

OVERVIEW



1. Power button	5. Kensington Nano Security Slot
2. Headphone / microphone combo jack (3.5mm)	6. USB-A (USB 5Gbps), Always On
3. USB-A (USB 5Gbps)	7. 2x Thunderbolt 4
4. HDMI	8. Nano-SIM card 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) Arrow Lake (ARL)
- Intel® V Series Core Ultra 5 / 7 Processor (Series 2) Lunar Lake (LNL)

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics	NPU	Overall TOPS
Core Ultra 5 225U (ARL)	12 (2 P- core + 8 E- core + 2 LP E-core)	14	P-core 1.5GHz / E-core 1.3GHz / LP E-core 700MHz	E-core 3.8GHz / Intel® Smart Intel® Graphics		Intel® AI Boost, up to 12 TOPS	-	
Core Ultra 5 226V (LNL)			P-core 2.1GHz / LP E-core 2.1GHz	P-core 4.5GHz / LP E-core 3.5GHz	8MB Intel® Smart Cache	Intel® Arc™ Graphics 130V, up to 53 TOPS	Intel® AI Boost, up to 40 TOPS	Up to 97 TOPS
Core Ultra 5 235H (ARL)	14 (4 P- core + 8 E- core + 2 LP E-core)	14	P-core 2.4GHz / E-core 1.8GHz / LP E-core 700MHz	P-core 5.0GHz / E-core 4.4GHz / LP E-core 2.5GHz	18MB Intel® Smart Cache	Intel® Arc™ 140T GPU, up to 74 TOPS	Intel® AI Boost, up to 13 TOPS	Up to 94 TOPS
Core Ultra 5 235U (ARL)	12 (2 P- tra 5 Core + 8 E- tRL) core + 2 LP		Intel® AI Boost, up to 12 TOPS	-				
Core Ultra 7 255U (ARL)	12 (2 P- core + 8 E- core + 2 LP E-core)	14	P-core 2GHz / E- core 1.7GHz / LP E-core 700MHz	P-core 5.2GHz / E-core 4.2GHz / LP E-core 2.4GHz	12MB Intel® Smart Cache	Intel® Graphics	Intel® AI Boost, up to 12 TOPS	-
Core Ultra 7 256V (LNL)	8 (4 P-core + 4 LP E- core)	8	P-core 2.2GHz / LP E-core 2.2GHz	P-core 4.8GHz / LP E-core 3.7GHz	12MB Intel® Smart Cache	Intel® Arc™ Graphics 140V, up to 64 TOPS	Intel® AI Boost, up to 47 TOPS	Up to 115 TOPS
Core Ultra 7 258V (LNL)	8 (4 P-core + 4 LP E- core)	8	P-core 2.2GHz / LP E-core 2.2GHz	P-core 4.8GHz / LP E-core 3.7GHz	12MB Intel® Smart Cache	Intel® Arc™ Graphics 140V, up to 64 TOPS	Intel® AI Boost, up to 47 TOPS	Up to 115 TOPS
Core Ultra 7 265H (ARL)	16 (6 P- core + 8 E- core + 2 LP E-core)	16	P-core 2.2GHz / E-core 1.7GHz / LP E-core 700MHz	P-core 5.3GHz / E-core 4.5GHz / LP E-core 2.5GHz	24MB Intel® Smart Cache	Intel® Arc™ 140T GPU, up to 75 TOPS	Intel® AI Boost, up to 13 TOPS	Up to 97 TOPS
Core Ultra 7 265U (ARL)	12 (2 P- core + 8 E- core + 2 LP E-core)	14	P-core 2.1GHz / E-core 1.7GHz / LP E-core 700MHz	P-core 5.3GHz / E-core 4.2GHz / LP E-core 2.4GHz	12MB Intel® Smart Cache	Intel® Graphics	Intel® AI Boost, up to 12 TOPS	-
Core Ultra 7 266V (LNL)	8 (4 P-core + 4 LP E- core)	8	P-core 2.2GHz / LP E-core 2.2GHz	P-core 5GHz / LP E-core 3.7GHz	12MB Intel® Smart Cache	Intel® Arc™ Graphics 140V, up to 66 TOPS	Intel® AI Boost, up to 48 TOPS	Up to 118 TOPS
Core Ultra 7 268V (LNL)	8 (4 P-core + 4 LP E- core)	8	P-core 2.2GHz / LP E-core 2.2GHz	P-core 5GHz / LP E-core 3.7GHz	12MB Intel® Smart Cache	Intel® Arc™ Graphics 140V, up to 66 TOPS	Intel® AI Boost, up to 48 TOPS	Up to 118 TOPS

