

# ThinkPad X1 Carbon (5th Gen) 20HR0067++

**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**  
16GB Soldered

**Display**  
14" WQHD (2560x1440) IPS

**Multi-touch**  
None

**Storage**  
1TB SSD M.2 PCIe NVMe Opal2

**Optical**  
None

**WLAN + Bluetooth**  
Intel 8265 ac, 2x2 + BT4.1

**WWAN**  
Sierra EM7455

**SIM Card**  
None

**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

**End of Support**  
Jul 18, 2022

**Ann Date (mm/yy)**  
07/17

## Note:

Country Code "US" is for United States, "++" is for EMEA countries (e.g. AD - Saudi, Arabia, AT - Austria, BM - Bulgaria, etc.), "xx" is for EAST countries (e.g. BM - Bulgaria, CX - Hungary, CY - Cyprus, etc.), and "\*\*\*" is for MEA countries (e.g. AD - Saudi, Arabia, ED - Egypt, EQ - Sweden, etc.). Please be aware that the EMEA/ EAST/MEA models listed above might not be available in all countries



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# ThinkPad X1 Carbon (5<sup>th</sup> Gen) Platform Specifications

Product Specifications Reference (PSREF)

|                 |                                                                                                                                                                                                                                                                                                                                                                                  |            |              |                |                     |       |              |                       |                                                  |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |           |           |               |             |        |                |             |        |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|----------------|---------------------|-------|--------------|-----------------------|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|-----------|---------------|-------------|--------|----------------|-------------|--------|
| Processor       | 6th Generation Intel® Core™ i5 / i7 Processor (EMEA has only i5-6300U and i7-6600U)                                                                                                                                                                                                                                                                                              |            |              |                |                     |       |              |                       | Smart card reader                                | None                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |           |           |               |             |        |                |             |        |
|                 | Processor Number                                                                                                                                                                                                                                                                                                                                                                 | # of Cores | # of Threads | Base Frequency | Max Turbo Frequency | Cache | Memory Types | Processor Graphics    | Media reader                                     | MicroSD card reader, supports UHS-II microSD card                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |           |           |               |             |        |                |             |        |
|                 | i5-6200U                                                                                                                                                                                                                                                                                                                                                                         | 2          | 4            | 2.3 GHz        | 2.8 GHz             | 3MB   | LPDDR3-1866  | Intel HD Graphics 520 | Ports                                            | Two USB 3.1 Gen 1 (USB 3.0, one Always On), two USB 3.1 Type-C Gen 2 / Thunderbolt 3 (support data, video, and power delivery), HDMI 1.4b, Ethernet extension connector |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |           |           |               |             |        |                |             |        |
|                 | i5-6300U                                                                                                                                                                                                                                                                                                                                                                         |            |              | 2.4 GHz        | 3.0 GHz             | 3MB   |              |                       | ThinkPad WiGig dock                              |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |           |           |               |             |        |                |             |        |
|                 | i7-6500U                                                                                                                                                                                                                                                                                                                                                                         |            |              | 2.5 GHz        | 3.1 GHz             | 4MB   |              |                       | HDMI to VGA: Lenovo HDMI to VGA Monitor Adapter  |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |           |           |               |             |        |                |             |        |
|                 | i7-6600U                                                                                                                                                                                                                                                                                                                                                                         |            |              | 2.6 GHz        | 3.4 GHz             | 4MB   |              |                       | USB-C to VGA: Lenovo USB-C to VGA Adapter        |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |           |           |               |             |        |                |             |        |
|                 | or 7th Generation Intel Core i5 / i7 Processor                                                                                                                                                                                                                                                                                                                                   |            |              |                |                     |       |              |                       | USB-C to DP: Lenovo USB-C to DisplayPort Adapter |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |           |           |               |             |        |                |             |        |
|                 | Processor Number                                                                                                                                                                                                                                                                                                                                                                 | # of Cores | # of Threads | Base Frequency | Max Turbo Frequency | Cache | Memory Types | Processor Graphics    | Camera (optional)                                | 720p: HD720p resolution, fixed focus                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |           |           |               |             |        |                |             |        |
|                 | i5-7200U                                                                                                                                                                                                                                                                                                                                                                         | 2          | 4            | 2.5 GHz        | 3.1 GHz             | 3MB   | LPDDR3-1866  | Intel HD Graphics 620 | IR & 720p: IR camera and HD720p camera           |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |           |           |               |             |        |                |             |        |
|                 | i5-7300U                                                                                                                                                                                                                                                                                                                                                                         |            |              | 2.6 GHz        | 3.5 GHz             | 3MB   |              |                       | Audio support                                    | HD Audio, Conexant® CX11871 codec / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |           |           |               |             |        |                |             |        |
