PSREF

Product Specifications Reference

ThinkPad Tablets



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Summary of Changes

This section describes the technical changes made in this edition. This edition might also include minor corrections and editorial changes which are not identified.

February 24, 2021 - Version 573

Additions in this update

- New product(s) None
- ► Spec updated ThinkPad X12 Detachable

Withdrawals in this update

Withdrawn product(s) None

PERFORMANCE

Processor

Processor Family

8th generation Intel[®] Core[™] i5 / i7 Processor

Processor

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Core i5-8250U	4	8	1.6GHz	3.4GHz	6MB	LPDDR3-2133	Intel UHD Graphics 620
Core i5-8350U	4	8	1.7GHz	3.6GHz	6MB	LPDDR3-2133	Intel UHD Graphics 620
Core i7-8550U	4	8	1.8GHz	4.0GHz	8MB	LPDDR3-2133	Intel UHD Graphics 620
Core i7-8650U	4	8	1.9GHz	4.2GHz	8MB	LPDDR3-2133	Intel UHD Graphics 620

Operating System

- Windows® 10 Home 64
- Windows 10 Pro 64
- No operating system

Graphics

Graphics	Туре	Memory	Key Features	
Intel UHD Graphics 620	Integrated	Shared	DirectX® 12	

Chipset

Intel SoC (System on Chip) platform

Memory

Memory Type

LPDDR3-2133

Storage

Storage Support

One drive, up to 1TB M.2 2280 SSD

Storage Type

Disk Type	Interface	RPM	Security
M.2 2280 SSD	SATA 6Gb/s	-	-
M.2 2280 SSD	SATA 6Gb/s	-	Opal2
M.2 2280 SSD	PCIe NVMe, PCIe 3.0 x4	-	Opal2

Removable Storage

Card Reader

- MicroSD card slot (WiFi model)
- Nano-SIM + microSD card slot (WWAN model)

Multi-Media

Speakers

Stereo speakers, 1W x2

Microphone

Dual array microphone

Camera

- Front 2.0-megapixel, fixed focus + IR; and rear 8.0-megapixel, auto Focus
- Front 2-megapixel, fixed focus; and rear 8.0-megapixel, auto Focus

Notes:

Lenovo

• IR camera is mutually exclusive with NFC

Sensor

Vibrator

No vibrator

Sensors

- Ambient light sensor (ALS)
- Gyroscope sensor
- Accelerometer (G) sensor

Battery

Battery

Integrated Li-Polymer 42Wh battery

Max Battery Life

MobileMark® 2014: 9.5 hr

Notes:

• All battery life claims are approximate maximum and based on results using the MobileMark 2014, MobileMark 2018, and/or JEITA 2.0 battery-life benchmark tests. Actual battery life will vary and depends on many factors such as product configuration and usage, software use, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time and use.

Power Adapter

- 45W USB-C AC adapter
- 65W USB-C AC adapter

DESIGN

Display

Display

Size	Resolution	Touch	Туре	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Key Features
13.0″	QHD+ (3000x2000)	Multi- touch	IPS	400 nits	Anti-reflection, Anti-smudge	3:2	1200:1	-	160°	Corning® Gorilla® Glass

Notes:

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

Touchscreen

Capacitive-type multi-touch, supports 10-point touch

Input Device

Pen

- ThinkPad® Pen Pro, batteries required, on-board garaged
- Lenovo Pen Pro with replaceable battery
- No pen (pen needs to be purchased separately)

Mechanical

Dimensions (WxDxH)

Models	Dimensions
Tablet	304.1 x 226 x 8.9 mm (11.97 x 8.9 x 0.35 inches)
Tablet with folio keyboard	304.1 x 226 x 14.4 mm (11.97 x 8.9 x 0.57 inches)

Weight

Lenovo

Models	Weight			
Tablet	0.89 kg (1.96 lbs)			
Tablet with folio keyboard	Tablet: 0.89 kg (1.96 lbs) Tablet with folio keyboard: 1.27 kg (2.8 lbs)			

