

PERFORMANCE

Processor

Processor Family

AMD Ryzen™ 5 / 7 Processor

Processor\*\*

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics
AMD Ryzen 5 5600H	6	12	3.3GHz	4.2GHz	3MB L2 / 16MB L3	AMD Radeon™ Graphics
AMD Ryzen 7 5800H	8	16	3.2GHz	4.4GHz	4MB L2 / 16MB L3	AMD Radeon Graphics

Operating System

Operating System\*\*

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

Graphics

Graphics\*\*

Graphics	Type	Memory	Boost Clock	TGP	Key Features
NVIDIA® GeForce GTX 1650	Discrete	4GB GDDR6	-	-	DirectX® 12
NVIDIA GeForce RTX™ 3050 Laptop GPU	Discrete	4GB GDDR6	1500 MHz / 1740 MHz	95W	Advanced Optimus, Resizable BAR, Dynamic Boost 2.0, DirectX 12 Ultimate

Monitor Support

Monitor Support\*\*

- 3050 / 3050Ti models: 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
- 1650 models: supports up to 4 independent displays (native display and 3 external monitors via HDMI and USB-C)
  - HDMI supports up to 3840x2160@60Hz
  - USB-C supports up to 5120x3200@60Hz

Chipset

Chipset

AMD SoC (System on Chip) platform

Memory

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

Up to 16GB DDR4-3200 offering

Memory Slots

Two DDR4 SO-DIMM slots, dual-channel capable

Memory Type

DDR4-3200

Notes:

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

Storage

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

Up to two drives, 1x 2.5" HDD + 1x M.2 SSD

- 2.5" HDD up to 1TB
- M.2 2242 SSD up to 512GB
- M.2 2280 SSD up to 1TB

**Storage Slot**

- HDD/SSD mode: one 2.5" drive slot + one M.2 slot
  - One 2.5" SATA HDD slot
  - One M.2 2280 PCIe® 3.0 x4 slot
- Dual SSD mode: two M.2 slots
  - Two M.2 2280 PCIe 3.0 x4 slot

**Storage Type\*\*\***

Disk Type	Interface	RPM
2.5" SATA HDD	SATA 6Gb/s	5.4K
M.2 2242 SSD	PCIe NVMe®, PCIe 3.0 x4	-
M.2 2280 SSD	PCIe NVMe, PCIe 3.0 x4	-

Notes:

[1] The storage capacity supported is based on the test results with current Lenovo storage offerings.

**Removable Storage**

**Optical**

None

**Card Reader**

4-in-1 card reader (SD, SDHC, SDXC, MMC)

**Multi-Media**

**Audio Chip**

High Definition (HD) Audio, Realtek® ALC3306 codec

**Speakers**

Stereo speakers, 2W x2, Nahimic Audio

**Microphone**

Dual-microphone array

**Camera**

HD 720p, with camera shutter, fixed focus

**Battery**

**Battery**

Integrated Li-Polymer 80Wh battery, supports Rapid Charge Pro (charge up to 50% in 30min)

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

MobileMark® 2018: 5.72 hr (discrete mode) or 8.1 hr (hybrid mode)

Notes:

[1] All battery life claims are approximate maximum and based on results using the MobileMark 2014, MobileMark 2018, MobileMark 25, 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 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**

230W slim tip (3-pin) AC adapter, 100-240V, 50-60Hz

**DESIGN**

Display

Display\*\*

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle (L/R/U/D)	Key Features
17.3"	FHD (1920x1080)	None	IPS	300nits	Anti-glare	16:9	800:1	72% NTSC	85°/85°/-/-	Refresh rate 60Hz, AMD FreeSync™, DC dimmer
17.3"	FHD (1920x1080)	None	IPS	300nits	Anti-glare	16:9	800:1	72% NTSC	85°/85°/-/-	Refresh rate 144Hz, AMD FreeSync, Dolby® Vision™, DC dimmer

Touchscreen

Non-touch

Input Device

Keyboard

6-row, multimedia Fn keys, numeric keypad

Keyboard Backlight

White backlight

Touchpad

Buttonless Mylar® surface multi-touch touchpad, 69 x 104 mm (2.72 x 4.09 inches)

Mechanical

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

398.6 x 290 x 24.3-26.2 mm (15.7 x 11.41 x 0.96-1.03 inches)

Weight<sup>[2]</sup>

Around 2.98 kg (6.57 lbs)

Case Color

Phantom blue (top), shadow black (bottom)

Surface Treatment

Painting

Case Material

PC-ABS (top), PC-ABS (bottom)

System Lighting

No system lighting

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

Ethernet<sup>[1]</sup>

Gigabit Ethernet

WLAN + Bluetooth®<sup>[2][3]</sup>

Wi-Fi® 6, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 card

Notes:

[1] Wake-on-LAN needs the power adapter plugged in.

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

[3] Wi-Fi 6 full features might be limited by country-level restrictions.

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

### Standard Ports

- 1x Card reader
- 1x Ethernet (RJ-45)
- 1x HDMI 2.1
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Power connector
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C 3.2 Gen 2 (support data transfer and DisplayPort™ 1.4)
- 1x USB-C 3.2 Gen 2 (support data transfer, Power Delivery and DisplayPort 1.4)
- 3x USB 3.2 Gen 1

### 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.

## SECURITY & PRIVACY

### Security

#### Security Chip

Firmware TPM 2.0 integrated in SoC

#### Fingerprint Reader

No fingerprint reader

#### BIOS Security

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

#### Other Security

Camera privacy shutter

## 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

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

**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.

- 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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