

ThinkPad X1 Carbon Gen 8 20U90006GE

Product

ThinkPad X1 Carbon Gen 8

Region

WE

Country/Region

Germany

Machine Type

20U9

TopSeller

TopSeller

Processor

Intel Core i7-10510U (4C / 8T, 1.8 / 4.9GHz, 8MB)

Graphics

Integrated Intel UHD Graphics

Chipset

Intel SoC Platform

Memory

16GB Soldered LPDDR3-2133

Storage

512GB SSD M.2 2280 PCIe NVMe Opal2

Display

14" FHD (1920x1080) IPS 400nits Anti-glare

Touchscreen

None

Ethernet

100/1000M via Optional Adapter

Optical

None

WLAN + Bluetooth

Intel AX201 11ax, 2x2 + BT5.0

WWAN

Fibocom L850-GL

SIM Card

None

Smart Card Reader

None

Monitor Cable

None

Case Material

Carbon Fiber (Top) + Magnesium Alloy (Bottom)

Bundled Accessories

ThinkPad Ethernet Extension Adapter Gen 2

Camera

720p + IR with ThinkShutter

Microphone

4x, 360°

Color

Black, Paint

Keyboard

Backlit, German

Fingerprint Reader

Touch Style, Match-on-Chip

NFC

NFC

TPM

Discrete TPM 2.0

Battery

Integrated 51Wh

Power Adapter

65W USB-C Slim

System Management

None

Operating System

Windows 10 Pro 64, German

Bundled Software

None

Base Warranty

3-year, Depot

Bundled Service

None

EAN / UPC / JAN

0194778622271

End of Support

2026-11-28

Announce Date

2020-04-28

Recommended Services

Best

5Y Premier Support Upgrade from 3Y Depot/CCI (5WS0T36119)

Better

4Y Premier Support Upgrade from 3Y Depot/CCI (5WS0T36132)

Good

3Y Premier Support Upgrade from 3Y Depot/CCI (5WS0T36160)

Notes:

Battery life is an estimated maximum. Actual battery life may vary based on many factors, including screen brightness, active applications, features, power management settings, battery age and conditioning, and other customer preferences.

L [WWW.LENOVO.COM](https://www.lenovo.com)

Lenovo may not offer the products, services or features discussed in this document in other countries. Lenovo may withdraw an offering at any time. Information is subject to change without notice. Consult your local representative for information on offerings available in your area.

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.



<https://psref.lenovo.com>

Visit psref website for the latest version of Product Specifications Reference.

© Lenovo, 2020. All rights reserved.



Lenovo

ThinkPad X1 Carbon Gen 8 Platform Specifications

Product Specifications Reference (PSREF)

