### ThinkPad P51 Platform Specifications

<table>
<thead>
<tr>
<th>Processor</th>
<th>6th or 7th Generation Intel® Core™ i7 Processor or Intel Xeon® Processor E3 v5 or v6 Family</th>
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</thead>
<tbody>
<tr>
<td><strong>Processor Number</strong></td>
<td><strong># of Cores</strong></td>
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<tr>
<td>17-6620HQ</td>
<td>4</td>
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<tr>
<td>E3-1505M v6</td>
<td>4</td>
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<tr>
<td>7-7700HQ</td>
<td>4</td>
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<tr>
<td>E3-1555M v6</td>
<td>4</td>
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<tr>
<td>E3-1535M v6</td>
<td>4</td>
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</tbody>
</table>

**Graphics**
- Intel HD Graphics 530, 630, P530, or P630 in processor and NVIDIA Quadro® M1200 or M2200, 4GB memory; supports external digital monitor via HDMI, Mini DisplayPort, or Thunderbolt™; supports four independent displays; Max resolution: 3840x2160@60Hz (DisplayPort via Mini DisplayPort cable); 3840x2160@60Hz (Thunderbolt); 4096x2160@24Hz (HDMI).

**Chipset**
- Mobile Intel CM238 Chipset

**Memory**
- 64GB max / 2400MHz DDR4, ECC or non-ECC (ECC function supported only on Xeon processor), dual-channel capable, four DDR4 SO-DIMM sockets
- * System clocks down for processors with lower memory controller

**Display**
- 15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, IPS, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, 170° viewing angle
- Capacitive-type multi-touch, supports 10-finger gesture, 220 nits (FHD only)
- ThinkPad Pen Pro, active pen for multi-touch display

**Storage**
- Up to 3 drives (two M.2 SSD and one HDD)
- * System clocks down for processors with lower memory controller

**RAID (optional)**
- Optional: RAID 0/1 support

**Optical**
- None

**Ethernet**
- Non-vPro model: Intel Ethernet Connection I219-V (Jacksonville)
- vPro model: Intel Ethernet Connection I219-LM (Jacksonville)

**WLAN**
- One of the following, configurable by model:
  - Intel Dual Band Wireless-AC 8260, Wi-Fi 2x2 802.11ac + BT4.1, M.2 card
  - Intel Dual Band Wireless-A 8265, Wi-Fi 2x2 802.11ac + BT4.1, M.2 card
- Bluetooth 4.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter
- * Intel 8260ac / 8265ac card support BT4.2 but is limited to BT4.1 by Windows OS

**WWAN (optional)**
- One of the following, configurable by model:
  - Wireless WAN upgradable
  - Integrated Mobile Broadband 4G LTE-A, Qualcomm® Snapdragon™ X7 LTE-A (Sierra Wireless EM7455), M.2 card

**SIM card (optional)**
- Micro-SIM card slot, opt Verizon LTE (US) or Lenovo® Connect (EMEA) SIM card

**Dimensions**
- WxDxH: 14.86" x 9.93" x 0.96-1.16"; 377.4mm x 252.3mm x 24.5-29.4mm
- WxDxH(Touch): 14.86" x 9.93" x 1.02-1.21"; 377.4mm x 252.3mm x 25.8-30.7mm

**Weight**
- Models
  - Non-touch: 5.6 lb / 2.55kg
  - Mult-touch: 6.2 lb / 2.82kg

**Case color**
- Black

**Case material**
- Display cover: Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum

**Smart card reader**
- Optional: Smart card reader

**ExpressCard**
- One slot (ExpressCard/34)

**Media reader**
- 4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card

**Ports**
- Four USB 3.1 Gen 1 (USB 3.0, one Always On), USB Type-C / Thunderbolt 3, Mini DisplayPort 1.2a, HDMI 1.4b, Ethernet (RJ-45), Dock connector

**Camera**
- Optional: 3-megapixel HD camera

**Audio support**
- HD Audio, Realtek ALC3268 codec / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack

**Security**
- Power-on password, hard disk password, supervisor password, security keyhole

**Fingerprint reader**
- Touch style match on chip fingerprint reader on the palm rest

**Color calibration**
- Optional: Pantone® color calibrator by X-Rite® color calibration sensor in palm rest

**Battery**
- Lithium Polymer 4-cell (66Wh) or 6-cell (90Wh)

**Max battery life**
- Model
  - Discrete Graphics: 4.5 hr
  - Hybrid Graphics: 6.5 hr

**AC adapter**
- 170W slim tip AC adapter

**Operating system**
- One of the following, configurable by model:
  - Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 10 Pro 64
  - Windows® 10 Home 64
  - Windows 10 Pro 64
  - Windows 10 Pro 64 for Workstations

**Limited warranty**
- One of the following, configurable by model:
  - 1-year depot repair service
  - 3-year/1-year battery depot repair service
  - 3-year/1-year battery limited onsite service

**Mi-Spec test**
- MIL-STD-810G military testing

**Environment**
- EPEAT® Gold (US only); ENERGY STAR® 6.1; RoHS-compliant

Note: The specifications above may not be available in all regions.

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