Al (Artificial Intelligence)

AI PC Category**

• Copilot+ PC (Lunar Lake)[1]



• AI PC (Arrow Lake)[2]

NPU

Integrated Intel® AI Boost, up to 48 TOPS

Notes:

[1] Copilot+ PCs have at least 16GB RAM, 256GB storage, and a NPU that runs 40+ TOPs to run the latest AI tools build-in latest Windows® 11 to accelerate productivity and creativity.

[2] 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[1]
- Linux^[2]
- 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™ 140T GPU	Integrated	Shared	Share CPU TDP	DirectX® 12.2
Intel® Arc™ Graphics 130V	Integrated	Shared	Share CPU TDP	DirectX® 12.2
Intel® Arc™ Graphics 140V	Integrated	Shared	Share CPU TDP	DirectX® 12.2
Intel® Graphics	Integrated	Shared	Share CPU TDP	DirectX® 12.2

Monitor Support

Monitor Support[1]

Arrow Lake: supports up to 4 independent displays (native display and 3 external monitors via HDMI® and Thunderbolt™) Lunar Lake: supports up to 3 independent displays (native display and 2 external monitors via HDMI® and Thunderbolt™)

- HDMI® supports up to 4K@60Hz
- Thunderbolt™ supports up to 8K@60Hz^[2]

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

- 16GB soldered memory, not upgradable
- 32GB soldered memory, not upgradable
- 64GB soldered memory, not upgradable^[1]

Memory Slots

Memory soldered to systemboard, no slots, dual-channel

Memory Type**

Arrow Lake: LPDDR5x-8400^[2]



• Lunar Lake: LPDDR5x-8533, MoP (Memory on Package) memory

Notes:

[1] 64GB memory is only available for Arrow Lake.

[2] Installed memory is actually LPDDR5x-8533 but runs as LPDDR5x-8400 due to platform limitation.

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 V or H series processor: one M.2 2280 PCle® 5.0 x4 slot

Storage Type**

Disk Type	Interface	Offering	Security
M.2 2280 SSD ^[3]	PCIe® NVMe®, PCIe® 4.0 x4	256GB / 512GB / 1TB	Opal 2.0
M.2 2280 SSD	PCIe® NVMe®, PCIe® 5.0 x4 Performance ^[4]	512GB / 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.

PCle[®] 3.0 (x2 / x4): 2 GB/s (16 Gbps) / 4 GB/s (32 Gbps);

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

PCle[®] 5.0 (x2 / x4): 8 GB/s (64 Gbps) / 16 GB/s (128 Gbps).

[3] 256GB stroage is only available for Arrow Lake.

[4] 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**

- Arrow Lake: High Definition (HD) Audio, Realtek® ALC3306 codec
- Lunar Lake: SoundWire®, Realtek® ALC713 codec

Speakers

Stereo speakers, 2W x2, Dolby Atmos®

Microphone

Dual-microphone array, 360° far-field, Dolby Voice®

Camera**

- FHD 1080p + IR discrete, with privacy shutter, fixed focus, temporal noise reduction
- UHD 8.0MP + IR discrete, with privacy shutter, MIPI, fixed focus, Computer Vision, temporal noise reduction

Battery

Battery^[1]

