# **OVERVIEW**



1. 2x USB 2.0	11. Lighting switch
2. 2x USB 3.2 Gen 1	12. Optional ports on expansion cards
3. Headphone jack (3.5mm)	13. Power connector
4. Microphone jack (3.5mm)	14. SPDIF out
5. Power button	15. Mic-in (3.5mm)
6. 2x USB 2.0	16. CEN/LFE out
7. USB-C 3.2 Gen 2x2	17. Line-in (3.5mm)
8. USB 3.2 Gen 2	18. Line-out (3.5mm)
9. 4x USB 3.2 Gen 1	19. SURROUND out
10. Ethernet (RJ-45)	

# PERFORMANCE

### **Processor**

#### **Processor Family**

13th Generation Intel<sup>®</sup> Core<sup>™</sup> i7 / i9 Processor

#### Processor\*\*[1]

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Core i7- 13700K	16 (8 P-core + 8 E-core)	24	P-core 3.4GHz / E-core 2.5GHz	Max Turbo up to 5.4GHz / P-core 5.3GHz / E-core 4.2GHz	30MB	DDR5- 5600	Intel® UHD Graphics 770
Core i7- 13700KF	16 (8 P-core + 8 E-core)	24	P-core 3.4GHz / E-core 2.5GHz	Max Turbo up to 5.4GHz / P-core 5.3GHz / E-core 4.2GHz	30MB	DDR5- 5600	-
Core i9- 13900K	24 (8 P-core + 16 E-core)	32	P-core 3.0GHz / E-core 2.2GHz	Max Turbo up to 5.8GHz / P-core 5.4GHz / E-core 4.3GHz	36MB	DDR5- 5600	Intel® UHD Graphics 770
Core i9- 13900KF	24 (8 P-core + 16 E-core)	32	P-core 3.0GHz / E-core 2.2GHz	Max Turbo up to 5.8GHz / P-core 5.4GHz / E-core 4.3GHz	36MB	DDR5- 5600	-
Core i7- 14700K	20 (8 P-core + 12 E-core)	28	P-core 3.4GHz / E-core 2.5GHz	Max Turbo up to 5.6GHz / P-core 5.5GHz / E-core 4.3GHz	33MB	DDR5- 5600	-
Core i7- 14700KF	20 (8 P-core + 12 E-core)	28	P-core 3.4GHz / E-core 2.5GHz	Max Turbo up to 5.6GHz / P-core 5.5GHz / E-core 4.3GHz	33MB	DDR5- 5600	-
Core i9- 14900K	24 (8 P-core + 16 E-core)	32	P-core 3.2GHz / E-core 2.4GHz	Max Turbo up to 6.0GHz / P-core 5.6GHz / E-core 4.4GHz	36MB	DDR5- 5600	Intel® UHD Graphics 770

#### Notes:

[1] Intel<sup>®</sup> UHD Graphics in processor is disabled.

Intel® Max Turbo frequency will vary depending on application workload and the hardware and software configurations, see http://www.intel.com/technology/turboboost/ for more information.

# **Operating System**

#### **Operating System**\*\*

- Windows<sup>®</sup> 11 Pro
- Windows<sup>®</sup> 11 Home
- Windows<sup>®</sup> 11 Home Single Language
- No preload operating system

# Graphics

### Graphics\*\*[1]

Graphics	Туре	Memory	AI TOPS (Peak)	Max Resolution	Connector	Key Features
NVIDIA <sup>®</sup> GeForce RTX™ 3080	Discrete	10G GDDR6X	-	7680x4320@60Hz(HDMI®); 7680x4320@60Hz(DP)	3x DP 1.4a, 1x HDMI® 2.1 FRL	DirectX® 12
NVIDIA <sup>®</sup> GeForce RTX <sup>™</sup> 4070	Discrete	12G GDDR6X	466	7680x4320@60Hz(HDMI®); 7680x4320@60Hz(DP)	3x DP 1.4a, 1x HDMI® 2.1a FRL	DirectX® 12
NVIDIA® GeForce RTX™ 4070 Ti	Discrete	12G GDDR6X	641	7680x4320@60Hz(HDMI®); 7680x4320@60Hz(DP)	3x DP 1.4a, 1x HDMI® 2.1a FRL	DirectX® 12
NVIDIA® GeForce RTX™ 4070 Ti	Discrete	16G GDDR6	706	7680x4320@60Hz with DSC, HDR(HDMI <sup>®</sup> ), 7680x4320@60Hz with DSC, HDR(DP)	1x HDMI® 2.1a FRL, 3x DP 1.4a	DirectX® 12

# Legion T7 34IRZ8

PSREF Product Specifications Reference

Lenovo

SUPER						
NVIDIA® GeForce RTX™ 4080	Discrete	16G GDDR6X	780	7680x4320@60Hz(HDMI®); 7680x4320@60Hz(DP)	3x DP 1.4a, 1x HDMI® 2.1a FRL	DirectX® 12
NVIDIA® GeForce RTX™ 4080 SUPER	Discrete	16G GDDR6X	836	7680x4320@60Hz with DSC, HDR(HDMI <sup>®</sup> ), 7680x4320@60Hz with DSC, HDR(DP)	3x DP 1.4a, 1x HDMI® 2.1a FRL	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**

Supports up to 4 independent displays via discrete graphics ports (DP, HDMI®)

### Chipset

Chipset

Intel<sup>®</sup> Z790 chipset

### Memory

#### Max Memory<sup>[1][2]</sup>

Up to 64GB DDR5-5600

#### **Memory Slots**

Four DDR5 UDIMM slots, dual-channel capable

#### Memory Type\*\*[3]

- DDR5-4800
- DDR5-5600

#### **Memory Protection**

Non-ECC

#### Notes:

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

[2] Maximum supported memory speed may be lower when populating multiple DIMMs per channel on products that support multiple memory channels.

