OVERVIEW



1. Smart card reader	6. HDMI
2. Nano-SIM card slot	7. 2x Thunderbolt 4
3. USB-A (USB 5Gbps)	8. USB-A (USB 5Gbps), Always On
4. Ethernet (GbE RJ-45)	9. Headphone jack (3.5mm)
5. Kensington Nano Security Slot	

PERFORMANCE

Processor

Processor Family

Intel® H Series Core Ultra 5 / 7 / 9 / X9 Processor (Series 3); supports up to 16 cores; up to 5.1GHz

Processor**

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Processor Graphics	NPU	Intel® vPro® Eligibility
Core Ultra 5 336H	12 (4 P-core + 4 E-core + 4 LP E-core)	12	P-core 1.9GHz / E-core 1.5GHz / LP E-core 1.5GHz	P-core 4.6GHz / E-core 3.4GHz / LP E-core 3.2GHz	18MB Intel® Smart Cache	Intel® Graphics, up to 37 TOPS	Up to 47 TOPS	Intel® vPro® Platform
Core Ultra 7 356H	16 (4 P-core + 8 E-core + 4 LP E-core)	16	P-core 1.9GHz / E-core 1.5GHz / LP E-core 1.5GHz	P-core 4.7GHz / E-core 3.5GHz / LP E-core 3.3GHz	18MB Intel® Smart Cache	Intel® Graphics, up to 40 TOPS	Up to 50 TOPS	-
Core Ultra 7 366H	16 (4 P-core + 8 E-core + 4 LP E-core)	16	P-core 2.0GHz / E-core 1.6GHz / LP E-core 1.6GHz	P-core 4.8GHz / E-core 3.6GHz / LP E-core 3.4GHz	18MB Intel® Smart Cache	Intel® Graphics, up to 40 TOPS	Up to 50 TOPS	Intel® vPro® Platform
Core Ultra 9 386H	16 (4 P-core + 8 E-core + 4 LP E-core)	16	P-core 2.1GHz / E-core 1.6GHz / LP E-core 1.6GHz	P-core 4.9GHz / E-core 3.7GHz / LP E-core 3.5GHz	18MB Intel® Smart Cache	Intel® Graphics, up to 40 TOPS	Up to 50 TOPS	Intel® vPro® Platform
Core Ultra X9 378H	16 (4 P-core + 8 E-core + 4 LP E-core)	16	P-core 2.0GHz / E-core 1.6GHz / LP E-core 1.6GHz	P-core 5.0GHz / E-core 3.8GHz / LP E-core 3.6GHz	18MB Intel® Smart Cache	Intel® Arc™ B390 GPU, up to 122 TOPS	Up to 50 TOPS	-
Core Ultra X9 388H	16 (4 P-core + 8 E-core + 4 LP E-core)	16	P-core 2.1GHz / E-core 1.6GHz / LP E-core 1.6GHz	P-core 5.1GHz / E-core 3.8GHz / LP E-core 3.7GHz	18MB Intel® Smart Cache	Intel® Arc™ B390 GPU, up to 122 TOPS	Up to 50 TOPS	Intel® vPro® Platform

AI (Artificial Intelligence)

AI PC Category

- AI-Ready Workstations
- Copilot+ PC

NPU**

- Up to 47 TOPS (Core Ultra 5)
- Up to 50 TOPS (Core Ultra 7 / 9 / X9)

Operating System

Operating System

- Windows® 11 Pro
- Windows® 11 Home
- Ubuntu Linux LTS
- Red Hat Enterprise Linux 10.2 (certified only, for detailed and latest information, please visit Red Hat Certified Hardware)
- No preload operating system

Graphics

Graphics[1]

Graphics	Type	Memory	AI TOPS (Peak)
Intel® Graphics	Integrated	Shared	40 TOPS (Int8, Core Ultra 7 / 9); 37 TOPS (Int8, Core Ultra 5)
Intel® Arc™ B390 GPU	Integrated	Shared	122 TOPS (Int8)

NVIDIA® RTX PRO 500 Blackwell Generation 6GB GDDR7 Laptop GPU	Discrete	6GB GDDR7	294 TOPS (FP4 TOPS with Sparsity)
NVIDIA® RTX PRO 1000 Blackwell Generation 8GB GDDR7 Laptop GPU	Discrete	8GB GDDR7	440 TOPS (FP4 TOPS with Sparsity)

Notes:

[1] The numbers of TOPS are peak values measured under different methodologies and are not directly comparable across Intel® and NVIDIA® GPUs. Actual AI performance depends on the selected configuration, model support, and system workload.

