.06 x 0.81 inches)</td>
</tr>
</tbody>
</table>
NVIDIA graphics models | 361.9 x 255.5 x 20.83 mm (14.25 x 10.06 x 0.82 inches)

**Weight**

<table>
<thead>
<tr>
<th>Models</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model with grey cover</td>
<td>Starting at 1.683 kg (3.71 lbs)</td>
</tr>
<tr>
<td>Model with black cover</td>
<td>Starting at 1.677 kg (3.7 lbs)</td>
</tr>
</tbody>
</table>

**Case Color**
- Black
- Storm grey

**Case Material**
- Model with black cover: PC 50% GF + PC 20% CF (top), PPS (bottom)
- Model with grey cover: Aluminium (top), PPS (bottom)

**Notes:**
1. The system dimensions and weight vary depending on configurations.
2. Storm grey case will be available in in the middle of May.

**CONNECTIVITY**

**Network**

**Onboard Ethernet**
- Gigabit Ethernet, Intel Ethernet Connection I219-LM (vPro models), supports Wake-on-LAN
- Gigabit Ethernet, Intel Ethernet Connection I219-V (non-vPro models), supports Wake-on-LAN

**WLAN + Bluetooth**
- Intel Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi + Bluetooth 5.2
- Qualcomm® NFA-725A Wi-Fi 6E, 802.11ax 2x2 Wi-Fi + Bluetooth 5.2

**WWAN**
- Wireless WAN upgradeable to 4G (with antenna ready)
- Fibocom L860-GL-16, 4G LTE CAT16, MIMO 4x4, M.2 card, with embedded eSIM functionality
- Quectel EM05-G, 4G LTE CAT4, M.2 card
- No support

**SIM Card**
- Gemalto eSIM
- No SIM card inbox

**NFC**
- Near Field Communication
- No support

**Notes:**
1. Bluetooth 5.2 is hardware ready but may run at a lower version due to OS limitation

**Ports**

**Standard Ports**
- 2x Thunderbolt 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 2.0)
- 2x USB 3.2 Gen 1 (one Always On)
- 1x HDMI, up to 4K/60Hz
- 1x Ethernet (RJ-45)
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Security keyhole

**Optional Ports**
- 1x Smart card reader
- 1x Nano-SIM card slot (WWAN support models)

**Notes:**
1. The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file
attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

- USB 2.0: 480 Mbit/s;
- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- Thunderbolt 3/4: 40 Gbit/s

Docking

Docking

Various docking solutions supported via Thunderbolt or USB-C.

For more compatible docking solutions, please visit Docking for ThinkPad P16s Gen 1 (Intel)

Monitor Cable

Monitor Cable**

- Lenovo HDMI to VGA Monitor Adapter
- Lenovo USB-C to DisplayPort Adapter
- Lenovo USB-C to VGA Adapter
- No monitor cable

SECURITY & PRIVACY

Security

Security Chip**

- Discrete TPM 2.0, TCG certified
- Firmware TPM 2.0 integrated in SoC

Physical Locks

Kensington® Nano Security Slot, 2.5 x 6 mm

Smart Card Reader

- Smart card reader
- No smart card reader

Fingerprint Reader

- Touch style fingerprint reader on power button
- No fingerprint reader

BIOS Security

- Power-on password
- Supervisor password
- NVMe password
- Self-healing BIOS

Other Security

- (Optional) Camera privacy shutter
- (Optional) IR camera for Windows Hello

MANAGEABILITY

System Management

System Management[*]

- Intel vPro
- Non-vPro

Notes:

1. Intel vPro offers a superset of DASH’s defined capabilities.

SERVICE

Warranty

Base Warranty**[1]
• 1-year depot service
• 1-year depot with 2-year system board service (Korea only)
• 1-year limited onsite service
• 3-year (1-yr battery) depot service
• 3-year (1-yr battery) limited onsite service
• No base warranty

Notes:
1. More information of warranty policy, please access https://pcsupport.lenovo.com/warranty

ENVIRONMENTAL

Sustainability

Material
97% PCC recycled plastic used in speaker enclosure
97% PCC recycled plastic used in the 52.5Wh battery
95% PCC recycled plastic used in standard 65W adapter
Low-temperature solder
90% recycled and/or sustainable packaging

Operating Environment

Temperature
- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F ) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

Humidity
- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 5% to 95% at wet-bulb temperature 27°C (81°F)

Altitude
Maximum altitude (without pressurization): 3048 m (10,000 ft)

Notes:
1. When you charge the battery, its temperature must be no lower than 10°C (50°F).

CERTIFICATIONS

Green Certifications

EPEAT™ Gold
ENERGY STAR® 8.0
TCO Certified 9.0
RoHS compliant

Other Certifications

Mil-Spec Test
MIL-STD-810H military test passed

ISV Certifications

Please visit ISV certifications for Lenovo Workstations

• Feature with ** means that only one offering listed under the feature is configured on selected models.
Lenovo reserves the right to change specifications or other product information without notice. Lenovo is not responsible for photographic or typographical errors. LENOVO PROVIDES THIS PUBLICATION “AS IS,” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore this disclaimer may not apply to you.

The specifications on this page may not be available in all regions, and may be changed or updated without notice.