

# ThinkPad T580 20L90024++

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  
8GBx1

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  
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                       | <i>WxDxH:</i> 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     |                                            |                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |        |      |      |      |             |             |             |                         |        |         |         |         |         |         |
|                                                | i5-8250U                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 4          | 8            | 1.6 GHz        | 3.4 GHz             | 6MB         | DDR4-2400    | Intel UHD Graphics 620 | Smart card reader<br>Media reader<br>Ports |                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |        |      |      |      |             |             |             |                         |        |         |         |         |         |         |
|                                                | 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><i>(optional)</i>                                                                                                                                                             | Optional: 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 |        |      |      |      |             |             |             |                         |        |         |         |         |         |         |
| Chipset                                        | Intel SoC (System on Chip) platform                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            |              |                |                     |             |              |                        |                                            | Camera <i>(optional)</i>                                                                                                                                                                       | 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                                        | <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                                                                                                                                                                                       | 6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight                                                                                                                                                                                                                                                                                                                                                                                                                    |        |      |      |      |             |             |             |                         |        |         |         |         |         |         |
| Multi-touch <i>(opt)</i>                       | On-cell touch, supports 10-finger gesture (FHD only)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |              |                |                     |             |              |                        |                                            | UltraNav™                                                                                                                                                                                      | TrackPoint® pointing device and buttonless Mylar surface multi-touch touchpad                                                                                                                                                                                                                                                                                                                                                                                                                         |        |      |      |      |             |             |             |                         |        |         |         |         |         |         |
| 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 |            |              |                |                     |             |              |                        |                                            | Security                                                                                                                                                                                       | Power-on password, hard disk password, supervisor password, security keyhole                                                                                                                                                                                                                                                                                                                                                                                                                          |        |      |      |      |             |             |             |                         |        |         |         |         |         |         |
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |              |                |                     |             |              |                        |                                            | Security chip                                                                                                                                                                                  | Discrete TPM 2.0, TCG Certified                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |        |      |      |      |             |             |             |                         |        |         |         |         |         |         |
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |              |                |                     |             |              |                        |                                            | vPro <i>(optional)</i>                                                                                                                                                                         | Intel vPro Technology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |        |      |      |      |             |             |             |                         |        |         |         |         |         |         |
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |              |                |                     |             |              |                        |                                            | Fingerprint reader                                                                                                                                                                             | Optional: Touch style match on chip fingerprint reader on the palm rest, anti-spoofing technology                                                                                                                                                                                                                                                                                                                                                                                                     |        |      |      |      |             |             |             |                         |        |         |         |         |         |         |
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |              |                |                     |             |              |                        |                                            | NFC <i>(optional)</i>                                                                                                                                                                          | Near Field Communication                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |        |      |      |      |             |             |             |                         |        |         |         |         |         |         |
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |              |                |                     |             |              |                        |                                            | Battery                                                                                                                                                                                        | Optional integrated Li-Ion 32Wh battery and external Li-Ion 24Wh, 48Wh, or 72Wh battery                                                                                                                                                                                                                                                                                                                                                                                                               |        |      |      |      |             |             |             |                         |        |         |         |         |         |         |
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |            |              |                |                     |             |              |                        |                                            | Max battery life<br><i>(MobileMark® 2014)</i>                                                                                                                                                  | <table><tr><th>Models</th><th>24Wh</th><th>48Wh</th><th>72Wh</th><th>32Wh + 24Wh</th><th>32Wh + 48Wh</th><th>32Wh + 72Wh</th></tr><tr><td><i>Max battery life</i></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 | <i>Max battery life</i> | 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 |              |                        |                                            |                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |        |      |      |      |             |             |             |                         |        |         |         |         |         |         |
| <i>Max battery life</i>                        | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |        |      |      |      |             |             |             |                         |        |         |         |         |         |         |
| Optical                                        | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |              |                |                     |             |              |                        |                                            | Preload                                                                                                                                                                                        | Windows® 10 Home 64 or Windows 10 Pro 64                                                                                                                                                                                                                                                                                                                                                                                                                                                              |        |      |      |      |             |             |             |                         |        |         |         |         |         |         |
| Ethernet                                       | <i>Non-vPro model:</i> Intel Ethernet Connection I219-V (Jacksonville)<br><i>vPro model:</i> Intel Ethernet Connection I219-LM (Jacksonville)                                                                                                                                                                                                                                                                                                                                                                                                                               |            |              |                |                     |             |              |                        |                                            | 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>                                                                                                                                                                                                                                                                          |        |      |      |      |             |             |             |                         |        |         |         |         |         |         |
| 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                                                                                                                                                                                                                                                                                                                                                                                                                  |            |              |                |                     |             |              |                        |                                            | Mil-Spec test                                                                                                                                                                                  | MIL-STD-810G military certification                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |        |      |      |      |             |             |             |                         |        |         |         |         |         |         |
| WWAN <i>(optional)</i>                         | 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>                                                                                                                                                                                                                                                                                          |            |              |                |                     |             |              |                        |                                            | Environment                                                                                                                                                                                    | EPEAT™ Gold; ENERGY STAR® 6.1; RoHS-compliant                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |      |      |      |             |             |             |                         |        |         |         |         |         |         |
| SIM card <i>(opt)</i>                          | Nano-SIM card slot, optional Verizon LTE (US) SIM card                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |            |              |                |                     |             |              |                        |                                            |                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |        |      |      |      |             |             |             |                         |        |         |         |         |         |         |

# ThinkPad T580



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