|                 | i7-7500U                                                                                                                                                                                                                                                                                                                                                                         |            |              | 2.7 GHz        | 3.5 GHz             | 4MB   |              |                       | Keyboard                                         | 6-row, spill-resistant, multimedia Fn keys, LED backlight                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |           |           |               |             |        |                |             |        |
|                 | i7-7600U                                                                                                                                                                                                                                                                                                                                                                         |            |              | 2.8 GHz        | 3.9 GHz             | 4MB   |              |                       | UltraNav™                                        | TrackPoint® pointing device and buttonless Glass surface multi-touch touchpad                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |           |           |               |             |        |                |             |        |
| 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)                                                                                                                                                                     |            |              |                |                     |       |              |                       |                                                  | Security                                                                                                                                                                | Power-on password, hard disk password, supervisor password, security keyhole                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |            |           |           |               |             |        |                |             |        |
| Chipset         | Intel SoC (System on Chip) platform                                                                                                                                                                                                                                                                                                                                              |            |              |                |                     |       |              |                       |                                                  | Security chip                                                                                                                                                           | Discrete TPM 2.0, TCG Certified                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |           |           |               |             |        |                |             |        |
| Memory          | 8GB or 16GB / 1866MHz LPDDR3 / soldered to systemboard, no sockets                                                                                                                                                                                                                                                                                                               |            |              |                |                     |       |              |                       |                                                  | vPro (optional)                                                                                                                                                         | Intel vPro Technology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |            |           |           |               |             |        |                |             |        |
| 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                                                                                                                                                                                                                                       |            |              |                |                     |       |              |                       |                                                  | Fingerprint reader                                                                                                                                                      | Touch style match on chip fingerprint reader on the palm rest                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            |           |           |               |             |        |                |             |        |
|                 | Some: 14.0" (355mm) WQHD (2560x1440), anti-glare, LED backlight, IPS, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, 170° viewing angle                                                                                                                                                                                                                                      |            |              |                |                     |       |              |                       |                                                  | NFC (optional)                                                                                                                                                          | Near Field Communication                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |           |           |               |             |        |                |             |        |
| Multi-touch     | None                                                                                                                                                                                                                                                                                                                                                                             |            |              |                |                     |       |              |                       |                                                  | Battery                                                                                                                                                                 | Integrated Li-Polymer 3-cell (57Wh) RapidCharge battery                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |           |               |             |        |                |             |        |
| Storage         | One of the following, configurable by model: <ul style="list-style-type: none"><li>M.2 SSD / SATA 6.0Gb/s (e.g. xxxGB SSD M.2)</li><li>M.2 SSD / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s (e.g. xxxGB SSD M.2 PCIe NVMe)</li></ul>                                                                                                                                                        |            |              |                |                     |       |              |                       |                                                  | Max battery life                                                                                                                                                        | MobileMark® 2014: 15.5 hr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |            |           |           |               |             |        |                |             |        |
| Optical         | None                                                                                                                                                                                                                                                                                                                                                                             |            |              |                |                     |       |              |                       |                                                  | AC adapter                                                                                                                                                              | 45W or 65W USB Type-C AC adapter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |            |           |           |               |             |        |                |             |        |
| Ethernet        | Native Intel Ethernet Connection I219-V (Non-vPro) or I219-LM (vPro) via optional ThinkPad Ethernet Extension Cable                                                                                                                                                                                                                                                              |            |              |                |                     |       |              |                       |                                                  | RapidCharge                                                                                                                                                             | <table><tr><td>AC adapter</td><td>45W USB-C</td><td>65W USB-C</td></tr><tr><td>Charge to 80%</td><td>Not support</td><td>1.0 hr</td></tr><tr><td>Charge to 100%</td><td>Not support</td><td>2.5 hr</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                            | AC adapter | 45W USB-C | 65W USB-C | Charge to 80% | Not support | 1.0 hr | Charge to 100% | Not support | 2.5 hr |
