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:

• Items with * are only available on selected models

ThinkPad X1 Carbon Gen 11

PERFORMANCE

Processor

Processor Family

13th Generation Intel® U or P Series Core™ i5 / i7 Processor

Processor**[1]

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics
Core i5-1335U	10 (2 P-core + 8 E-core)	12	P-core 1.3GHz / E-core 0.9GHz	P-core 4.6GHz / E-core 3.4GHz	12MB	Intel Iris® Xe Graphics
Core i5-1340P	12 (4 P-core + 8 E- core)	16	P-core 1.9GHz / E-core 1.4GHz	P-core 4.6GHz / E-core 3.4GHz	12MB	Intel Iris Xe Graphics
Core i5-1345U	10 (2 P-core + 8 E-core)	12	P-core 1.6GHz / E-core 1.2GHz	P-core 4.7GHz / E-core 3.5GHz	12MB	Intel Iris Xe Graphics
Core i7-1355U	10 (2 P-core + 8 E-core)	12	P-core 1.7GHz / E-core 1.2GHz	P-core 5.0GHz / E-core 3.7GHz	12MB	Intel Iris Xe Graphics
Core i7-1360P	12 (4 P-core + 8 E- core)	16	P-core 2.2GHz / E-core 1.6GHz	P-core 5.0GHz / E-core 3.7GHz	18MB	Intel Iris Xe Graphics
Core i7-1365U	10 (2 P-core + 8 E-core)	12	P-core 1.8GHz / E-core 1.3GHz	P-core 5.2GHz / E-core 3.9GHz	12MB	Intel Iris Xe Graphics
Core i7-1370P	14 (6 P-core + 8 E-core)	20	P-core 1.9GHz / E-core 1.4GHz	P-core 5.2GHz / E-core 3.9GHz	24MB	Intel Iris Xe Graphics

Notes:

[1] Intel Core i5-1340P, i5-1350P and i7-1360p are for special bid only.

Operating System

Operating System**

- Fedora Linux^[1]
- Linux^[2]
- No operating system
- Ubuntu Linux^[3]
- Windows[®] 11 DG Windows 10 Pro 64
- Windows 11 Home
- Windows 11 Home Single Language
- Windows 11 Pro

Notes:

[1], [2], [3] 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 Iris Xe Graphics	Integrated	Shared	Share CPU TDP	DirectX® 12.1

Monitor Support

Monitor Support^[1]

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.

Lenovo

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

Memory Slots

Memory soldered to systemboard, no slots, 8-channel

Memory Type**

- LPDDR5/x-6400 (16GB)^[1]
- LPDDR5/x-6000 (32GB)^[2]
- LPDDR5x-6000 (64GB)^[3]

Notes:

Installed memory is actually LPDDR5-6400 or LPDDR5x-7500 but run at 6400MHz due to platform limitation.
 Installed memory is actually LPDDR5-6400 or LPDDR5x-7500 but run at 6000MHz due to platform limitation.
 Installed memory is actually LPDDR5x-7500 but run at 6000MHz due to platform limitation.

Storage

Storage Support^[1]

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

Storage Slot

One M.2 2280 PCIe[®] 4.0 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 / 1TB / 2TB	Opal 2.0

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.

Removable Storage

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

Quad-microphone array, 360° far-field, Dolby Voice

Camera**

- HD 720p, with privacy shutter, fixed focus
- FHD 1080p, with privacy shutter, fixed focus
- FHD 1080p + IR hybrid, with privacy shutter, fixed focus
- FHD 1080p + IR discrete, with privacy shutter, MIPI, fixed focus, Computer Vision

Battery

ThinkPad X1 Carbon Gen 11

Lenovo

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

Configuration 1 (max battery life) MobileMark® 25: up to 13.95 hr with 658 performance score @250nits JEITA 2.0: up to 28.5 hr @150nits Local video playback: up to 22.9 hr @150nits

Alternate configuration 2 MobileMark 25: up to 13.63 hr with 654 performance score @250nits JEITA 2.0: up to 26.4 hr @150nits Local video playback: up to 20.5 hr @150nits

Alternate configuration 3 MobileMark 25: up to 13.48 hr with 642 performance score @250nits JEITA 2.0: up to 24.8 hr @150nits Local video playback: up to 19.8 hr @150nits

Notes:

[1] Configuration 1 (max battery life): WUXGA (non-touch), Intel i5-1345U, 16GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode

Alternate configuration 2: WUXGA (non-touch), Intel i5-1340P, 16GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode

Alternate configuration 3: WUXGA (non-touch), Intel i5-1350P, 16GB LPDDR5x, Win 11, 57Wh battery, best power efficiency power mode

All battery life claims are approximate maximum and based on results using <u>MobileMark 2018</u>, <u>MobileMark 25</u>, 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 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 <u>Microsoft[®] link</u> for more information about the Windows Performance power slider.

Power Adapter

Power Adapter**[1]

- 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 (3-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
- No power adapter^[2]

Notes:

[1] AC adapter offerings depend on the country.

[2] No power adapter is for special bid only.

