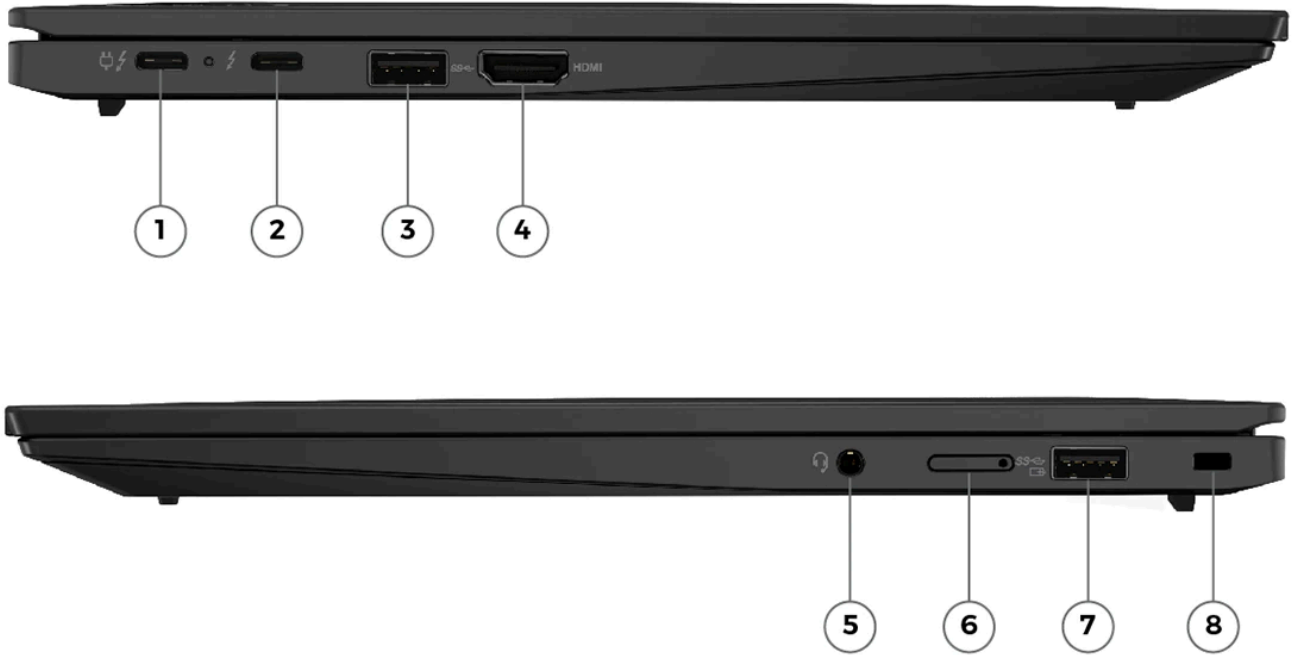


## OVERVIEW



1. Thunderbolt 4	5. Headphone / microphone combo jack (3.5mm)
2. Thunderbolt 4	6. Nano-SIM card slot *
3. USB 3.2 Gen 1	7. USB 3.2 Gen 1 (Always On)
4. HDMI	8. Kensington Nano Security Slot

Notes:

- Ports with \* are only available on selected models

## PERFORMANCE

### Processor

#### Processor Family

12th Generation Intel® Core™ i5 / i7 Processor

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

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor 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 i5-1245U	10 (2 P-core + 8 E-core)	12	P-core 1.6GHz / E-core 1.2GHz	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 i7-1265U	10 (2 P-core + 8 E-core)	12	P-core 1.8GHz / E-core 1.3GHz	P-core 4.8GHz / E-core 3.6GHz	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 i5-1250P	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 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 i7-1270P	12 (4 P-core + 8 E-core)	16	P-core 2.2GHz / E-core 1.6GHz	P-core 4.8GHz / E-core 3.5GHz	18MB	LPDDR5-5200	Intel Iris Xe Graphics
Core i7-1280P	14 (6 P-core + 8 E-core)	20	P-core 1.8GHz / E-core 1.3GHz	P-core 4.8GHz / E-core 3.6GHz	24MB	LPDDR5-5200	Intel Iris Xe Graphics

#### Notes:

1. i7-1280P is NOT available in EMEA.

