ThinkCentre M93/M93p Tower Platform Specifications

Product Specifications Reference (PSREF)

Processor

4th Generation Intel® Core™ i3 / i5 / i7 Processors

Processor	Cores / Threads	Frequency (Base/Max)	Cache	Memory Types	Integrated Graphics
Core i3-4130	2 / 4	3.4 GHz	3 MB	DDR3-1600	HD 4400
Core i5-4570	4 / 4	3.2 GHz / 3.6 GHz	6 MB	DDR3-1600	HD 4600
Core i5-4590	4 / 4	3.3 GHz / 3.7 GHz	6 MB	DDR3-1600	HD 4600
Core i5-4670	4 / 4	3.4 GHz / 3.8 GHz	6 MB	DDR3-1600	HD 4600
Core i7-4770	4 / 8	3.4 GHz / 3.9 GHz	8 MB	DDR3-1600	HD 4600
Core i7-4790	4 / 8	3.6 GHz / 4 GHz	8 MB	DDR3-1600	HD 4600

Memory

32GB max, UDIMM, PC3-12800 1600MHz DDR3, four 240-pin DIMM sockets

Disk

Some: SATA 6.0Gb/s, 3.5" Wide, 7200 rpm
Some: 500GB (5400 rpm, 2.5" wide) or 1TB (7200 rpm, 3.5" wide) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s
Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide

Optical

Some: DVD-ROM SATA 1.5Gb/s Drive
Some: Super Multi-Burner DVD±RW SATA 1.5Gb/s Drive

Onboard SATA

Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)

Media reader

Optional 29-in-1 media reader, internal USB 2.0

Graphics

Intel HD Graphics 4400/4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays, works along with discrete graphics to support five independent monitors;
Max resolution: 3840x2160 (DP)@60Hz [HD 4x00]; 2560x1600 (DP)@60Hz [Intel HD]; 1920x1200 (VGA)@60Hz (Reduced Blanking)

Some: **AMD Radeon HD 8570**, DirectX 11, 3D Hardware Acceleration, 2GB, PCI Express 3.0 x16 adapter (8x elec), one VGA, one HDMI, 40 watts;
Max resolution: 4096x2160 (HDMI)@24Hz; 2048x1536 (VGA)@85Hz

Some: **AMD Radeon™ HD 8470**, DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one VGA, one DisplayPort, 25 watts,
Max resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz

Some: **AMD Radeon™ HD 7450**, DirectX 11, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts;
Max resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz

Some: **NVIDIA® Geforce® GT 620**, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts;
Max resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz

DP cable

None

Chipset

Intel Q87 Chipset

Front ports

Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)

Rear ports

Four USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), one VGA, two DisplayPort, optional PS/2 ports (keyboard/mouse), additional VGA, DisplayPort, or HDMI on optional graphic card on some models

Rear audio ports

Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)

IEEE 1394

None

Audio support

High Definition (HD) Audio, Realtek ALC662 / optional internal speaker (1watt)

WLAN[13]

Some: 11b/g/n, PCIe Half Mini Card, Realtek RTL8723BE, Wi-Fi/BT 4.0, 1x1
Some: 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1
Some: 11b/g/n, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2
Some: 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Advanced-N 6235, Wi-Fi + Bluetooth combo adapter, Intel vPro technology support, 2x2
Some: 11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi/BT 4.0, 2x2
Some: 11ac/a/b/g/n, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + BT combo adapter, Intel vPro technology support, 2x2

Bluetooth™

Some: Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter

Ethernet

One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®

Modem

None

Manageability

Intel Active Management Technology 9.0 (Intel AMT 9.0);
Intel vPro technology on some models (require choosing a vPro-support Wi-Fi adapter to enable vPro function through wireless connection)

Security chip

Trusted Platform Module, TCG 1.2-compliant

Security features

- One lock to secure both cover and entire system to fixed object:
  -Padlock loop (in rear for opt padlock)
  -Security slot (in rear for optional Kensington® MicroSaver® cable)
- Power-on password
- Administrator password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Optional Chassis intrusion switch

Keyboard

Preferred Pro USB Keyboard (USB connector), Lenovo logo

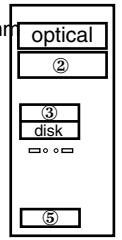
Mouse

Enhanced Optical USB Mouse, black, Lenovo logo

Mechanical

- Mini Tower (25L), business black color, metal case
- *(WxDxH)* 6.89" X 17.41" X 16.32"; 175mm X 442.3mm X 414.5mm
- 24.69 lb (11.20 kg) in maximum configuration
- Toolless cover removal, adapter retention
- Toolless disk, optical drive removal

Bay 1: 5.25", 1.6" high, access, std optical
Bay 2: 5.25", 1.6" high, access, open
Bay 3: 3.5", 1" high, access, opt reader
Bay 4: 3.5", 1" high, no access, std disk
Bay 5: 3.5", 1" high, no access, opt disk
Slot 1: half-length, full-height, PCIe 3.0 x16 (75w max)
Slot 2: half-length, full-height, PCIe 2.0 x1
Slot 3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75w max)
Slot 4: half-length, full-height, 32-bit PCI 2.3



Power supply

280 watts, autosensing, 85% PSU

Limited warranty[3]

Some: **3-years**, **limited onsite service** / service upgrades available
Some: **3-years**, **limited onsite service, OID** (Onsite International Delivery) / service upgrades available
For Lenovo service upgrade options, please go to S-TC sheet

Preload

Preloaded operating system

Some: No operating system
Some: Windows® 7 Professional 32
Some: Windows 7 Professional 64
Some: Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
Some: Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit

Ready to install applications (only some listed)

- Rescue and Recovery™
- Password Manager

Preloaded applications (only some listed)

- ThinkVantage® Product Recovery
- ThinkVantage System Update
- ThinkVantage Communication Utility
- Desktop Power Manager
- View Management Utility
- Lenovo Cloud Storage by SugarSync
- Lenovo Solution Center
- Lenovo Message Center Plus
- Norton™ Internet Security (30 days of virus definitions)
- Adobe® Reader®
- Skype™
- Microsoft Office preloaded; purchase a product key to activate
- Cyberlink PowerDVD (DVD±RW, DVD)
- Cyberlink Power2Go (DVD±RW)
- Cyberlink PowerProducer (DVD±RW)
- Evernote
- Intel AppUp
- Intel Small Business Advantage
- Nitro Pro

Environment

ENERGY STAR® 6.0 (Need 85% PSU and Windows OS);
EPEAT™ Gold rating (Need 85% PSU and Windows OS);
GREENGUARD®; RoHS-compliant; Cisco EnergyWise compatible; ULE Gold

Accessories

For compatible accessories, please go to TC-AQP sheet

See footnotes for more detailed information

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