Case Color

Black

Case Material

Magnesium-aluminium

Others

Kensington® Security Slot

Buttons

- Reset switch
- Volume button
- Power button

CONNECTIVITY

Network

WLAN + Bluetooth™

Intel Dual Band Wireless-AC 8265, 802.11ac Dual Band 2x2 Wi-Fi + Bluetooth 4.2

WWAN

- Integrated Mobile Broadband 4G LTE-A, Sierra Wireless EM7430
- Integrated Mobile Broadband 4G LTE-A, Sierra Wireless EM7430C
- Integrated Mobile Broadband 4G LTE-A, Sierra Wireless EM7455
- Not Support

SIM Card

No SIM card

NFC

- Near Field Communication
- Not support

Notes:

• NFC is mutually exclusive with IR camera

Ports

Standard Ports

- 2x USB-C 3.1 Gen 1 (support data transfer, Power Delivery and DisplayPort[™])
- 1x Pen holder slot
- 1x headphone / microphone combo jack (3.5mm)
- 1x Pogo pin keyboard connector

Notes:

• Depending on many factors, actual data transfer speed may be lower than theoretical speed

Optional Ports

- 1x microSD card slot (WiFi model)
- 1x Nano-SIM + microSD card slot (LTE model)

Docking

- Thin Keyboard (magnetic detachable)
- ThinkPad USB-C Dock Gen 2
- No docking

Monitor Cable

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

Product Specifications Reference

SECURITY & PRIVACY

Security

Security Chip

- Discrete TPM 2.0, TCG certified
- Disabled (in some regions)

Fingerprint Reader

Touch style fingerprint reader on display cover

MANAGEABILITY

System Management

- Intel vPro Technology, DASH
- None

SERVICE

Warranty

Base Warranty

- 1-year depot service
- 1-year depot with 2-year system board service
- 1-year + 2-year depot service
- 1-year + 2-year limited onsite service
- 3-year (1-yr battery) depot service
- 3-year (1-yr battery) limited onsite service

ACCESSORIES

Bundled Accessories

- Lenovo USB-C to Ethernet Adapter
- Lenovo USB-C to USB-A Adapter
- Lenovo USB-C Travel Hub
- None

CERTIFICATIONS

Green Certifications

- EPEAT[™] Silver
- GREENGUARD[®]
- Low Halogen
- RoHS compliant

Other Certifications

Mil-Spec Test MIL-STD-810G military test passed





ThinkPad X12 Detachable

PERFORMANCE

Processor

Processor Family

11th Generation Intel[®] Core[™] i3 / i5 /i7 Processor

Processor

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Core i3-1110G4	2	4	2.5GHz	3.9GHz	6MB	LPDDR4x-4266	Intel UHD Graphics
Core i5-1130G7	4	8	1.8GHz	4.0GHz	8MB	LPDDR4x-4266	Intel Iris® Xe Graphics
Core i5-1140G7	4	8	1.8GHz	4.2GHz	8MB	LPDDR4x-4266	Intel Iris Xe Graphics
Core i7-1160G7	4	8	2.1GHz	4.4GHz	12MB	LPDDR4x-4266	Intel Iris Xe Graphics
Core i7-1180G7	4	8	2.2GHz	4.6GHz	12MB	LPDDR4x-4266	Intel Iris Xe Graphics

Operating System

- Windows® 10 Home 64
- Windows 10 Pro 64
- No operating system

Graphics

Graphics	Туре	Memory	Key Features	
Intel UHD Graphics	Integrated	Shared	DirectX® 12	
Intel Iris Xe Graphics	Integrated	Shared	DirectX 12	

Monitor Support

Supports up to 3 independent displays via native display and 2 external monitors; supports external monitors via USB-C (5120x3200@60Hz) or Thunderbolt™ (5120x3200@60Hz)

Chipset

Intel SoC (System on Chip) platform

Memory

Memory Type

LPDDR4x-4266

Notes:

