

# **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® V Series Core Ultra 5 / 7 Processor (Series 2)

## Processor\*\*

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics	NPU
Core Ultra 5 226V	8 (4 P-core + 4 LPE-core)	8	P-core 2.1GHz / LPE-core 2.1GHz	P-core 4.5GHz / LPE-core 3.5GHz	8MB	Intel® Arc™ Graphics 130V, up to 53 TOPS	Intel® AI Boost
Core Ultra 7 256V	8 (4 P-core + 4 LPE-core)	8	P-core 2.2GHz / LPE-core 2.2GHz	P-core 4.8GHz / LPE-core 3.7GHz	12MB	Intel® Arc™ Graphics 140V, up to 64 TOPS	Intel® AI Boost
Core Ultra 7 258V	8 (4 P-core + 4 LPE-core)	8	P-core 2.2GHz / LPE-core 2.2GHz	P-core 4.8GHz / LPE-core 3.7GHz	12MB	Intel® Arc™ Graphics 140V, up to 64 TOPS	Intel® AI Boost
Core Ultra 7 266V	8 (4 P-core + 4 LPE-core)	8	P-core 2.2GHz / LPE-core 2.2GHz	P-core 5GHz / LPE- core 3.7GHz	12MB	Intel® Arc™ Graphics 140V, up to 66 TOPS	Intel® AI Boost
Core Ultra 7 268V	8 (4 P-core + 4 LPE-core)	8	P-core 2.2GHz / LPE-core 2.2GHz	P-core 5GHz / LPE- core 3.7GHz	12MB	Intel® Arc™ Graphics 140V, up to 66 TOPS	Intel® AI Boost

# Al (Artificial Intelligence)

# **AI PC Category**

Copilot+ PC[1]

### **Al Performance**

Up to 118 overall TOPS

# NPU

Integrated Intel® AI Boost, up to 48 TOPS

Notes:

[1] The AI features of Copilot+ PC require Windows® 11 to be installed.

# **Operating System**

## Operating System\*\*

- Windows® 11 Pro
- Windows® 11 Home
- 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™ Graphics 130V	Integrated	Shared	Share CPU TDP	DirectX® 12.2
Intel® Arc™ Graphics 140V	Integrated	Shared	Share CPU TDP	DirectX® 12.2

# **Monitor Support**

# Monitor Support[1]

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<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**

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

### **Memory Slots**

Memory soldered to systemboard, no slots, dual-channel

## **Memory Type**

LPDDR5x-8533, MoP (Memory on Package) memory

## **Storage**

## Storage Support[1]

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

## **Storage Slot**

One M.2 2280 PCIe® 5.0 x4 slot

## Storage Type\*\*

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

# Notes:

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

# **Removable Storage**

## Card Reader

No card reader

## Multi-Media

## **Audio Chip**

High Definition (HD) Audio, 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 19.9 hr with 642 performance score @250nits JEITA-BAT 3.0 (Video/Idle): up to 16.0 hr / 30.2 hr @200nits Local video playback: up to 29.5 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 (touch), Intel® Core™ Ultra 5 226V, 16GB 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<sup>®</sup> (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

### 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 <sup>[1]</sup>	500nits	Anti-glare, anti- smudge	16:10	1000:1	100% sRGB	60Hz	85° / 85° / 85° / 85°	Low power, Eyesafe® Certified 2.0, 87.8% screen to body ratio
14"	WUXGA (1920x1200)	Multi- touch	IPS <sup>[2]</sup>	500nits	Anti- reflection, anti- smudge	16:10	1000:1	100% sRGB	60Hz	85° / 85° / 85° / 85°	Low power, Eyesafe® Certified 2.0, 87.8% screen to body ratio
14"	WUXGA (1920x1200)	Multi- touch	IPS <sup>[3]</sup>	500nits	Anti-glare, anti- smudge	16:10	1500:1	100% sRGB	60Hz	85° / 85° / 85° / 85°	ThinkPad® Privacy Guard, Eyesafe® Certified 2.0, 87.8% screen to body ratio
14"	2.8K (2880x1800)	Multi- touch	OLED	500nits	Anti- reflection,	16:10	100,000:1	100% DCI-	120Hz VRR	85° / 85° / 85° / 85°	DisplayHDR™ True Black



		anti-		P3		500, Dolby
		smudge				Vision®,
						Eyesafe®
						Certified 2.0,
						87.8% screen
						to body ratio

### **Touchscreen**

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

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
- · No pen (purchase separately)

### Keyboard

6-row, spill-resistant, air intake design, multimedia Fn keys, 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 15.49 mm (12.31 x 8.57 x 0.61 inches)

Weight<sup>[2]</sup>

Starting at 1.30 kg (2.87 lbs)

**Case Color** 

Grev

**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**

### **Ethernet**

No onboard Ethernet<sup>[1]</sup>

WLAN + Bluetooth®[2]

Intel® Wi-Fi® 7 BE201, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.4[3]

WWAN\*\*

# ThinkPad X1 2-in-1 Gen 10



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

#### SIM Card

No physical SIM card inbox

#### **NFC**

- Near Field Communication
- No support

#### Notes:

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

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

[3] 6GHz Wi-Fi® 7 operation is subject to the regulation rules in each country.

## 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)

## **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 <u>Docking for ThinkPad® X1 2-in-1 Gen 10</u>

# **SECURITY & PRIVACY**

# **Security**

## **Security Chip**

Discrete TPM 2.0, TCG certified, FIPS 140-2 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 athentication
- FIDO (Fast Identity Online) authentication
- Self-healing BIOS

## **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)

# MANAGEABILITY

# **System Management**

### **System Management**

- Intel® vPro® Enterprise[1]
- Non-vPro®

Notes:

[1] 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.

# **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)

### Δltitude

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>

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[2]

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered<sup>[3]</sup>
- ErP Lot 6/26
- · RoHS compliant
- TCO Certified 10.0

## 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 epeat.net and energystar.gov 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**

- 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.
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