

# ThinkPad T470 Platform Specifications

Product Specifications Reference (PSREF)

|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                      |            |              |                |                     |                 |              |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------|----------------|---------------------|-----------------|--------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|------------|-------------|-------------|-----------------|-----------------|------------|--------|---------|---------|---------|---------|---------|----------|--------|---------|---------|---------|---------|---------|
| Processor                                           | 6th Generation Intel® Core™ i5 / i7 Processor (i7-6500U is not available in EMEA)                                                                                                                                                                                                                                                                                                                    |            |              |                |                     |                 |              |                       | Dimensions<br>Weight                                                                                                                                                                                                                                                                                                                                                                                                                               | WxDxH: 13.25" x 9.15" x 0.79"; 336.6mm x 232.5mm x 19.95mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |
|                                                     | Processor Number                                                                                                                                                                                                                                                                                                                                                                                     | # of Cores | # of Threads | Base Frequency | Max Turbo Frequency | Cache           | Memory Types | Processor Graphics    |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |
|                                                     | i5-6200U                                                                                                                                                                                                                                                                                                                                                                                             | 2          | 4            | 2.3 GHz        | 2.8 GHz             | 3MB             | DDR4-2133    | Intel HD Graphics 520 |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |
|                                                     | i5-6300U                                                                                                                                                                                                                                                                                                                                                                                             |            |              | 2.4 GHz        | 3.0 GHz             | 3MB             |              |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |
|                                                     | i7-6500U                                                                                                                                                                                                                                                                                                                                                                                             |            |              | 2.5 GHz        | 3.1 GHz             | 4MB             |              |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |
| i7-6600U                                            | 2.6 GHz                                                                                                                                                                                                                                                                                                                                                                                              |            |              | 3.4 GHz        | 4MB                 |                 |              |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |
| or 7th Generation Intel Core i3 / i5 / i7 Processor |                                                                                                                                                                                                                                                                                                                                                                                                      |            |              |                |                     |                 |              |                       | Smart card reader<br>Media reader<br>Ports<br><br>WiGig dock (opt)<br>Monitor cable<br><br>Camera (optional)<br><br>Audio support<br><br>Keyboard<br>UltraNav™<br><br>Security<br>Security chip<br>vPro (optional)<br>Fingerprint reader<br>NFC (optional)<br><br>Internal battery<br>External battery<br>Max battery life (MobileMark® 2014)<br><br>AC adapter<br><br>Preload<br><br><br><br>Limited warranty<br><br>Mil-Spec test<br>Environment | Optional: Smart card reader<br>4-in-1 reader (MMC, SD, SDHC, SDXC), supports SD 3.0, UHS-I<br>Three USB 3.1 Gen 1 (USB 3.0, one Always On),<br>USB 3.1 Type-C Gen 2 / Thunderbolt 3, HDMI 1.4b, Ethernet (RJ-45),<br>Dock connector<br>ThinkPad WiGig dock<br>Optional: Lenovo USB-C to VGA Adapter<br><br>720p: HD720p resolution, fixed focus<br>IR & 720p: IR camera and HD720p camera (mutually exclusive with WiGig)<br>HD Audio, Realtek ALC3268 codec / stereo speakers, 2W x 2 /<br>dual array