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Summary of Changes

This section describes the technical changes made in this edition. This edition might also include minor corrections and editorial changes which are not identified.

January 2020 - Version 554

Additions in this update

► New product(s)
  ThinkSmart Edition Tiny M920q for Zoom Rooms

► New model(s)
  None

► Others
  None

Withdrawals in this update

► Withdrawn product(s)
  None
### ThinkCentre M820z Platform Specifications

#### Processor

<table>
<thead>
<tr>
<th>Processor</th>
<th>Cores / Threads</th>
<th>Frequency Base/Max(GHz)</th>
<th>Cache</th>
<th>Memory Support (Up to)</th>
<th>Integrated Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel Celeron, Intel Pentium, or 8th / 9th Gen Intel Core™ i3 / i5 / i7 / i9 series</td>
<td>2 / 4</td>
<td>3.1G / 3.2G / 3.7G</td>
<td>2 MB DDR4-2400 / 2666</td>
<td>UHD 610 / 630</td>
<td></td>
</tr>
</tbody>
</table>

#### Memory

- 32GB max (16GB SO-DIMM only available via special bid models), DDR4-2666+, two 260-pin SO-DIMM sockets, dual-channel capable
- * System clocks down for the processors with lower memory controller

#### Storage

- **Some:** Hard Drive / SATA 6.0Gb/s, 2.5", 5400 rpm or 7200 rpm
- **Some:** Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" / M.2 SSD (2242 / 2280) / PCIe NVMe, PCIe 3.0 x2 or PCIe 3.0 x4
- **Some:** Intel Optane Memory (not supported in Celeron / Pentium Processor), M.2
- **Some:** DVD-ROM SATA 1.5Gb/s Drive, slim (9.0mm)
- **Some:** DVD Burner (DVD±RW), SATA 1.5Gb/s Drive, slim (9.0mm)

#### Optical Media reader

- Optional 3-in-1 media card reader

#### Graphics

- **Intel HD Graphics 610**: in processor, uses main memory, DirectX 12, external monitor support via DisplayPort™:
  - Max resolution: 4096x2304 (DP) @60Hz, 1920x1080 (Panel) @60Hz

#### Display

- 21.5" (546.1mm) Full HD 1080p (1920x1080) TFT color, Borderless design, TFT-LCD, In-Plane Switching technology (In-Plane Switching may refer to IPS, PLS, ADS, AHVA, and AA), Wide viewing angle (+-85°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, support Low Blue Light Mode

#### Multi-touch Camera

- Optional multi-touch, supports 10-point, AIT (Advanced in-cell Touch) technology
- Optional 1080p camera, with dual microphone, LED indicator, physical switch on/off, supports multi-degree rotation (horizontal 0° to 180°, vertical -25° to 25°)

#### Controls

- Physical buttons on sides for microphone mute and power on/off

#### Chipset

- **Intel B360 Chipset**

#### Rear ports

- Four USB 3.1 Gen1 (one supports Smart Power On), one ethernet (RI-J45), one DisplayPort, one optional serial (9-pin), one USB 3.1 Gen2 (one is Always On and fast charge), one USB-C Type-C Gen 1, one optional card reader, one headphone jack / microphone combo jack (3.5mm)

#### Side ports

- Four USB 3.1 Gen1 (one supports Smart Power On), one ethernet (RI-J45), one DisplayPort, one optional serial (9-pin), one USB 3.1 Gen2 (one is Always On and fast charge), one USB-C Type-C Gen 1, one optional card reader, one headphone jack / microphone combo jack (3.5mm)

#### Audio support

- High Definition (HD) Audio, Realtek ALC233 / two internal speakers (2W x 2), Dolby Audio™ Premium

### WLAN

- Some: 11ac wireless, M.2 Card, Realtek RTL8821CE (dual band), Wi-Fi + Bluetooth 4.2 combo adapter, 1x1
- Some: 11ac wireless, M.2 Card, Realtek RTL8822BE (dual band), Wi-Fi + Bluetooth 4.2 combo adapter, 2x2
- Some: 11ac wireless, M.2 Card, Intel Dual Band Wireless AC 3165, Wi-Fi + Bluetooth 4.2 combo adapter, 1x1
- Some: 11ac wireless, M.2 Card, Intel Dual Band Wireless AC 8265, Wi-Fi + Bluetooth 4.2 combo adapter, 2x2
- **Some:** Bluetooth 4.2 wireless, integrated in Wi-Fi + BT combo adapter

### Ethernet

- Gigabit ethernet, Realtek RTL8111F, Wake on LAN™

### Manageability

- None

#### Security features

- Security slot (in rear for attachment of Kensington® MicroSaver® cable)
- Boot sequence control
- Security features (built-in hard drive lock)
- * Security slot in rear for attachment of Kensington® MicroSaver® cable
- **Smart USB protection, allows keyboard/ mouse only, blocks all storage devices
- **Optional Chassis intrusion switch

#### Keyboard

- **Some:** Lenovo Calliope Keyboard (USB connector), black
- **Some:** Lenovo Calliope Keyboard (USB connector), black
- **Some:** Lenovo Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- **Some:** Lenovo Calliope Mouse (USB connector), black
- **Some:** Lenovo Fingerprint Mouse (USB connector), Windows Hello support, black
- **Some:** Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black

### Mouse

- **Business black color
- **Touchless back cover, stand, memory removal
- **Support VESA mount (100mm)

#### Mechanical

- Dimensions (WxDxH): 491 X 49 X 342 (mm)
- Power supply: 150 watts, autosensing, 90% PSU

#### Preloaded applications

- Lenovo Vantage
- Microsoft Office preloaded; purchase a product key to activate
- Cyberlink PowerDVD (only for models with DVD / DVD±RW)
- Cyberlink Power2GO (only for models with DVD±RW)
- Lenovo Accessibility tools
- Lenovo Support App
- Lenovo System Update
- Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black

#### Power supply

- 150 watts, autosensing, 90% PSU

#### Limited warranty

- 1-year or 3-year, depot repair service / service upgrades available
- 1-year or 3-year, limited onsite service / service upgrades available

#### Preloaded operating system

- Windows 10 Pro 64-bit

#### Preloaded applications (only some listed)

- Lenovo Vantage
- Microsoft Office preloaded; purchase a product key to activate
- Cyberlink PowerDVD (only for models with DVD / DVD±RW)
- Cyberlink Power2GO (only for models with DVD±RW)
- Lenovo Support App
- Lenovo System Update
- Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black

#### Environment

- ENERGY STAR® 7.0, EPEAT® Silver rating* (*not for non-OS models), ErP Lot 3, TCO AIo Computer certified, GREENGUARD® certified, TUV Eye comfort certified (for Full Function Monitor Stand only), TUV Low Blue Light certified, TUV Ultra Low Noise certified (on some models), RoHS-compliant

#### MIL-SPEC test

- Military Standard 810G

#### Accessories

- For compatible accessories, please go to http://smartfind.lenovo.com

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

Lenovo, June 2019
Processor | Intel® Celeron®, Intel Pentium®, or 8th / 9th Gen Intel Core™ i3 / i5 / i7 / i9 series | Intel® UHD 630
---|---
Core i5-9400 | 29.0G / 4.0G | 8 MB DDR4-2400 | 12 MB DDR4-2400
Core i5-9600 | 3.1G / 4.6G | 9 MB DDR4-2400 | 12 MB DDR4-2400
Core i7-9700 | 3.0G / 4.9G | 9 MB DDR4-2400 | 12 MB DDR4-2400
Core i9-9900 | 3.1G / 5.0G | 16 MB DDR4-2400 | 12 MB DDR4-2400

Memory | 32GB max (16GB SO-DIMM only available via special bid models), DDR4-2666*, two 260-pin SO-DIMM sockets, dual-channel capable
---|---

Storage | Some: Hard Drive / SATA 6.0Gb/s, 2.5" SFF or 3.5" SFF, up to 2.5" HDD (2nd HDD occupies ODD bay), RAID0/1 support (RAID0 preset only available via special bid model)
---|---

Graphics | Intel HD Graphics 610/630 in processor, uses main memory, DirectX® 12, external monitor via DisplayPort™
---|---

