

# **OVERVIEW**



1. Smart card reader *	6. 2x Thunderbolt 4
2. Nano-SIM card slot *	7. HDMI
3. USB-A (USB 5Gbps)	8. USB-A (USB 5Gbps), Always On
4. Ethernet (RJ-45)	9. Headphone / microphone combo jack (3.5mm)
5. Kensington Nano Security Slot	

### Notes:

• Items with \* are only available on selected models



# **PERFORMANCE**

### **Processor**

#### **Processor Family**

Intel® U or H Series Core Ultra 5 / 7 Processor (Series 2)

### Processor\*\*

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics	NPU	Overall TOPS
Core Ultra 5 225H	14 (4 P-core + 8 E-core + 2 LPE-core)	+ 8 E-core + 14   core 1.3GHz / LPE-		P-core 4.9GHz / E- core 4.3GHz / LPE-core 2.5GHz	18MB	Intel® Arc™ 130T GPU, up to 63 TOPS[1]	Intel® AI Boost, up to 13 TOPS	Up to 83 TOPS
Core Ultra 5 225U	12 (2 P-core + 8 E-core + 2 LPE-core)	14	P-core 1.5GHz / E- core 1.3GHz / LPE- core 700MHz	P-core 4.8GHz / E- core 3.8GHz / LPE-core 2.4GHz	12MB	Intel® Graphics	Intel® AI Boost, up to 12 TOPS	-
Core Ultra 5 235H	14 (4 P-core + 8 E-core + 2 LPE-core)	14	P-core 2.4GHz / E- core 1.8GHz / LPE- core 700MHz	P-core 5.0GHz / E- core 4.4GHz / LPE-core 2.5GHz	18MB	Intel® Arc™ 140T GPU, up to 74 TOPS <sup>[2]</sup>	Intel® AI Boost, up to 13 TOPS	Up to 94 TOPS
Core Ultra 5 235U	12 (2 P-core + 8 E-core + 2 LPE-core)	14	P-core 2.0GHz / E- core 1.6GHz / LPE- core 700MHz	P-core 4.9GHz / E- core 4.1GHz / LPE- core 2.4GHz	12MB	Intel® Graphics	Intel® AI Boost, up to 12 TOPS	-
Core Ultra 7 255H	16 (6 P-core + 8 E-core + 2 LPE-core)	16	P-core 2GHz / E- core 1.5GHz / LPE- core 700MHz	P-core 5.1GHz / E- core 4.4GHz / LPE-core 2.5GHz	24MB	Intel® Arc™ 140T GPU, up to 74 TOPS <sup>[3]</sup>	Intel® AI Boost, up to 13 TOPS	Up to 96 TOPS
Core Ultra 7 255U	12 (2 P-core + 8 E-core + 2 LPE-core)	14	P-core 2GHz / E- core 1.7GHz / LPE- core 700MHz	P-core 5.2GHz / E- core 4.2GHz / LPE-core 2.4GHz	12MB	Intel® Graphics	Intel® AI Boost, up to 12 TOPS	-
Core Ultra 7 265H	16 (6 P-core + 8 E-core + 2 LPE-core)	16	P-core 2.2GHz / E- core 1.7GHz / LPE- core 700MHz	P-core 5.3GHz / E- core 4.5GHz / LPE-core 2.5GHz	24MB	Intel® Arc™ 140T GPU, up to 75 TOPS <sup>[4]</sup>	Intel® AI Boost, up to 13 TOPS	Up to 97 TOPS
Core Ultra 7 265U	12 (2 P-core + 8 E-core + 2 LPE-core)	14	P-core 2.1GHz / E- core 1.7GHz / LPE- core 700MHz	P-core 5.3GHz / E- core 4.2GHz / LPE-core 2.4GHz	12MB	Intel® Graphics	Intel® AI Boost, up to 12 TOPS	-

#### Notes:

[1], [2], [3], [4] Intel® Arc™ graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

# Al (Artificial Intelligence)

**AI PC Category** 

AI PC[1]

NPU

Integrated Intel® AI Boost, up to 13 TOPS

Notes:

[1] AI PCs have a NPU capable of 10+ TOPs to run the Copilot assistant by pressing the optional Microsoft® Copilot key or using Win + C.

# **Operating System**

### Operating System\*\*

- Windows® 11 Pro
- Windows® 11 Home
- Windows® 11 Home Single Language
- Ubuntu Linux<sup>[1]</sup>
- Linux<sup>[2]</sup>
- No preload operating system



#### Notes:

[1], [2] Some features may not be supported on the system with Linux preload, including but not limited to Intel® RST RAID, MIPI computer vision camera, WWAN, Human Presence Detection, etc.

