

OVERVIEW





1. Power button	3. 2x Thunderbolt 4
2. Headphone / microphone combo jack (3.5mm)	

Notes:

• Optional nano-SIM card slot on the rear side (not shown on the sample product above)



PERFORMANCE

Processor

Processor Family

12th Generation Intel® Core™ i5 / i7 Processor

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor 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	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	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	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	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	Intel Iris Xe Graphics

Operating System

Operating System**

- Windows® 11 Pro
- Windows 11 Home
- Windows 11 Home Single Language
- Windows 11 DG Windows 10 Pro 64
- Windows 10 IoT Enterprise LTSC 2021
- Linux[1]
- Ubuntu Linux^[2]
- No 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 Iris Xe Graphics	Integrated	Shared	Share CPU TDP	DirectX® 12.1

Monitor Support

Monitor Support[1]

Supports up to 3 independent displays (native display and 2 external monitors via Thunderbolt™)

• Thunderbolt supports up to 5K@60Hz

Notes:

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

Chipset

Chipset

Intel SoC (System on Chip) platform

Memory

Max Memory

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



Memory Slots

Memory soldered to systemboard, no slots, 8-channel

Memory Type

LPDDR5-5200^[2]

Notes:

- [1] 32GB memory is only for i7-1280P models.
- [2] Installed memory is actually 6400MHz but run at 5200MHz due to processor limitation.

Storage

Storage Support[1]

One drive, up to 1TB M.2 2242 SSD

Storage Slot

One M.2 2242 PCIe® 4.0 x4 slot

Storage Type

Disk Type	Interface	Offering	Security
M.2 2242 SSD	PCIe NVMe®, PCIe 4.0 x4	256GB / 512GB / 1TB	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 1W x2 tweeters, Dolby® Atmos®

Microphone

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

Camera**[1]

- 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

Notes:

[1] FHD 1080p camera and FHD 1080p + IR discrete camera are only available on non-touch models. FHD 1080p + IR hybrid camera is only available on touch models.

Battery

Battery

Integrated Li-Polymer 49.5Wh battery, supports Rapid Charge (charge up to 80% in 1hr)

Battery Life[1]

Configuration 1 (max battery life)

MobileMark® 2018: up to 11.0 hr with 871 performance score @200nits MobileMark 25: up to 10.3 hr with 806 performance score @250nits JEITA 2.0: up to 18.2 hr @150nits

Local video playback: up to 16.2 hr @150nits

Alternate configuration 2

MobileMark 2018: up to 10.4 hr with 888 performance score @200nits MobileMark 25: up to 9.8 hr with 796 performance score @250nits

ThinkPad X1 Nano Gen 2



JEITA 2.0: up to 17.9 hr @150nits Local video playback: up to 15.6 hr @150nits

Alternate configuration 3

MobileMark 2018: up to 10.1 hr with 845 performance score @200nits

MobileMark 25: up to 9.6 hr with 838 performance score @250nits

JEITA 2.0: up to 17.0 hr @150nits

Local video playback: up to 15.4 hr @150nits

Notes:

[1] Configuration 1 (max battery life): 2K (non-touch), Intel i5-1240P, 16GB LPDDR5, Win 11, 49.5Wh battery, best power efficiency power mode

Alternate configuration 2: 2K (non-touch), Intel i5-1250P, 16GB LPDDR5, Win 11, 49.5Wh battery, best power efficiency power mode

Alternate configuration 3: 2K (non-touch), Intel i7-1280P, 32GB LPDDR5, Win 11, 49.5Wh 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 Microsoft® link for more information about the Windows Performance power slider.

Power Adapter

Power Adapter**[1]

- 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][2]

Si	ize	Resolution	Touch	Туре	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle (L/R/U/D)	Key Features
13	3"	2K (2160x1350)	None	IPS	450 nits	Anti-glare	16:10	1000:1	100% sRGB	85°/85°/85°/85°	Low
13	3"	2K (2160x1350)	Multi- touch	IPS	450 nits	Anti-glare, Anti- reflection, Anti- smudge	16:10	1000:1	100% sRGB	85°/85°/85°/85°	Low

Touchscreen

- Add-on Film Touch, supports 10-point touch[3]
- 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] IPS (in-plane switching) technology may refer to IPS, PLS, ADS, AHVA, AAS.
- [3] Multi-touch display is only for black weave models.

Input Device

Keyboard



6-row, spill-resistant, 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
Non-touch models	293.2 x 208.0 x 14.4 mm (11.54 x 8.19 x 0.57 inches)
Touch models	293.3 x 208.1 x 14.8 mm (11.55 x 8.19 x 0.58 inches)

Weight^[2]

Models	Weight
Touch models	Starting at 991.5 g (2.19 lbs)
Non-touch models	Starting at 966.5 g (2.13 lbs)

Case Color**

- · Deep black, paint
- Deep black, weave

Case Material

Carbon fiber (top), magnesium alloy (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 L860-GL-16, 4G LTE CAT16, MIMO 4x4, M.2 card
- Qualcomm® Snapdragon™ X55 5G Modem-RF System, Sub-6 GHz, M.2 card, with embedded eSIM functionality
- No support

SIM Card

- Gemalto eSIM card (physical)
- No SIM card inbox

NEC

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^[1]

Standard Ports

- 2x Thunderbolt 4 / USB4® 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort™ 1.4)
- 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 Docking for ThinkPad® X1 Nano Gen 2

Monitor Cable

Monitor Cable***

- Lenovo USB-C to VGA Adapter
- Lenovo USB-C to HDMI® Adapter
- · No monitor cable

SECURITY & PRIVACY

Security

Security Chip

Discrete TPM 2.0, TCG certified

Smart Card Reader

No smart card reader

Fingerprint Reader

Touch style fingerprint reader on palm rest, 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
- Glance by Mirametrix®
- (Optional) Computer Vision-based User Presence Sensing including lock on leave
- Tile ready

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^[1]

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 https://smartfind.lenovo.com/. To learn more details of warranty policy, please access https://pcsupport.lenovo.com/warranty.

ENVIRONMENTAL

Sustainability

Material

97% PCC recycled plastic used in the 49.5Wh battery 30% PCC recycled plastic used in speaker enclosure Low-temperature solder 90% recycled and/or sustainable packaging

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
- Lenovo USB-C Port Replicator
- None

CERTIFICATIONS



Green Certifications

- (Optional) ENERGY STAR® 8.0
- (Optional) EPEAT™ Gold Registered[2]
- ErP Lot 3
- 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 self-declaration.

[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

- Feature with ** means that only one offering listed under the feature is configured on selected models.
- Feature with *** means that one or more offerings listed under the feature could be configured on selected models.
- 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.







intel.



intel



intel



