# **OVERVIEW**



1. USB-C 3.2 Gen 1 (data transfer only)	6. HDMI 2.1
2. E-camera shutter switch	7. Power connector
3. Ethernet (RJ-45)	8. Thunderbolt 4
4. Thunderbolt 4	9. Headphone / microphone combo jack (3.5mm)
5. 3x USB 3.2 Gen 1 (one Always On)	

# PERFORMANCE

## **Processor**

### **Processor Family**

11th Generation Intel<sup>®</sup> Core<sup>™</sup> i7 / i9 Processor

### Processor\*\*

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Core i7-11800H	8	16	2.3GHz	4.6GHz	24MB	DDR4-3200	Intel UHD Graphics
Core i9-11980HK	8	16	3.3GHz	5.0GHz	24MB	DDR4-3200	Intel UHD Graphics

# **Operating System**

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

- Windows<sup>®</sup> 11 Pro 64
- Windows 11 Home 64
- Windows 10 Pro 64
- Windows 10 Home 64
- No operating system

# Graphics

## Graphics\*\*

Graphics	Туре	Memory	Boost Clock	TGP	Key Features
NVIDIA® GeForce® RTX™ 3060 Laptop GPU	Discrete	6GB GDDR6	1425 MHz / 1702 MHz	130W	Advanced Optimus, Resizable BAR, Dynamic Boost 2.0, VR ready, DirectX® 12 Ultimate
NVIDIA GeForce RTX 3070 Laptop GPU	Discrete	8GB GDDR6	1560 MHz / 1620 MHz	140W	Advanced Optimus, Resizable BAR, Dynamic Boost 2.0, VR ready, DirectX 12 Ultimate
NVIDIA GeForce RTX 3080 Laptop GPU	Discrete	16GB GDDR6	1545 MHz / 1710 MHz	165W	Advanced Optimus, Resizable BAR, Dynamic Boost 2.0, VR ready, DirectX 12 Ultimate

# **Monitor Support**

### **Monitor Support**

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and USB-C®)

• HDMI supports up to 7680x4320@60Hz

• USB-C supports up to 5120x3200@60Hz

## Chipset

#### Chipset

Intel HM570 chipset

# Memory

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

Up to 32GB DDR4-3200 offering

# Memory Slots

Two DDR4 SO-DIMM slots, dual-channel capable

#### **Memory Type**

DDR4-3200

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<sup>[1]</sup>

Up to two drives, 2x M.2 SSD

• M.2 2280 SSD up to 2TB

# Lenovo Legion 7 16ITHg6

#### Storage Slot

Two M.2 slots

- One M.2 2280 PCIe<sup>®</sup> Gen 3x4 slot, supports M.2 2242/2280 SSD
- One M.2 2280 PCIe Gen 4x4 slot, supports M.2 2242/2280 SSD

#### Storage Type

Disk Type	Interface	RPM	Offering	Security
M.2 2280 SSD	PCIe NVMe®, PCIe 4.0 x4	-	-	-

#### RAID

RAID 0 support

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® ALC3306 codec

#### Speakers

Stereo speakers, 2W x2, Nahimic Audio, Harman Speakers, Smart AMP

#### Microphone

Dual array microphone

#### Camera

HD 720p, with E-camera shutter, fixed focus

## Battery

#### Battery

Integrated Li-Polymer 80Wh battery, supports Rapid Charge Boost (get 2 hours of runtime with a 15-minute charge)

#### Max Battery Life<sup>[1]</sup>

MobileMark<sup>®</sup> 2018: 4.8 hr (discrete mode) or 6.6 hr (hybrid mode)

Notes:

1. All battery life claims are approximate maximum and based on results using the MobileMark 2014, MobileMark 2018, JEITA 2.0, 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 and depends 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<sup>[1]</sup>

300W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz

Notes:

1. AC adapter offerings depend on the country.

# DESIGN

## Display

Display\*\*[1]

