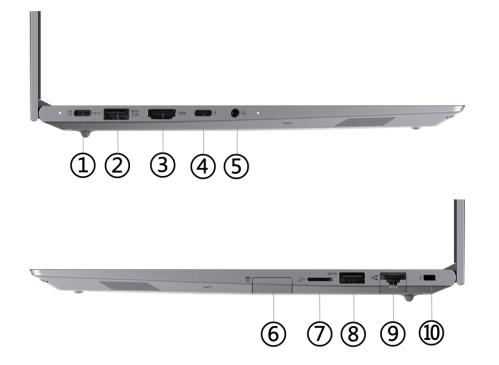
# **OVERVIEW**



1. USB-C 3.2 Gen 2	6. USB 2.0 (hidden)
2. USB 3.2 Gen 1 (Always On)	7. microSD card reader
3. HDMI	8. USB 3.2 Gen 1
4. Thunderbolt 4	9. Ethernet (RJ-45)
5. Headphone / microphone combo jack (3.5mm)	10. Kensington Nano Security Slot

### ThinkBook 14 G4+ IAP

### **Product Specifications** Reference

# PERFORMANCE

### **Processor**

### **Processor Family**

12th Generation Intel<sup>®</sup> Core<sup>™</sup> i3 / i5 / i7 / i9 Processor

### Processor\*\*[1]

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Core i3- 1215U	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	LPDDR5- 5200	Intel UHD Graphics
Core i5- 1235U	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	LPDDR5- 5200	Intel Iris® Xe Graphics
Core i7- 1255U	10 (2 P-core + 8 E-core)	12	P-core 1.7GHz / E- core 1.2GHz	P-core 4.7GHz / E- core 3.5GHz	12MB	LPDDR5- 5200	Intel Iris Xe Graphics
Core i5- 1240P	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	LPDDR5- 5200	Intel Iris Xe Graphics
Core i5- 12500H	12 (4 P-core + 8 E-core)	16	P-core 2.5GHz / E- core 1.8GHz	P-core 4.5GHz / E- core 3.3GHz	18MB	LPDDR5- 5200	Intel Iris Xe Graphics
Core i7- 1260P	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	LPDDR5- 5200	Intel Iris Xe Graphics
Core i7- 12700H	14 (6 P-core + 8 E-core)	20	P-core 2.3GHz / E- core 1.7GHz	P-core 4.7GHz / E- core 3.5GHz	24MB	LPDDR5- 5200	Intel Iris Xe Graphics
Core i9- 12900H	14 (6 P-core + 8 E-core)	20	P-core 2.5GHz / E- core 1.8GHz	P-core 5.0GHz / E- core 3.8GHz	24MB	LPDDR5- 5200	Intel Iris Xe Graphics

Notes:

1. The maximum supported memory speed will vary on the selected onboard memory

### **Operating System**

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

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

### **Graphics**

#### Graphics\*\*

Graphics	Туре	Memory	Boost Clock	TGP	Key Features
Intel UHD Graphics	Integrated	Shared	-	Share CPU TDP	DirectX® 12
Intel Iris Xe Graphics	Integrated	Shared	-	Share CPU TDP	DirectX 12.1
NVIDIA® GeForce RTX™ 2050 Laptop GPU	Discrete	4GB GDDR6	1700 MHz	50W	DirectX 12

### **Monitor Support**

### **Monitor Support**

Supports up to 4 independent displays (native display and 3 external monitors via HDMI®, USB-C® and Thunderbolt™) • HDMI supports up to 3840x2160@60Hz

- USB-C supports up to 5120x3200@60Hz
- Thunderbolt supports up to 5120x3200@60Hz

### **Chipset**

### Chipset

Intel SoC (System on Chip) platform

### Memory

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

- 8GB soldered memory, not upgradable
- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable

#### **Memory Slots**

Memory soldered to systemboard, no slots, dual-channel

### Memory Type

LPDDR5-4800

Notes:

1. The max memory is based on the test results with current Lenovo<sup>®</sup> memory offerings. The system may support more memory as the technology develops.

### Storage

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

Up to two drives, 2x M.2 SSD

- M.2 2242 SSD up to 1TB
- M.2 2280 SSD up to 1TB

### Storage Slot

- Two M.2 slots
- One M.2 2280 PCIe® 3.0 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	256GB / 512GB / 1TB
M.2 2280 SSD	PCIe NVMe, PCIe 4.0 x4	512GB / 1TB

Notes:

2. The system supports dual SSD via two M.2 slots, but Lenovo only offers one SSD configuration.

### **Removable Storage**

Optical

None

#### Card Reader

3-in-1 MicroSD card reader (SD, SDHC, SDXC)

### **Multi-Media**

#### **Audio Chip**

High Definition (HD) Audio, Realtek® ALC3287 codec

#### Speakers

Stereo speakers, 2W x2, Dolby® Atmos®

### Microphone

Dual array microphone with Al-based noise-cancelling, near-field

#### Camera\*\*

- HD 720p, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- IR & FHD 1080p hybrid, with privacy shutter, fixed focus

### **Battery**

#### Battery\*\*

• Integrated Li-Polymer 46.5Wh battery, supports Rapid Charge Pro (charge up to 70% in 30min) with 100W AC adapter

<sup>1.</sup> 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.

