

# ThinkPad T580 20L9003P++

Region  
EMEA

Machine Type  
20L9

TopSeller  
TopSeller

Processor  
Core i5-8250U (4C, 1.6 / 3.4GHz, 6MB)

vPro  
No

Graphics  
Integrated Intel UHD Graphics 620

Memory  
16GBx1

Display  
15.6" FHD (1920x1080) IPS

Multi-touch  
None

Storage  
256GB SSD M.2 PCIe NVMe Opal2

Optical  
None

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

WWAN  
Fibocom L830-EB

SIM Card  
None

Smart Card Reader  
Smart Card Reader

Monitor Cable  
None

Camera  
720p

Keyboard  
Backlit

Fingerprint Reader  
Fingerprint Reader

NFC  
None

TPM  
dTPM 2.0

Battery  
4-cell (32Wh) + 3-cell (24Wh)

Power Adapter  
65W USB-C

Operating System  
Windows 10 Pro 64

Warranty  
3-year, Depot

End of Support  
Apr 6, 2024

Ann Date (mm/yy)  
03/18

## 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 T580 Platform Specifications

Product Specifications Reference (PSREF)

|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |                |                     |                     |              |                        |                       |                                                                    |                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |        |      |      |      |             |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------|---------------------|---------------------|--------------|------------------------|-----------------------|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--------|------|------|------|-------------|
| Processor                                      | 7th Generation Intel® Core™ i5 Processor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |                |                     |                     |              |                        |                       | Dimensions<br>Weight                                               | WxDxH: 14.40" x 9.95" x 0.79-0.80"; 365.8mm x 252.8mm x 19.95-20.2mm<br><i>Integrated model:</i> starting at 4.29 lb / 1.95 kg;<br><i>Discrete model:</i> starting at 4.39 lb / 1.99 kg                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |        |      |      |      |             |
|                                                | Processor Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | # of Cores   | # of Threads   | Base Frequency      | Max Turbo Frequency | Cache        | Memory Types           | Processor Graphics    |                                                                    | Case color<br>Case material                                                                                                                                                                                                                                                                                                                                         | <i>Display cover:</i> Glass-Fiber Reinforced Plastic (PPS);<br><i>Bottom:</i> Glass-Fiber Reinforced Plastic                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |  |  |        |      |      |      |             |
|                                                | 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 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |                |                     |                     |              |                        |                       |                                                                    | Smart card reader<br>Media reader<br>Ports                                                                                                                                                                                                                                                                                                                          | <i>Optional:</i> Smart card reader<br>4-in-1 reader (MMC, SD, SDHC, SDXC)<br>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 (RJ-45), nano-SIM card slot (WWAN models), headphone / microphone combo jack, optional smart card reader, 4-in-1 reader (MMC, SD, SDHC, SDXC), side docking connector, security keyhole<br><i>HDMI to VGA:</i> Lenovo HDMI to VGA Monitor Adapter<br><i>USB-C to DP:</i> Lenovo USB-C to DisplayPort Adapter |  |  |  |  |  |  |        |      |      |      |             |
| Processor Number                               | # of Cores                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | # of Threads | Base Frequency | Max Turbo Frequency | Cache               | Memory Types | Processor Graphics     |                       |                                                                    |                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |        |      |      |      |             |
| i5-8250U                                       | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 8            | 1.6 GHz        | 3.4 GHz             | 6MB                 | DDR4-2400    | Intel UHD Graphics 620 |                       |                                                                    |                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |        |      |      |      |             |
| i5-8350U                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              | 1.7 GHz        | 3.6 GHz             | 6MB                 |              |                        |                       |                                                                    |                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |        |      |      |      |             |
| 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 only or Intel HD Graphics 620 or Intel UHD Graphics 620 in processor and NVIDIA® GeForce® MX150, 2GB GDDR5 memory; supports external digital monitor via HDMI or USB Type-C; supports three independent displays; Max resolution: 4096x2304@60Hz (USB Type-C); 4096x2160@30Hz (HDMI)                                                                                                                                                                                                                           |              |                |                     |                     |              |                        |                       | Monitor cable (optional)                                           | <i>HDMI to VGA:</i> Lenovo HDMI to VGA Monitor Adapter<br><i>USB-C to DP:</i> Lenovo USB-C to DisplayPort Adapter                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |        |      |      |      |             |
| Chipset<br>Memory                              | Intel SoC (System on Chip) platform<br>32GB max / 2400MHz DDR4, dual-channel capable, two DDR4 SO-DIMM sockets<br>* System clocks down for processors with lower memory controller                                                                                                                                                                                                                                                                                                                                                                                          |              |                |                     |                     |              |                        |                       | Camera (optional)                                                  | <i>One of the following, configurable by model:</i> <ul style="list-style-type: none"><li>• HD720p camera with ThinkShutter camera privacy, fixed focus</li><li>• IR camera and HD720p camera, fixed focus</li></ul>                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |        |      |      |      |             |
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |                |                     |                     |              |                        |                       | Audio support                                                      | HD Audio, Realtek® ALC3287 codec, Dolby® Audio™ Premium / stereo speakers, 2W x 2 / dual array microphone, headphone / microphone combo jack                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |        |      |      |      |             |