Display | 23.8" (604.5mm) Full HD 1080p (1920x1080) TFT color, Borderless design, In-Plane Switching technology (In-Plane Switching, also refer to IPS, PLS, ADS, AHVA, and AA), wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, support Low Blue Light Mode, work as standalone monitor via DisplayPort (DP in / out combo)
---|---

Multi-touch | Some: 1080p camera, with dual microphones, LED indicator, physical switch on/off, supports multi-degree rotation (horizontal 0° to 180°, vertical -25° to 25°)
---|---

Camera | RGBIR camera, 1080p, with dual microphones, physical switch on/off, supports multi-degree rotation (horizontal 0° to 180°, vertical -25° to 25°); Windows Hello support, only available via special bid models
---|---

Controls | Physical buttons on side for microphone control and power on/off
---|---

Chipset | Intel® Q370 Chipset
---|---

Rear ports* | Four USB 3.1 Gen1 (one supports Smart Power On), one ethernet (RJ-45), one DisplayPort in/out combo port, one optional serial (9-pin)
---|---

Side ports* | One USB 3.1 Gen1, one USB 3.1 Type-C Gen1, one optional card reader, one headphone / microphone combo jack (3.5mm)
---|---

M.2 card slot | Two M.2 Card slots (one for WLAN, one for SSD/Optane)
---|---

Audio support | High Definition (HD) Audio, Realtek ALC233 / two internal speakers (3W x 2), Dolby® Audio™ Premium
---|---

WLAN | Some: 11ac Wi-Fi + BT 4.2, M.2 Card, Realtek RTL8821CE (dual band), 1x1
---|---

Bluetooth™ | Some: Bluetooth 4.2, 5.0 wireless, integrated in Wi-Fi + BT combo adapter
---|---

Management | Intel Active Management Technology 12.0 (Intel AMT 12.0); Intel vPro technology on some models (require choosing a vPro-support Wi-Fi adapter to enable vPro function through wireless connection)
---|---

Security chip | Discrete TPM 2.0, TCG Certified
---|---

Security features | • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; one Kensington lock also locks chassis)
---|---

Power supply | 150 watts, autosensing, 90% PSU
---|---

Limited warranty* | Some: 1-year or 3-year, depot repair service / service upgrades available
---|---

Preload | Preloaded operating system
---|---

Preloaded applications (only some listed) | Lenovo Vantage
---|---

Environment | ENERGY STAR® 7.0, EPEAT® Silver rating* ("not for non-OS models), Erp Lot 3, TCO AIO Computer certified, GREENGUARD® certified, TUV Eye comfort certified, TUV Low Blue Light certified, TUV Ultra Low Noise certified (on some models), RoHS-compliant
---|---

MIL-STD test | MIL-STD-810G military certification (Low Pressure [Altitude], High Temperature, Low Temperature, Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus)
---|---

Accessories | For compatible accessories, please go to http://smartfind.lenovo.com
---|---

Note: The specifications above may not be available in all regions.
### ThinkCentre M90n-1 Nano Platform Specifications

**Product Specifications Reference (PSREF)**

#### Processor

<table>
<thead>
<tr>
<th>Processor</th>
<th>Cores / Threads</th>
<th>Frequency Base/Max(GHz)</th>
<th>Cache</th>
<th>Memory Support (Up to)</th>
<th>Integrated Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i3-8145U</td>
<td>2 / 4</td>
<td>2.1G / 3.9G</td>
<td>4 MB</td>
<td>DDR4-2400</td>
<td>UHD 620</td>
</tr>
<tr>
<td>Core i5-8265U</td>
<td>4 / 8</td>
<td>1.6G / 3.9G</td>
<td>6 MB</td>
<td>DDR4-2400</td>
<td>UHD 620</td>
</tr>
<tr>
<td>Core i7-8865U</td>
<td>4 / 8</td>
<td>1.9G / 4.8G</td>
<td>8 MB</td>
<td>DDR4-2400</td>
<td>UHD 620</td>
</tr>
</tbody>
</table>

#### Memory

8GB or 16GB / DDR4-2666* / soldered to system board, no sockets, non-ECC

* System automatically clocks down for the processors with lower memory controller.

#### Storage

Support up to two M.2 SSD

Some: M.2 22280 SSD / PCIe NVMe, PCIe 3.0 x 4

Some: M.2 22422 SSD / PCIe NVMe, PCIe 3.0 x 2

* M.2 SSD / Optane with SSD in PCIe 3.0 x 2 M.2 slot can only run at PCIe 3.0 x 2

* Depending on many factors, actual data transfer speed may be lower than theoretical speed.

#### RAID

RAID 0/1 support (RAID preset only available via special bid model)

None

#### Graphics

Intel UHD Graphics 620 in processor, uses main memory, DirectX 12, one DisplayPort™, one USB 3.1 Type-C Gen2 with display function, up to 2 independent displays;

- Max resolution: 4096x2304 (DP)@60Hz; 4096x2304 (Type-C)@60Hz;
- Optional DP to VGA dongle, DP to HDMI dongle, Type-C to VGA dongle, Type-C to HDMI dongle, Type-C to DP dongle;

#### Optical

RAID 0/1 support (RAID preset only available via special bid model)

None

#### Chipset

Intel SoC (System on Chip) platform

#### Monitor cable

2x USB 3.1 Gen2, 1x USB 3.1 Type-C Gen 2, one headphone / microphone combo jack (3.5mm)

#### Rear ports (Std.)

2x USB 3.1 Gen2, 1x USB 3.1 Type-C Gen 2 (with display function, support power-in [20V and >45W]), 1x ethernet (RJ-45), 1x DisplayPort

#### Audio support

Realtek ALC333VB / internal speaker (1watt)

#### WLAN

Some: 11ac wireless, M.2 Card, Realtek RTL8822CE (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 1x1

Some: 11ac wireless, M.2 Card, Realtek RTL8822CE (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 2x2

Some: 11ac wireless, M.2 Card, Intel Wireless-AC 9462 (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 1x1

Some: 11ac wireless, M.2 Card, Intel Wireless-AC 9560 (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 2x2

Some: 11ac wireless, M.2 Card, Intel Wireless-AC 9560 (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 2x2

#### Bluetooth

Some: Bluetooth 5.0 wireless, integrated in Wi-Fi + BT combo adapter

#### Ethernet

Gigabit ethernet, Intel Ethernet Connection I219-LM(Jacksonville), Wake on LAN™

#### Security features

- Security slot (in rear for optional Kensington® MicroSaver® cable)
- Chassis intrusion switch
- Power-on password
- Administrator password
- Hard disk password

#### Security chip

Intel vPro technology on some models (require choosing a vPro-support Wi-Fi adapter to enable vPro function through wireless connection)

Discrete TPM 2.0, TCG Certified

#### Manageability

- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Smart USB protection, allows keyboard/ mouse only, blocks all storage devices

#### Mechanical

Nano (0.35L), black color; metal case

Three M.2 slots: two for M.2 SSD (one PCIe 3.0 x 4 and one PCIe 3.0 x 2) and one for WLAN

#### Dimensions (WxDxH)

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions (WxDxH)</th>
<th>Weight (Approx.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M90n-1 Nano</td>
<td>7.05” X 3.46” X 0.87”</td>
<td>1.11 lb (0.505 kg), vary by config</td>
</tr>
</tbody>
</table>

#### Floor Stand

VESA mount bracket kit, supports VESA 75mm

#### Power supply

65 watts AC/DC adapter, autosensing, 88% PSU (Not for TIO models)

#### Limited warranty

Some: 1-year, unlimited onsite service / service upgrades available

Some: 3-year, unlimited onsite service / service upgrades available

#### Preload

Windows® 10 Pro 64-bit

#### Environment

ENERGY STAR® 7.1, EPEAT® Silver rating (North America), ErP Lot 3, TCO 8.0, TUV ultra low noise verified (on some models), RoHS, WEEE, REACH

#### MIL-SPEC test

MIL-STD-810H (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Solar Radiation)

#### Accessories

For compatible accessories, please go to http://smartfind.lenovo.com

Note: The specifications above may not be available in all regions.
ThinkCentre M90n-1 Nano IoT Platform Specifications

Product Specifications Reference (PSREF)