### Operating System

#### Operating System\*\*

- Windows® 11 Pro 64
- Windows 11 Home 64
- Windows 11 DG Windows 10 Pro 64
- Fedora Linux
- Linux
- Ubuntu Linux
- No operating system

### Graphics

#### Graphics

Graphics	Type	Memory	TGP	Key Features
Intel Iris Xe Graphics	Integrated	Shared	Share CPU TDP	DirectX® 12

### Monitor Support

#### Monitor Support<sup>[1]</sup>

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

- Thunderbolt supports up to 5K@60Hz
- HDMI supports up to 4K@60Hz

#### Notes:

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

### Chipset

# ThinkPad X1 Carbon Gen 10

## Chipset

Intel SoC (System on Chip) platform

## Memory

### Max Memory<sup>[1][2]</sup>

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

### Memory Slots

Memory soldered to systemboard, no slots, 8-channel

### Memory Type<sup>[3]</sup>

LPDDR5-5200

#### Notes:

1. The max memory is based on the test results with current Lenovo® memory offerings. The system may support more memory as the technology develops.
2. 8GB memory is NOT available in EMEA.
3. Installed memory is actually 6400MHz but run at 5200MHz due to processor limitation

## Storage

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

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

### Storage Slot

One M.2 2280 PCIe® Gen 4x4 slot, supports M.2 2242/2280 SSD

### Storage Type<sup>\*\*[2]</sup>

Disk Type	Interface	Offering	Security
M.2 2280 SSD	PCIe NVMe®, PCIe 4.0 x4	256GB / 512GB / 1TB	Opal2
M.2 2280 SSD	PCIe NVMe, PCIe 4.0 x4 Performance	512GB / 1TB / 2TB	Opal2

#### Notes:

1. 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.
2. 512GB and 1TB M.2 2280 PCIe 4x4 SSD are NOT available in EMEA.

## Removable Storage

### Optical

None

### Card Reader

No card reader

## Multi-Media

### Audio Chip

High Definition (HD) Audio, Realtek® ALC3306 codec

### Speakers

Stereo speakers, 2W x2 woofers and 0.8W x2 tweeters, Dolby® Atmos®

### Microphone

Four microphones, quad-array, 360° far-field, Dolby Voice

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

- HD 720p, with privacy shutter, fixed focus
- 1080p, with privacy shutter, fixed focus
- IR & 1080p hybrid, with privacy shutter, fixed focus
- Discrete IR & 1080p, MIPI, with privacy shutter & Computer Vision, fixed focus

#### Notes:

1. 720p camera is NOT available in EMEA.

## Battery

### Battery

Integrated Li-Polymer 57Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

### Battery Life<sup>[1]</sup>

Configuration 1 (max battery life)

