

**OVERVIEW**



1. Power connector	6. Power button
2. HDMI 1.4	7. Headphone / microphone combo jack (3.5mm)
3. 2x USB 3.2 Gen 2	8. Optical drive eject button
4. Ethernet (RJ-45)	9. Top camera
5. 2x USB 2.0	

## PERFORMANCE

### Processor

#### Processor Family

Intel® Celeron®, Intel® Pentium®, or 12th Generation Intel® Core™ i3 / i5 / i7 Processor

#### Processor\*\*<sup>[1]</sup>

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Celeron® 7305	5 (1 P-core + 4 E-core)	6	P-core 1.1GHz / E-core 0.9GHz	-	8MB	DDR4-3200	Intel® UHD Graphics
Pentium® Gold 8505 <sup>[2]</sup>	5 (1 P-core + 4 E-core)	6	P-core 1.2GHz / E-core 0.9GHz	P-core 4.4GHz / E-core 3.3GHz	8MB	DDR4-3200	Intel® UHD Graphics
Core™ i3-1215U <sup>[3]</sup>	6 (2 P-core + 4 E-core)	8	P-core 1.2GHz / E-core 0.9GHz	P-core 4.4GHz / E-core 3.3GHz	10MB	DDR4-3200	Intel® UHD Graphics
Core™ i3-1220P <sup>[4]</sup>	10 (2 P-core + 8 E-core)	12	P-core 1.5GHz / E-core 1.1GHz	P-core 4.4GHz / E-core 3.3GHz	12MB	DDR4-3200	Intel® UHD Graphics
Core™ i5-1235U <sup>[5]</sup>	10 (2 P-core + 8 E-core)	12	P-core 1.3GHz / E-core 0.9GHz	P-core 4.4GHz / E-core 3.3GHz	12MB	DDR4-3200	Intel® Iris® Xe Graphics
Core™ i5-1240P <sup>[6]</sup>	12 (4 P-core + 8 E-core)	16	P-core 1.7GHz / E-core 1.2GHz	P-core 4.4GHz / E-core 3.3GHz	12MB	-	Intel® Iris® Xe Graphics
Core™ i5-12450H <sup>[7]</sup>	8 (4 P-core + 4 E-core)	12	P-core 2.0GHz / E-core 1.5GHz	P-core 4.4GHz / E-core 3.3GHz	12MB	DDR4-3200	Intel® UHD Graphics
Core™ i7-1260P <sup>[8]</sup>	12 (4 P-core + 8 E-core)	16	P-core 2.1GHz / E-core 1.5GHz	P-core 4.7GHz / E-core 3.4GHz	18MB	-	Intel® Iris® Xe Graphics
Core™ i5-13420H <sup>[9]</sup>	8 (4 P-core + 4 E-core)	12	P-core 2.1GHz / E-core 1.5GHz	P-core 4.6GHz / E-core 3.4GHz	12MB	DDR4-3200	Intel® UHD Graphics
Core™ i7-13620H <sup>[10]</sup>	10 (6 P-core + 4 E-core)	16	P-core 2.4GHz / E-core 1.8GHz	P-core 4.9GHz / E-core 3.6GHz	24MB	DDR4-3200	Intel® UHD Graphics

#### Notes:

<sup>[1]</sup> Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

<sup>[2], [3], [4], [5], [6], [7], [8], [9], [10]</sup> 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® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Windows® 11 Home in S mode
- No preload operating system

### Graphics

#### Graphics\*\*<sup>[1]</sup>

Graphics	Type	Memory	Connector	Max Resolution	Key Features
Intel® UHD Graphics	Integrated	Shared	1x HDMI® 1.4	1920x1080@60Hz(HDMI®)	DirectX® 12.1
Intel® Iris® Xe Graphics	Integrated	Shared	1x HDMI® 1.4	1920x1080@60Hz(HDMI®)	DirectX® 12.1
Intel® Iris® Xe Graphics	Integrated	Shared	1x HDMI® 1.4	1920x1080@60Hz(HDMI®)	DirectX® 12
NVIDIA® GeForce MX550	Discrete	2GB GDDR6	1x HDMI® 1.4	1920x1080@60Hz(HDMI®)	DirectX® 12
NVIDIA® GeForce MX550	Discrete	4GB GDDR6	1x HDMI® 1.4	1920x1080@60Hz(HDMI®)	DirectX® 12

#### Notes:

[1] Intel® Iris® Xe Graphics capability requires system to be configured with dual-channel memory. On the system with single-channel memory, Intel® Iris® Xe Graphics will function as Intel® UHD Graphics.