DESIGN

Display

Display**[1]

Size	Resolution	Touch	Туре	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle (L/R/U/D)	Key Features
14″	WUXGA (1920x1200)	None	IPS ^[2]	400 nits	Anti-glare	16:10	1000:1	100% sRGB	85°/85°/85°/85°	Low power, Eyesafe® Certified 2.0, ICC Template color calibration
14″	WUXGA (1920x1200)	Multi- touch	IPS ^[3]	400 nits	Anti-glare	16:10	1000:1	100% sRGB	85°/85°/85°/85°	Low power, Eyesafe Certified

Lenovo

PSREF Product Specifications Reference

										2.0, ICC Template color calibration
14″	WUXGA (1920x1200)	Multi- touch	IPS ^[4]	500 nits	Anti-glare	16:10	1000:1	100% sRGB	85°/85°/85°/85°	ThinkPad® Privacy Guard
14″	2.2K (2240x1400)	None	IPS ^[5]	300 nits	Anti-glare	16:10	1500:1	100% sRGB	85°/85°/85°/85°	TÜV Low Blue Light Method 2
14"	2.8K (2880x1800)	None	OLED	400nits	Anti-glare, Anti- reflection, Anti- smudge	16:10	100000:1	100% DCI- P3	85°/85°/85°/85°	DisplayHDR™ True Black 500, Eyesafe Certified 2.0, ICC Template color calibration

Color Calibration

- ICC Template color calibration
- No color calibration

Touchscreen

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

Notes:

[1] California Electronic Waste Recycling Fee

In California USA, 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, please go to https://www.calrecycle.ca.gov/Electronics/Consumer. [2], [3], [4], [5] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.

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

Dimensions (WxDxH)[1]

Models	Dimensions
Models with 720p camera	315.6 x 222.5 x 14.96 mm (12.43 x 8.76 x 0.59 inches)
Models with other camera	315.6 x 222.5 x 15.36 mm (12.43 x 8.76 x 0.60 inches)

Weight^[2]

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 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^[1]

WLAN + Bluetooth®[2]

Intel Wi-Fi[®] 6E AX211, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1^[3]

WWAN**

- Wireless WAN upgradable to 4G or 5G (with antenna ready)
- Fibocom FM350-GL, 5G Sub-6 GHz, M.2 Card, with embedded eSIM functionality
- Fibocom L860-GL-16, 4G LTE CAT16, MIMO 4x4, M.2 card, with embedded eSIM functionality
- No support

SIM Card

No SIM card inbox

NFC

- Near Field Communication
- No support

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 limitations.
- [3] Wi-Fi 6E full features might be limited by country-level restrictions.

Wi-Fi 6E is 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^{III}

Standard Ports

- 1x USB 3.2 Gen 1
- 1x USB 3.2 Gen 1 (Always On)
- 2x Thunderbolt 4 / USB4[®] 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort[™] 1.4a)
- 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 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;

USB4 20Gbps / USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;

USB4 40Gbps (USB 40Gbps): 40 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 <u>Docking for ThinkPad X1 Carbon Gen 11</u>

Monitor Cable

Monitor Cable

- Lenovo HDMI to VGA Monitor Adapter
- No monitor cable

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 integrated in power button, match-on-chip

BIOS Security

- Power-on password
- Supervisor password
- System management password
- NVMe password
- FIDO (Fast Identity Online) authentication
- 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
- Glance by Mirametrix®
- (Optional) Computer Vision-based User Presence Sensing including lock on leave

MANAGEABILITY

System Management

System Management**

- Intel vPro[®] Enterprise^[1]
- Intel vPro Essentials^[2]
- Non-vPro

Notes:

[1], [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

Notes:

[1] The warranty upgrades may be bundled with some models, please check the "Included upgrade" column in the specific model's configurations. For more service extensions, please go to <u>https://smartfind.lenovo.com/</u>. To learn more details of warranty policy, please access <u>https://pcsupport.lenovo.com/warranty</u>.

ENVIRONMENTAL

Sustainability

Material

Lenovo

90% recycled magnesium on keyboard cover
55% recycled aluminium on bottom cover
90% PCC recycled plastic used in speaker enclosure
25-30% PCC recycled plastic used in the 57Wh battery enclosure
90% PCC recycled plastic used in standard 45W and 65W adapters
Low-temperature solder
Retail or standard packaging: plastic free packaging with 100% bamboo sugarcane fiber
Bulk packaging: 90% recycled and FSC certified content

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)

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^{III}

Green Certifications

- (Optional) ENERGY STAR[®] 8.0
- (Optional) EPEAT[™] Gold Registered^[2]
- ErP Lot 6/26
- TCO Certified 9.0
- RoHS compliant

Notes:

[1] The items listed under the "Green Certifications" section may not only refer to certification but also registration or selfdeclaration.

[2] EPEAT is registered where applicable, please see https://www.epeat.net for registration status by country.

Other Certifications

Mil-Spec Test

MIL-STD-810H military test passed

Other Certifications

- (Optional) Intel Evo™ Platform
- (Optional) Eyesafe Certified 2.0
- (Optional) TÜV Rheinland® Low Blue Light Method 2
- TÜV Rheinland Dynamic Privacy Filter (DPF) Certification (Privacy Guard models)

ThinkPad X1 Carbon Gen 11

- Lenovo reserves the right to change specifications or other product information without notice. Lenovo is not responsible for photographic or typographical errors. LENOVO PROVIDES THIS PUBLICATION "AS IS," WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore this disclaimer may not apply to you.
- The specifications on this page may not be available in all regions, and may be changed or updated without notice.