Processor

<table>
<thead>
<tr>
<th>Processor</th>
<th>Cores / Threads</th>
<th>Frequency Base/MAX(GHz)</th>
<th>Cache</th>
<th>Memory Support (Up to)</th>
<th>Integrated Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel Celeron™ or 8th Generation Intel Core™ i3 Processor</td>
<td>2 / 2</td>
<td>1.8G</td>
<td>2 MB</td>
<td>DDR4-2133</td>
<td>UHD 610</td>
</tr>
<tr>
<td>Celeron 4205U</td>
<td>2 / 2</td>
<td>1.8G</td>
<td>2 MB</td>
<td>DDR4-2133</td>
<td>UHD 610</td>
</tr>
<tr>
<td>Core i3-8145U</td>
<td>2 / 4</td>
<td>2.1G / 3.9G</td>
<td>4 MB</td>
<td>DDR4-2400</td>
<td>UHD 620</td>
</tr>
</tbody>
</table>

Memory

* System automatically clocks down for the processors with lower memory controller

Storage

Support up to two M.2 SSD
Some: M.2 2280 SSD / PCIe NVMe, PCIe 3.0 x 4*
Some: M.2 2242 SSD / PCIe NVMe, PCIe 3.0 x 2
Some: Intel Optane™ Memory H10 with Solid State Storage, M.2 2280, PCIe NVMe 3.0 x 4 (not support Celeron)

RAID

Optical None

RAID 0/1 support (RAID preset only available via special bid model)

RAID with SSD / Optane with SSD in PCIe 3.0 x 2 M.2 slot can only run at PCIe 3.0 x 2

Graphics

Intel UHD Graphics 610/620 in processor, uses main memory, DirectX® 12, one DisplayPort™, one USB 3.1 Type-C Gen2 with display support, up to 2 independent displays;
Max resolution: 4096x2304 (DP) @ 60Hz; 4096x2304 (Type-C) @ 60Hz;
Optional DP to VGA dongle, DP to HDMI dongle, Type-C to VGA dongle, Type-C to DP dongle

Monitor cable

Audio support

Realtek ALC233VB / internal speaker (1watt)

Chipset

Intel SoC (System on Chip) platform

Front ports (Std.)* 2x USB 3.1 Gen2, 1x USB 3.1 Type-C Gen 2, one headphone / microphone combo jack (3.5mm), 2x serial

Rear ports (Std.)* With Celeron: 1x USB 2.0, 1x USB 3.1 Type-C Gen 2 (with display function, support power-in [20V, > 45W]), 1x ethernet (RJ-45), 1x DisplayPort
With Core i3: 1x USB 3.1 Gen2, 1x USB 3.1 Type-C Gen 2 (with display function, support power-in [20V, > 45W]); 2x ethernet (RJ-45), 1x DisplayPort

I/O box* Optional I/O box, connect to the USB 3.1 Type-C Gen 2 port 2 port of M90n-1 Nano, extends 2x serial, 2x ethernet (RJ-45), I/O box is equipped with Realtek RTL8153B, gigabit ethernet, 1x DI (Digital Input) connector, 1x DO (Digital Output) connector

* Depending on many factors, actual data transfer speed may be lower than theoretical speed

Audio support

Realtek ALC233VB / internal speaker (1watt)

WLAN

Some: 11ac wireless, M.2 Card, Realtek RTL8822CE (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 1x1
Some: 11ac wireless, M.2 Card, Realtek RTL8822CE (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 2x2
Some: 11ac wireless, M.2 Card, Intel Wireless-AC 9462 (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 1x1
Some: 11ac wireless, M.2 Card, Intel Wireless-AC 9560 (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 2x2
Some: 11ac wireless, M.2 Card, Intel Wireless-AC 9560 (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 2x2

Bluetooth Ethernet

Some: Bluetooth 5.0 wireless, integrated in Wi-Fi + BT combo adapter
With Core i3: Gigabit ethernet, Realtek RTL8111K, 1x RJ-45, Wake on LAN®
With Core i3: Two gigabit ethernet, Realtek RTL8111K and RTL8111HN, 2x RJ-45

Some: Bluetooth 5.0 wireless, Intel vPro technology support, 2x2

WLAN

Some: 11ac wireless, M.2 Card, Realtek RTL8882CE (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 1x1
Some: 11ac wireless, M.2 Card, Realtek RTL8882CE (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 2x2
Some: 11ac wireless, M.2 Card, Intel Wireless-AC 9462 (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 1x1
Some: 11ac wireless, M.2 Card, Intel Wireless-AC 9560 (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 2x2
Some: 11ac wireless, M.2 Card, Intel Wireless-AC 9560 (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 2x2

Security chip Security features

Discrete TPM 2.0, TCG Certified

● Security slot (in rear for optional Kensington® MicroSaver® cable)
● Chassis intrusion switch
● Power-on password
● Administrator password
● Hard disk password

Manageability

None

Boot sequence control

Boot without keyboard and mouse

Individual USB port disablement

Keyboard

Some: Lenovo Calliope Keyboard (USB connector), black
Some: Lenovo Traditional Keyboard (USB connector), black
Some: Lenovo Calliope Wireless Keyboard (2.4GHz via USB receiver), black
Some: Lenovo Calliope Mouse (USB connector), black
Some: Lenovo Fingerprint Mouse (USB connector), Windows Hello support, black
Some: Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black

Mouse

Some: Lenovo Calliope Mouse (USB connector), black
Some: Lenovo Fingerprint Mouse (USB connector), Windows Hello support, black
Some: Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black

Mechanical

Nano (fanless 0.55L), black color; metal case
Four M.2 slots: two for M.2 SSD (one PCIe 3.0 x4 and one PCIe 3.0 x2), one for WLAn, and one for WWAN

Preload

Preloaded operating system

Some: Windows® 10 Pro 64-bit
Some: Windows 10 Home 64-bit
Some: Windows 10 IoT Enterprise (only available via special bid model)

Environment

ENERGY STAR® 7.1*, EPEAT Silver rating (North America)*, ErP Lot 3, TCO 8.0, TUV ultra low noise verified (on some models), RoHS, WEEE, REACH
* Not for the models with I/O box

MIL-SPEC test

MIL-STD-810H* (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Solar Radiation)*
* Not for the models with I/O box

Accessories

For compatible accessories, please go to http://smartfind.lenovo.com

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

Lenovo, January 2020
## ThinkCentre M710 SFF Platform Specifications

**Processor**

<table>
<thead>
<tr>
<th>Processor</th>
<th>Cores / Threads</th>
<th>Frequency Base/Max(GHz)</th>
<th>Cache</th>
<th>Memory Support (Up to)</th>
<th>Integrated Graphics</th>
</tr>
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<tbody>
<tr>
<td>Pentium G4400</td>
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<tr>
<td>Core i3-6100</td>
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<td>HD 630</td>
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<tr>
<td>Core i7-7600</td>
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<td>3.6G / 4.2G</td>
<td>8 MB</td>
<td>DDR4-2400</td>
<td>HD 630</td>
</tr>
</tbody>
</table>

**Memory**

- 64GB max, UDIMM, DDR4-2400, four 288-pin DIMM sockets, non-ECC, dual-channel capable
- * System automatically clocks down for the processors with lower memory controller speed

**Storage**

- Some: Hard Drive / SATA 6.0Gb/s, 2.5" or 3.5", 5400 rpm or 7200 rpm
- Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" or 3.5"
- Some: M.2 Solid State Drive (SSD) / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s
- Some: Intel Optane™ Memory (models with 7th gen Core processor), M.2
- Some: DVD Burner (DVDs+RW), SATA 1.5Gb/s Drive, slim (9.0mm)
- Some: Three onboard SATA 6.0Gb/s connectors
- Optional 7-in-1 media reader

**Optical**

- Intel HD Graphics 510/530/610/630 in processor, uses main memory, DirectX 12, one VGA, two DisplayPort™, supports 3 independent displays, works along with discrete graphics to support more displays;
- max resolution: 4906x2304 (DP) @60Hz; 2048x1536 (VGA) @50Hz
- Some: NVIDIA GeForce® GT 730, DirectX 12, 2GB, PCIe 2.0 x8 adapter, two DisplayPort, 35 watts;
- max resolution: 3840x2160 (DisplayPort) @60Hz;
- Optional DP to VGA, DP to DVI-D (single link), DP to dual DP, or DP to HDMI 1.4

