

# 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	
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics			Weight	<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	
	i5-10210U	4	8	1.6 GHz	4.2 GHz	6MB	LPDDR3-2133	Intel UHD Graphics			Case color	Black paint or black weave	
	i5-10310U			1.6 GHz	4.4 GHz	6MB			Case material	<i>Display cover:</i> Carbon Fiber; <i>Bottom:</i> magnesium alloy			
	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)										Smart card reader	None	
Chipset	Intel SoC (System on Chip) platform										Media reader	None	
Memory	8GB or 16GB / 2133MHz LPDDR3 / soldered to systemboard, no sockets										Ports	Two USB 3.1 Gen 1 (one Always On), two USB 3.1 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>	
Display	Size	Resolution	Type	Surface	Touch	Brightness	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Monitor cable	Lenovo HDMI to VGA Monitor Adapter <i>Optional:</i> ThinkPad Ethernet Extension Adapter Gen 2	
	14.0"	FHD (1920x1080)	IPS	Anti-glare	-	400 nits	16:9	800:1	72%	170°	Bundled Accy	<i>Optional:</i> ThinkPad Ethernet Extension Adapter Gen 2	
	14.0"	FHD (1920x1080)	IPS	Anti-glare	Multi-touch	400 nits	16:9	700:1	72%	170°	Camera (optional)	• HD720p camera with ThinkShutter camera privacy, fixed focus • IR camera and HD720p camera with ThinkShutter camera privacy, fixed focus	
	14.0"	FHD (1920x1080) ThinkPad Privacy Guard	IPS	Anti-glare	Multi-touch	500 nits	16:9	1500:1	72%	170°	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	
	14.0"	WQHD (2560x1440)	IPS	Anti-glare	-	300 nits	16:9	1000:1	72%	170°	Keyboard	6-row, spill-resistant, multimedia Fn keys with Unified Communications controls, LED backlight	
	14.0"	UHD (3840x2160) HDR 400, Dolby Vision™	IPS	Glossy	-	500 nits	16:9	1500:1	90% DCI-P3	170°	UltraNav™	TrackPoint® pointing device and buttonless glass surface multi-touch touchpad	
Multi-touch (opt)	* WQHD is NOT available in EMEA Capacitive-type multi-touch, supports 10-finger gesture, anti-reflection (AR) / anti-smudge (AS) coating										Security	Power-on password, hard disk password, supervisor password, security keyhole	
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										Security chip	• Firmware TPM 2.0 integrated in chipset • Discrete TPM 2.0 TCG Certified	
Optical	None										System Mgt (opt)	Intel vPro Technology	
Ethernet	Native Intel Ethernet Connection I219-V (Non-vPro) or I219-LM (vPro) via optional ThinkPad Ethernet Extension Adapter Gen 2										Fingerprint reader	Touch style match on chip fingerprint reader on the palm rest	
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>										NFC (optional)	Near Field Communication	
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>										Battery	Integrated Li-Polymer 51Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter	
SIM card (opt)	Nano-SIM card, Lenovo Connect 12 month, 4G LTE (US, UK and Germany only)										Max battery life	<i>MobileMark® 2014:</i> 19.5 hr <i>MobileMark 2018:</i> 13.5 hr <i>* Battery life varies significantly with settings, usage, &amp; other factors</i>	
											AC adapter	• 45W USB-C AC adapter • 65W USB-C AC adapter • 65W USB-C slim AC adapter	
											Operating system	• Windows® 10 Home 64 • Windows 10 Pro 64	
											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	
											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  
April 2020