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[1]
- Ubuntu Linux[2]
- Linux[3]
- No preload operating system

Notes:

[1] Windows® 10 IoT Enterprise LTSC 2021 is for special bid only.

[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	Type	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 LPDDR5-6400 but run as LPDDR5-5200 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.

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

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

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 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 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]

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

Touchscreen

- Add-on Film Touch, supports 10-point touch[2]
- Non-touch

Notes:

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

[2] 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
Non-touch models	Starting at 966.5 g (2.13 lbs)
Touch models	Starting at 991.5 g (2.19 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 (Bluetooth® 5.2 hardware ready)[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 physical SIM card inbox

NFC

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] 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

SECURITY & PRIVACY

Security

Security Chip

Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Smart Card Reader

No smart card reader

Fingerprint Reader

Touch style fingerprint reader on palm rest, match-on-chip

BIOS Security

- Certificate based BIOS authentication
- FIDO (Fast Identity Online) authentication
- NVMe® password
- Power-on password
- Self-healing BIOS
- Supervisor password
- System management password

Other Security

- (Optional) IR camera for Windows® Hello (facial recognition)
- Camera privacy shutter
- 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

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

Notes:

[1] For more compatible accessory solutions, please visit [Accessories for ThinkPad® X1 Nano Gen 2](#).

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)

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).

ENVIRONMENTAL

Sustainability

Material

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

CERTIFICATIONS

Green Certifications[1]

Green Certifications[2]

- ENERGY STAR® 8.0
- EPEAT™ Gold Registered[3]
- ErP Lot 3

- RoHS compliant
- TCO Certified 9.0

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 https://compliance.lenovo.com.
[2] EPEAT™ registration and ENERGY STAR® certification are dependent on system 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

(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.

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