**Chipset**

- Intel B250 Chipset

**Monitor**

- Four USB 3.1 Gen1, optional two USB 3.1 Type-C Gen 2 (only available via special bid), microphone (3.5mm), headphone (3.5mm)
- Two USB 3.1 Gen1, two USB 2.0, optional two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), one VGA, two DisplayPort, two PS/2 ports (keyboard/mouse);
- Two additional DisplayPort on optional graphics on some models
- Rear audio ports: Line-in (3.5mm), line-out (3.5mm), microphone-in (3.5mm)
- None
- * Depending on many factors, actual data transfer speed may be lower than theoretical speed

**Audio**

- High Definition (HD) Audio, Realtek ALC862 / optional internal speaker (1.5 watt)

**WLAN**

- Some: 11ac wireless, M.2 Card, Qualcomm Atheros QCA9377A (dual band), Wi-Fi + Bluetooth 4.1 combo adapter, 1x1
- Some: 11ac wireless, M.2 Card, Qualcomm Atheros QCA6174A (dual band), Wi-Fi + Bluetooth 4.1 combo adapter, 2x2

**Bluetooth**

- Some: 11ac wireless, M.2 Card, Intel Dual Band Wireless-AC 3165, Wi-Fi + Bluetooth 4.1 combo adapter, 1x1
- Some: 11ac wireless, M.2 Card, Intel Dual Band Wireless-AC 8265, Wi-Fi + Bluetooth 4.1 combo adapter, 2x2
- Some: Bluetooth 4.1 wireless, integrated in Wi-Fi + BT combo adapter

**Ethernet**

- None

**Manageability**

- TPM (Trusted Platform Module) 2.0, TCG Certified
- * Downgrade to TPM1.2 for the models with Win10 DG Win7 32 OS

**Security chip**

- None

**Keyboard**

- Some: Lenovo Calliope Keyboard (USB connector), black
- Some: Lenovo Traditonal Keyboard (USB connector), black
- Some: Lenovo Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Some: Lenovo Calliope Mouse (USB connector), black

**Mouse**

- Some: Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black

**Mechanical**

- SFF (8.4L), black color; metal case
- * (WxOxD)/3.6" X 11.4" X 13.5"; 92.5mm X 290.5mm X 342.5mm
- Approx. 13.2 lb (6.0 kg), weight may vary by configuration
- Tastless cover, disk, optical removal
- Optional dust filter
- Bay 1: Slim external ODD bay
- Bay 2: 3.5", 1" high, internal, HDD/SSD
- Bay 3: 2.5", internal, HDD/SSD (optional bay)
- Slot 1: low-profile (length < 150mm, height < 68mm), PCIe 3.0 x16*
- Slot 2: low-profile (length < 150mm, height < 68mm), PCIe 3.0 x1*
- Slot 3: low-profile (length < 150mm, height < 68mm), PCIe 3.0 x1*
- Slot 4: no slot, only bracket for optional port extension*
- M.2 card slots: Two (one for WLAN, one for SSD/Optane)
- Optional 2 front USB3.1 Type-C ports module occupies PCIe x16 slot (x4 card), optional rear 2x USB2.0 / parallel / 2nd serial occupy one expansion slot
- Optional system floor stand for vertical orientation

**Power supply**

- Some: 180 watts, autosensing, 85% PSU
- Some: 210 watts, autosensing, 92% PSU (only available via special bid)

**Limited warranty**

- Some: 1-year or 3-year, depot service / service upgrades available
- Some: 1-year or 3-year, limited onsite service / service upgrades available

**Preload**

- Preloaded operating system
- Windows 7 Professional 32/64 preinstalled through downgrade rights in Windows 10 Pro 64-bit (not available with 7th Gen Intel processor)
- Windows 10 Pro 64-bit
- Windows 10 Home 64-bit
- Preloaded applications (only some listed)
- Microsoft Office preloaded; purchase a product key to activate
- Only for Window 10
- Lenovo Companion
- Lenovo Solution Center
- Lenovo ThinkVantage Tools
- Create Recovery Media
- Adobe® Reader
- Cyberlink PowerDVD Create
- ENERGY STAR® 6.1, EPEAT™ Gold rating (North America), EPEAT® 6.1, EPEAT Gold rating (North America)
- TUV low noise verified (on some models)

**Environment**

- ENERGY STAR® 6.1, EPEAT™ Gold rating (North America), EPEAT® 6.1, EPEAT Gold rating (North America)
- TUV low noise verified (on some models)

**Accessories**

- For compatible accessories, please go to http://www.lenovoquickpick.com

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

Lenovo, June 2017
## ThinkCentre M710e SFF Platform Specifications

### Processor

<table>
<thead>
<tr>
<th>Processor</th>
<th>Cores / Threads</th>
<th>Frequency Base/Max(GHz)</th>
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<td>DDR4-2133</td>
<td>HD 630</td>
</tr>
</tbody>
</table>

### Memory

- 32GB max, UDIMM, DDR4-2400*, two 288-pin DIMM sockets, non-ECC, dual-channel capable
- *System channel clocks down for the processors with lower memory controller

### Storage

<table>
<thead>
<tr>
<th>Type</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard Drive</td>
<td>Some: Hard Drive / SATA 6.0Gb/s, 2.5&quot; or 3.5&quot;, 5400 rpm or 7200 rpm</td>
</tr>
<tr>
<td>SSD</td>
<td>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5&quot;</td>
</tr>
<tr>
<td>DVD Burner</td>
<td>Some: DVD-ROM SATA 1.5Gb/s Drive, slim (9.0mm)</td>
</tr>
</tbody>
</table>

### Optical

- DVD burner (DVD±RW), SATA 1.5Gb/s Drive, slim (9.0mm)
- Optional 7-in-1 media reader

### Onboard SATA

- Two onboard SATA 6.0Gb/s connectors
- Media reader

### Graphics

- Intel HD Graphics 510/530/610/630 in processor, uses main memory, DirectX® 12, one VGA, one DisplayPort™, supports 2 independent displays, works with discrete graphics to support more displays:
  - Max resolution: 4096x2160 (DP) @60Hz; 1920x1200 (VGA) @60Hz
  - NVIDIA GeForce® GT 730, DirectX 12, 2GB, PCIe 2.0 x8 adapter, two DisplayPort, 35 watts;
  - Max resolution: 3840x2160 (DisplayPort) @60Hz

### Monitor cable

- Optional DP to VGA, DP to DVI-D (single link), DP to dual DP, or DP to HDMI 1.4

### Chipset

- Intel H270 Chipset

### Front ports

- Two USB 3.1 Gen1, microphone (3.5mm), one headphone / microphone combo jack (3.5mm)

### Rear ports

- Two USB 3.1 Gen1, two USB 2.0, optional two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), one VGA, one DisplayPort, optional external USB to PS/2 ports cable (for PS/2 keyboard / mouse); additional DisplayPort on optional graphics on some models

### Rear audio ports

- Line-out jack (3.5mm)

### IEEE 1394

- None
- * Depending on many factors, actual data transfer speed may be lower than theoretical speed

### Audio support

- High Definition (HD) Audio, Realtek ALC233 / internal speaker (1.5 watt )

### WLAN

- None

### Bluetooth

- None

### Ethernet

- Gigabit ethernet, Realtek RTL8111HN, Wake on LAN®

### Modem

- None

### Manageability

- None

### Security chip

- TPM (Trusted Platform Module) 2.0, TCG Certified
- * Downgrade to TPM1.2 for the models with Win10 DG Win7 32 OS

### Security features

- Security slot (in rear for optional Kensington® MicroSaver® cable)
- Padlock loop
- Smart USB protection, allows keyboard / mouse only, blocks all storage devices
- Optional smart card clip to physically lock both keyboard and mouse

### Keyboard

- Some: Lenovo Calliope Keyboard (USB connector), black
- Some: Lenovo Traditional Keyboard (USB connector), black
- Some: Lenovo Calliope Mouse (USB connector), black
- Some: Lenovo Fingerprint Mouse (USB connector), Windows Hello support, black