Processor	10th Generation Intel® Core™ i5 / i7 Processor										Dimensions <i>WxDxH (Privacy Guard):</i> 12.72" x 8.54" x 0.61"; 323mm x 217mm x 15.4mm <i>WxDxH (other model):</i> 12.72" x 8.54" x 0.59"; 323mm x 217mm x 14.9mm <i>Privacy Guard model:</i> starting at 2.66 lb / 1.21 kg; <i>Other model:</i> starting at 2.4 lb / 1.09 kg		
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics					
	i5-10210U	4	8	1.6 GHz	4.2 GHz	6MB	LPDDR3-2133	Intel UHD Graphics					
	i5-10310U			1.7 GHz	4.4 GHz	6MB							
	i7-10510U			1.8 GHz	4.9 GHz	8MB							
i7-10610U	1.8 GHz			4.9 GHz	8MB								
Graphics	Intel UHD Graphics in processor; supports up to 3 independent displays via native display and two external monitors; supports external monitors via HDMI (up to 4K@24Hz) or Thunderbolt (5K@60Hz)										Weight		
Chipset	Intel SoC (System on Chip) platform										Case color	Black paint or black weave	
Memory	8GB or 16GB / 2133MHz LPDDR3 / soldered to systemboard, no sockets										Case material	<i>Display cover:</i> Carbon Fiber; <i>Bottom:</i> magnesium alloy	
Display	Size	Resolution	Type	Surface	Touch	Brightness	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Smart card reader	None	
	14.0"	FHD (1920x1080)	IPS	Anti-glare	-	400 nits	16:9	800:1	72%	170°	Media reader	None	
	14.0"	FHD (1920x1080)	IPS	Anti-glare	Multi-touch	400 nits	16:9	700:1	72%	170°	Ports	Two USB 3.2 Gen 1 (one Always On), two USB 3.2 Type-C Gen 2 / Thunderbolt 3 (with the function of Power Delivery and DisplayPort), HDMI 1.4b, Ethernet extension connector, nano-SIM card slot (WWAN models), headphone / microphone combo jack, side docking connector, security keyhole <i>* Depending on many factors, actual data transfer speed may be lower than theoretical speed</i>	
	14.0"	FHD (1920x1080) ThinkPad Privacy Guard	IPS	Anti-glare	Multi-touch	500 nits	16:9	1500:1	72%	170°	Monitor cable	<i>Optional:</i> Lenovo HDMI to VGA Monitor Adapter	
	14.0"	WQHD (2560x1440)	IPS	Anti-glare	-	300 nits	16:9	1000:1	72%	170°	Bundled Accy	<i>Optional:</i> ThinkPad Ethernet Extension Adapter Gen 2	
	14.0"	UHD (3840x2160) HDR 400, Dolby Vision™	IPS	Glossy	-	500 nits	16:9	1500:1	90% DCI-P3	170°	Camera (optional)	• HD720p camera with ThinkShutter camera privacy, fixed focus • IR camera and HD720p camera with ThinkShutter camera privacy, fixed focus	
Multi-touch (opt)	<i>* WQHD is NOT available in EMEA</i> Capacitive-type multi-touch, supports 10-finger gesture, anti-reflection (AR) / anti-smudge (AS) coating										Audio support	HD Audio, USI 4551-513711-00 codec / Dolby® Atmos™ speaker system, 2W x 2, 0.8 x 2 / four 360° far-field microphones, headphone / microphone combo jack	
	Storage	• M.2 2280 SSD / PCIe NVMe 3.0 x 4 • Intel Optane Memory H10 with Solid State Storage, M.2 2280, PCIe NVMe 3.0 x 4										Keyboard	6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, LED backlight
Optical	None										UltraNav™	TrackPoint® pointing device and buttonless glass surface multi-touch touchpad	
Ethernet	Native Intel Ethernet Connection I219-V (Non-vPro) or I219-LM (vPro) via optional ThinkPad Ethernet Extension Adapter Gen 2										Security	Power-on password, hard disk password, supervisor password, security keyhole	
WLAN + Bluetooth™	Intel Wi-Fi 6 AX201, Wi-Fi 2x2 802.11ax + Bluetooth 5.0 <i>* Intel AX201 card supports BT5.1 but is limited to BT5.0 by Windows OS</i>										Security chip	• Firmware TPM 2.0 integrated in chipset • Discrete TPM 2.0 TCG Certified	
WWAN (optional)	• Wireless WAN upgradable • Integrated Mobile Broadband 4G LTE-A, Fibocom L850-GL, M.2 card • Integrated Mobile Broadband 4G LTE-A, Fibocom L860-GL, MIMO 2x2, M.2 card <i>* For non-WWAN model, it means the model is NOT WWAN upgradable</i>										System Mgt (opt)	Intel vPro Technology	
SIM card (opt)	• Gemalto eSIM Card • Nano-SIM card, Lenovo Connect 4 month, 4G LTE										Fingerprint reader	Touch style match on chip fingerprint reader on the palm rest	
	Battery											NFC (optional)	Near Field Communication
	Max battery life											Battery	Integrated Li-Polymer 51Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter <i>MobileMark® 2014:</i> 19.5 hr <i>MobileMark 2018:</i> 13.8 hr <i>* Battery life varies significantly with hardware configurations, settings, usage, & other factors</i>
	AC adapter											Max battery life	<i>MobileMark® 2014:</i> 19.5 hr <i>MobileMark 2018:</i> 13.8 hr <i>* Battery life varies significantly with hardware configurations, settings, usage, & other factors</i>
	Operating system											AC adapter	• 45W USB-C AC adapter • 65W USB-C AC adapter • 65W USB-C slim AC adapter
	Limited warranty (optional)											Operating system	• Windows® 10 Home 64 • Windows 10 Pro 64
	Mil-Spec test											Limited warranty (optional)	• 1-year depot repair service • 1-year depot with 2-year system board repair service • 1-year limited onsite service • 1-year + 2-year depot repair service • 1-year + 2-year limited onsite service • 3-year/1-yr battery depot repair service • 3-year/1-yr battery limited onsite service
	Environment											Mil-Spec test	MIL-STD-810G military testing
												Environment	EPEAT™ Gold; ENERGY STAR® 8.0; TCO Certified; RoHS-compliant

Note: The specifications above may not be available in all regions.

Lenovo
June 2020

Lenovo

ThinkPad X1 Carbon Gen 8

