

## ThinkPad X1 Carbon (2<sup>nd</sup> Gen) Platform Specifications

Processor	4th Generation Intel® Core™ i5 / i7 Processor							
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics
	i5-4200U	2	4	1.6 GHz	2.6 GHz	3MB	DDR3L-1600	Intel HD Graphics 4400
	i5-4210U			1.7 GHz	2.7 GHz	3MB		
	i5-4300U			1.9 GHz	2.9 GHz	3MB		
	i7-4600U			2.1 GHz	3.3 GHz	4MB		
Memory	4GB or 8GB / DDR3L-1600MHz / soldered to systemboard, no sockets							
Optical Storage	None							
	M.2 Solid State Drive (SSD)							
Widescreen display	Some: <b>14.0"</b> (355mm) <b>HD+ (1600x900)</b> , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio Some: <b>14.0"</b> (355mm) <b>WQHD (2560x1440)</b> , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, <b>IPS</b> , 170° viewing angle							
Multi-touch	Some: Capacitive-type multi-touch, supports 10-finger gesture, 270 nits							
Camera	HD720p resolution, low light sensitive, face tracking, fixed focus, <b>gesture input</b>							
Light sensor	Ambient Light Sensor (Windows 8.1 64-bit only)							
Graphics	<b>Intel HD Graphics 4400 or 5000</b> in processor, external digital monitor support via Mini DisplayPort or HDMI™ (supports VGA analog monitor via Mini DisplayPort to VGA Monitor Cable); supports three independent displays; <i>Max resolution: 3840x2160 (Mini DisplayPort)@30Hz; 2880x1620 (HDMI)@60Hz</i>							
Keyboard	<b>Adaptive Keyboard</b> with a dynamically changing row providing additional functionality based on the type of the application active / 5-row, spill-resistant (except Adaptive Keys), <b>LED backlight</b>							
UltraNav™	TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch							
ThinkLight™	None							
Dimensions³	WQHD (WxDxH): 13.03" x 8.92" x 0.70"; 331.0mm x 226.5mm x 17.72mm HD+ (WxDxH): 13.03" x 8.93" x 0.71"; 331.0mm x 226.8mm x 18.16mm WQHD Touch (WxDxH): 13.03" x 8.94" x 0.73"; 331.0mm x 227.1mm x 18.46mm							
Weight²	Models	WQHD		HD+		WQHD Touch		
	Weight	2.82 lb / 1.28kg		2.96 lb / 1.34kg		3.15 lb / 1.43kg		
Case material	Display cover: Carbon-Fiber Reinforced Plastic + Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum							
Battery type	Integrated Lithium Polymer 8-cell (45Wh) RapidCharge battery							
Max battery life¹⁰	Integrated battery: up to 9 hr							
AC Adapter	45W AC Adapter, 65W Slim AC Adapter, or 65W AC Adapter							
RapidCharge	AC Adapter	45W		65W Slim		65W		
	Charge to 80%	1.0hr		50min		50min		
	Charge to 100%	2.3hr		2.1hr		2.1hr		
Chipset	Intel SoC (System on Chip) platform							
Smart card reader	None							
Media reader	None							
Ports	Two USB 3.0 (one Always On), MiniDP, HDMI, Ethernet extension connector, Lenovo OneLink connector, Micro-SIM card tray (WWAN upg / WWAN model only)							
Monitor Cable	Some: Mini DisplayPort to VGA Monitor Cable							

Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/microphone jack	
WLAN <sup>4</sup>	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> <li>Intel Wireless-N 7260, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card</li> <li>Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card</li> <li>Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card</li> </ul>	
WWAN (optional)	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> <li>Wireless WAN upgradable</li> <li>Wireless WAN, Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/ HSPA+/EVDO/GSM/GPRS/EDGE, GPS, M.2 card (US models)</li> <li>Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE models)</li> <li>Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card (WE models)</li> </ul>	
SIM card (optional)	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> <li>AT&amp;T® or Verizon® LTE (4G), contract required with service provider (US models)</li> <li>Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required (WE models)</li> <li>User selectable, contract required with service provider</li> </ul>	
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
Ethernet	Ethernet Extension cable	
NFC	<i>Optional:</i> Near Field Communication	
Security	Power-on password, hard disk password, supervisor password, security keyhole, reset switch	
Security chip	Trusted Platform Module, TCG 1.2-compliant	
vPro (optional)	Intel vPro Technology	
Fingerprint reader	Fingerprint reader on the keyboard bezel, swipe sensor	
Limited warranty <sup>12</sup>	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> <li>1-year depot repair service</li> <li>3-year/1-yr battery depot repair service</li> <li>3-year/1-yr battery limited onsite service<sup>24</sup></li> <li>3-year/1-yr battery limited onsite service, OID (Onsite International Delivery)</li> </ul>	
Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit <ul style="list-style-type: none"> <li>Lenovo Solution Center</li> <li>ThinkVantage Product Recovery</li> <li>Rescue and Recovery™</li> <li>ThinkVantage System Update</li> <li>PC Device Stage</li> <li>Adobe® Reader®</li> <li>Nitro Pro</li> <li>Evernote®</li> <li>Microsoft® Office preloaded; purchase a product key to activate</li> <li>Norton™ Internet Security (30 days of virus definitions)</li> </ul>	<i>Some:</i> Windows 8.1 64-bit <i>Some:</i> Windows 8.1 Pro 64-bit <ul style="list-style-type: none"> <li>Lenovo Solution Center</li> <li>Lenovo Support</li> <li>Lenovo Companion</li> <li>ThinkVantage System Update</li> <li>Hightail - Metro</li> <li>PC Device Stage</li> <li>AccuWeather</li> <li>Amazon Kindle</li> <li>Nitro Pro</li> <li>Rara Streaming</li> <li>Norton Studio</li> <li>Microsoft Office preloaded; purchase a product key to activate</li> <li>Norton Internet Security (30 days of virus definitions)</li> </ul>
Mil-Spec test	MIL-STD-810G military certification	
Environment	EPEAT™ Gold; ENERGY STAR® 6.0; RoHS-compliant	