### Mouse

- SFF (7.4L), black color, metal case
- *(WxDxH) 3.9" X 11.9" X 10.8"; 100mm X 303.5mm X 273.5mm
- *Approx. 9.37 lb (4.25 kg), weight may vary by configuration
- Bay 1: Slim external ODD bay
- Bay 2: 3.5", 1" high, internal, supports 2.5" or 3.5" HDD/SSD (2.5 to 3.5 bracket comes with disk)
- Slot 1: low-profile (length < 152mm, height < 64mm), PCIe 3.0 x16®
- Slot 2: low-profile (length < 152mm, height < 64mm), PCIe 3.0 x1®
- M.2 card slots: one for SSD
- *Optional rear 2x USB2.0 / parallel occupies one expansion slot
- Optional system floor stand for vertical orientation

### Mechanical

- Fanless cooling
- *Energy STAR® 6.1, EPEAT® Silver rating (North America), EPEAT Lot 3, RoHS-compliant, WEEE

### Floor Stand

- *Optional rear 2x USB2.0 / parallel occupies one expansion slot
- Optional system floor stand for vertical orientation

### Power supply

- 180 watts, autosensing, 85% PSU

### Limited warranty

- 1-year or 3-year, depot service / service upgrades available
- 3-year or 1-year, limited onsite service / service upgrades available

### Preload

- Preloaded operating system
  - Some: Windows 10 Pro 64-bit
  - Some: Windows 10 Home 64-bit
  - Some: Windows 7 Professional 32/64 preinstalled through downgrade rights
  - In Windows 10 Pro 64-bit(not available with 7th Gen Intel processor)
- Preloaded applications (only some listed)
  - Microsoft Office preloaded;
  - purchase a product key to activate
  - Cyberlink PowerDVD (DVD, DVD±RW)
  - Cyberlink PowerDVD Create (DVD±RW)
  - Only for Windows 10
  - Lenovo Companion
  - Only for Windows 7
  - Lenovo Solution Center
  - Lenovo System Update
  - Create Recovery Media
  - Adobe® Reader®

### Environment

- ENERGY STAR® 6.1, EPEAT® Silver rating (North America), EPEAT Lot 3, RoHS-compliant, WEEE

### Accessories

- For compatible accessories, please go to [http://www.lenovoquickpick.com](http://www.lenovoquickpick.com)

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

Lenovo, January 2018
**ThinkCentre M715 SFF Platform Specifications**

**Processor**

<table>
<thead>
<tr>
<th>APU / processor</th>
<th>Cores / Threads</th>
<th>Frequency (Base/Max)</th>
<th>L2 Cache</th>
<th>Integrated Graphics</th>
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</tbody>
</table>

**Memory**

- 64GB max, UDIMM, DDR4-2400, four 288-pin DIMM sockets, non-ECC, dual-channel capable
  - System automatically clocks down for the processors with lower memory controller speeds

**Storage**

- Hard Drive SATA 6.0Gb/s, 2.5" or 3.5", 5400 rpm or 7200 rpm
- Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5"
- Some: M.2 Solid State Drive (SSD) / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s
- Some: DVD-ROM SATA 1.5Gb/s Drive, slim (9.0mm)
- Some: DVD Burner (DVDs+RW), SATA 1.5Gb/s Drive, slim (9.0mm)

**Optical**

- Three onboard SATA 6.0Gb/s connectors
- Optional 7-in-1 media reader

**Graphics**

- AMD Radeon™ Graphics in processor (not for AMD Ryzen processor), uses main memory, DirectX® 12, one VGA, two DisplayPort™ (Onboard VGA and DP ports and DP ports are invalid on the models with AMD Ryzen processor), supports 3 independent displays, works along with AMD discrete graphics to support more displays;
  - Maximum resolution: 4096x2160 (DP) @ 60Hz; 1920x1200 (VGA) @ 60Hz
  - Some: NVIDIA GeForce® GT 730, DirectX 12, 2GB, PCIe 2.0 x8 adapter;
  - Some: NVIDIA GeForce® GT 730, DirectX 12, 2GB, PCIe 2.0 x8 adapter, two DisplayPort, 35 watts;
  - Some: NVIDIA GeForce® GT 730, DirectX 12, 2GB, PCIe 2.0 x8 adapter, two DisplayPort, 35 watts;
  - Max resolution: 3840x2160 (DisplayPort) @ 60Hz;
- Optional DP to VGA, DP to DVI-D (single link), DP to dual DP, or DP to HDMI 1.4

**Chipset**

- AMD B350 Chipset

**Audio support**

- High Definition (HD) Audio, Realtek ALC662 / optional internal speaker (1.5 watt)

**WLAN**

- Some: Wireless and Bluetooth 4.1 combo adapter, 1x1

**Bluetooth™**

- Optional Bluetooth 4.0 or 4.1, integrated in Wi-Fi + BT combo adapter

**Ethernet**

- Gigabit ethernet, Realtek RTL8111EPV, Wake on LAN™

**Management Security chip**

- DASH

**Keyboard**

Some: Lenovo Calliope Keyboard (USB connector), black
Some: Lenovo Traditional Keyboard (USB connector), black
Some: Lenovo Calliope Wireless Keyboard (2.4GHz via USB receiver), black
Some: Lenovo Calliope Mouse (USB connector), black
Some: Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black

**Mouse**

Some: Lenovo Fingerprint Mouse (USB connector), Windows Hello support, black

**Security features**

- 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

**Mechanical**

- SFF (4.8L), black color: metal case
- (WxDxH) 3.6” x 11.4” x 13.5”; 92.5mm x 290.5mm x 343.5mm
- Approx. 13.2 lb (6.0 kg), weight may vary by configuration
- Toolless cover, disk, optical removal
- Optional dust filter
- Bay 1: Slim external ODD bay
- Bay 2: 3.5”, internal, HDD/SSD
- Bay 3: 2.5”, internal, HDD/SSD (bay only comes with 2.5" 2nd disk)
- Slot 1: low-profile (length < 150mm, height < 68mm), PCIe 3.0 x16
- Slot 2: low-profile (length < 150mm, height < 68mm), PCIe 2.0 x1
- Slot 3: low-profile (length < 150mm, height < 68mm), PCIe 2.0 x1
- Slot 4: no slot, only bracket for optional port extension
- M.2 card slots: two (one for WLAN, one for SSD)
- * Optional front USB3.1 Type-C x2 module occupies PCIe x16 slot (x4 card), optional rear 2x USB2.0 / parallel / 2nd serial occupies one expansion slot

**Floor Stand**

Optional system floor stand for vertical orientation

**Power supply**

- Some: 180 watts, autosensing, 85% PSU
- Some: 210 watts, autosensing, 92% PSU (only available via special bid)

**Limited warranty**

- Some: 1-year or 3-year, depot service / service upgrades available
- Some: 1-year or 3-year, limited onsite service / service upgrades available

**Preload**

- Preloaded operating system
- Some: Windows® 7 Professional 32/64 preinstalled through downgrade rights in Windows 10 Pro 64-bit (Only available with Pro A6/A10/A12-8xxx APUs)
- Some: Windows 10 Pro 64-bit
- Some: Windows 10 Home 64-bit

**Preloaded applications (only some listed)**

- Microsoft Office preloaded;
- purchase a product key to activate
- Only for Window 10
- Lenovo Companion
- Only for Windows 7
- Lenovo Solution Center
- Lenovo ThinkVantage Tools
- Create Recovery Media
- Adobe® Reader®
- Cyberlink PowerDVD Create (DVD+RW)

**Environment**

- ENERGY STAR® 6.1, EPEAT® Gold rating (North America), ErP Lot 3, GREENGUARD®, RoHS-compliant

**Accessories**

- For compatible accessories, please go to [http://www.lenovoupickup.com](http://www.lenovoupickup.com)

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

Lenovo, July 2017
ThinkCentre M720 SFF Platform Specifications

Product Specifications Reference (PSREF)

Processor

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<td>2 MB</td>
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</tr>
</tbody>
</table>

Memory

64GB max, UDIMM, DDR4-2666, four 288-pin DIMM sockets, non-ECC, dual-channel capable*
* System automatically clocks down for the processors with lower memory controller

