**ThinkPad P51s Platform Specifications**

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### Processor
- **6th Generation Intel® Core™ i7 Processor**
  - Processor Number: 7-6500U
    - # of Cores: 2
    - # of Threads: 4
    - Base Frequency: 2.5 GHz
    - Max Turbo Frequency: 3.1 GHz
    - Cache: 4MB
    - Memory Types: DDR4-2133
    - Processor Graphics: Intel HD Graphics 520
  - Processor Number: 7-6600U
    - # of Cores: 2
    - # of Threads: 4
    - Base Frequency: 2.5 GHz
    - Max Turbo Frequency: 3.4 GHz
    - Cache: 4MB
    - Memory Types: DDR4-2133
    - Processor Graphics: Intel HD Graphics 520

### Graphics
- Intel HD Graphics 520 or 620 in processor and NVIDIA Quadro® M520, 2GB 2.5GHz GDDR5 memory supports external digital monitor via HDMI or USB Type-C; supports three independent displays:
  - Max resolution: 4096x2304 @60Hz (USB Type-C); 3840x2160 @30Hz (HDMI)

### Chipset
- Intel SoC (System on Chip) platform

### Memory
- 32GB max / 2400MHz DDR4, dual-channel capable, two DDR4 SO-DIMM sockets

### Display
- Some: 15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, IPS, 300 nits, 16:9 aspect ratio, 72% gamut, 170° viewing angle
- Some: 15.6" (396mm) 4K (3840x2160), anti-glare, LED backlight, IPS, 300 nits, 16:9 aspect ratio, 1000:1 contrast ratio, 72% gamut, 170° viewing angle
- On-cell touch, supports 10-finger gesture (FHD only)

### Storage
- System has one HDD slot or one M.2 2280 slot exclusively for storage
  - Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, Active Protection System™
  - Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high (e.g. xxxGB SSD)
  - Some: M.2 SSD / PCIe NVMe, PCIe 3.0, 16Gb/s
  - Some: 128GB M.2 SSD / SATA 6.0Gb/s, in WAN slot as 2nd Storage, mutually exclusive with WWAN and WiGi

### 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 (WiGi can coexist with WWAN):
  - Realtek® RTL8822BE, Wi-Fi 2x2 802.11ac + BT4.1, M.2 card
  - Intel Dual Band Wireless-AC 8260, Wi-Fi 2x2 802.11ac + BT4.1, M.2 card
  - Intel Dual Band Wireless-AC 8265, Wi-Fi 2x2 802.11ac + BT4.1, M.2 card
  - Intel Tri-Band Wireless-AC 18265, WiGi 802.11ad + Wi-Fi 2x2 802.11ac + BT4.1, M.2 card
- Bluetooth™ Bluetooth 4.1 wireless, integrated in Wi-Fi + Bluetooth combo adapter
  - * 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 WiGi):
  - Wireless WAN upgradable
  - Integrated Mobile Broadband 4G LTE-A
  - Qualcomm® Snapdragon™ X7 LTE-A (Sierra Wireless EM7455), M.2 card
  - Integrated Mobile Broadband 4G LTE
  - Intel XMM™ 7160 (Fibocom L831-EAU), M.2 card (EAME only)

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

### Preload
- Windows® 7 Professional 64 preinstalled
- Some: Windows 10 Home 64 through downgrade rights in Windows 10 Pro 64
- Lenovo Solution Center
- Lenovo PowerEdge
- ThinkVantage Product Recovery
- ThinkVantage System Update
- Adobe® Reader®
- Microsoft® Office preloaded; purchase a product key to activate
- McAfee® LiveSafe™ (30-day trial)

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

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

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**Lenovo**

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