### **Graphics**

### Graphics\*\*

Graphics	Туре	Memory	TGP	Key Features
Intel® Arc™ 130T GPU <sup>[1]</sup>	Integrated	Shared	Share CPU TDP	DirectX® 12.2
Intel® Arc™ 140T GPU[2]	Integrated	Shared	Share CPU TDP	DirectX® 12.2
Intel® Graphics	Integrated	Shared	Share CPU TDP	DirectX® 12.2

#### Notes:

[1], [2] Intel® Arc™ graphics only available on select H-series Intel® Core™ Ultra processor powered systems with at least 16GB of system memory in a dual-channel configurations, otherwise it will function as Intel® Graphics.

### **Monitor Support**

#### Monitor Support[1]

Supports up to 4 independent displays (native display and 3 external monitors via HDMI® and Thunderbolt™)

- HDMI® supports up to 4K@60Hz
- Thunderbolt™ supports up to 8K@60Hz<sup>[2]</sup>

#### Notes:

[1] Refresh rates >60hz also supported, however max resolution will be limited.

[2] 8K resolution support needs 2 display pipes. That is, simultaneous display number will "-1" when 8K resolution displayed.

### **Chipset**

### Chipset

Intel® SoC (System on Chip) platform

### Memory

Max Memory[1]

Up to 64GB DDR5-5600

### **Memory Slots**

Two DDR5 SODIMM / CSODIMM slots, dual-channel capable

# Memory Type

DDR5-5600

### Notes:

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

### **Storage**

### Max Storage Support[1]

One drive, up to 2TB M.2 2280 SSD

#### Storage Slot[2]

- Models with U series processor: one M.2 2280 PCIe® 4.0 x4 slot
- Models with H series processor: one M.2 2280 PCle<sup>®</sup> 5.0 x4 slot

### Storage Type\*\*

Disk Type	Interface	Offering	Security
M.2 2280 SSD	PCIe® NVMe®, PCIe® 4.0 x4	256GB / 512GB / 1TB	Opal 2.0
M.2 2280 SSD	PCIe® NVMe®, PCIe® 4.0 x4 Performance	512GB	Opal 2.0
M.2 2280 SSD	PCIe® NVMe®, PCIe® 5.0 x4 Performance[3]	1TB / 2TB	Opal 2.0



#### 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<sup>®</sup> 3.0 (x2 / x4): 2 GB/s (16 Gbps) / 4 GB/s (32 Gbps);

PCle<sup>®</sup> 4.0 (x2 / x4): 4 GB/s (32 Gbps) / 8 GB/s (64 Gbps);

PCle<sup>®</sup> 5.0 (x2 / x4): 8 GB/s (64 Gbps) / 16 GB/s (128 Gbps).

[3] PCle® 5.0 x4 SSD is downgraded to PCle® 4.0 x4 performance on the models with U series processor.

### Removable Storage

#### **Card Reader**

No card reader

#### Multi-Media

#### **Audio Chip**

High Definition (HD) Audio, Realtek® ALC3287 codec

#### **Speakers**

Stereo speakers, 2W x2, Dolby Audio™

#### Microphone

- Dual-microphone array, 360° far-field, Dolby Voice®
- No microphone<sup>[1]</sup>

#### Camera\*\*

- 5.0MP + IR discrete, with privacy shutter, fixed focus, temporal noise reduction
- 5.0MP, with privacy shutter, fixed focus, temporal noise reduction
- No camera<sup>[2]</sup>

### Notes:

[1] No microphone is for special bid only.

[2] No camera is for special bid only.

### **Battery**

### Battery\*\*

- 52.5Wh Rechargeable Li-ion Battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W or 100W AC adapter
- 86Wh Rechargeable Li-ion Battery, supports Rapid Charge (charge up to 80% in 1hr) with 100W AC adapter

### Battery Life[1]

Configuration 1 (max battery life)

MobileMark® 25: up to 11.5 hr with 459 performance score @250nits

JEITA-BAT 3.0 (Video/Idle): up to 12.7 hr / 24.1 hr @200nits

Local video playback: up to 21.4 hr @150nits

### Alternate configuration 2

MobileMark® 25: up to 10.55 hr with 682 performance score @250nits

JEITA-BAT 3.0 (Video/Idle): up to 10.33 hr / 21.2 hr @200nits

Local video playback: up to 18.3 hr @150nits

#### Alternate configuration 3

MobileMark® 25: up to 9.63 hr with 565 performance score @250nits

JEITA-BAT 3.0 (Video/Idle): up to 9.27 hr / 18.32 hr @200nits

Local video playback: up to 17.42 hr @150nits

#### Notes:

[1] Configuration 1 (max battery life): WUXGA low power (non-touch), Intel® Core™ Ultra 5 225U, 8GB DDR5, Win 11, 52.5Wh battery, best power efficiency power mode

Alternate configuration 2: WUXGA low power (non-touch), Intel® Core™ Ultra 5 225H, 8GB DDR5, Win 11, 52.5Wh battery, best power efficiency power mode

Alternate configuration 3: WUXGA (non-touch), Intel® Core™ Ultra 5 235U, 16GB DDR5, Win 11, 52.5Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using MobileMark® 25, JEITA 3.0, continuous 1080p



local video playback (using default Media Player in Fullscreen mode 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, software, wireless functionality, power management settings, and screen brightness.