Storage

Some: Hard Drive / SATA 6.0Gb/s, 2.5" or 3.5"; 5400 rpm or 7200 rpm
Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5"
Some: M.2 Solid State Drive (SSD) / PCIe NVMe, PCIe 3.0 x 4*, 32Gb/s
* M.2 SSD (2242) PCIe NVMe only supports PCIe 3.0 x 2, 16Gb/s

Optical

Some: Intel Optane™ Memory (not support Celeron / Pentium Processor), M.2
Some: DVD-ROM SATA 1.5Gb/s Drive, slim (9.0mm)
Some: DVD Burner (DVs+RW), SATA 1.5Gb/s Drive, slim (9.0mm)

Onboard SATA Media reader

Optional 7-in-1 media reader

Graphics

Intel UHD Graphics 610/630 in processor, uses main memory, DirectX® 12, one VGA (up to 2048x1536 @60Hz), two DisplayPort™ (up to 4096x2304 @60Hz), supports 3 independent displays, more displays support via discrete graphics
Some: NVIDIA GeForce® GT 730 (End Of Life), DirectX 12, 2GB GDDR5, PCIe 3.0 x16, 35 watts, two DisplayPort (up to 3840x2160 @60Hz)
Some: AMD Radeon™ R520, DirectX 12, 2GB GDDR5, PCIe 3.0 x8, 30 watts, two DisplayPort (up to 4096x2160 @60Hz)

Monitor cable

Optional DP to VGA dongle, DP to DVI-D dongle, DP to dual DP dongle (for Collage Display with intel integrated graphics), or DP to HDMI 1.4 dongle

Chipset

Intel B360 Chipset

Front ports (Std.): 2x USB 3.1 Gen2, 2x USB 3.1 Gen1, 1x USB 3.1 Type-C Gen1 (15W charging), 1x Thunderbolt™ (USB-C), 1x headphone / microphone combo jack (3.5mm)
Front ports (Opt.): Optional (1x media reader)
Rear ports (Std.): 4x USB 2.0, 2x serial (9-pin), 1x ethernet (RJ-45), 1x VGA, 2x DisplayPort, 1x line-out (3.5mm)
Rear ports (Opt.): Optional: 2x USB 3.1 Gen1 via PCIe x1**, 2x USB 3.1 Type-C Gen2 via PCIe x4** (special bid only), 1x 2nd serial (9-pin), 4x serial (9-pin) via PCIe x1, 1x parallel (25-pin), 2x PS/2 ports (keyboard/mouse), additional RJ-45 and video ports available on optional graphics or ethernet card

** Depending on many factors, actual data transfer speed may be lower than theoretical speed
** Choose either 2x USB 3.1 Gen1 or 2x USB 3.1 Type-C Gen2

Audio support

High Definition (HD) Audio, Realtek ALC232VB2 / internal speaker (2 watt)
WLAN

Some: 11ac wireless, M.2 Card, Realtek RTL8822CE (dual band), Wi-Fi + Bluetooth 4.2 combo adapter, 1x1

Limited warranty

Some: 1-year or 3-year, depot service / service upgrades available
Some: 1-year or 3-year, limited onsite service / service upgrades available

Preload

Preloaded operating system
Some: Windows 10 Pro 64-bit
Some: Windows 10 Home 64-bit
Preloaded applications (only some listed)
Lenovo Vantage
Microsoft Office preloaded; purchase a product key to activate
Cyberlink PowerDVD (only for models with DVD / DVD±RW)
Cyberlink Power2GO (only for models with DVD / DVD±RW)

Environment

ENERGY STAR® 6.1, EPEAT® Silver rating (North America), ErP Lot 3, TCO, TUV low noise verified (coming soon, on some models), RoHS-compliant

Accessories

For compatible accessories, please go to http://smartfind.lenovo.com

Note: The specifications above may not be available in all regions.
Lenovo, December 2019
ThinkCentre M720e SFF Platform Specifications

Product Specifications Reference (PSREF)

Processor

<table>
<thead>
<tr>
<th>Processor</th>
<th>Cores / Threads</th>
<th>Frequency Base/Max(GHz)</th>
<th>Cache</th>
<th>Memory Support (Up to)</th>
<th>Integrated Graphics</th>
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</table>

Memory

- 32GB max, UDIMM, DDR4-2666*, two 288-pin DIMM sockets, non-ECC, dual-channel capable
- * Memory may be underclocked to DDR4-2400 for the lower memory controller in processor.

Storage

- Some: Hard Drive / SATA 6.0Gb/s, 2.5" or 3.5", 5400 rpm or 7200 rpm
- Some: M.2 Solid State Drive (SSD) / PCIe NVMe, PCIe 3.0 x2 or PCIe 3.0 x4
- Some: Intel Optane™ Memory, M.2 2280, PCIe NVMe, PCIe 3.0 x 2
- Some: DVD-ROM SATA 1.5Gb/s Drive, slim (9.0mm)
- Some: DVD Burner (DVD±RW), SATA 1.5Gb/s Drive, slim (9.0mm)
- Two onboard SATA 6.0Gb/s connectors
- Optional 7-in-1 media reader

Graphics

- Intel HD Graphics 610/630 in processor, uses main memory, DirectX® 12, one VGA, one DisplayPort™, supports 2 independent displays, works along with discrete graphics to support more displays:
  - Max resolution: 4096x2304 (DP) @60Hz; 2048x1536 (VGA) @50Hz
  - Some: AMD Radeon™ 520, DirectX 12, 2GB GDDR5, PCIe 3.0 x8 adapter, one VGA, one HDMI, 30 watts (Max)
  - Max resolution: 3840x2160 (HDMI) @30Hz; 2048x1536 (VGA) @85Hz
- Optional DP to VGA, DP to DVI-D (single link), DP to dual DP, or DP to HDMI 1.4

Chipset

- Intel B365 Chipset

Front ports

- Front USB 3.1 Gen1, microphone (3.5mm), one headphone / microphone combo jack (3.5mm)

Rear ports

- Rear USB 3.1 Gen1, two USB 2.0, serial (9-pin), ethernet (RJ-45), one VGA, one DisplayPort, Line-out jack (3.5mm)
- Rear USB 2.0, optional 2nd serial (9-pin), optional parallel (25-pin), optional external USB to PS/2 ports cable (for PS/2 keyboard / mouse);
- additional video ports or RJ-45 on optional graphics / ethernet card on some models
- * Depending on many factors, actual data transfer speed may be lower than theoretical speed

Audio support

- High Definition (HD) Audio, Realtek ALC623 / internal speaker (2 watt)

WLAN

- None

Bluetooth

- None

Ethernet

- Gigabit ethernet, Realtek RTL8111HN, Wake on LAN
- Some: Bitland BN8E8B*, gigabit ethernet, PCIe x1

Modem

- None

Note: The specifications above may not be available in all regions.
ThinkCentre M725 SFF Platform Specifications

Product Specifications Reference (PSREF)

Processor

<table>
<thead>
<tr>
<th>Processor</th>
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Memory

- 64GB max, UDIMM, DDR4-2466*, four 288-pin DIMM sockets, non-ECC, dual-channel capable
- System memory supports up to DDR4-2666, memory frequency may automatically clock down for the lower capability of memory controller in processor

Storage

- Some: Hard Drive / SATA 6.0Gb/s, 2.5" or 3.5", 5400 rpm or 7200 rpm
- Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5"
- Some: M.2 SSD / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s
- * 128GB SSD M.2 (2242) PCIe NVMe and AMD A6 / A8 / A10 / A12 processor only supports PCIe 3.0 x 2, 16Gb/s

Optical

- Some: DVD-ROM SATA 1.5Gb/s Drive, slim (9.0mm)
- Some: DVD Burner (DVDxRW), SATA 1.5Gb/s Drive, slim (9.0mm)

Onboard SATA

- Three onboard SATA 6.0Gb/s connectors, RAID 0/1 support (RAID preset only available via special bid model)

Media Reader

- Optional 7-in-1 media reader

Graphics

- AMD Radeon™ Graphics in processor (only for some processors), uses main memory
- DirectX 12, one VGA, two DisplayPort
- Onboard graphics with dedicated video ports are only available on the microprocessors with integrated graphics
- Displays 3 independent displays, works along with AMD discrete graphics to support more displays
- Max resolution: 4096x2160 (DP) @ 60Hz; 1920x1200 (VGA) @ 60Hz

