ThinkPad X280 Platform Specifications

Processor	7th Generation Intel® Core™ i3 / i5 Processor *(i3-7130U is NOT available in US and EMEA; i5-7200U is NOT available in US)*

Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics
i3-7130U			2.7 GHz	-	3MB		
i5-7200U	2	4	2.5 GHz	3.1 GHz	3MB	DDR4-2133	Intel HD Graphics 620
i5-7300U			2.6 GHz	3.5 GHz	3MB		

or 8th Generation Intel Core i5 / i7 Processor

Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics
i5-8250U			1.6 GHz	3.4 GHz	6MB		
i5-8350U	4	8	1.7 GHz	3.6 GHz	6MB	DDR4-2400	Intel UHD Graphics 620
i7-8550U			1.8 GHz	4.0 GHz	8MB		
i7-8650U			1.9 GHz	4.2 GHz	8MB		

Graphics	Intel HD Graphics 620 or Intel UHD Graphics 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@30Hz (HDMI)
Chipset	Intel SoC (System on Chip) platform
Memory	4GB, 8GB, or 16GB / 2400MHz DDR4 / soldered to systemboard, no sockets *(4GB memory is NOT available in US)* * System clocks down for processors with lower memory controller
Display	*Some:* 12.5" (317.5mm) HD (1366x768), anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 400:1 contrast ratio *Some:* 12.5" (317.5mm) FHD (1920x1080), anti-glare, LED backlight, IPS, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, 170° viewing angle
Multi-touch *(opt)*	On-cell touch, supports 10-finger gesture (FHD only) *(FHD non-touch model is NOT available in US)*
Storage	*One of the following, configurable by model:* • M.2 SSD / SATA 6.0Gb/s (e.g. xxxGB SSD M.2) • M.2 SSD / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s (e.g. xxxGB SSD M.2 PCIe NVMe)
Optical	None
Ethernet	Native Intel Ethernet Connection I219-V (*Non-vPro*) or I219-LM (*vPro*)) via optional ThinkPad Ethernet Extension Cable Gen 2
WLAN + Bluetooth™	Intel Dual Band Wireless-AC 8265, Wi-Fi 2x2 802.11ac + Bluetooth 4.1, M.2 card * *Intel 8265ac card supports BT4.2 but is limited to BT4.1 by Windows OS*
WWAN *(optional)*	*One of the following, configurable by model (mutually exclusive with Intel Optane memory):* • Integrated Mobile Broadband 4G LTE, Intel XMM™ 7262 (Fibocom L830-EB), M.2 card (EMEA only) • Integrated Mobile Broadband 4G LTE-A, Intel XMM™ 7360 (Fibocom L850-GL), M.2 card
SIM card *(opt)*	Nano-SIM card slot, in the combo slot with microSD card reader, optional Verizon LTE (US) SIM card

Dimensions	*WxDxH:* 12.11" x 8.26" x 0.69-0.70"; 307.7mm x 209.8mm x 17.4-17.8mm
Weight	*FHD non-touch model:* 2.49 lb / 1.13 kg; *HD non-touch model:* 2.78 lb / 1.26 kg; *FHD multi-touch model:* 2.79 lb / 1.27 kg
Case color	Black
Case material	*Display cover:* Carbon Fiber (FHD non-touch model) or Glass Fiber (HD / FHD multi-touch model); *Bottom:* Magnesium/Aluminum
Smart card reader	*Optional:* Smart card reader
Media reader	MicroSD card reader, in the combo slot with nano-SIM card
Ports	Two USB 3.1 Gen 1 (one Always On), USB 3.1 Type-C Gen 1, USB 3.1 Type-C Gen 2 / Thunderbolt 3, HDMI 1.4b, Ethernet extension connector, combo slot of nano-SIM card (WWAN models) and microSD card reader, headphone / microphone combo jack, optional smart card reader, side docking connector, security keyhole
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)*	*One of the following, configurable by model:* • HD720p camera with ThinkShutter camera privacy, fixed focus • IR camera and HD720p camera, fixed focus
Audio support	HD Audio, Realtek® ALC3287 codec, Dolby® Audio™ Premium / stereo speakers, 2W x 2 / dual array microphone, headphone / microphone combo jack
Keyboard	6-row, spill-resistant, multimedia Fn keys, optional LED backlight
UltraNav™	TrackPoint® pointing device and buttonless Mylar surface multi-touch touchpad
Security	Power-on password, hard disk password, supervisor password, security keyhole
Security chip	Discrete TPM 2.0, TCG Certified
vPro *(optional)*	Intel vPro Technology
Fingerprint reader	*Optional:* Touch style match on chip fingerprint reader on the palm rest, anti-spoofing technology
NFC *(optional)*	Near Field Communication
Battery	Integrated Li-Ion 48Wh battery, supports Rapid Charge (charge up to 80% in 1hr) with 65W USB Type-C AC adapter
Max battery life	*MobileMark® 2014:* 16.6 hr * Battery life varies significantly with settings, usage, & other factors
AC adapter	45W or 65W USB Type-C AC adapter
Preload	Windows® 10 Home 64 or Windows 10 Pro 64
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; ENERGY STAR® 6.1; RoHS-compliant