



Lenovo ThinkPad X1 Carbon (5th Gen) Intel® Core™ i7 i7-7600U Laptop 35.6 cm (14") Full HD 8 GB LPDDR3-SDRAM 256 GB SSD Wi-Fi 5 (802.11ac) Windows 10 Pro Black



Brand : Lenovo

Product family: ThinkPad

Product code: 20HR005HUS

Product name : ThinkPad X1 Carbon (5th Gen)

Intel Core i7-7600U (2.8GHz), 8GB LPDDR3, 256GB SSD, 14" FHD (1920x1080) IPS, Intel HD Graphics 620, WLAN, Windows 10 Pro

Lenovo ThinkPad X1 Carbon (5th Gen). Product type: Laptop, Form factor: Clamshell. Processor family: Intel® Core™ i7, Processor model: i7-7600U, Processor frequency: 2.8 GHz. Display diagonal: 35.6 cm (14"), HD type: Full HD, Display resolution: 1920 x 1080 pixels. Internal memory: 8 GB, Internal memory type: LPDDR3-SDRAM. Total storage capacity: 256 GB, Storage media: SSD. Mobile network generation: 4G. Operating system installed: Windows 10 Pro. Product color: Black

Design		Ports & interfaces	
Product type *	Laptop	USB Sleep-and-Charge	✓
Product color *	Black	USB Sleep-and-Charge ports	1
Form factor *	Clamshell	Performance	
Market positioning	Business	Motherboard chipset	Intel SoC
Display		Keyboard	
Display diagonal *	35.6 cm (14")	Pointing device	ThinkPad UltraNav
Display resolution *	1920 x 1080 pixels	Numeric keypad *	✗
Touchscreen *	✗	Keyboard backlight	✓
HD type	Full HD	Spill-resistant keyboard	✓
Panel type	IPS	Windows keys	✓
LED backlight	✓	Software	
Native aspect ratio	16:9	Operating system architecture	64-bit
Display surface	Matt	Operating system installed *	Windows 10 Pro
Screen shape	Flat	Processor special features	
Processor		Intel® My WiFi Technology (Intel® MWT)	✓
Processor manufacturer *	Intel	Intel® Smart Response Technology	✓
Processor family *	Intel® Core™ i7	Intel® Identity Protection Technology (Intel® IPT)	✓
Processor generation	7th gen Intel® Core™ i7	Intel® Hyper Threading Technology (Intel® HT Technology)	✓
Processor model *	i7-7600U	Intel® Turbo Boost Technology	2.0
Processor cores	2	Enhanced Intel SpeedStep Technology	✓
Processor threads	4	Intel® Clear Video HD Technology (Intel® CVT HD)	✓
Processor boost frequency	3.9 GHz	Intel Clear Video Technology	✓
Processor frequency *	2.8 GHz	Intel® Quick Sync Video Technology	✓
System bus rate	4 GT/s	Intel Flex Memory Access	✓
Processor cache	4 MB	Intel® Smart Cache	✓
Processor cache type	Smart Cache	Intel® AES New Instructions (Intel® AES-NI)	✓
Processor socket	BGA 1356	Intel Trusted Execution Technology	✓
Processor lithography	14 nm	Intel Enhanced Halt State	✓
Processor operating modes	64-bit	Intel VT-x with Extended Page Tables (EPT)	✓
Processor series	Intel Core i7-7600 Mobile Series		
Processor codename	Kaby Lake		
Bus type	OPI		
Stepping	H0		
Thermal Design Power (TDP)	15 W		
Configurable TDP-up frequency	2.9 GHz		
Configurable TDP-up	25 W		
Configurable TDP-down	7.5 W		

Processor		Processor special features	
Configurable TDP-down frequency	0.8 GHz	Intel® Secure Key	✓
Tjunction	100 °C	Intel TSX-NI	✓
Maximum number of PCI Express lanes	12	Intel Stable Image Platform Program (SIPP)	✓
PCI Express slots version	3.0	Intel® OS Guard	✓
PCI Express configurations	1x2, 1x4, 2x2, 2x1, 4x1	Intel Software Guard Extensions (Intel SGX)	✓
ECC supported by processor	✗	Intel® Clear Video Technology for Mobile Internet Devices (Intel CVT for MID)	✓
Memory		Intel 64	✓
Internal memory *	8 GB	Execute Disable Bit	✓
Internal memory type	LPDDR3-SDRAM	Idle States	✓
Memory clock speed	1866 MHz	Thermal Monitoring Technologies	✓
Memory form factor	On-board	Processor package size	42 x 24 mm
Maximum internal memory *	8 GB	Supported instruction sets	AVX 2.0, SSE4.1, SSE4.2
Storage		Processor code	SR33Z
Total storage capacity *	256 GB	CPU configuration (max)	1
Storage media *	SSD	Embedded options available	✓
Number of SSDs installed	1	Graphics & IMC lithography	14 nm
SSD capacity	256 GB	Intel Virtualization Technology for Directed I/O (VT-d)	✓
SSD form factor	M.2	Intel Identity Protection Technology version	1.00
Optical drive type *	✗	Intel Smart Response Technology version	1.00
Card reader integrated	✓	Intel Stable Image Platform Program (SIPP) version	1.00
Compatible memory cards	MicroSD (TransFlash)	Intel Secure Key Technology version	1.00
Graphics		Intel TSX-NI version	1.00
Discrete graphics card model *	Not available	Intel Virtualization Technology (VT-x)	✓
On-board graphics card *	✓	Processor ARK ID	97466
Discrete graphics card *	✗	Conflict-Free processor	✓
On-board graphics card family	Intel® HD Graphics	Battery	
On-board graphics card model *	Intel® HD Graphics 620	Battery technology	Lithium Polymer (LiPo)
On-board graphics card base frequency	300 MHz	Number of battery cells	3
On-board graphics card dynamic frequency (max)	1150 MHz	Battery capacity *	57 Wh
Maximum on-board graphics card memory	32 GB	Battery life (max)	15.5 h
On-board graphics card DirectX version	12.0	Power	
On-board graphics card OpenGL version	4.4	AC adapter frequency	50 - 60 Hz
On-board graphics card ID	0x5916	AC adapter input voltage	100 - 240 V
Audio		Security	
Number of built-in speakers	2	Cable lock slot	✓
Speaker power	2 W	Fingerprint reader	✓
Built-in microphone	✓	Trusted Platform Module (TPM)	✓
Camera		Password protection	✓
Front camera	✓	Password protection type	HDD, Power on, Supervisor
Front camera signal format	720p	Certificates	
Network		Compliance certificates	RoHS
Mobile network generation	4G	Sustainability	
4G standard	LTE	Sustainability certificates	EPEAT Gold, ENERGY STAR
Wi-Fi	✓	Weight & dimensions	
Top Wi-Fi standard *	Wi-Fi 5 (802.11ac)	Width	323.5 mm
Wi-Fi standards	802.11a, Wi-Fi 5 (802.11ac), 802.11b, 802.11g, Wi-Fi 4 (802.11n)	Depth	217.1 mm
Mobile network connection *	✓	Height	15.9 mm
Ethernet LAN	✗	Weight *	1.13 kg
Bluetooth	✓		
Bluetooth version	4.1		
WWAN	Installed		

Ports & interfaces		Packaging content	
USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity *	2	AC adapter included *	✓
USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity	2	Manual	✓
HDMI ports quantity *	1	Quick start guide	✓
DVI port	✗	Power cord included	✓
S/PDIF out port	✗	Other features	
Microphone in	✗	LightScribe	✗
Combo headphone/mic port	✓	3D	✗

Catalog Object Cloud



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