Monitor Cable

- Optional DP to VGA dongle, DP to DVI-D dongle, DP to dual DP dongle, or DP to HDMI 1.4 dongle

Chipset

- AMD B450 Chipset

Front Ports

- Front ports ( Std.): 2x USB 3.1 Gen2, 2x USB 3.1 Gen1, 1x microphone (3.5mm), 1x headphone (3.5mm)
- Front ports (Opt.): Optional: 1x media reader, 2x USB 3.1 Type-C Gen2 via PCIe card (special bid only)
- Rear ports (Std.): 2x USB 3.1 Gen1, 2x USB 2.0, 1x serial (9-pin), 1x ethernet (RJ-45), 1x VGA**, 2x DisplayPort**, 2x PS/2 ports (keyboard / mouse); 1x line-in (3.5mm), 1x line-out (3.5mm), 1x microphone (3.5mm)
- Rear ports (Opt.): Optional: 2x USB 2.0, 1x 2nd serial (9-pin), 1 parallel (25-pin), additional RJ-45 and video ports available on optional graphics or ethernet card

Audio Support

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

WLAN

- Some: 11ac wireless, M.2 Card, Realtek RTL8821CE (dual band), Wi-Fi + Bluetooth 4.2 combo adapter, 1x1
- Some: 11ac wireless, M.2 Card, Qualcomm Atheros QCA9377A (dual band), Wi-Fi + Bluetooth 4.2 combo adapter, 1x1
- Some: 11ac wireless, M.2 Card, Realtek RTL8822BE (dual band), Wi-Fi + Bluetooth 4.2 combo adapter, 2x2
- Some: 11ac wireless, M.2 Card, Qualcomm Atheros QCA6174A (dual band), Wi-Fi + Bluetooth 4.2 combo adapter, 2x2

Bluetooth

- Some: Bluetooth 4.2, wireless, integrated in Wi-Fi + BT combo adapter

Power Supply

- Some: 180 watts, autosensing, 85% PSU
- Some: 210 watts, autosensing, 85% PSU
- Some: 260 watts, autosensing, 92% PSU (only available via special bid)

Power Stand

- Optional system floor stand for vertical orientation

Limited Warranty

- 1-year or 3-year, limited onsite service / service upgrades available

Preload

- Preloaded operating system
- Some: Windows 10 Pro 64-bit
- Some: Windows 10 Home 64-bit

Preloaded Applications

- Preloaded applications (only some listed)
- Lenovo Vantage
- Microsoft Office preloaded; purchase a product key to activate
- Cyberlink PowerDVD (only for models with DVD / DVDxRW)
- Cyberlink Power2GO (only for models with DVDs xRW)
- LinkedIn

Environment

- ENERGY STAR® 7.0*, EPEAT® Silver rating* (*not for non-OS models)
- EEpLot 3; RoHS-compliant

Accessories

- For compatible accessories, please go to http://smartfind.lenovo.com

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

Lenovo, July 2018
## Product Specifications Reference (PSREF)

### Processor
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<th>AMD Athlon PRO and Ryzen 3 / 5 / 7 PRO series processor</th>
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</thead>
<tbody>
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<td><strong>Processor</strong></td>
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<td>Athlon PRO 300GE</td>
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<td>Ryzen 3 PRO 3200G</td>
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<td>Ryzen 7 PRO 3700</td>
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<td>Ryzen 9 PRO 3900</td>
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</table>

### Memory
| 64GB max, UDIMM, DDR4-2666*, four 288-pin DIMM sockets, non-ECC, dual-channel capable |

### Storage
| Some: Hard Drive / SATA 6.0Gb/s, 2.5" or 3.5", 5400 rpm or 7200 rpm |

### Optical
| Some: DVD Burner (DVD±RW), SATA 1.5Gb/s Drive, slim (9.0mm) |

### Onboard SATA
| Three onboard SATA 6.0Gb/s connectors, RAID 0/1 support (RAID preset only available via special bid model) |

### Media reader
| Optional 7-in-1 media reader |

### Graphics
| AMD Radeon™ Graphics in processor (only for some processors), uses main memory, DirectX® 12, one VGA, two DisplayPort™ (Onboard VGA and DP ports are only available on the models with integrated graphics), supports 3 independent displays, works along with AMD discrete graphics to support more displays; Max resolution: 1080p (1920x1080) (DP)@60Hz; Some: AMD Radeon™ 520, DirectX 12, 2GB GDDR5, PCIe 3.0 x8 adapter, two DisplayPort, 30 watts (Max); Max resolution: 4096x2160 (DP)@60Hz |

### Monitor cable
| Optional DP to VGA, DP to DVI-D (single link), DP to dual DP, or DP to HDMI 1.4 |

### Chipset
| AMD PRO 560 FCH |

### Front ports
| (Std.) 2x USB 3.1 Gen2, 2x USB 3.1 Gen1, 1x microphone (3.5mm), 1x headphone (3.5mm) |
| Optiona: 1x media reader |

### Rear ports
| (Std) 2x USB 3.1 Gen1 (one support Smart Power-On), 2x USB 2.0, 1x serial (9-pin), 1x ethernet (RJ-45), 1x VGA**, 2x DisplayPort**, 2x PS/2 ports (keyboard / mouse); 1x line-in (3.5mm), 1x line-out (3.5mm), 1x microphone (3.5mm) |

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

### WLAN
| Some: 11ac wireless, M.2 Card, Realtek RTL8822CE (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 2x2 |
| Some: 11ac wireless, M.2 Card, Qualcomm Atheros QCA6174A (dual band), Wi-Fi + Bluetooth 4.2 combo adapter, 2x2 |
| Some: 11ac wireless, M.2 Card, Intel Wireless-AC 9260 (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 2x2 |

### Bluetooth™
| Some: Bluetooth 4.2 / 5.0 wireless, integrated in Wi-Fi + BT combo adapter |

### Ethernet
| Optiona: Gigabit ethernet, Realtek RTL8111EPV, Wake on LAN™ |

### Manageability
| Security chip |
| Security features |
| DASH 10/1.1 |

### Power supply
| Some: 180 watts, autosensing, 85% PSU |
| Some: 210 watts, autosensing, 85% PSU |
| Some: 260 watts, autosensing, 92% PSU (only available via special bid) |

### Limited warranty
| 1-year or 3-year, limited onsite service / service upgrades available |

### Preload
| Preloaded operating system |
| Some: Windows 10 Pro 64-bit |
| Some: Windows 10 Home 64-bit |
| Some: Windows 10 IoT Enterprise |
| Some: Linux Ubuntu |

### Environment
| ENERGY STAR® 7.0, EPEAT™ Silver rating™ (*not for non-OS models); ErP Lot 3, RoHS-compliant, WEEE |

### Accessories
| For compatible accessories, please go to http://smartfind.lenovo.com |

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

Lenovo, September 2019
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<td>HD 630</td>
</tr>
</tbody>
</table>

Memory

64GB max, UDIMM, DDR4-2400*, four 288-pin DIMM sockets, non-ECC, dual-channel capable
* System automatically clocks down for the processors with lower memory controller

Security chip

- Security slot (in rear for optional Kensington® MicroSaver® cable)
- Padlock loop
- Smart USB protection, allows keyboard/mouse only, blocks all storage devices
- Optional cable lock to physically lock both keyboard and mouse
- 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

Some: Lenovo Calliope Keyboard (USB connector), black
Some: Lenovo Traditional Keyboard (USB connector), black
Some: Lenovo Calliope Wireless Keyboard (2.4GHz via USB receiver), black

Mouse

Some: Lenovo Calliope Mouse (USB connector), black
Some: Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black