## Monitor Support

### Monitor Support

Supports up to 2 independent displays via native display and 1 external monitor; supports external monitor via HDMI®

## Chipset

### Chipset

Intel® SoC (System on Chip) platform

## Memory

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

Up to 16GB DDR4-3200

### Memory Slots

Two DDR4 SO-DIMM slots, dual-channel capable

### Memory Type

DDR4-3200

### Memory Protection

Non-ECC

Notes:

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

## Storage

### Storage Support<sup>[1][2]</sup>

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

- 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	5.4K
M.2 2280 SSD	PCIe® NVMe®, PCIe® 3.0 x4	-
M.2 2280 SSD	PCIe® NVMe®, PCIe® 4.0 x4	-
M.2 2242 SSD	PCIe® NVMe®, PCIe® 3.0 x4	-

### RAID

No support

Notes:

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

[2] 2.5" HDD bracket kit only comes with pre-configured HDD models.

## Removable Storage

### Optical

- DVD burner (DVD±RW), SATA 1.5Gb/s, slim (9.0mm)
- None

### Card Reader

No card reader

## Multi-Media

### Audio Chip

High Definition (HD) Audio, Realtek® ALC256 codec

### Speakers

Stereo speakers, 3W x2, Audio by HARMAN

### Microphone

Dual-microphone array

### Camera\*\*

- HD 720p, fixed focus
- IR & 5.0-megapixel, fixed focus
- No camera

## Power Supply

### Power Supply\*\*

Power	Type	Efficiency	Key Features
90W	Adapter	89%	100V - 240V
135W	Adapter	89%	100V - 240V

## DESIGN

### Display

#### Display\*\*<sup>[1]</sup>

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle (L/R/U/D)	Key Features
23.8"	FHD (1920x1080)	None	IPS	250nits	Anti-glare	16:9	1000:1	72% NTSC	horizontal: +/- 89°, vertical: +/- 89°	Borderless design
23.8"	FHD (1920x1080)	Multi-touch	IPS	250nits	Anti-glare	16:9	1000:1	72% NTSC	horizontal: +/- 89°, vertical: +/- 89°	Borderless design

### Touchscreen

- Advanced In-cell Touch (AIT), supports 10-point touch
- Non-touch

Notes:

<sup>[1]</sup> IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

## Input Device

### Pen

No support

### Keyboard\*\*

- EOS Wireless Keyboard, black
- EOS Wireless Keyboard, white
- Lenovo® Calliope Keyboard (USB connector), black
- Lenovo® Calliope Keyboard (USB connector), silver
- Lenovo® Calliope Keyboard (USB connector), white
- Lenovo® Calliope Wireless Keyboard, black
- Lenovo® Calliope Wireless Keyboard, silver
- Lenovo® Calliope Wireless Keyboard, white

### Mouse\*\*

- Lenovo® Calliope Mouse (USB connector), black
- Lenovo® Calliope Mouse (USB connector), white
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Lenovo® Calliope Wireless Mouse (2.4GHz via USB receiver), white

## Mechanical

### Form Factor

AIO (23.8 inches)

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

541.2 x 185.34 x 433.96 mm (21.3 x 7.29 x 17.08 inches)

**Packaging Dimensions (WxDxH)**

235 x 666 x 561 mm (9.25 x 26.22 x 22.08 inches)

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

Models	Weight
Models with stand	7.03 kg (15.49 lbs)

**Packaging Weight**

All models: 9.79 kg (21.58 lbs)

**Case Color<sup>\*\*</sup>**

- Black
- White

**Bays**

- 1x 2.5" disk bay
- 1x slim ODD bay

**Expansion Slots**

Two M.2 slots (one for WLAN, one for SSD)

**Stand**

Monitor stand, supports -5° to +25° tilt

**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

**WLAN + Bluetooth<sup>\*\*</sup>**

- 802.11ac 2x2 Wi-Fi® + Bluetooth® 5.1, M.2 Card
- Wi-Fi® 6, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.2, M.2 card<sup>[1]</sup>

**Notes:**

[1] Bluetooth® 5.2 requires Windows® 11.

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

**Rear Ports**

- 2x USB 2.0
- 2x USB 3.2 Gen 2
- 1x HDMI® 1.4
- 1x Ethernet (RJ-45)
- 1x power connector

**Bottom Ports**

1x headphone / microphone combo jack (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.

## SECURITY & PRIVACY

### Security

#### Security Chip

Firmware TPM 2.0 integrated in SoC

#### Physical Locks

No physical locks

#### BIOS Security

- Administrator password
- Power-on password
- Hard disk password

## SERVICE

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

#### 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

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -20°C (-4°F) to 60°C (140°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>[1]</sup>

#### Green Certifications

- ErP Lot 3 and Lot 7
- 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.
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