microphone, combo audio/microphone jack<br><br>6-row, spill-resistant, multimedia Fn keys, optional LED backlight<br>TrackPoint® pointing device and buttonless Mylar surface multi-touch touchpad<br><br>Power-on password, hard disk password, supervisor password, security keyhole<br>Discrete TPM 2.0, TCG Certified<br>Intel vPro Technology<br>Optional: Touch style match on chip fingerprint reader on the keyboard bezel<br>Near Field Communication<br><br>Optional: Integrated Li-Polymer 3-cell (24Wh)<br>Li-Polymer 3-cell (24Wh) or Li-Ion 6-cell (48Wh or 72Wh)<br><table><tr><td>Models</td><td>3-cell</td><td>3 + 3-cell</td><td>6-cell 48Wh</td><td>6-cell 72Wh</td><td>3 + 6-cell 48Wh</td><td>3 + 6-cell 72Wh</td></tr><tr><td>Integrated</td><td>6.9 hr</td><td>13.9 hr</td><td>13.9 hr</td><td>20.9 hr</td><td>20.9 hr</td><td>27.1 hr</td></tr><tr><td>Discrete</td><td>6.9 hr</td><td>13.9 hr</td><td>14.3 hr</td><td>21.6 hr</td><td>21.2 hr</td><td>28.6 hr</td></tr></table><br>45W or 65W AC adapter (slim tip), 45W or 65W USB Type-C AC adapter<br><br>Windows® 7 Professional 64 preinstalled through downgrade rights in<br>Windows 10 Pro 64<br>• Lenovo Solution Center<br>• Lenovo PowerEngage<br>• ThinkVantage Product Recovery<br>• ThinkVantage System Update<br>• Adobe® Reader®<br>• Microsoft® Office preloaded;<br>purchase a product key to activate<br>• McAfee® LiveSafe™ (30-day trial)<br><br>One of the following, configurable by model:<br>• 1-year depot repair service<br>• 3-year/1-yr battery depot repair service<br>• 3-year/1-yr battery limited onsite service<br><br>MIL-STD-810G military certification<br><br>EPEAT™ Gold (US only); ENERGY STAR® 6.1; RoHS-compliant | Models | 3-cell | 3 + 3-cell | 6-cell 48Wh | 6-cell 72Wh | 3 + 6-cell 48Wh | 3 + 6-cell 72Wh | Integrated | 6.9 hr | 13.9 hr | 13.9 hr | 20.9 hr | 20.9 hr | 27.1 hr | Discrete | 6.9 hr | 13.9 hr | 14.3 hr | 21.6 hr | 21.2 hr | 28.6 hr |
| Models                                              | 3-cell                                                                                                                                                                                                                                                                                                                                                                                               | 3 + 3-cell | 6-cell 48Wh  | 6-cell 72Wh    | 3 + 6-cell 48Wh     | 3 + 6-cell 72Wh |              |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |
| Integrated                                          | 6.9 hr                                                                                                                                                                                                                                                                                                                                                                                               | 13.9 hr    | 13.9 hr      | 20.9 hr        | 20.9 hr             | 27.1 hr         |              |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |
| Discrete                                            | 6.9 hr                                                                                                                                                                                                                                                                                                                                                                                               | 13.9 hr    | 14.3 hr      | 21.6 hr        | 21.2 hr             | 28.6 hr         |              |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |
| Graphics                                            | Intel HD Graphics 520 or 620 in processor only, or<br>Intel HD Graphics 620 in processor and NVIDIA GeForce® 940MX,<br>2GB 2.5GHz GDDR5 memory (discrete models are NOT available in EMEA);<br>supports external digital monitor via HDMI or USB Type-C;<br>supports three independent displays;<br>Max resolution: 4096x2304@60Hz (USB Type-C); 4096x2160@24Hz (HDMI)                               |            |              |                |                     |                 |              |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |
| Chipset                                             | Intel SoC (System on Chip) platform                                                                                                                                                                                                                                                                                                                                                                  |            |              |                |                     |                 |              |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |
| Memory                                              | 32GB max / 2400MHz DDR4, dual-channel capable, two DDR4 SO-DIMM sockets<br>* System clocks down for processors with lower memory controller                                                                                                                                                                                                                                                          |            |              |                |                     |                 |              |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |
| Display                                             | Some: 14.0" (355mm) HD (1366x768), anti-glare, LED backlight,<br>220 nits, 16:9 aspect ratio, 400:1 contrast ratio<br>Some: 14.0" (355mm) FHD (1920x1080), anti-glare, LED backlight,<br>220 nits, 16:9 aspect ratio, 400:1 or 500:1 contrast ratio<br>Some: 14.0" (355mm) FHD (1920x1080), anti-glare, LED backlight, IPS,<br>250 nits, 16:9 aspect ratio, 700:1 contrast ratio, 170° viewing angle |            |              |                |                     |                 |              |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |
| Multi-touch (opt)                                   | On-cell touch, supports 10-finger gesture (FHD only)                                                                                                                                                                                                                                                                                                                                                 |            |              |                |                     |                 |              |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |
| 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 x 2, 16Gb/s<br>Some: 128GB M.2 SSD / SATA 6.0Gb/s, in WWAN slot as 2nd Storage,<br>mutually exclusive with WWAN and WiGig                  |            |              |                |                     |                 |              |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |
| Optical                                             | None                                                                                                                                                                                                                                                                                                                                                                                                 |            |              |                |                     |                 |              |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |
| Ethernet                                            | Non-vPro model: Intel Ethernet Connection I219-V (Jacksonville)<br>vPro model: Intel Ethernet Connection I219-LM (Jacksonville)                                                                                                                                                                                                                                                                      |            |              |                |                     |                 |              |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |
| WLAN                                                | One of the following, configurable by model (WiGig can coexist with WWAN):<br>• Realtek® RTL8822BE, Wi-Fi 2x2 802.11ac + BT4.1, M.2 card<br>• Intel Dual Band Wireless-AC 8260, Wi-Fi 2x2 802.11ac + BT4.1, M.2 card<br>• Intel Dual Band Wireless-AC 8265, Wi-Fi 2x2 802.11ac + BT4.1, M.2 card<br>• Intel Tri-Band Wireless-AC 18265, WiGig 802.11ad + Wi-Fi 2x2 802.11ac + BT4.1, M.2 card        |            |              |                |                     |                 |              |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |
| Bluetooth™                                          | Bluetooth 4.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter<br>* Intel 8265ac / 18265ac card support BT4.2 but is limited to BT4.1 by Windows OS                                                                                                                                                                                                                                           |            |              |                |                     |                 |              |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |
| WWAN (optional)                                     | One of the following, configurable by model (WWAN can coexist with WiGig):<br>• Wireless WAN upgradable<br>• Integrated Mobile Broadband 4G LTE-A,<br>Qualcomm® Snapdragon™ X7 LTE-A (Sierra Wireless EM7455), M.2 card<br>• Integrated Mobile Broadband 4G LTE,<br>Intel XMM™ 7160 (Fibocom L831-EAU), M.2 card (EMEA only)                                                                         |            |              |                |                     |                 |              |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |
| SIM card (opt)                                      | Micro-SIM card slot, opt Verizon LTE (US) or Lenovo® Connect (EMEA) SIM card                                                                                                                                                                                                                                                                                                                         |            |              |                |                     |                 |              |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |        |            |             |             |                 |                 |            |        |         |         |         |         |         |          |        |         |         |         |         |         |

| Model              | 20HD0002++                            |
|--------------------|---------------------------------------|
| Product            | ThinkPad T470                         |
| Region             | EMEA                                  |
| Machine Type       | 20HD                                  |
| TopSeller          | TopSeller                             |
| Processor          | Core i5-7200U (2C, 2.5 / 3.1GHz, 3MB) |
| vPro               | No                                    |
| Graphics           | Integrated Intel HD Graphics 620      |
| Memory             | 8GBx1                                 |
| Display            | 14" 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 L831-EAU                      |
| SIM Card           | None                                  |
| Smart Card Reader  | Smart Card Reader                     |
| Dock               | None                                  |
| Monitor Cable      | None                                  |
| Case Material      | PPS                                   |
| Camera             | 720p                                  |
| Keyboard           | Backlit                               |
| Fingerprint Reader | Fingerprint Reader                    |
| NFC                | None                                  |
| TPM                | dTPM 2.0                              |
| Battery            | 3-cell (24Wh) + 3-cell (24Wh)         |
| Power Adapter      | 45W                                   |
| Operating System   | Windows 10 Pro 64                     |
| Warranty           | 3-year, Onsite                        |
| End of Support     | Feb 28, 2023                          |
| Ann Date (mm/yy)   | 01/17                                 |