| AC adapter      | 45W USB-C                                                                                                                                                                                                                                                                                                                                                                        | 65W USB-C  |              |                |                     |       |              |                       |                                                  |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |           |           |               |             |        |                |             |        |
| Charge to 80%   | Not support                                                                                                                                                                                                                                                                                                                                                                      | 1.0 hr     |              |                |                     |       |              |                       |                                                  |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |           |           |               |             |        |                |             |        |
| Charge to 100%  | Not support                                                                                                                                                                                                                                                                                                                                                                      | 2.5 hr     |              |                |                     |       |              |                       |                                                  |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |           |           |               |             |        |                |             |        |
| WLAN            | One of the following, configurable by model (WiGig can coexist with WWAN): <ul style="list-style-type: none"><li>Intel Dual Band Wireless-AC 8260, Wi-Fi 2x2 802.11ac + BT4.1, M.2 card</li><li>Intel Dual Band Wireless-AC 8265, Wi-Fi 2x2 802.11ac + BT4.1, M.2 card</li><li>Intel Tri-Band Wireless-AC 18265, WiGig 802.11ad + Wi-Fi 2x2 802.11ac + BT4.1, M.2 card</li></ul> |            |              |                |                     |       |              |                       |                                                  | Preload                                                                                                                                                                 | Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 10 Pro 64 <ul style="list-style-type: none"><li>Lenovo Solution Center</li><li>Lenovo PowerEngage</li><li>ThinkVantage Product Recovery</li><li>ThinkVantage System Update</li><li>Adobe® Reader®</li><li>Microsoft® Office preloaded; purchase a product key to activate</li><li>McAfee® LiveSafe™ (30-day trial)</li></ul> Some: Windows 10 Pro 64 <ul style="list-style-type: none"><li>Lenovo Companion</li><li>Lenovo Setting</li><li>Microsoft Office preloaded; purchase a product key to activate</li></ul> |            |           |           |               |             |        |                |             |        |
| Bluetooth™      | Bluetooth 4.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter<br>* Intel 8265ac / 18265ac card support BT4.2 but is limited to BT4.1 by Windows OS                                                                                                                                                                                                                       |            |              |                |                     |       |              |                       |                                                  | Limited warranty                                                                                                                                                        | One of the following, configurable by model: <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</li></ul>                                                                                                                                                                                                                                                                                                                                                                    |            |           |           |               |             |        |                |             |        |
| WWAN (optional) | Integrated Mobile Broadband 4G LTE-A, Qualcomm® Snapdragon™ X7 LTE-A (Sierra Wireless EM7455)                                                                                                                                                                                                                                                                                    |            |              |                |                     |       |              |                       |                                                  | Mil-Spec test                                                                                                                                                           | MIL-STD-810G military certification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |           |           |               |             |        |                |             |        |
| SIM card (opt)  | Micro-SIM card slot, opt Verizon LTE (US) or Lenovo® Connect (EMEA) SIM card                                                                                                                                                                                                                                                                                                     |            |              |                |                     |       |              |                       |                                                  | Environment                                                                                                                                                             | EPEAT™ Gold (US only); ENERGY STAR® 6.1; RoHS-compliant                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |           |           |               |             |        |                |             |        |
| Dimensions      | WxDxH: 12.74" x 8.55" x 0.63"; 323.5mm x 217.1mm x 15.95mm                                                                                                                                                                                                                                                                                                                       |            |              |                |                     |       |              |                       |                                                  |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |           |           |               |             |        |                |             |        |
| Weight          | Starting at 2.49 lb / 1.13 kg                                                                                                                                                                                                                                                                                                                                                    |            |              |                |                     |       |              |                       |                                                  |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |           |           |               |             |        |                |             |        |
| Case color      | Black or Silver (silver is not available in EMEA)                                                                                                                                                                                                                                                                                                                                |            |              |                |                     |       |              |                       |                                                  |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |           |           |               |             |        |                |             |        |
| Case material   | Display cover: CFRP/GFRP hybrid;<br>Bottom: magnesium alloy hybrid                                                                                                                                                                                                                                                                                                               |            |              |                |                     |       |              |                       |                                                  |                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |           |           |               |             |        |                |             |        |

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