

ThinkPad X1 Carbon Gen 8 20U90035US

Product

ThinkPad X1 Carbon Gen 8

Region

NA

Country/Region

USA

Machine Type

20U9

TopSeller

TopSeller

Processor

Intel Core i5-10310U (4C / 8T, 1.7 / 4.4GHz, 6MB)

Graphics

Integrated Intel UHD Graphics

Chipset

Intel SoC Platform

Memory

8GB Soldered LPDDR3-2133

Storage

256GB 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

None

SIM Card

None

Smart Card Reader

None

Monitor Cable

None

Case Material

Carbon Fiber (Top) + Magnesium Alloy (Bottom)

Bundled Accessories

None

Camera

720p with ThinkShutter

Microphone

4x, 360°

Color

Black, Paint

Keyboard

Backlit, English

Fingerprint Reader

Touch Style, Match-on-Chip

NFC

None

TPM

Discrete TPM 2.0

Battery

Integrated 51Wh

Power Adapter

65W USB-C

System Management

Intel vPro

Operating System

Windows 10 Pro 64, English

Bundled Software

None

Base Warranty

3-year, Depot

Bundled Service

None

EAN / UPC / JAN

194778830386

End of Support

2026-11-28

Announce Date

2020-04-28

Recommended Services**Best**

3Y Lenovo Protect (Premier Support + Keep Your Drive + Accidental Damage Protection + Sealed Battery) (5PS0N73216)

Better

3Y Lenovo Support (Premier Support + Keep Your Drive + Sealed Battery) (5PS0N73159)

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.

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>

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Lenovo™

ThinkPad X1 Carbon Gen 8 Platform Specifications

Product Specifications Reference (PSREF)



Processor											Dimensions																																																													
10th Generation Intel® Core™ i5 / i7 Processor											WxDxH (Privacy Guard): 12.72" x 8.54" x 0.61"; 323mm x 217mm x 15.4mm																																																													
<table border="1"> <thead> <tr> <th>Processor Number</th> <th># of Cores</th> <th># of Threads</th> <th>Base Frequency</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory Types</th> <th>Processor Graphics</th> </tr> </thead> <tbody> <tr> <td>i5-10210U</td> <td rowspan="4">4</td> <td rowspan="4">8</td> <td>1.6 GHz</td> <td>4.2 GHz</td> <td>6MB</td> <td rowspan="4">LPDDR3-2133</td> <td rowspan="4">Intel UHD Graphics</td> </tr> <tr> <td>i5-10310U</td> <td>1.7 GHz</td> <td>4.4 GHz</td> <td>6MB</td> </tr> <tr> <td>i7-10510U</td> <td>1.8 GHz</td> <td>4.9 GHz</td> <td>8MB</td> </tr> <tr> <td>i7-10610U</td> <td>1.8 GHz</td> <td>4.9 GHz</td> <td>8MB</td> </tr> </tbody> </table>											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	WxDxH (other model): 12.72" x 8.54" x 0.59"; 323mm x 217mm x 14.9mm																																	
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Graphics											Weight																																																													
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)											Privacy Guard model: starting at 2.66 lb / 1.21 kg; Other model: starting at 2.4 lb / 1.09 kg																																																													
Chipset											Case color																																																													
Intel SoC (System on Chip) platform											Black paint or black weave																																																													
Memory											Case material																																																													
8GB or 16GB / 2133MHz LPDDR3 / soldered to systemboard, no sockets											Display cover: Carbon Fiber; Bottom: magnesium alloy																																																													
Display											Smart card reader																																																													
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<p>* WQHD is NOT available in EMEA</p>											None																																																													
Multi-touch (opt)											Ports																																																													
Capacitive-type multi-touch, supports 10-finger gesture, anti-reflection (AR) / anti-smudge (AS) coating											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																																																													
Storage											Monitor cable																																																													
<ul style="list-style-type: none"> 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 											Bundled Accy																																																													
Optical											Optional: Lenovo HDMI to VGA Monitor Adapter																																																													
None											Camera (optional)																																																													
Ethernet											<ul style="list-style-type: none"> HD720p camera with ThinkShutter camera privacy, fixed focus IR camera and HD720p camera with ThinkShutter camera privacy, fixed focus 																																																													
Native Intel Ethernet Connection I219-V (Non-vPro) or I219-LM (vPro) via optional ThinkPad Ethernet Extension Adapter Gen 2											Audio support																																																													
WLAN + Bluetooth™											<ul style="list-style-type: none"> 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 																																																													
Intel Wi-Fi 6 AX201, Wi-Fi 2x2 802.11ax + Bluetooth 5.0											Keyboard																																																													
* Intel AX201 card supports BT5.1 but is limited to BT5.0 by Windows OS											6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, LED backlight																																																													
WWAN (optional)											UltraNav™																																																													
<ul style="list-style-type: none"> 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 * For non-WWAN model, it means the model is NOT WWAN upgradable 											TrackPoint® pointing device and buttonless glass surface multi-touch touchpad																																																													
SIM card (opt)											Security																																																													
<ul style="list-style-type: none"> Gemalto eSIM Card Nano-SIM card, Lenovo Connect 4 month, 4G LTE 											Power-on password, hard disk password, supervisor password, security keyhole																																																													
											Security chip																																																													
											<ul style="list-style-type: none"> Firmware TPM 2.0 integrated in chipset Discrete TPM 2.0 TCG Certified 																																																													
											System Mgt (opt)																																																													
											Intel vPro Technology																																																													
											Fingerprint reader																																																													
											Touch style match on chip fingerprint reader on the palm rest																																																													
											NFC (optional)																																																													
											Near Field Communication																																																													
											Battery																																																													
											Integrated Li-Polymer 51Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter																																																													
											Max battery life																																																													
											<ul style="list-style-type: none"> MobileMark® 2014: 19.5 hr MobileMark 2018: 13.8 hr * Battery life varies significantly with hardware configurations, settings, usage, & other factors 																																																													
											AC adapter																																																													
											<ul style="list-style-type: none"> 45W USB-C AC adapter 65W USB-C AC adapter 65W USB-C slim AC adapter 																																																													
											Operating system																																																													
											<ul style="list-style-type: none"> Windows® 10 Home 64 Windows 10 Pro 64 																																																													
											Limited warranty (optional)																																																													
											<ul style="list-style-type: none"> 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 																																																													
											Mil-Spec test																																																													
											MIL-STD-810G military testing																																																													
											Environment																																																													
											EPEAT™ Gold; ENERGY STAR® 8.0; RoHS-compliant																																																													

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

Lenovo
May 2020

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