MobileMark® 2018: up to 15.0 hr with 838 performance score @200nits

MobileMark 25: up to 13.1 hr with 663 performance score @250nits

JEITA 2.0: up to 24.9 hr @150nits

Local video playback: up to 19.9 hr @150nits

Alternate configuration 2

MobileMark 2018: up to 14.3 hr with 840 performance score @200nits

MobileMark 25: up to 11.3 hr with 623 performance score @250nits

JEITA 2.0: up to 24.9 hr @150nits

Local video playback: up to 19.9 hr @150nits

Alternate configuration 3

MobileMark 2018: up to 14.2 hr with 809 performance score @200nits

MobileMark 25: up to 11.1 hr with 600 performance score @250nits

JEITA 2.0: up to 21.7 hr @150nits

Local video playback: up to 19.7 hr @150nits

### Notes:

- Configuration 1 (max battery life): WUXGA (non-touch), Intel i5-1235U, 8GB LPDDR5, Win 11, 57Wh battery, best power efficiency power mode  
Alternate configuration 2: WUXGA (non-touch), Intel i5-1240P, 16GB LPDDR5, Win 11, 57Wh battery, best power efficiency power mode  
Alternate configuration 3: WUXGA (non-touch), Intel i7-1260P, 16GB LPDDR5, Win 11, 57Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using [MobileMark 2018](#), [MobileMark 25](#), JEITA 2.0, 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 and depends 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<sup>\*\*[1][2]</sup>

- 45W USB-C® (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 45W USB-C (3-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C slim (2-pin) AC adapter, supports PD 3.0, 100-240V, 50-60Hz
- 65W USB-C slim (3-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
- No power adapter

### Notes:

- AC adapter offerings depend on the country.
- In EMEA only 65W USB-C slim AC adapters are available.

## DESIGN

## Display

### Display<sup>\*\*[1][2]</sup>

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Key Features
14.0"	WUXGA (1920x1200)	None	IPS	400 nits	Anti-glare	16:10	1000:1	100% sRGB	170°	Low power, Eyesafe® Certified
14.0"	WUXGA	On-cell	IPS	400 nits	Anti-glare	16:10	1000:1	100%	170°	Low power,

# ThinkPad X1 Carbon Gen 10

	(1920x1200)	touch						sRGB		Eyesafe Certified
14.0"	WUXGA (1920x1200)	On-cell touch	IPS	500 nits	Anti-glare	16:10	1000:1	100% sRGB	170°	ThinkPad® Privacy Guard, TÜV ePrivacy Certification
14.0"	2.2K (2240x1400)	None	IPS	300 nits	Anti-glare	16:10	1500:1	100% sRGB	170°	TÜV Low Blue Light Method 2
14.0"	WQUXGA (3840x2400)	None	IPS	500 nits	Glossy	16:10	1500:1	100% DCI-P3	170°	Low power, Dolby Vision™, DisplayHDR™ 400, Eyesafe Certified
14.0"	2.8K (2880x1800)	None	OLED	SDR 400nits, HDR 500nits	Anti-glare, Anti-reflection, Anti-smudge	16:10	100000:1	100% DCI-P3	170°	DisplayHDR 500 True Black, Eyesafe Certified
14.0"	WQUXGA (3840x2400)	Add On Film Touch	IPS	500 nits	Anti-glare, Anti-reflection, Anti-smudge	16:10	1500:1	100% DCI-P3	170°	Low power, Dolby Vision, DisplayHDR 400, Eyesafe Certified

### Touchscreen\*\*

- Add-on Film Touch, supports 10-point touch
- On-cell touch, supports 10-point touch
- 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>
2. 2.2K display and Add on Film Touch display are NOT available in EMEA.

## Input Device

### Keyboard

6-row, spill-resistant, air intake design, multimedia Fn keys with Unified Communications controls

### Keyboard Backlight

LED backlight

### UltraNav™

TrackPoint® pointing device and glass surface multi-touch touchpad, 56 x 110 mm (2.20 x 4.33 inches)

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

### Dimensions (WxDxH)

Models	Dimensions
Model with 720p camera	315.6 x 222.5 x 14.95 mm (12.43 x 8.76 x 0.59 inches)
Model with other camera	315.6 x 222.5 x 15.36 mm (12.43 x 8.76 x 0.60 inches)

### Weight

Starting at 1.12 kg (2.48 lbs)

### Case Color\*\*

- Deep black, paint
- Deep black, weave

### Case Material

Carbon fiber (top), aluminium (bottom)

