ThinkPad X1 Carbon (5th Gen) Platform Specifications

Processor

6th Generation Intel® Core™ i5 / i7 Processor

Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics
i5-6200U	2	4	2.3 GHz	2.8 GHz	3MB	LPDDR3-1866	Intel HD Graphics 520
i5-6300U			2.4 GHz	3.0 GHz	3MB		
i7-6500U			2.5 GHz	3.1 GHz	4MB		
i7-6600U			2.6 GHz	3.4 GHz	4MB		

or 7th Generation Intel Core i5 / i7 Processor

Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics
i5-7200U	2	4	2.5 GHz	3.1 GHz	3MB	LPDDR3-1866	Intel HD Graphics 620
i5-7300U			2.6 GHz	3.5 GHz	3MB		
i7-7500U			2.7 GHz	3.5 GHz	4MB		
i7-7600U			2.8 GHz	3.9 GHz	4MB		

Graphics
Intel HD Graphics 520 or 620 in processor;
supports external digital monitor via HDMI or USB Type-C;
supports three independent displays;
Max resolution: 4096x2304@60Hz (USB Type-C); 4096x2160@24Hz (HDMI)

Chipset
Intel SoC (System on Chip) platform

Memory
8GB or 16GB / 1866MHz LPDDR3 / soldered to systemboard, no sockets

Display
Some: 14.0" (355mm) FHD (1920x1080), anti-glare, LED backlight, IPS, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, 170° viewing angle
Some: 14.0" (355mm) WQHD (2560x1440), anti-glare, LED backlight, IPS, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, 170° viewing angle

Multi-touch
None

Storage
Some: M.2 SSD / SATA 6.0Gb/s (e.g. xxxG SSD)
Some: M.2 SSD / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s (e.g. xxxG SSD PCIe NVMe)

Optical
None

Ethernet
Native Intel Ethernet Connection I219-V (*Non-vPro*) or I219-LM (*vPro*))
via optional ThinkPad Ethernet Extension Cable

WLAN
One of the following, configurable by model (WiGig can coexist with WWAN):
- Intel Dual Band Wireless-AC 8260, Wi-Fi 2x2 802.11ac + BT4.1, M.2 card
- Intel Dual Band Wireless-AC 8265, Wi-Fi 2x2 802.11ac + BT4.1, M.2 card
- Intel Tri-Band Wireless-AC 18265, WiGig 802.11ad + Wi-Fi 2x2 802.11ac + BT4.1, M.2 card

Bluetooth™
Bluetooth 4.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter
** Intel 8265ac / 18265ac card support BT4.2 but is limited to BT4.1 by Windows OS*

WWAN *(optional)*
One of the following, configurable by model (WWAN can coexist with WiGig):
- Wireless WAN upgradable
- Integrated Mobile Broadband 4G LTE-A, Qualcomm® Snapdragon™ X7 LTE-A (Sierra Wireless EM7455), M.2 card

SIM card *(opt)*
Micro-SIM card slot, opt Verizon LTE (US) or Lenovo® Connect (EMEA) SIM card

Dimensions
WxDxH: 12.74" x 8.55" x 0.63"; 323.5mm x 217.1mm x 15.95mm

Weight
from 2.49 lb / 1.13 kg

Case color
Black or Silver

Case material
Display cover: CFRP/GFRP hybrid;
Bottom: magnesium alloy hybrid

Smart card reader
None

Media reader
MicroSD card reader, supports UHS-II microSD card

Ports
Two USB 3.1 Gen 1 / USB 3.0 (one Always On),
two USB 3.1 Type-C Gen 2 / Thunderbolt 3 / DisplayPort 1.2a / Power Delivery 2.0,
HDMI 1.4b, Ethernet extension connector

WiGig dock *(opt)*
ThinkPad WiGig dock

Monitor cable *(optional)*
HDMI to VGA: Lenovo HDMI to VGA Monitor Adapter
USB-C to VGA: Lenovo USB-C to VGA Adapter
USB-C to DP: Lenovo USB-C to DisplayPort Adapter

Camera *(optional)*
720p: HD720p resolution, fixed focus
IR & 720p: IR camera and HD720p camera

Audio support
HD Audio, Conexant® CX11871 codec / stereo speakers, 2W x 2 /
dual array microphone, combo audio/microphone jack

Keyboard
6-row, spill-resistant, multimedia Fn keys, LED backlight

UltraNav™
TrackPoint® pointing device and buttonless Glass surface multi-touch touchpad

Security
Power-on password, hard disk password, supervisor password, security keyhole

Security chip
Win7 model: discrete TPM 1.2, TCG Certified
Win10 model: discrete TPM 2.0, TCG Certified

vPro *(optional)*
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 3-cell *(57Wh)* RapidCharge battery

Max battery life
MobileMark® 2014: 15.5 hr

AC adapter
45W or 65W USB Type-C AC adapter

RapidCharge

AC adapter	*45W USB-C*	*65W USB-C*
Charge to 80%	Not support	1.0 hr
Charge to 100%	Not support	2.5 hr

Preload
Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 10 Pro 64
- Lenovo Solution Center
- Lenovo PowerEngage
- ThinkVantage Product Recovery
- ThinkVantage System Update
- Adobe® Reader®
- Microsoft® Office preloded; purchase a product key to activate
- McAfee® LiveSafe™ (30-day trial)

Some: Windows 10 Home 64
Some: Windows 10 Pro 64
- Lenovo Companion
- Lenovo Setting
- Microsoft Office preloaded; purchase a product key to activate

Limited warranty
One of the following, configurable by model:
- 1-year depot repair service
- 3-year/1-yr battery depot repair service
- 3-year/1-yr battery limited onsite service

Mil-Spec test
MIL-STD-810G military certification

Environment
EPEAT™ Gold (US only); ENERGY STAR® 6.1; RoHS-compliant

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Model	20HR002F++
Product	ThinkPad X1 Carbon (5th Gen)
Region	EMEA
Machine Type	20HR
TopSeller	TopSeller
Processor	Core i7-7500U (2C, 2.7 / 3.5GHz, 4MB)
vPro	No
Graphics	Integrated Intel HD Graphics 620
Memory	8GB Soldered
Display	14" FHD (1920x1080) IPS
Multi-touch	None
Storage	512GB SSD M.2 PCIe NVMe Opal2
Optical	None
WLAN + Bluetooth	Intel 8265 ac, 2x2 + BT4.1
WWAN	Sierra EM7455
SIM Card	Lenovo Connect
Dock	None
Monitor Cable	None
Adapter	ThinkPad Ethernet Extension Cable
Color	Black
Camera	720p
Keyboard	Backlit
Fingerprint Reader	Fingerprint Reader
NFC	None
TPM	dTPM 2.0
Battery	3-cell (57Wh)
Power Adapter	65W USB-C
Operating System	Windows 10 Pro 64
Warranty	3-year, Onsite
Global	No
Ann Date (mm/yy)	02/17




























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