## OVERVIEW

| 1.  | 2x USB 2.0                                    | 8.  | 4x USB 3.2 Gen 1                           |
| 2.  | 2x USB 3.2 Gen 1                              | 9.  | USB-C 3.2 Gen 2x2                          |
| 3.  | Headphone (3.5mm)                             | 10. | 6x Audio connectors(with SPDIF)             |
| 4.  | Microphone (3.5mm)                            | 11. | Ethernet (RJ-45)                            |
| 5.  | Power button                                  | 12. | Optional ports on expansion cards          |
| 6.  | 2x USB 2.0                                    | 13. | Power connector                            |
| 7.  | Lighting switch                               | 14. | USB 3.2 Gen 2                              |
PERFORMANCE

Processor
Processor Family
12th Generation Intel® Core™ i5 / i7 / i9 Processor

<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 i7-12700K</td>
<td>12 (8 P-core + 4 E-core)</td>
<td>20</td>
<td>P-core 3.6GHz / E-core 2.7GHz</td>
<td>P-core 4.9GHz / E-core 3.8GHz</td>
<td>25MB</td>
<td>DDR5-4800</td>
<td>Intel UHD Graphics 770</td>
</tr>
<tr>
<td>Core i7-12700KF</td>
<td>12 (8 P-core + 4 E-core)</td>
<td>20</td>
<td>P-core 3.6GHz / E-core 2.7GHz</td>
<td>P-core 4.9GHz / E-core 3.8GHz</td>
<td>25MB</td>
<td>DDR5-4800</td>
<td>-</td>
</tr>
<tr>
<td>Core i9-12900K</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 3.2GHz / E-core 2.4GHz</td>
<td>P-core 5.1GHz / E-core 3.9GHz</td>
<td>30MB</td>
<td>DDR5-4800</td>
<td>Intel UHD Graphics 770</td>
</tr>
<tr>
<td>Core i9-12900KF</td>
<td>16 (8 P-core + 8 E-core)</td>
<td>24</td>
<td>P-core 3.2GHz / E-core 2.4GHz</td>
<td>P-core 5.1GHz / E-core 3.9GHz</td>
<td>30MB</td>
<td>DDR5-4800</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes:
1. P-core means performance core, E-core means efficient core

Operating System
Operating System**
- Windows® 11 Pro 64
- Windows 11 Home 64
- No operating system

Graphics
Graphics**[1]

<table>
<thead>
<tr>
<th>Graphics</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>NVIDIA® GeForce RTX™ 3060 Ti</td>
<td>Discrete</td>
<td>8G GDDR6</td>
<td>3x DP 1.4a, 1x HDMI® 2.1</td>
<td>7680x4320@60Hz(HDMI), 7680x4320@60Hz(DP)</td>
<td>DirectX® 12</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NVIDIA GeForce RTX 3070</td>
<td>Discrete</td>
<td>8G GDDR6</td>
<td>3x DP 1.4a, 1x HDMI 2.1</td>
<td>7680x4320@60Hz(HDMI); 7680x4320@60Hz(DP)</td>
<td>DirectX 12</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NVIDIA GeForce RTX 3070 Ti</td>
<td>Discrete</td>
<td>8G GDDR6X</td>
<td>-</td>
<td>3x DP 1.4a, 1x HDMI 2.1</td>
<td>7680x4320@60Hz(HDMI); 7680x4320@60Hz(DP)</td>
<td>DirectX 12</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>NVIDIA GeForce RTX 3080</td>
<td>Discrete</td>
<td>10G GDDR6X</td>
<td>3x DP 1.4a, 1x HDMI 2.1</td>
<td>7680x4320@60Hz(HDMI); 7680x4320@60Hz(DP)</td>
<td>DirectX 12</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NVIDIA GeForce RTX 3080 Ti</td>
<td>Discrete</td>
<td>12G GDDR6X</td>
<td>-</td>
<td>3x DP 1.4a, 1x HDMI 2.1</td>
<td>7680x4320@60Hz(HDMI); 7680x4320@60Hz(DP)</td>
<td>DirectX 12</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
1. The information of integrated graphics are not applicable for the models without integrated graphics (for the details, please refer to processor section)

Monitor Support
Monitor Support
Supports up to 4 independent displays via discrete graphics

Chipset
Chipset
Intel Z690 chipset

Memory
Max Memory**
Up to 128GB DDR5-4800

Memory Slots
Four DDR5 UDIMM slots, dual-channel capable

Memory Type**
- DDR5-4800
- DDR5-4800, Armor

Memory Protection
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.
2. Installed memory is actually 4800MHz, but may run at 4000MHz or 4400MHz depending on the memory support rules of Intel.

