OVERVIEW



1. Headphone / microphone combo jack (3.5mm)	6. Power connector
2. USB-A (USB 5Gbps)	7. HDMI
3. USB-A (USB 5Gbps)	8. USB-C (USB 10Gbps), with USB PD 95-100W & DP 2.1
4. E-shutter switch	9. Thunderbolt 4
5. Ethernet (2.5GbE RJ-45)	10. USB-A (USB 10Gbps), Always On

PERFORMANCE

Processor

Processor Family

Intel® HX Series Core Ultra 7 / 9 Processor (Series 2)

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics	NPU	Overall TOPS
Core Ultra 7 255HX	20 (8 P-core + 12 E-core)	20	P-core 2.4GHz / E-core 1.8GHz	P-core 5.2GHz / E-core 4.5GHz	30MB Intel® Smart Cache	Intel® Graphics, up to 8 TOPS	Intel® AI Boost, up to 13 TOPS	Up to 33 TOPS
Core Ultra 9 275HX	24 (8 P-core + 16 E-core)	24	P-core 2.7GHz / E-core 2.1GHz	P-core 5.4GHz / E-core 4.6GHz	36MB Intel® Smart Cache	Intel® Graphics, up to 8 TOPS	Intel® AI Boost, up to 13 TOPS	Up to 36 TOPS
Core Ultra 9 290HX Plus	24 (8 P-core + 16 E-core)	24	P-core 2.7GHz / E-core 1.8GHz	P-core 5.5GHz / E-core 4.7GHz	36MB Intel® Smart Cache	Intel® Graphics, up to 8 TOPS	Intel® AI Boost, up to 13 TOPS	Up to 36 TOPS

AI (Artificial Intelligence)

AI PC Category

AI-Powered Gaming PC[1]

NPU

Integrated Intel® AI Boost, up to 13 TOPS

Notes:

[1] AI-Powered Gaming PCs feature Lenovo® AI Engine+ and NVIDIA® GeForce RTX™ GPUs to handle AI-driven tasks and deliver exceptional gaming performance.

Operating System

Operating System**

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- No preload operating system

Graphics

Graphics**

Graphics	Type	Memory	Boost Clock	TGP	AI TOPS (Peak)	Key Features
NVIDIA® GeForce RTX™ 5070 Ti Laptop GPU	Discrete	12GB GDDR7	2220 MHz	140W	992 TOPS	DLSS 4, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 5080 Laptop GPU	Discrete	16GB GDDR7	2287 MHz	175W	1334 TOPS	DLSS 4, DirectX® 12 Ultimate
NVIDIA® GeForce RTX™ 5090 Laptop GPU	Discrete	24GB GDDR7	2160 MHz	175W	1824 TOPS	DLSS 4, DirectX® 12 Ultimate

Monitor Support

Monitor Support[1]

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C®)
• HDMI® supports up to 8K@60Hz
• USB-C® supports up to 8K@60Hz

Notes:

[1] For Max resolution, DSC-enabled display is required.

Chipset

Chipset

Intel® HM870 chipset

Memory

Max Memory[1]

- Up to 32GB DDR5-6400 offering
- Up to 64GB DDR5-6400 offering

Memory Slots

Two DDR5 CSODIMM slots, dual-channel capable

Memory Type

DDR5-6400

Notes:

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

Storage

Max Storage Support[1]

Up to two drives, 2x M.2 SSD
• M.2 2242 SSD up to 1TB
• M.2 2280 SSD up to 2TB

Storage Slot[2]

Two M.2 slots
• One M.2 2280 PCIe® 5.0 x4 slot
• One M.2 2280 PCIe® 4.0 x4 slot

Storage Type***

Disk Type	Interface	Offering
M.2 2242 SSD	PCIe® NVMe®, PCIe® 4.0 x4	1TB
M.2 2280 SSD	PCIe® NVMe®, PCIe® 4.0 x4	1TB
M.2 2280 SSD	PCIe® NVMe®, PCIe® 5.0 x4 Performance	1TB / 2TB

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo® storage offerings.
[2] The actual data transfer rate of the following PCIe® interface also depends on the capabilities of the connected PCIe® device. The listed values represent theoretical maximums.
PCIe® 3.0 (x2 / x4): 2 GB/s (16 Gbps) / 4 GB/s (32 Gbps);
PCIe® 4.0 (x2 / x4): 4 GB/s (32 Gbps) / 8 GB/s (64 Gbps);
PCIe® 5.0 (x2 / x4): 8 GB/s (64 Gbps) / 16 GB/s (128 Gbps).