Monitor Support

Monitor Support

Supports up to 4 independent displays (native display and 3 external monitors via Thunderbolt™ 4 and HDMI®).
Max resolution for multiple external display:
• 2x 5120x3200@60Hz / 3840x2160@120Hz (Thunderbolt™ 4)
• 1x 3840x2160@60Hz (HDMI®)
Max resolution for single external display:
• Thunderbolt™ 4 supports up to 7680x4320@60Hz or 3840x2160@240Hz
• HDMI® supports up to 3840x2160@60Hz

Chipset

Chipset

Intel® SoC (System on Chip) platform

Memory

Max Memory

Up to 96GB (1x 96GB LPCAMM2), upgradable

Memory Slots

One LPCAMM2 connector, dual-channel

Memory Type[1]

LPDDR5X-8533, maximum transfer speeds of up to 7467 MT/s, 16GB / 32GB / 64GB / 96GB memory modules are available

Notes:

[1] Installed memory is actually LPDDR5X-8533 but runs as LPDDR5X-7467 due to platform limitation.

Storage

Max Storage Support[1]

Up to one 2TB M.2 2280 Gen 5 Performance SSD

Storage Slot[2]

One M.2 2280 PCIe® 5.0 x4 slot

Storage Type**

Disk Type	Interface	Offering	Security
M.2 2280 SSD	PCIe® NVMe®, PCIe® 4.0 x4	512GB / 1TB	Opal 2.0
M.2 2280 SSD	PCIe® NVMe®, PCIe® 5.0 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.
[2] The actual data transfer rate of the following PCIe® interface also depends on the capabilities of the connected PCIe® device. The listed values represent theoretical maximums.
PCIe® 3.0 (x2 / x4): 2 GB/s (16 Gbps) / 4 GB/s (32 Gbps);
PCIe® 4.0 (x2 / x4): 4 GB/s (32 Gbps) / 8 GB/s (64 Gbps);
PCIe® 5.0 (x2 / x4): 8 GB/s (64 Gbps) / 16 GB/s (128 Gbps).

Removable Storage

Card Reader

No card reader

Multi-Media

Audio Chip

SoundWire®, Realtek® ALC722-CG codec

Speakers

Stereo speakers, 2W x2, Dolby Atmos®

Microphone

Dual-microphone array, 360° far-field, Dolby Voice®

Camera**

- 5.0MP + IR with Privacy Shutter, HDR and Computer Vision Human Presence Detection
- 5.0MP + IR with privacy shutter, fixed focus, temporal noise reduction
- 5.0MP with privacy shutter, fixed focus, temporal noise reduction

Battery

Battery**

- 60Wh Rechargeable Li-ion Battery, supports Rapid Charge (charge up to 80% in 1hr)
- 75Wh Rechargeable Li-ion Battery, supports Rapid Charge (charge up to 80% in 1hr)

Power Adapter

Power Adapter[1]

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

Notes:

[1] AC adapter offerings depend on the country.

DESIGN

Display

Display**

Size	Resolution	Touch	Type	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Refresh Rate	Viewing Angle (L/R/U/D)	Key Features
14.5″	WUXGA (1920x1200)	Non-touch	IPS	400nits	Anti-glare	16:10	1000:1	45% NTSC	60Hz	85° / 85° / 85° / 85°	88.51% screen to body ratio, AICCP color calibration, UL Low Blue Light, UL Eyesafe® 2.0 Certified, DC dimming
14.5″	WUXGA (1920x1200)	Multi-touch	IPS	400nits	Anti-glare	16:10	1000:1	45% NTSC	60Hz	85° / 85° / 85° / 85°	88.51% screen to body ratio, AICCP color calibration, UL Low Blue Light, UL Eyesafe® 2.0 Certified, DC dimming
14.5″	3K (3072x1920)	Non-touch	IPS	500nits	Anti-glare	16:10	1500:1	100% DCI-P3	30 - 120Hz VRR	85° / 85° / 85° / 85°	88.51% screen to body ratio, TCON Color Calibration, UL Low Blue

											Light, UL Eyesafe® 2.0 Certified, DC dimming

Touchscreen

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

Screen-to-Body Ratio

88.51%

Color Calibration**

- AICCP color calibration (WUXGA display)
- TCON factory color calibration (3K display)

Input Device

Pen

No support

Keyboard

6-row, spill-resistant, multimedia Fn keys, Copilot key

Keyboard Backlight

- LED backlight
- Non-backlight

UltraNav™

3-button TrackPoint® pointing device and glass-like Mylar® surface multi-touch TrackPad, 60 x 115 mm (2.36 x 4.53 inches)

Mechanical

Dimensions (WxDxH)[1]