The maximum capacity of the battery will decrease with time, ambient temperature and use.

Refer to Microsoft® link for more information about the Windows® Performance power slider.

### **Power Adapter**

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

- 65W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C<sup>®</sup> (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® nano GaN (2-pin, wall-mount) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® nano GaN (3-pin, wall-mount) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim GaN (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C® slim GaN (3-pin) 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
- No power adapter

Notes:

[1] AC adapter offerings depend on the country.

# **DESIGN**

### **Display**

#### Display\*\*

Size	Resolution	Touch	Туре	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Refresh Rate	Viewing Angle (L/R/U/D)	Key Features
16"	WUXGA (1920x1200)	Multi- touch	IPS <sup>[1]</sup>	400nits	Anti- glare	16:10	1000:1	45% NTSC	60Hz	85° / 85° / 85° / 85°	Eyesafe® Certified 2.0
16"	WUXGA (1920x1200)	Non- touch	IPS <sup>[2]</sup>	400nits	Anti- glare	16:10	1000:1	45% NTSC	60Hz	85° / 85° / 85° / 85°	-
16"	WUXGA (1920x1200)	Multi- touch	IPS <sup>[3]</sup>	500nits	Anti- glare	16:10	1000:1	100% sRGB	60Hz	85° / 85° / 85° / 85°	ThinkPad® Privacy Guard
16"	WUXGA (1920x1200)	Non- touch	IPS <sup>[4]</sup>	500nits	Anti- glare	16:10	1200:1	100% sRGB	60Hz	85° / 85° / 85° / 85°	Low power, Eyesafe® Certified 2.0

### Touchscreen

- On-cell multi-touch, supports 10-point touch
- Non-touch

#### Screen-to-Body Ratio

87.22%

Notes:

[1], [2], [3], [4] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

### **Input Device**

Pen

No support

### Keyboard

6-row, spill-resistant, multimedia Fn keys, numeric keypad, key travel 1.5mm / 1.35mm (Fn row & G/H/B), Copilot key

### **Keyboard Backlight**

- · LED backlight
- · Non-backlight



#### UltraNav™

TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu Glass-like Mylar® surface multi-touch 3-button Trackpad, 67.7 x 115 mm (2.67 x 4.53 inches)

#### Mechanical

### Dimensions (WxDxH)[1]

Models	Dimensions
Non-WWAN models	359.7 x 250.8 x 11.8/18.14 (front/rear), 23.5 (maximum) mm; 14.16 x 9.87 x 0.46/0.71 (front/rear), 0.93 (maximum) inches
WWAN support models	359.7 x 250.8 x 11.8/18.14 (front/rear), 23.65 (maximum) mm; 14.16 x 9.87 x 0.46/0.71 (front/rear), 0.93 (maximum) inches

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

Models	Weight
WLAN models with 52.5Wh battery	Starting at 1.76 kg (3.89 lbs)
WWAN models with 52.5Wh battery	Starting at 1.79 kg (3.95 lbs)
WLAN models with 86Wh battery	Starting at 1.89 kg (4.17 lbs)
WWAN models with 86Wh battery	Starting at 1.98 kg (4.37 lbs)

#### **Case Color**

Black

#### **Case Material**

PC + 20% CF (top), PC + 20% CF (bottom)

#### 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]

- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3<sup>[2]</sup>
- Intel® Wi-Fi® 7 BE201, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.4[3]

#### **WWAN**\*\*

- Wireless WAN upgradable to 4G (with antenna ready)
- Wireless WAN upgradable to 5G (with antenna ready)
- Quectel EM061K-GL, 4G LTE CAT6, M.2 card, with embedded eSIM functionality
- Quectel RM520N-GL, 5G Sub-6 GHz, M.2 card, with embedded eSIM functionality
- No support

#### SIM Card

- KDDI eSIM Program (Japan)[4]
- No physical SIM card inbox

### Ethernet\*\*

- Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

#### NFC

- · Near Field Communication
- No support

#### Notes:

[1] Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system,



driver, etc.

- [2] Wi-Fi® 6E operation is subject to the regulation rules in each country.
- [3] Wi-Fi® 7 operation is subject to the regulation rules in each country.
- [4] KDDI eSIM Program has no physical SIM card inbox and is for special bid only.