Storage
Storage Support**
Up to six drives, 2x 3.5" HDD + 2x 2.5" HDD + 2x M.2 SSD
- 3.5" HDD up to 2TB
- 2.5" HDD up to 1TB
- M.2 SSD up to 1TB

Storage Type**

<table>
<thead>
<tr>
<th>Disk Type</th>
<th>Interface</th>
<th>RPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5&quot; SATA HDD</td>
<td>SATA 6Gb/s</td>
<td>7.2K</td>
</tr>
<tr>
<td>M.2 2280 SSD</td>
<td>PCIe® NVMe®, PCIe 4.0 x4</td>
<td>-</td>
</tr>
</tbody>
</table>

RAID
No support

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.

Removable Storage
Optical
None

Card Reader
No card reader

Multi-Media
Audio Chip
High Definition (HD) Audio, Realtek® ALC897 codec

Speakers
No speakers

Power Supply

<table>
<thead>
<tr>
<th>Power</th>
<th>Type</th>
<th>Efficiency</th>
<th>Key Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>500W</td>
<td>Fixed</td>
<td>85%</td>
<td>100V - 240V</td>
</tr>
<tr>
<td>550W</td>
<td>Fixed</td>
<td>88%</td>
<td>220V</td>
</tr>
</tbody>
</table>
**DESIGN**

**Input Device**

**Keyboard**
- Lenovo Calliope Keyboard (USB connector), black
- No keyboard

**Mouse**
- Lenovo Calliope Mouse (USB connector), black
- No mouse

**Mechanical**

**Form Factor**
Tower (34L)

**Dimensions (WxDxH)**
211 x 450 x 483 mm (8.3 x 17.7 x 19 inches)

**Packaging Dimensions (WxDxH)**
All models: 325 x 585 x 630 mm (12.8 x 23.03 x 24.8 inches)

**Weight**
17 kg (37.47 lbs)

**Packaging Weight**
All models: 17 kg (37.47 lbs)

**Case Color**
Black

**Chassis**
Transparent side cover

**Bays**
- 4x 2.5” disk bay
- 2x 3.5” disk bay

**Expansion Slots**
- One PCIe 5.0 x16
- One PCIe 4.0 x16 (x4 signal)
- Two PCIe 3.0 x1
- Four M.2 slots (one for WLAN, three for SSD)

**Cooling System (Fan & Cooler)**
- Advance Pro Air Cooling, ARGB (120mm-Side-flow-air-cooler, 3x Front-120mm-FAN & 1x Rear-120-FAN)
- Advance Max Air Cooling, ARGB (120mm-Side-flow-air-cooler, 3x Front-120mm-FAN & 1x Rear-120-FAN & 2x Top-120mm-FAN)
- Premium Max Liquid Cooling, ARGB (360mm-integrated-liquid-cooler combined with 3x front 120mm-FAN, 1x Rear-120-FAN & 2x Top-120mm-FAN)

**System Lighting**
- Legion OY iconic LED
- Internal ambient lighting

**CONNECTIVITY**

**Network**

**Onboard Ethernet**
2.5GbE, Realtek RTL8125BG Gaming Ethernet, 1x RJ-45

**WLAN + Bluetooth®**
- Wi-Fi® 6, 802.11ax 2x2 Wi-Fi + Bluetooth 5.2, M.2 card
• Wi-Fi 6E, 802.11ax 2x2 Wi-Fi + Bluetooth 5.2, M.2 card

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

Ports

Rear Ports
• 2x USB 2.0
• 4x USB 3.2 Gen 1
• 1x USB 3.2 Gen 2
• 6x audio connectors (with SPDIF)
• 1x USB-C® 3.2 Gen 2x2
• 1x Lighting switch
• 1x Ethernet (RJ-45)
• 1x power connector

Top Ports
• 2x USB 2.0
• 2x USB 3.2 Gen 1
• 1x headphone (3.5mm)
• 1x microphone (3.5mm)

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
2. For video ports on discrete graphics, please see graphics section

SECURITY & PRIVACY

Security

Security Chip
Firmware TPM 2.0 integrated in chipset

BIOS Security
• Administrator password
• Hard disk password

SERVICE

Warranty

Base Warranty**(1)
• 1-year mail-in service
• 1-year depot service
• 2-year depot service
• 3-year depot service

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

ENVIRONMENTAL

Operating Environment

Temperature
Storage: -40°C (-40°F) to 60°C (140°F)

Humidity
• Operating: 20% to 80%
• Storage: 10% to 90%

Altitude
• Operating: 0 m (0 ft) to 3048 m (10,000 ft)
• Storage: 0 m (0 ft) to 12192 m (40,000 ft)

CERTIFICATIONS

Green Certifications

(Optional) ENERGY STAR® 8.0, ErP Lot 3, EPEAT™ Sliver

• 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.