[3] Installed memory is actually DDR5-5600 or DDR5-4800 but may run as DDR5-4400 or DDR5-4000 depending on the memory support capability of Intel<sup>®</sup>.

# Storage

#### Storage Support<sup>[1]</sup>

Up to seven drives, 2x 3.5" HDD + 2x 2.5" HDD + 3x M.2 SSD

- 3.5" HDD up to 2TB
- 2.5" HDD up to 2TB
- M.2 SSD up to 2TB

#### Storage Type\*\*

Disk Type	Interface	RPM
3.5" SATA HDD	SATA 6Gb/s	7.2K
M.2 2280 SSD	PCIe® NVMe®, PCIe® 4.0 x4	-

Notes:

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

# **Removable Storage**

#### Optical

None

No card reader

# Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC897 codec

#### Speakers

No speakers

# **Power Supply**

### Power Supply\*\*

Power	Туре	Efficiency	Key Features
500W	Fixed	85%	100V - 240V
850W	Fixed	90%	100V - 240V
1200W	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 (34L)

Dimensions (WxDxH)<sup>[1]</sup>

211 x 464 x 494 mm (8.3 x 18.26 x 19.44 inches)

### Packaging Dimensions (WxDxH)

318 x 580 x 625 mm (12.51 x 22.8 x 24.6 inches)

#### Weight<sup>[2]</sup>

17 kg (37.47 lbs)

#### **Packaging Weight**

19 kg (41.88 lbs)

#### Case Color

Storm grey

#### Chassis\*\*

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

#### **Expansion Slots**

- One PCIe® 5.0 x16
- One PCIe<sup>®</sup> 4.0 x16 (x4 signal)
- One PCIe® 3.0 x1
- Four M.2 slots (one for WLAN, three for SSD)

#### Cooling System (Fan & Cooler)\*\*

- 150W 120MM with RGB Light cooler, 3x M.2 SSD Heatsink
- 150W 120MM with RGB Light cooler, 2x M.2 SSD Heatsink
- 150W 120MM with RGB Light cooler, M.2 SSD Heatsink
- 150W 120mm-Fan with ARGB lighting air cooler, 1x rear system fan with ARGB, 2x top system fan with ARGB, 3x front system fan with ARGB

# Legion T7 34IRZ8

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- 150W 120mm-Fan with ARGB lighting air cooler, 1x rear system fan with ARGB, 3x front system fan with ARGB
- 250W 360MM with RGB Light cooler, M.2 SSD Heatsink
- 250W 360MM with RGB Light liquid cooler, 2x M.2 SSD Heatsink
- 250W 360MM with RGB Light liquid cooler, 3x M.2 SSD Heatsink
- 250W 360mm-Fan with ARGB lighting liquid cooler, 1x rear system fan with ARGB, 2x top system fan with ARGB

# System Lighting

Legion ARGB Lighting

#### Notes:

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

[2] The system weight is approximate and based on results in Lenovo<sup>®</sup> 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

#### WLAN + Bluetooth®[1]

Wi-Fi<sup>®</sup> 6E, 802.11ax 2x2 Wi-Fi<sup>®</sup> + Bluetooth<sup>®</sup> 5.3, M.2 card<sup>[2]</sup>

#### **Onboard Ethernet**

2.5GbE, Realtek<sup>®</sup> RTL8125BG Gaming Ethernet, 1x RJ-45

Notes:

[1] WIFI 6E may downgrade to WIFI 6 due to Regulatory restrictions.

[2] Bluetooth<sup>®</sup> 5.3 requires Windows<sup>®</sup> 11.

### Ports<sup>[1]</sup>

#### Rear Ports\*\*[2]

- 1x USB-C<sup>®</sup> 3.2 Gen 2x2
- 1x USB 3.2 Gen 2
- 2x USB 2.0
- 4x USB 3.2 Gen 1
- 1x Ethernet (RJ-45)
- 1x Lighting switch
- 6x audio connectors (with SPDIF)

#### 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;

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

USB4<sup>®</sup> 40Gbps (USB 40Gbps): 40 Gbit/s;

Thunderbolt<sup>™</sup> 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
- More BIOS security features, please visit <u>BIOS Simulator</u><sup>[1]</sup>

#### Notes:

[1] The BIOS simulator is just for reference. Default settings and some options may vary depending on the hardware, operating system and BIOS version.

# SERVICE

#### **Warranty**<sup>III</sup>

#### Base Warranty\*\*

- 1-year mail-in service
- 1-year courier or carry-in service
- 2-year courier or carry-in service
- 3-year courier or carry-in service

#### 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 <u>https://smartfind.lenovo.com/</u>. To learn more details of warranty policy, please access <u>https://support.lenovo.com/warrantylookup/warrantypolicy</u>.

# **OPERATING REQUIREMENTS**

# **Operating Environment**

#### Temperature

At altitudes up to 2438 m (8,000 ft)

- Operating: 5°C to 35°C (41°F to 95°F)
  Storage: 5°C to 43°C (41°F to 109°F)

#### **Relative 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**<sup>III</sup>

#### **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. For ESG & regulatory compliance documents, please visit <u>https://compliance.lenovo.com</u>.

- Feature with \*\* means that only one option listed under the feature can be configured on selected models. Please refer to the model configuration for specific information.
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