# Lenovo Legion 7 16ITHg6

PSREF Product Specifications Reference

Lenovo

Size	Resolution	Touch	Туре	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Key Features
16.0″	WQXGA (2560x1600)	None	Mini- LED IPS	1250 nits	Anti- glare	16:10	100000:1	100% DCI- P3 & 100% Adobe® RGB	178°	Refresh rate 165Hz, Dolby® Vision™, DisplayHDR™ 1000, Free-Sync
16.0″	WQXGA (2560x1600)	None	IPS	500 nits	Anti- glare	16:10	1200:1	100% sRGB	178°	Refresh rate 165Hz, Dolby Vision, DisplayHDR 400, G- Sync, DC dimmer

# Color Calibration

X-Rite® Pantone® factory color calibration

#### Touchscreen

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, numeric keypad

#### **Keyboard Backlight**

RGB backlight

#### Touchpad

Buttonless glass surface multi-touch touchpad, supports Precision TouchPad (PTP), 75 x 120 mm (2.95 x 4.72 inches)

## **Mechanical**<sup>III</sup>

#### Dimensions (WxDxH)

360 x 260 x 20.1-23.5 mm (14.17 x 10.23 x 0.79-0.93 inches)

#### Weight

2.5 kg (5.5 lbs)

Case Color

## Storm grey

Surface Treatment

Anodizing sandblasting

#### **Case Material**

Aluminium (top), aluminium (bottom)

### System Lighting

"Y" logo RGB lighting on top cover RGB lighting on power button "U" strip RGB lighting RGB lighting on left / right / rear thermal vent

Notes:

1. The system dimensions and weight vary depending on configurations.

# CONNECTIVITY

## Network

Onboard Ethernet Gigabit Ethernet, 1x RJ-45 WLAN + Bluetooth®\*\*[1][2]

Lenovo

- Wi-Fi<sup>®</sup> 6, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 card
- Intel Killer Wi-Fi 6 AX1650, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 Card

#### Notes:

- 1. Bluetooth 5.2 is hardware ready but may run at a lower version due to OS limitation
- 2. Wi-Fi 6 full features might be limited by country-level restrictions.

#### **Ports**<sup>III</sup>

#### **Standard Ports**

- 2x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C 3.2 Gen 1 (support data transfer only)
- 1x Thunderbolt<sup>™</sup> 4 / USB4<sup>®</sup> 40Gbps (support data transfer and DisplayPort<sup>™</sup> 1.4)
- 1x Thunderbolt 4 / USB4 40Gbps (support data transfer, Power Delivery 100W and DisplayPort 1.4)
- 1x HDMI 2.1
- 1x Ethernet (RJ-45)
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Power connector

#### 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

# **SECURITY & PRIVACY**

## Security

#### **Security Chip**

Firmware TPM 2.0 integrated in chipset

### Fingerprint Reader

No fingerprint reader

#### **BIOS Security**

- Power-on password
- Supervisor password
- Hard disk password

#### **Other Security**

E-Camera shutter

# SERVICE

## Warranty

#### Base Warranty\*\*[1]

- 1-year depot service
- 1-year depot with 2-year system board service (Korea only)
- 2-year (1-yr battery) depot service
- 3-year (1-yr battery) depot service

Notes:

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

# ENVIRONMENTAL

# **Operating Environment**

Temperature<sup>[1]</sup>

- 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)
- At altitudes above 2438 m (8,000 ft)

- Maximum temperature when operating under the unpressurized condition: 31.3°C (88°F)

#### 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**

### **Green Certifications**

- ErP Lot 3
- RoHS compliant

# **Other Certifications**

### Other Certifications

- TÜV Rheinland<sup>®</sup> High Gaming Performance
- TÜV Rheinland Low Blue Light (Hardware Solution)
- Feature with \*\* means that only one offering listed under the feature is configured on selected models.
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