57Wh Rechargeable Li-ion Battery, supports Rapid Charge (charge up to 80% in 1hr)

Battery Life[2]

Configuration 1 (max battery life)

MobileMark® 25: up to 20.2 hr with 690 performance score @250nits

JEITA-BAT 3.0 (Video/Idle): up to 16.3 hr / 31.4 hr @200nits

Local video playback: up to 29.9 hr @150nits

Alternate configuration 2

MobileMark® 25: up to 16.18 hr with 533 performance score @250nits JEITA-BAT 3.0 (Video/Idle): up to 13.31 hr / 28.35 hr @200nits

Local video playback: up to 23.5 hr @150nits



Alternate configuration 3

MobileMark® 25: up to 16.73 hr with 748 performance score @250nits JEITA-BAT 3.0 (Video/Idle): up to 14.3 hr / 33.5 hr @200nits

Local video playback: up to 28.4 hr @150nits

Notes:

[1] Rapid charge is only guaranteed when the computer is turned off or in standby mode or in hibernation mode. When the computer is powered on, the Charge Time will vary depending on system power consumption and AC adapter power.

[2] Configuration 1 (max battery life): WUXGA (touch), Intel® Core™ Ultra 7 268V, 32GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode

Alternate configuration 2: WUXGA (non-touch), Intel® Core™ Ultra 7 265U, 16GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode

Alternate configuration 3: WUXGA (non-touch), Intel® Core™ Ultra 5 235H, 32GB LPDDR5x, Win 11, 57Wh 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® (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
- 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
14"	WUXGA (1920x1200)	Multi- touch	IPS ^[1]	500nits	Anti-glare, anti- smudge	16:10	1000:1	100% sRGB	60Hz	85° / 85° / 85° / 85°	Low power, Eyesafe® Certified 2.0
14"	WUXGA (1920x1200)	Multi- touch	IPS ^[2]	500nits	Anti- reflection, anti- smudge	16:10	1000:1	100% sRGB	60Hz	85° / 85° / 85° / 85°	Low power, Eyesafe® Certified 2.0
14"	WUXGA (1920x1200)	Multi- touch	IPS ^[3]	500nits	Anti-glare, anti- smudge	16:10	1500:1	100% sRGB	60Hz	85° / 85° / 85° / 85°	ThinkPad® Privacy Guard, Eyesafe® Certified 2.0
14"	2.8K (2880x1800)	Multi- touch	OLED	500nits	Anti- reflection, anti- smudge	16:10	100,000:1	100% DCI- P3	120Hz VRR	85° / 85° / 85° / 85°	DisplayHDR™ True Black 500, Eyesafe® Certified 2.0



Touchscreen

OGS (One Glass Solution) multi-touch, supports 10-point touch

Screen-to-Body Ratio

87.8%

Notes:

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

Multi-mode

Multi-mode

Laptop, tent, stand, and tablet modes supported by 360° hinge

Input Device

Pen

- Lenovo® Yoga® Pen, supports magnetic attachment, tilt detection and Type-C charging
- No pen (purchase separately)

Keyboard

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

Keyboard Backlight

LED backlight

UltraNav™**

- TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu Glass surface multi-touch Haptic Touchpad, 70.5 x 120 mm (2.78 x 4.72 inches)
- TrackPoint® pointing device, double-tap to open the TrackPoint® Quick Menu Glass surface multi-touch 3-button Trackpad, 56.2 x 120 mm (2.21 x 4.72 inches)

Mechanical

Dimensions (WxDxH)[1]

312.80 x 217.65 x 16.19-18.3 mm (12.31 x 8.57 x 0.64-0.72 inches)

Weight[2]

Models	Weight
Arrow Lake	Starting at 1.22 kg (2.68 lbs)
Lunar Lake	Starting at 1.30 kg (2.87 lbs)

Case Color

Grey

Case Material

Aluminium (top), aluminium (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][2]

- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3
- Intel® Wi-Fi® 6E AX211, 802.11ax 2x2 Wi-Fi® + Bluetooth® 5.3, Intel® vPro® technology support^[3]
- Intel® Wi-Fi® 7 BE201, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.4
- Intel® Wi-Fi® 7 BE201, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.4, Intel® vPro® technology support[4]

WWAN**



- Wireless WAN upgradable to 4G (with antenna ready)
- Wireless WAN upgradable to 5G (with antenna ready)
- · Quectel EM160R-GL, 4G LTE CAT16, 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)[5]
- No physical SIM card inbox

Ethernet

No onboard Ethernet^[6]

NFC

- · Near Field Communication
- No support

Notes:

[1] Wi-Fi® operation (including Wi-Fi® 6, Wi-Fi® 6E, Wi-Fi® 7, etc.) is subject to the regulatory requirements of each country. Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

[2] Wi-Fi® 6E is only available for Arrow Lake.

[3], [4] Intel® vPro® platform requires the hardware and software necessary to deliver the manageability use cases, security features, system performance, and stability that define the platform. For detailed vPro® support information, please refer to the System Management section.

[5] KDDI eSIM Program has no physical SIM card inbox and is for special bid only.

[6] Ethernet support via optional Lenovo® USB-C® to Ethernet Adapter.

Ports^[1]

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)

Optional Ports

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

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[™] / USB-C[®].

For more compatible docking solutions, please visit Docking for ThinkPad® X1 2-in-1 Gen 10 Aura Edition

SECURITY & PRIVACY

Security

ThinkShield

ThinkShield is a comprehensive security solution that encompasses hardware, software, and supply chain components. For more detials, visit <u>here</u>

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



No smart card reader

Fingerprint Reader

Touch style fingerprint reader in keyboard key, match-on-chip

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 (Arrow Lake), please visit <u>BIOS Simulator[1]</u>
- More BIOS security features (Lunar Lake), please visit BIOS Simulator^[2]

Other Security

- · Camera privacy shutter
- Computer Vision-based User Presence Sensing including lock on leave (UHD 8.0MP + IR camera models)
- Ultrasonic Human Presence Detection (FHD 1080p + IR camera models)
- IR camera for Windows® Hello (facial recognition)
- Privacy Guard with Privacy Alert (models with ThinkPad® Privacy Guard display)

Notes:

[1], [2] 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] 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 Intel® vPro® Platform 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

ACCESSORIES

Bundled Accessories

Bundled Accessories***[1]

- Lenovo® HDMI® to VGA Monitor Adapter
- Lenovo® USB-C® to Ethernet Adapter (1Gbps)
- None

Notes:



[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® X1 2-in-1 Gen 10 Aura Edition.

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]

- 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)

Altituda

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^[1]

75% recycled aluminium on top cover

75% recycled aluminium on keyboard frame of non-WWAN models

90% recycled magnesium on keyboard frame of WWAN models

55% recycled aluminium and 45% hydro aluminium on bottom cover

85% PCC recycled plastic used in keycaps of backlit keyboard

90% PCC recycled plastic used in speaker enclosure

90% PCC recycled plastic used in the 57Wh battery pack frame

90% PCC recycled plastic used in 65W adapters

35% PCC recycled plastic used in cable / antenna holders

25% PCC recycled plastic used in hall sensor magnet

Plastic free packaging with FSC certified paper

Notes:

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

CERTIFICATIONS

Green Certifications^[1]

Green Certifications[2]

- ENERGY STAR® 9.0
- EPEAT™ Gold Registered
- 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 https://compliance.lenovo.com.

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

Other Certifications

Mil-Spec Test

MIL-STD-810H military test passed



Other Certifications

- Eyesafe® Certified 2.0
- (Optional) Intel® Evo™ Platform
- TÜV Rheinland® Dynamic Privacy Filter (DPF) Certification (Privacy Guard models)
- 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.
- Feature with *** means that one or more options listed under the feature can be configured on selected models. Please refer to the model configuration for specific information.
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