

ThinkPad X1 Carbon Gen 8 Platform Specifications

Product Specifications Reference (PSREF)

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Processor	10th Generation Intel® Core™ i5 / i7 Processor										Dimensions	WxDxH (Privacy Guard): 12.72" x 8.54" x 0.61"; 323mm x 217mm x 15.4mm WxDxH (other model): 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	Privacy Guard model: starting at 2.66 lb / 1.21 kg; Other model: 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			1.7 GHz	4.4 GHz	6MB					Case material	Display cover: Carbon Fiber; Bottom: 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 3.2 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 * Depending on many factors, actual data transfer speed may be lower than theoretical speed		
Display	Size	Resolution		Type	Surface	Touch	Bright-ness	Aspect Ratio	Contrast Ratio	Color Gamut	Viewing Angle	Monitor cable	Optional: Lenovo HDMI to VGA Monitor Adapter	
	14.0"	FHD (1920x1080)		IPS	Anti-glare	-	400 nits	16:9	800:1	72%	170°	Bundled Accy	Optional: 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 * Intel AX201 card supports BT5.1 but is limited to BT5.0 by Windows OS										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 * For non-WWAN model, it means the model is NOT WWAN upgradable										Battery	Integrated Li-Polymer 51Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W AC adapter		
SIM card (opt)	• Gemalto eSIM Card • Nano-SIM card, Lenovo Connect 4 month, 4G LTE										Max battery life	MobileMark® 2014: 19.5 hr MobileMark 2018: 13.8 hr * Battery life varies significantly with hardware configurations, settings, usage, & other factors		
											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.

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