• 8GB or 16GB LPDDR4x-4266 soldered, dual-channel capable

Storage

Storage Support

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

Storage Type

Disk Type	Interface	RPM	Security
M.2 2242 SSD	PCle NVMe, PCle 3.0 x4	-	-

Multi-Media

Speakers

Stereo speakers, Realtek® ALC3306-GRT codec, 1W x2, Dolby® Audio™

Microphone

Dual array microphone, 360° far-field for Cortana, near-field for Alexa

Camera

5.0-megapixel front user-facing Hybrid RGB/IR camera with webcam privacy shutter, fixed focus; 8.0-megapixel rear world-facing, auto focus

Sensor

Vibrator

No vibrator

Sensors

- Gyroscope sensor
- Hall sensor
- Inclinometer sensor
- Accelerometer (G) sensor
- Proximity sensor (WWAN model)

Battery

Battery

Integrated Li-Polymer 42Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter

Max Battery Life

MobileMark® 2018: 10.36 hr JEITA 2.0: 12.42 hr

Notes:

• All battery life claims are approximate maximum and based on results using the MobileMark 2014, MobileMark 2018, and/or JEITA 2.0 battery-life benchmark tests. Actual battery life will vary and depends on many factors such as product configuration and usage, software use, wireless functionality, power management settings, and screen brightness. The maximum capacity of the battery will decrease with time and use.

Charging Time

In operation: 2.0 hr Off ~80%: 0.83 hr Off ~100%: 2.0 hr

Power Adapter

- 45W USB-C AC adapter
- 65W USB-C AC adapter
- 65W USB-C slim AC adapter

DESIGN

Display

Display

Size	Resolution	Touch	Туре	Brightness	Surface	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Key Features
12.3″	FHD+ (1920x1280)	Multi- touch	IPS	400 nits	Anti-reflection, Anti-smudge	3:2	1500:1	100% sRGB	178°	Corning® Gorilla® Glass 5

Notes:

 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

Touchscreen

GF2 Direct Bonding, capacitive-type multi-touch, supports 10-point touch

Input Device

Pen

- Lenovo Precision Pen, magnetically attached to the system
- Lenovo Digital Pen with replaceable battery
- Lenovo Digital Pen without replaceable battery
- No pen (pen needs to be purchased separately)

Mechanical

Dimensions (WxDxH)

Models	Dimensions
Tablet	283.3 x 203.5 x 8.8 mm (11.15 x 8.01 x 0.34 inches)
Folio keyboard	283.3 x 217.8 x 5.7 mm (11.15 x 8.57 x 0.22 inches)

Weight

Models	Weight
Tablet	760 g (1.67 lbs)
Folio keyboard	340 g (0.75 lbs)

Case Color

Black

Case Material

Magnesium-aluminium

Notes:

• Surface treatment: Peachskin paint

Others

- Hinge locking: 170°
- Kensington[®] Security Slot

Buttons

- Volume button
- Power button

CONNECTIVITY

Network

WLAN + Bluetooth™

Intel Wi-Fi 6 AX201, 802.11ax 2x2 Wi-Fi + Bluetooth 5.1, MU-MIMO

WWAN

- Integrated Mobile Broadband 4G LTE-A, CAT9, Fibocom L850-GL, M.2 card
- Not Support

SIM Card

- No SIM card
- Nano-SIM card slot for WWAN (eSIM support: Gemalto)

NFC

- Near Field Communication
- Not support

WIFI Direct

Support

WIFI Display

Support

Ports

Standard Ports

- 1x USB-C 3.2 Gen 2 (support data transfer, Power Delivery 3.0 and DisplayPort[™] 1.4)
- 1x Thunderbolt 4 / USB4[™] 40Gbps (support data transfer, Power Delivery 3.0 and DisplayPort 1.4)
- 1x Nano-SIM card slot
- 1x headphone / microphone combo jack (3.5mm)
- 1x Pogo pin connector (8-point)

Notes:

• Depending on many factors, actual data transfer speed may be lower than theoretical speed

Docking

- ThinkPad® X12 Folio Keyboard with touchpad (Pogo Pin, Detachable), 3-level backlight
- No docking

Monitor Cable

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

SECURITY & PRIVACY

Security

Security Chip

- Discrete TPM 2.0, TCG certified
- Disabled (in some regions)

