Lenovo PSREF
Product Specifications
Reference

OVERVIEW

1. 2x USB 3.2 Gen 1	7. 2x USB 2.0
2. Headphone (3.5mm)	8. Ethernet (RJ-45)
3. Microphone (3.5mm)	9. 3x Audio line-out (3.5mm)
4. Power button	10. Optional ports on expansion cards
5. 2x USB 3.2 Gen 1	11. Power connector
6. USB-C 3.2 Gen 2	

PERFORMANCE

Processor

Processor Family

AMD Ryzen™ 5 / 7 / 9 Processor

Processor**[1]

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
AMD Ryzen™ 5 3600	6	12	3.6GHz	4.2GHz	3MB L2 / 32MB L3	DDR4-3200	-
AMD Ryzen™ 5 5600G	6	12	3.9GHz	4.4GHz	3MB L2 / 16MB L3	DDR4-3200	AMD Radeon™ Graphics
AMD Ryzen™ 7 3700X	8	16	3.6GHz	4.4GHz	4MB L2 / 32MB L3	DDR4-3200	-
AMD Ryzen™ 7 5700G	8	16	3.8GHz	4.6GHz	4MB L2 / 16MB L3	DDR4-3200	AMD Radeon™ Graphics
AMD Ryzen™ 7 5800	8	16	3.4GHz	4.6GHz	4MB L2 / 32MB L3	DDR4-3200	-
AMD Ryzen™ 9 5900X	12	24	3.7GHz	4.8GHz	6MB L2 / 64MB L3	DDR4-3200	-
AMD Ryzen™ 9 5950X	16	32	3.4GHz	4.9GHz	8MB L2 / 64MB L3	DDR4-3200	-

Notes:

[1] AMD Radeon™ Graphics in processor is disabled.

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 10 Pro 64
- Windows® 10 Home 64
- Windows® 10 Home 64 Single Language
- No operating system

Graphics

Graphics**[1]

Graphics	Type	Memory	Connector	Max Resolution	Key Features
AMD Radeon™ RX 5500	Discrete	4GB GDDR6	1x HDMI® 2.0, 3x DP 1.4	4096x2160@60Hz(HDMI®), 7680x4320@60Hz(DP)	DirectX® 12
AMD Radeon™ RX 6500XT	Discrete	4GB GDDR6	1x HDMI® 2.1 FRL , 1x DP 1.4	7680x4320@60Hz(HDMI®), 7680x4320@60Hz(DP)	DirectX® 12, OpenGL 4.6
AMD Radeon™ RX 6800XT	Discrete	16GB GDDR6	1x HDMI® 2.1, 2x DP 1.4,1x USB-C® 3.2 Gen2	7680x4320@120Hz(HDMI®), 7680x4320@60Hz(DP)	DirectX® 12
NVIDIA® GeForce GTX 1650 SUPER	Discrete	4GB GDDR6	1x HDMI® 2.0b, 2x DP 1.4	7680x4320 @60Hz(DP), 4096x2160@60Hz(HDMI®)	DirectX® 12
NVIDIA® GeForce GTX 1660 SUPER	Discrete	6GB GDDR6	1x DVI, 1x HDMI® 2.0b, 1x DP 1.4	7680x4320@60Hz(DP)	DirectX® 12
NVIDIA® GeForce RTX™ 2060 CD	Discrete	6GB GDDR6	1x HDMI® 2.0b, 3x DP 1.4	4096x2160@60Hz(HDMI®), 7680x4320@60Hz with DSC(DP)	DirectX® 12
NVIDIA® GeForce RTX™ 2070 CD	Discrete	8GB GDDR6	1x HDMI® 2.0b, 3x DP 1.4	7680x4320@60Hz(DP)	DirectX® 12 VR ready

NVIDIA® GeForce RTX™ 3050	Discrete	8GB GDDR6	1x HDMI® 2.1 FRL, 3x DP 1.4a	7680x4320@60Hz(HDMI®), 7680x4320@120Hz(DP)	DirectX® 12, OpenGL 4.6
NVIDIA® GeForce RTX™ 3060	Discrete	12G GDDR6	3x DP 1.4a, 1x HDMI® 2.1 FRL	7680x4320@60Hz(HDMI®), 7680x4320@60Hz(DP)	DirectX® 12
NVIDIA® GeForce RTX™ 3060 Ti	Discrete	8G GDDR6	3x DP 1.4a, 1x HDMI® 2.1 FRL	7680x4320@60Hz(HDMI®), 7680x4320@60Hz(DP)	DirectX® 12
NVIDIA® GeForce RTX™ 3070	Discrete	8G GDDR6	3x DP 1.4a, 1x HDMI® 2.1	7680x4320@60Hz(HDMI®); 7680x4320@60Hz(DP)	DirectX® 12
NVIDIA® GeForce RTX™ 3070 Ti	Discrete	8G GDDR6X	3x DP 1.4a, 1x HDMI® 2.1	7680x4320@60Hz(HDMI®); 7680x4320@60Hz(DP)	DirectX® 12

Notes:

[1] The information of integrated graphics are not applicable for the models with processor which has no integrated graphics inside (for the details, please refer to processor section).