### ThinkBook 14 G4+ IAP

Lenovo

Integrated Li-Polymer 62Wh battery, supports Rapid Charge Pro (charge up to about 70% in 30min) with 100W AC adapter

### **Power Adapter**

#### Power Adapter\*\*[1]

- 65W USB-C (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C slim (2-pin, wall-mount) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 100W USB-C slim (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz

#### Notes:

1. AC adapter offerings depend on the country.

# DESIGN

### **Display**

#### Display\*\*[1]

Size	Resolution	Touch	Туре	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Key Features
14.0″	WUXGA (1920x1200)	None	IPS	300 nits	Anti- glare	16:10	1000:1	45% NTSC	170°	Refresh rate 60Hz, DC dimming
14.0″	2.2K (2240x1400)	None	IPS	300 nits	Anti- glare	16:10	1500:1	100% sRGB	170°	Refresh rate 60Hz, DC dimming
14.0″	2.8K (2880x1800)	None	IPS	400 nits	Anti- glare	16:10	1500:1	100% sRGB	170°	Refresh rate 90Hz, DC dimming

### 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

### Keyboard Backlight

LED backlight

### Touchpad

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

### Mechanical

#### Dimensions (WxDxH)

Models	Dimensions
Models with WUXGA display	312 x 224 x 16.5 mm (12.28 x 8.82 x 0.65 inches)
Models with 2.2K display	312 x 224 x 15.9 mm (12.28 x 8.82 x 0.63 inches)
Models with 2.8K display	312 x 224 x 15.9 mm (12.28 x 8.82 x 0.63 inches)

#### Weight

Starting at 1.4 kg (3.09 lbs)

#### Case Color

Arctic grey, dual-tone design

### Surface Treatment

Anodizing sandblasting

#### **Case Material**

Aluminium (top), aluminium (bottom)

Notes:

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

# CONNECTIVITY

### Network

#### Ethernet

Gigabit Ethernet, 1x RJ-45, supports Wake-on-LAN

#### WLAN + Bluetooth®\*\*[1][2]

- Wi-Fi<sup>®</sup> 6, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, M.2 card
- Wi-Fi 6E, 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 and Wi-Fi 6E full features might be limited by country-level restrictions.
- 6GHz Wi-Fi 6E operation is dependent on the support of the operating system, routers/APs/Gateways that support Wi-Fi 6E, and the regional regulatory certifications & spectrum allocation.
- Wi-Fi 6E is only enabled on Windows 11 and operates as Wi-Fi 6 with Windows 10.
- BT5.2 is supported on Windows 10 version 20H2 or above (limited to BT5.0 on the earlier version).

### **Ports**<sup>D</sup>

#### Standard Ports

- 1x USB 2.0 (hidden)
- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 1x USB-C 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 1x Thunderbolt 4 / USB 4 40Gbps (support data transfer, Power Delivery 3.0, and DisplayPort 1.4)
- 1x HDMI, up to 4K/60Hz
- 1x microSD card reader
- 1x Ethernet (RJ-45)
- 1x Headphone / microphone combo jack (3.5mm)

#### Notes:

- 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

### Docking

### Docking

Various docking solutions supported via Thunderbolt or USB-C. For more compatible docking solutions, please visit <u>Docking for ThinkBook 14 G4+ IAP</u>

# **SECURITY & PRIVACY**

### Security

Security Chip

Firmware TPM 2.0 integrated in SoC

### **Physical Locks**

Kensington® Nano Security Slot™, 2.5 x 6 mm

#### **Fingerprint Reader**

- Touch style fingerprint reader on smart power button
- No fingerprint reader

### **BIOS Security**

- Administrator password
- Power-on password
- Hard disk password
- Self-healing BIOS

#### **Other Security**

- Camera privacy shutter
- (Optional) IR camera for Windows Hello

# SERVICE

### Warranty

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

- 1-year courier or carry-in service
- 2-year (1-yr battery) courier or carry-in 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

- EPEAT<sup>™</sup> Gold
- ENERGY STAR® 8.0
- ErP Lot 3
- RoHS compliant

### **Other Certifications**

#### **Mil-Spec Test**

MIL-STD-810H military test passed

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

- (Optional) TÜV Rheinland<sup>®</sup> Low Blue Light (Software Solution)
- (Optional) Eyesafe® Certified

• (Optional) TÜV Rheinland Low Blue Light (Hardware Solution)

Notes:

1. Only models with 2.2K and 2.8K displays are certified for TÜV Rheinland Eyesafe Display.

- Feature with \*\* means that only one offering listed under the feature is configured on selected models.
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