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

#### **Standard Ports**

- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1)
- 1x USB-A (USB 5Gbps / USB 3.2 Gen 1), Always On
- 2x USB-C® (Thunderbolt™ 4 / USB4® 40Gbps), with USB PD 3.0 and DisplayPort™ 2.1
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (RJ-45)

#### Optional Ports\*\*\*

- 1x Nano-SIM card slot (WWAN support models)
- 1x Smart card reader

#### 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.

### **Docking**

#### **Docking**

Various docking solutions supported via Thunderbolt<sup>™</sup> / USB-C<sup>®</sup>. For more compatible docking solutions, please visit Docking for ThinkPad<sup>®</sup> T16 Gen 4 (Intel<sup>®</sup>)

### **SECURITY & PRIVACY**

### Security

### **Security Chip**

Discrete TPM 2.0, TCG certified, FIPS 140-3 certified

#### **Physical Locks**

Kensington® Nano Security Slot™, 2.5 x 6 mm

### **Smart Card Reader**

- Smart card reader, supports ISO 7816 and EMV
- · No smart card reader

#### Fingerprint Reader

- Touch style fingerprint reader integrated in power button, match-on-chip
- No fingerprint reader

### **BIOS Security**

- NVMe® password
- Power-on password
- Supervisor password
- System management password
- Certificate-based BIOS authentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS
- More BIOS security features, please visit <u>BIOS Simulator[1]</u>

### **Other Security**

- Camera privacy shutter (camera models)
- (Optional) Ultrasonic Human Presence Detection
- (Optional) IR camera for Windows® Hello (facial recognition)
- ThinkShield
- Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)

Notes:



[1] The BIOS simulator is just for reference. Default settings and some options may vary depending on the hardware, operating system and BIOS version.

### MANAGEABILITY

### **System Management**

### System Management[1]

- Intel® vPro® Enterprise[2]
- Non-vPro®

#### Notes:

[1] All versions of the Intel® vPro® platform require an eligible Intel® processor, a supported operating system, Intel® LAN and/or WLAN silicon, firmware enhancements, and other hardware and software necessary to deliver the manageability use cases, security features, system performance, and stability that define the platform. See <a href="Intel® vPro® Platform">Intel® vPro® Platform</a> for details.

[2] Intel® vPro® offers a superset of DASH's defined capabilities.

### **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)
- 1-year limited onsite service
- · 3-year (1-yr battery) courier or carry-in service
- 3-year (1-yr battery) limited onsite service
- No base warranty<sup>[1]</sup>

#### Notes

[1] No base warranty is for special bid only.

### **ACCESSORIES**

### **Bundled Accessories**

#### **Bundled Accessories**\*\*\*[1]

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to DisplayPort™ Adapter
- Lenovo® USB-C® to VGA Adapter
- None

#### Notes

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® T16 Gen 4 (Intel®).

### **OPERATING REQUIREMENTS**

### **Operating Environment**

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

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping package: -20°C (-4°F) to 60°C (140°F)
- Storage without package: 5°C (41°F) to 43°C (109°F)

#### Relative Humidity

- Operating: 8% to 95% at wet-bulb temperature 23°C (73°F)
- Storage and transportation: 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).

### **ENVIRONMENTAL**

# **Sustainability**

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

30% PCC recycled plastic on top cover

48% PCC recycled plastic used in display panel frame

90% recycled magnesium on keyboard frame cover

45% PCC recycled plastic on bottom cover of WWAN models

30% PCC recycled plastic on bottom cover of non-WWAN models

90% PCC recycled plastic used in speaker enclosure

90% PCC recycled plastic used in the battery frame

65% PCC recycled plastic used in keycap frame

85% PCC recycled plastic for backlit keycaps

70% PCC recycled plastic for non-backlit keycaps

90% PCC recycled plastic used in 65W and 100W adapters

100% Plastic Free One Lenovo® Packaging

Notes:

[1] PCC: Post Consumer Content, recycled materials from customers.

### **CERTIFICATIONS**

#### 

### Green Certifications[2]

- ENERGY STAR® 9.0
- EPEAT™ Gold Registered<sup>[3]</sup>
- ErP Lot 6/26
- RoHS compliant
- TCO Certified, generation 10

#### 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 <a href="https://compliance.lenovo.com">https://compliance.lenovo.com</a>.

[2] EPEAT™ registration and ENERGY STAR® certification are optional and only available on the models with preloaded OS. Please visit <u>epeat.net</u> and <u>energystar.gov</u> for more information.

[3] EPEAT™ is registered where applicable, please visit epeat.net for registration status by country.

#### **Other Certifications**

### Mil-Spec Test

MIL-STD-810H military test passed

#### Other Certifications

(Optional) Eyesafe® Certified 2.0

- 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.
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