325.2 x 226.3 x 11.7 / 16.22 (front / rear), 22.2 (maximum) mm
12.80 x 8.91 x 0.46 / 0.64 (front / rear), 0.87 (maximum) inches

Weight[2]

Starting at 1.63 kg (3.59 lbs)

Case Color

Black

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

WLAN + Bluetooth®**[1]

- Intel® Wi-Fi® 7 BE211, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.4 (Bluetooth® 6.0 hardware ready)
- Intel® Wi-Fi® 7 BE211, 802.11be 2x2 Wi-Fi® + Bluetooth® 5.4 (Bluetooth® 6.0 hardware ready), Intel® vPro® technology support

WWAN**

- Wireless WAN upgradable to 5G (with antenna ready)
- Snapdragon® X61, 5G Sub-6 GHz, with embedded eSIM functionality
- No support

SIM Card

No physical SIM card included

Ethernet**

- Gigabit Ethernet, Intel® Ethernet Connection I219-LM (vPro® models), 1x RJ-45, supports Wake-on-LAN
- Gigabit Ethernet, Intel® Ethernet Connection I219-V (non-vPro® models), 1x RJ-45, supports Wake-on-LAN

NFC

- Near Field Communication
- No support

Notes:

[1] Wi-Fi® operation (including Wi-Fi® 6, Wi-Fi® 6E, Wi-Fi® 7, etc.) is subject to the regulatory requirements of each country. Bluetooth® may operate at a lower version than hardware design depending on the factors such as operating system, driver, etc.

Ports[1]

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 Thunderbolt™ 4, with USB PD 3.1 and DisplayPort™ 2.1, 140W input / 15W output[2]
- 1x HDMI® 2.1, up to 4K/60Hz
- 1x Headphone / microphone combo jack (3.5mm)
- 1x Ethernet (GbE RJ-45)
- 1x Kensington® Nano Security Slot™

Optional Ports

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

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.
Thunderbolt™ 5: 80 Gbit/s (bidirectional), up to 120 Gbit/s in bandwidth boost mode for video-intensive applications.
[2] Thunderbolt™ 4 port supports 140W power input; optional AC adapter is 100W.

Docking

Docking

Various docking solutions supported via Thunderbolt™ or USB-C®.
For more compatible docking solutions, please visit Docking for ThinkPad® P14s Gen 7 (Intel®)

SECURITY & PRIVACY

Security

Security Chip**

- Firmware TPM 2.0 integrated in SoC
- Discrete TPM 2.0, TCG certified, FIPS 140-2 certified

Physical Locks

Kensington® Nano Security Slot™, 2.5 x 6 mm

Smart Card Reader

- Smart card reader, supports ISO 7816 and EMV
- No smart card reader

Fingerprint Reader

Touch style fingerprint reader integrated in power button, match-on-chip

BIOS Security

- NVMe® password
- Power-on password
- Supervisor password
- Self-healing BIOS
- More BIOS security features, please visit BIOS Simulator

Other Security

- (Optional) Computer Vision-based Human Presence Detection
- Bottom cover tamper detection
- Camera privacy shutter
- (Optional) IR camera for Windows® Hello (facial recognition)

MANAGEABILITY

System Management

System Management[1]

- Intel® vPro® Enterprise
- Non-vPro®

Notes:

[1] Intel® vPro® platform require an eligible Intel® processor, a supported operating system, Intel® LAN and/or WLAN silicon, firmware enhancements, and other hardware and software necessary to deliver the manageability use cases, security features, system performance, and stability that define the platform. See Intel® vPro® Platform for details.

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]

None

Notes:

[1] For more compatible accessory solutions, please visit Accessories for ThinkPad® P14s Gen 7 (Intel®).

OPERATING REQUIREMENTS

Operating Environment

Temperature[1]

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage and transportation in original shipping packaging: -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[1]

50% ecycled aluminium on top cover
85% PCC recycled plastic for non-backlit keycaps
90% PCC recycled plastic used in speaker enclosure
97% PCC recycled plastic used in the battery pack enclosure
90% PCC recycled plastic used in 100W adapter

Notes:

[1] PCC: Post Consumer Content, recycled materials from customers.

CERTIFICATIONS

Green Certifications[1]

Green Certifications[2]

- ENERGY STAR® 9.0
- EPEAT 2.0 Gold Registered
- RoHS compliant
- TCO Certified, generation 10

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 optional and only available on the models with preloaded OS. Please visit epeat.net and energystar.gov for more information.

Other Certifications

Mil-Spec Test

MIL-STD-810H military test passed

Other Certifications

- (Optional) Eyesafe® Certified 2.0
- (Optional) UL Low Blue Light

ISV Certifications

ISV Certifications

Please visit ISV certifications for Lenovo® Workstations

- 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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