### Notes:

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

## CONNECTIVITY

## Network

### Onboard Ethernet<sup>[1]</sup>

No Ethernet

### WLAN + Bluetooth<sup>®\*\*[2][3]</sup>

- Intel Wi-Fi<sup>®</sup> 6 AX201, 802.11ax 2x2 Wi-Fi + Bluetooth 5.2
- Intel Wi-Fi 6E AX211, 802.11ax 2x2 Wi-Fi + Bluetooth 5.2

### WWAN\*\*

- Wireless WAN upgradable to 4G (with antenna ready)
- Fibocom L860-GL-16, 4G LTE CAT16, MIMO 4x4, M.2 card
- Fibocom FM350-GL 5G NR module with embedded eSIM functionality, M.2 Card
- No support

### SIM Card

- Gemalto eSIM
- No SIM card inbox

### NFC

- Near Field Communication
- No support

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#### Notes:

1. Ethernet support via optional Lenovo USB-C to Ethernet Adapter
2. Bluetooth 5.2 is hardware ready but may run at a lower version due to OS limitation
3. Wi-Fi 6 and Wi-Fi 6E full features might be limited by country level restrictions.  
Wi-Fi 6E only enabled on Windows 11 and operates as Wi-Fi 6 with Windows 10.  
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.

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

### Standard Ports

- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x Thunderbolt 4 / USB4<sup>®</sup> 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort<sup>™</sup> 1.4a)
- 1x HDMI, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)

### Optional Ports

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

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#### 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;  
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 / USB-C.

For more compatible docking solutions, please visit [Docking for ThinkPad X1 Carbon Gen 10](#)

## Monitor Cable

### Monitor Cable

- Lenovo HDMI to VGA Monitor Adapter
- No monitor cable

## SECURITY & PRIVACY

## Security

**Security Chip**

Discrete TPM 2.0, TCG 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 on power button, match-on-chip

**BIOS Security**

- Power-on password
- Supervisor password
- System management password
- NVMe password
- USB FIDO (Fast Identity Online) device integration
- Certificate based BIOS authentication
- Firmware Resiliency 3.0

**Other Security**

- Camera privacy shutter
- (Optional) IR camera for Windows Hello
- (Optional) Privacy Guard with Privacy Alert
- (Optional) Computer Vision-based User Presence Sensing including lock on leave
- Mirametrix Glance
- Tile ready

## MANAGEABILITY

### System Management

**System Management\*\*<sup>[1]</sup>**

- Intel vPro Enterprise
- Intel vPro Essentials
- Non-vPro

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**Notes:**

1. Intel vPro offers a superset of DASH's defined capabilities.

## SERVICE

### Warranty

**Base Warranty\*\*<sup>[1]</sup>**

- 1-year depot service
- 1-year depot with 2-year system board service (Korea only)
- 1-year limited onsite service
- 3-year (1-yr battery) depot service
- 3-year (1-yr battery) limited onsite service
- No base warranty

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**Notes:**

1. More information of warranty policy, please access <https://pcsupport.lenovo.com/warranty>

## ENVIRONMENTAL

### Sustainability

**Material**

95% PCC recycled plastic used in speaker enclosure  
25-30% PCC recycled plastic used in the 57Wh battery

95% PCC recycled plastic used in standard 65W adapter  
Low-temperature solder  
90% recycled and/or sustainable packaging

## 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)

### 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).

## ACCESSORIES

### Bundled Accessories

#### Bundled Accessories

- Lenovo USB-C to Ethernet Adapter
- None

## CERTIFICATIONS

### Green Certifications

#### Green Certifications

- EPEAT™ Gold
- ENERGY STAR® 8.0
- ErP Lot 3
- TCO Certified 9.0
- RoHS compliant

### Other Certifications

#### Mil-Spec Test

MIL-STD-810H military test passed

#### Other Certifications

- (Optional) Eyesafe Certified
- (Optional) Intel Evo™ Platform
- TÜV Rheinland® Dynamic Privacy Filter (DPF) Certification (Privacy Guard models)
- (Optional) TÜV Rheinland Low Blue Light Method 2

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