

# ThinkPad T580 20L90025++

Region  
EMEA

Machine Type  
20L9

TopSeller  
TopSeller

Processor  
Core i7-8550U (4C, 1.8 / 4.0GHz, 8MB)

vPro  
No

Graphics  
Integrated Intel UHD Graphics 620

Memory  
16GBx1

Display  
15.6" UHD (3840x2160) IPS

Multi-touch  
None

Storage  
512GB 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  
IR & 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  
Mar 6, 2024

Ann Date (mm/yy)  
02/18

## 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                       | 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     |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |
|                   | i5-7200U                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 2          | 4            | 2.5 GHz        | 3.1 GHz             | 3MB         | DDR4-2133    | Intel HD Graphics 620  |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |
|                   | i5-7300U                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |            |              | 2.6 GHz        | 3.5 GHz             | 3MB         |              |                        |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |
|                   | or 8th Generation Intel Core i5 / i7 Processor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |            |              |                |                     |             |              |                        |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |
|                   | Processor Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | # of Cores | # of Threads | Base Frequency | Max Turbo Frequency | Cache       | Memory Types | Processor Graphics     | 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 |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |
|                   | 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<br>(optional)                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |
| Chipset           | Intel SoC (System on Chip) platform                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |              |                |                     |             |              |                        | Camera (optional)                          | One of the following, configurable by model: <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>                                                                                                                                                                                                                                                                                                |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |
| Memory            | 32GB max / 2400MHz DDR4, dual-channel capable, two DDR4 SO-DIMM sockets<br>* System clocks down for processors with lower memory controller                                                                                                                                                                                                                                                                                                                                                                                       |            |              |                |                     |             |              |                        | Audio support                              | HD Audio, Realtek® ALC3287 codec, Dolby® Audio™ Premium / stereo speakers, 2W x 2 / dual array microphone, headphone / microphone combo jack                                                                                                                                                                                                                                                                                                                                                                 |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |
| Display           | Some: 15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, IPS, 250 nits, 16:9 aspect ratio, 700:1 contrast ratio, 170° viewing angle<br>Some: 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                                   | 6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight                                                                                                                                                                                                                                                                                                                                                                                                                           |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |
| Multi-touch (opt) | On-cell touch, supports 10-finger gesture (FHD only)                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |              |                |                     |             |              |                        | UltraNav™                                  | TrackPoint® pointing device and buttonless Mylar surface multi-touch touchpad                                                                                                                                                                                                                                                                                                                                                                                                                                |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |
| Storage           | System has one HDD slot or one M.2 2280 slot exclusively for storage<br>Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, Active Protection System™<br>Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high (e.g. xxxGB SSD)<br>Some: M.2 SSD / PCIe NVMe, PCIe 3.0 x4, 32Gb/s<br>Some: 128GB M.2 SSD / PCIe NVMe, PCIe 3.0 x 2, 16Gb/s, in WWAN slot as 2nd Storage, mutually exclusive with WWAN<br>Some: 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 |            |              |                |                     |             |              |                        | Security                                   | Power-on password, hard disk password, supervisor password, security keyhole                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |
| Optical           | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |              |                |                     |             |              |                        | Security chip                              | Discrete TPM 2.0, TCG Certified                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |
| Ethernet          | Non-vPro model: Intel Ethernet Connection I219-V (Jacksonville)<br>vPro model: Intel Ethernet Connection I219-LM (Jacksonville)                                                                                                                                                                                                                                                                                                                                                                                                   |            |              |                |                     |             |              |                        | vPro (optional)                            | Intel vPro Technology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |
| WLAN + Bluetooth™ | Intel Dual Band Wireless-AC 8265, Wi-Fi 2x2 802.11ac + Bluetooth 4.1, M.2 card<br>* Intel 8265ac card supports BT4.2 but is limited to BT4.1 by Windows OS                                                                                                                                                                                                                                                                                                                                                                        |            |              |                |                     |             |              |                        | Fingerprint reader                         | <i>Optional:</i> Touch style match on chip fingerprint reader on the palm rest, anti-spoofing technology                                                                                                                                                                                                                                                                                                                                                                                                     |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |
| WWAN (optional)   | One of the following, configurable by model: <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>                                                                                                                                                                                                                                            |            |              |                |                     |             |              |                        | NFC (optional)                             | Near Field Communication                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |
| SIM card (opt)    | Nano-SIM card slot, optional Verizon LTE (US) SIM card                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |            |              |                |                     |             |              |                        | Battery                                    | Optional integrated Li-Ion 32Wh battery and external Li-Ion 24Wh, 48Wh, or 72Wh battery                                                                                                                                                                                                                                                                                                                                                                                                                      |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |
|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            |              |                |                     |             |              |                        | Max battery life<br>(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>* Battery life varies significantly with settings, usage, & other factors                                                                                                                                                     |  | 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 |
| 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     |              |                        |                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |
|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            |              |                |                     |             |              |                        | AC adapter                                 | 45W or 65W USB Type-C AC adapter                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |
|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            |              |                |                     |             |              |                        | Preload                                    | Windows® 10 Home 64 or Windows 10 Pro 64                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |
|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            |              |                |                     |             |              |                        | Limited warranty                           | One of the following, configurable by model: <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>                                                                                                                                                                                                                                                                           |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |
|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            |              |                |                     |             |              |                        | Mil-Spec test                              | MIL-STD-810G military certification                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |
|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            |              |                |                     |             |              |                        | Environment                                | EPEAT™ Gold; ENERGY STAR® 6.1; RoHS-compliant                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |        |      |      |      |             |             |             |                  |        |         |         |         |         |         |

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February 2018

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