Fingerprint Reader

- Touch style fingerprint reader on folio keyboard, match-on-chip
- No fingerprint reader

BIOS Security

- Power-on password
- Supervisor password
- System management password
- Hard disk password
- Self-healing BIOS

MANAGEABILITY

System Management

- Intel vPro Technology, DASH
- None

SERVICE

Warranty

Base Warranty

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

ACCESSORIES

Bundled Accessories

- Lenovo USB-C to Ethernet Adapter
- None

CERTIFICATIONS

Green Certifications

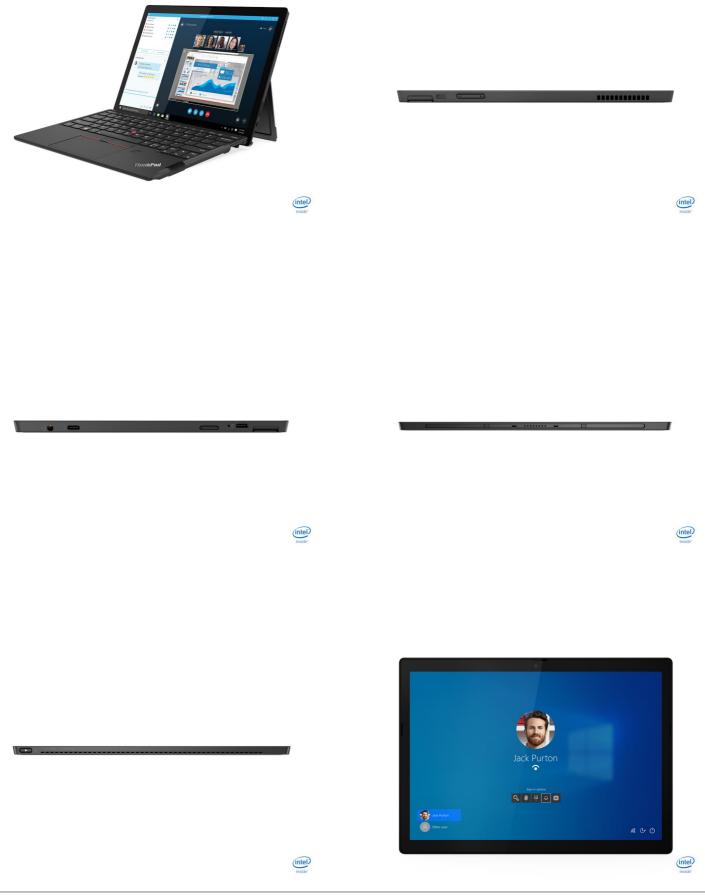
- EPEAT[™] Gold (tablet mode)
- EPEAT Silver (notebook mode)

- ENERGY STAR[®] 8.0
- ErP Lot 3
- FAA Certified
- Low Halogen
- TCO Certified 8.0RoHS compliant

Other Certifications

Mil-Spec Test

MIL-STD-810H military test passed



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Limited warranty: Support unrelated to a warranty issue may be subject to additional charges.

Lenovo Services:

Carry-in or Mail-in Service: Parts and labor repair coverage where the customer is responsible for shipping (including packaging) or delivery to authorized warranty provider or repair center.

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Expedited Depot: Parts and labor coverage with expedited turnaround. Shipping (including packaging) or delivery to the repair center is paid for by Lenovo.

Onsite / In-home Service: Parts and labor repair coverage where labor is provided onsite at your place of business.

If Lenovo determines your product problem is covered by the product warranty and cannot be resolved over the telephone, a technician will be dispatched to arrive onsite, typically the next day.

International Warranty Service (IWS): PC repair coverage for customers who require a critical warranty repair while travelling internationally. Visit www.lenovo.com/internationalwarranty for details. Visit www.lenovo.com/warranty for Lenovo Warranty Services terms and conditions for complete details and restrictions.

Included software: may differ from its retail version (if available), and may not include user manuals or all program functionality. Software license agreements may apply.

Battery life: Battery life (and recharge times) will vary based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.

Visit http://psref.lenovo.com/ for the latest version of Product Specifications Reference.

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