Monitor Support

Monitor Support[1]

Supports up to 4 independent displays via discrete graphics

Notes:

[1] Ports may vary by the discrete graphics.

Chipset

Chipset

AMD B550 chipset

Memory

Max Memory[1]

Up to 128GB DDR4-3200

Memory Slots

Four DDR4 UDIMM slots, dual-channel capable

Memory Type**

• DDR4-3200
• DDR4-3200, Armor

Memory Protection

Non-ECC

Notes:

[1] The max memory is based on the test results with current Lenovo® memory offerings.

Storage

Storage Support[1]

Up to five drives, 2x 3.5″ HDD + 1x 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***

Disk Type	Interface	RPM
2.5″ SATA HDD	SATA 6Gb/s	7.2K
M.2 2280 SSD	PCIe® NVMe®	-

RAID

No support

Notes:

[1] The max capacity of each disk type is based on the test results with current Lenovo® storage offerings.

Removable Storage

Optical

None

Card Reader

No card reader

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC892 codec

Speakers

No speakers

Power Supply

Power Supply**

Power	Type	Efficiency	Key Features
350W	Fixed	85%	100-240V, 50-60Hz
400W	Fixed	90%	100-240V, 50-60Hz
550W	Fixed	88%	220V
650W	Fixed	90%	100V - 240V
850W	Fixed	90%	100V - 240V

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 (26L)

Dimensions (WxDxH)[1]

205 x 396 x 411 mm (8.1 x 15.6 x 16.2 inches)

Packaging Dimensions (WxDxH)

370 x 485 x 550 mm (14.57 x 19.09 x 21.65 inches)

Weight[2]

14 kg (30.86 lbs)

Packaging Weight

All models: Around 16 kg (35.27 lbs)

Case Color

Raven black

Chassis**

- Normal side cover
- Transparent side cover
- Transparent side cover and inner decorate cover

Bays

- 1x 2.5″ disk bay
- 2x 2.5″/3.5″ disk bay

Expansion Slots

- One PCIe® 4.0 x16
- One PCIe® 3.0 x4
- Three M.2 slots (one for WLAN, two for SSD)

Cooling System (Fan & Cooler)***

- (Optional) 1x front system fan, 1x rear system fan for airflow or liquid
- (Optional) 1x rear system fan with ARGB
- (Optional) 1x rear system fan
- (Optional) 65W Air-Cooler, 95W Air-Cooler, or 150W Air-Cooler

System Lighting***

- (Optional) Internal ambient lighting
- Legion OY iconic LED

Others

(Optional) Carry handle

Notes:

[1] The system dimensions may vary depending on configurations.

[2] The system weight is approximate and based on results in Lenovo® lab, which varies depending on the source of component, variance of the distribution of each component, and manufacturing process. It may not be the exact weight for each specific model.

CONNECTIVITY

Network

Onboard Ethernet**

- Gigabit Ethernet, 1x RJ-45
- Gigabit Ethernet, Realtek® RTL8111H, 1x RJ-45

WLAN + Bluetooth®

- Wi-Fi® 6, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 card[1]
- No WLAN and Bluetooth®

Notes:

[1] Bluetooth® 5.2 is hardware ready but may run at a lower version due to OS limitations.

Ports[1]

Rear Ports[2]

- 1x USB-C® 3.2 Gen 2 (support data transfer and 5V@3A charging)
- 2x USB 2.0
- 2x USB 3.2 Gen 1
- 1x Ethernet (RJ-45)
- 1x power connector
- 3x line-out(3.5mm)

Top Ports

- 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;
USB4® 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;

USB4® 40Gbps (USB 40Gbps): 40 Gbit/s;
Thunderbolt™ 3/4: 40 Gbit/s.
[2] For video ports on discrete graphics, please see graphics section.

SECURITY & PRIVACY

Security

BIOS Security

- Administrator password
- Power-on password

SERVICE

Warranty[1]

Base Warranty**

- 1-year mail-in service
- 1-year courier or carry-in service
- 1-year limited onsite service
- 2-year courier or carry-in service
- 3-year courier or carry-in service
- OB

Notes:

[1] The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific model's configurations. For more service extensions, please go to https://smartfind.lenovo.com/. To learn more details 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[1]

Green Certifications

- ENERGY STAR® 8.0
- ErP Lot 3
- RoHS compliant

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or self-declaration.

- Feature with ** means that only one offering listed under the feature is configured on selected models.

- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.

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