| Display                                        | <i>Some:</i> 15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, IPS, 250 nits, 16:9 aspect ratio, 700:1 contrast ratio, 170° viewing angle<br><i>Some:</i> 15.6" (396mm) UHD (3840x2160), anti-glare, LED backlight, IPS, 300 nits, 16:9 aspect ratio, 1000:1 contrast ratio, 72% gamut, 170° viewing angle                                                                                                                                                                                                                                                          |              |                |                     |                     |              |                        |                       | Keyboard<br>UltraNav™                                              | 6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight<br>TrackPoint® pointing device and buttonless Mylar surface multi-touch touchpad                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |        |      |      |      |             |
| Multi-touch (opt)                              | On-cell touch, supports 10-finger gesture (FHD only)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |              |                |                     |                     |              |                        |                       | Security<br>Security chip<br>vPro (optional)<br>Fingerprint reader | Power-on password, hard disk password, supervisor password, security keyhole<br>Discrete TPM 2.0, TCG Certified<br>Intel vPro Technology<br><i>Optional:</i> Touch style match on chip fingerprint reader on the palm rest, anti-spoofing technology                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |        |      |      |      |             |
| Storage                                        | <i>System has one HDD slot or one M.2 2280 slot exclusively for storage</i><br><i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, Active Protection System™<br><i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high (e.g. xxxGB SSD)<br><i>Some:</i> M.2 SSD / PCIe NVMe, PCIe 3.0 x4, 32Gb/s<br><i>Some:</i> 128GB M.2 SSD / PCIe NVMe, PCIe 3.0 x 2, 16Gb/s, in WWAN slot as 2nd Storage, mutually exclusive with WWAN<br><i>Some:</i> 16GB Intel Optane™ memory, PCIe NVMe, PCIe 3.0 x 2, 16Gb/s, in WWAN slot as storage cache for HDD, mutually exclusive with WWAN |              |                |                     |                     |              |                        |                       | NFC (optional)                                                     | Near Field Communication                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |        |      |      |      |             |
| Optical                                        | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |              |                |                     |                     |              |                        |                       | Battery                                                            | Optional integrated Li-Ion 32Wh battery and external Li-Ion 24Wh, 48Wh, or 72Wh battery                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |        |      |      |      |             |
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |                |                     |                     |              |                        |                       | Max battery life (MobileMark® 2014)                                | <table><tr><td>Models</td><td>24Wh</td><td>48Wh</td><td>72Wh</td><td>32Wh + 24Wh</td><td>32Wh + 48Wh</td><td>32Wh + 72Wh</td></tr><tr><td>Max battery life</td><td>5.8 hr</td><td>12.5 hr</td><td>18.1 hr</td><td>13.8 hr</td><td>20.3 hr</td><td>26.1 hr</td></tr></table><br><i>* Battery life varies significantly with settings, usage, &amp; other factors</i> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  | Models | 24Wh | 48Wh | 72Wh | 32Wh + 24Wh |
| Models                                         | 24Wh                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 48Wh         | 72Wh           | 32Wh + 24Wh         | 32Wh + 48Wh         | 32Wh + 72Wh  |                        |                       |                                                                    |                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |        |      |      |      |             |
| Max battery life                               | 5.8 hr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 12.5 hr      | 18.1 hr        | 13.8 hr             | 20.3 hr             | 26.1 hr      |                        |                       |                                                                    |                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |        |      |      |      |             |
| Ethernet                                       | <i>Non-vPro model:</i> Intel Ethernet Connection I219-V (Jacksonville)<br><i>vPro model:</i> Intel Ethernet Connection I219-LM (Jacksonville)                                                                                                                                                                                                                                                                                                                                                                                                                               |              |                |                     |                     |              |                        |                       | AC adapter                                                         | 45W or 65W USB Type-C AC adapter                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |        |      |      |      |             |
| WLAN + Bluetooth™                              | Intel Dual Band Wireless-AC 8265, Wi-Fi 2x2 802.11ac + Bluetooth 4.1, M.2 card<br><i>* Intel 8265ac card supports BT4.2 but is limited to BT4.1 by Windows OS</i>                                                                                                                                                                                                                                                                                                                                                                                                           |              |                |                     |                     |              |                        |                       | Preload                                                            | Windows® 10 Home 64 or Windows 10 Pro 64                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |        |      |      |      |             |
| WWAN (optional)                                | <i>One of the following, configurable by model:</i> <ul style="list-style-type: none"><li>• Integrated Mobile Broadband 4G LTE, Intel XMM™ 7262 (Fibocom L830-EB), M.2 card (EMEA only)</li><li>• Integrated Mobile Broadband 4G LTE-A, Intel XMM™ 7360 (Fibocom L850-GL), M.2 card</li></ul>                                                                                                                                                                                                                                                                               |              |                |                     |                     |              |                        |                       | Limited warranty                                                   | <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</li></ul>                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |        |      |      |      |             |
| SIM card (opt)                                 | Nano-SIM card slot, optional Verizon LTE (US) SIM card                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |                |                     |                     |              |                        |                       | Mil-Spec test                                                      | MIL-STD-810G military certification                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |        |      |      |      |             |
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |                |                     |                     |              |                        |                       | Environment                                                        | EPEAT™ Gold; ENERGY STAR® 6.1; RoHS-compliant                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |        |      |      |      |             |

# ThinkPad T580



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