Removable Storage

Optical

None

Card Reader

No card reader

Multi-Media

Audio Chip

High Definition (HD) Audio, Realtek® ALC3306 codec

Speakers

4 stereo speakers, 2W x2 (woofers), 2W x2 (tweeters), optimized with Nahimic Audio, Smart Amplifier (AMP)

Microphone

Dual-microphone array

Camera**

- 5.0MP, with E-shutter, fixed focus
- HD 720p, with E-shutter, fixed focus

Battery

Battery**

- 80Wh Rechargeable Li-ion Battery, supports Super Rapid Charge (10min charge 0~30% capacity, 30min charge 0~70% capacity, 80min charge 0~100% capacity)
- 99.9Wh Rechargeable Li-ion Battery, supports Super Rapid Charge (10min charge 0~30% capacity, 30min charge 0~70% capacity, 80min charge 0~100% capacity)

Max Battery Life[1]

- Models with 80Wh battery:
  MobileMark® 30@250nits: 2.9 hr
  Local video (1080p) playback@150nits: 4.25 hr
- Models with 99.9Wh battery:
  MobileMark® 30@250nits: 2.85 hr
  Local video (1080p) playback@150nits: 6.25 hr

Notes:

[1] All battery life claims are approximate maximum and based on results using the MobileMark® 2014, MobileMark® 2018, MobileMark® 25, MobileMark® 30, JEITA 2.0, JEITA 3.0, continuous 1080p video playback (with 150nits brightness and default volume level) or Google Power Load Test (PLT) battery-life benchmark tests. Actual battery life will vary depending on many factors such as product configuration and usage, software use, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time and use.

Power Adapter

Power Adapter

- 400W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz
- No power adapter

Special Features

Special Features

AI Chip: LA3

DESIGN

Display

Display

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Refresh Rate	Viewing Angle (L/R/U/D)	Key Features
16″	WQXGA (2560x1600)	Non-touch	OLED	1100nits (HDR peak) / 500nits (SDR typical)	Glossy	16:10	1,000,000:1	100% DCI-P3	240Hz	89° / 89° / 89° / 89°	DisplayHDR™ True Black 1000, Dolby Vision®, NVIDIA® G-SYNC®, Advanced Optimus support, TÜV Low Blue Light, TÜV High Gaming Performance, TÜV Rheinland® Flicker Free

Touchscreen

Non-touch

Screen-to-Body Ratio

92% AAR (active area ratio)

Color Calibration

X-Rite® factory color calibration

Input Device

Pen

No support

Keyboard**

- Eclipse black models: 6-row, multimedia Fn keys, numeric keypad, key travel 1.6mm, cap recess 0.3mm, Copilot key, black keycaps
- Glacier white models: 6-row, multimedia Fn keys, numeric keypad, key travel 1.6mm, cap recess 0.3mm, Copilot key, white keycaps

Keyboard Backlight

Per-key RGB backlight

Touchpad

Buttonless Mylar® surface multi-touch touchpad, 75 x 120 mm (2.95 x 4.72 inches)

Mechanical

Dimensions (WxDxH)[1]

364.38 x 275.94 x 21.9-26.65 mm (14.35 x 10.86 x 0.86-1.05 inches)

Weight[2]

Starting at 2.57 kg (5.67 lbs)

Case Color**

- Eclipse black
- Glacier white

Case Material

Aluminium (top), aluminium (bottom)

Surface Treatment**

- Anodize electrophoresis deposition
- Anodizing sandblasting
- Anodizing sandblasting FIFA® edition

System Lighting***

- "Legion" logo with RGB lighting on top cover
- RGB lighting lens on the front and rear side

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

WLAN + Bluetooth®[1]

Wi-Fi® 7, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.4, M.2 card

WWAN

No support

Ethernet[2]

2.5GbE, Intel® Ethernet Controller I226-V, 1x RJ-45, supports Wake-on-LAN

Notes:

[1] Wi-Fi® operation (including Wi-Fi® 6, Wi-Fi® 6E, Wi-Fi® 7, etc.) is subject to the regulatory requirements of each country. Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.
[2] Wake-on-LAN needs the AC adapter plugged in and the system in S3 mode (sleep mode). Since Wake-on-LAN is enabled by default, there are no options displayed in the BIOS.

Ports[1]

Standard Ports

- 2x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-A (USB 10Gbps / USB 3.2 Gen 2), Always On
- 1x USB-C® (USB 10Gbps / USB 3.2 Gen 2), with USB PD 95-100W and DisplayPort™ 2.1[2]
- 1x Thunderbolt™ 4 / USB4® 40Gbps (support data transfer and DisplayPort™ 2.1)
- 1x HDMI® 2.1, up to 8K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (2.5GbE RJ-45)
- 1x Slim tip Power connector

Notes:

[1] The transfer speed of the 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.
[2] Supports Lenovo® protocol for 140W charging but requires a unique Lenovo® adapter for operation.

Docking

Docking

Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit
Docking for Legion Pro 7 16IAX10H

SECURITY & PRIVACY

Security

Security Chip

Firmware TPM 2.0 integrated in chipset

Fingerprint Reader

No fingerprint reader

BIOS Security[1]

- Administrator password
- Master hard disk password
- Power-on password
- User hard disk password
- User password
- Self-healing BIOS

Other Security

E-shutter

Notes:

[1] More BIOS security features, please visit BIOS Simulator

SERVICE

Warranty

Base Warranty**

- 1-year courier or carry-in service
- 1-year courier or carry-in with 2-year system board service (Korea only)
- 2-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) courier or carry-in service

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]

- 4 switchable keycaps
- Anti-Reflection screen protector
- Lenovo® Legion™ Gaming Speed Mouse Pad M
- None

Notes:

[1] For compatible accessory solutions, please visit Accessories for Legion Pro 7 16IAX10H.

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]

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: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage: 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[1]

Green Certifications

- 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 https://compliance.lenovo.com.

Other Certifications

Other Certifications

- TÜV Rheinland® Flicker Free
- TÜV Rheinland® High Gaming Performance
- TÜV Rheinland® Low Blue Light (Hardware Solution)

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