Mechanical

- SFF (8.4L), black color, metal case
- (WinOx) 3.6” X 11.4” X 13.5”; 92.5mm X 290.5mm X 343.5mm
- Approx. 11.92 lb (5.4 kg), weight may vary by configuration
- Toolless cover, disk, optical, graphic card removal
- Optional dust filter
  Bay 1: Slim external ODD bay
  Bay 2: 3.5”, 1” high, internal, HDD/SSD
  Bay 3: 2.5”, internal, HDD/SSD (optional bay)
  Slot 1: low-profile (length < 150mm, height < 68mm), PCIe 3.0 x16*
  Slot 2: low-profile (length < 150mm, height < 68mm), PCIe 3.0 x8*
  Slot 3: low-profile (length < 150mm, height < 68mm), PCIe 3.0 x16 (x4 signal)*
  Slot 4: no slot, only bracket for optional port extension*
  M.2 card slots: Two (one for WLAN, one for SSD/Optane)
  * Only 2 front USB3.1 Type-C ports module occupies PCIe x16 (x4 signal) slot, optional rear 2x USB2.0 / parallel / 2nd serial / cable lock / Wi-Fi antenna occupies one expansion slot

Floor Stand

Optional system stand floor for vertical orientation

Power supply

- Some: 180 watts, autosensing, 85% PSU
- Some: 210 watts, autosensing, 85% PSU
- Some: 250 watts, autosensing, 92% PSU (available via special bid)

Limited warranty

- Some: 1-year or 3-year, depot service / service upgrades available
- Some: 1-year or 3-year, limited onsite service / service upgrades available

Preload

Preloaded operating system

- Some: Windows® 7 Professional 32/64 preinstalled (not available with 7th Gen Intel® processor)
- Some: Windows 10 Pro 64-bit
- Some: Windows 10 Home 64-bit

Preloaded applications (only some listed)

- Microsoft Office preloaded;
- Lenovo Companion
- Lenovo Solution Center
- Lenovo ThinkVantage Tools
- Create Recovery Media
- Adobe® Reader
- Cyberlink PowerDVD Create (DVD+/RW)

Environment

- ENERGY STAR® 6.1, EPEAT™ Gold rating (North America), ErP Lot 3, GREENGUARD®, RoHS-compliant, TUV low noise verified (on some models)

Accessories

For compatible accessories, please go to http://www.lenovoquickpick.com

Lenovo, August 2017

Note: The specifications above may not be available in all regions.
### Product Specifications Reference (PSREF)

<table>
<thead>
<tr>
<th>Processor</th>
<th>Cores / Threads</th>
<th>Frequency</th>
<th>Cache</th>
<th>Memory Support (Up to)</th>
<th>Integrated Graphics</th>
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<tr>
<td>Celeron G4900</td>
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### Memory

- 64GB max, DDR4-2666, four 288-pin DIMM sockets, dual-channel capable
- *System automatically locks down for the processors with lower memory controller

### Storage

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<th>Capacity</th>
<th>Port</th>
<th>Speed</th>
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<td>Hard Drive</td>
<td>SATA 6.0Gb/s</td>
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<td>Some</td>
<td>Solid State Drive SSD</td>
<td>SATA 6.0Gb/s</td>
<td>2.5&quot;</td>
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<td>Some</td>
<td>M.2 Solid State Drive SSD</td>
<td>PCIe NVMe M.2 3.0 x 4</td>
<td>32GB/s</td>
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<td>Some</td>
<td>128GB SSD M.2 2242 PCIe NVMe only supports PCIe 3.0 x 2, 16GB/s</td>
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<td>Support</td>
<td>Intel Optane Memory (not supported on Celeron / Pentium Processor)</td>
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<td>M.2</td>
<td>Some</td>
<td>Type: M.2, 1.0Gbps, 9 (mm)</td>
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<td>Optical</td>
<td>Some</td>
<td>DVD Burner (DVDrW), SATA 1.5Gbps Drive, 9 (mm)</td>
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</table>

### Onboard SATA

Four onboard SATA 6.0Gb/s connectors, RAID 0/1 support (RAID preset only available via special bid model)

### Media reader

Optional 7-in-1 media reader

### Graphics

- **Intel HD Graphics 610/630**: in processor, uses main memory, DirectX® 12, one VGA (up to 2048x1536@50Hz), two DisplayPort™ (up to 4096x2304@60Hz), supports 3 independent displays, more displays support via discrete graphics
- **NVIDIA GeForce® GT 730**: end of life, DirectX 12, 2GB GDDR5, PCIe 2.0 x16, 35 watts, two DisplayPort (up to 3840x2160@60Hz)
- **AMD Radeon™ R720**: DirectX 12, 2GB GDDR5, PCIe 3.0 x8, 30 watts, two DisplayPort (up to 4096x2160@60Hz)

### Monitor cable

Optional DP to VGA dongle, DP to DVI-D dongle, DP to dual DP dongle (for Collage Display with Intel integrated graphics), or DP to HDMI 1.4 dongle

### Chipset

**Intel Q370 Chipset**

### Front ports & Rear ports

- **Front ports** (Std): 2x USB 3.1 Gen2, 2x USB 3.1 Gen1, 1x USB 3.1 Type-C Gen1 (15W charging), 1x microphone (3.5mm), 1x headphone / microphone combo jack (3.5mm)
- **Front ports** (Opt): 1x media reader
- **Rear ports** (Std): 4x USB 3.1 Gen1, 1x serial (9-pin), 1x ethernet (RJ-45), 1x VGA, 2x DisplayPort, 1x line-out (3.5mm)
- **Rear ports** (Opt): 2x USB 2.0, 2x USB 3.1 Gen1 via PCIe x1, 2x USB 3.1 Type-C Gen2 via PCIe x4 (special bid only), 1x 2nd serial (9-pin), 4x serial (9-pin) via PCIe x1, 1x parallel (25-pin), 2x PS/2 ports (keyboard/mouse), 1x Thunderbolt 3 (combo USB3.1 Type-C Gen 2 / DisplayPort) via PCIe x4 (available on 09/30/2018), additional RJ-45 and video ports available on optional graphics or ethernet card

### Power supply

- **Source**: 180 watts, autotuning, 95% PSU
- **Source**: 210 watts, autotuning, 95% PSU
- **Source**: 260 watts, autotuning, 92% PSU (only available via special bid)

### Preload

- **Source**: Windows 10 Pro 64-bit
- **Source**: Windows 10 Home 64-bit

### Environment

- **ENERGY STAR® 6.1**, EPEAT® Silver rating (North America), ErP Lot 3, TCO, TUV low noise verified (coming soon, on some models), RoHS-compliant

### Accessories

For compatible accessories, please go to http://smartfind.lenovo.com

---

*Note: The specifications above may not be available in all regions. Lenovo, December 2019*
## ThinkCentre M625 Tiny Platform Specifications

### Processor

<table>
<thead>
<tr>
<th>APU</th>
<th>Cores</th>
<th>Frequency Base/Max</th>
<th>L2 Cache</th>
<th>Memory Support (Up to)</th>
<th>Integrated Graphics</th>
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</thead>
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<td>A9-9420e</td>
<td>2</td>
<td>1.8 / 2.7 GHz</td>
<td>1 MB DDR4-1866</td>
<td>Radeon R5 Series</td>
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### Memory

- 8GB max, DDR4-2666, one 260-pin SO-DIMM socket
- System frequency automatically clocks down for the lower capability of memory controller in processor

### Disk

- Some: SATA 6.0Gb/s, 2.5" Wide, 5400 rpm or 7200 rpm
- Some: 128GB M.2 Solid State Drive (SSD) / PCIe NVMe interface
- Some: 256GB M.2 Solid State Drive (SSD) / PCIe NVMe interface

### Optical Onboard SATA Media reader

None

### Graphics

- AMD Radeon™ Graphics in processor, uses main memory, DirectX® 12, two DisplayPort™, one optional port (VGA or USB 2.0 Type-C with DisplayPort Alternate Mode), supports up to 2 independent displays:
  - Max resolution: 3840x2160 (DP)@60Hz; 2048x1280 (VGA)@60Hz;
  - 3840x2160 (USB 2.0 Type-C)@60Hz

### Monitor cable

- Optional DP to VGA, DP to DVI-D (single link), or DP to HDMI 1.4 dongle

### Chipset

- AMD SoC platform

### Front ports

- Two USB 3.1 Gen1 (one is Always On and fast charge), one microphone (3.5mm), one headphone / microphone combo jack (3.5mm)

### Rear ports

- Two optional ports (Port 1 for VGA / serial / USB 2.0 Type-C with DisplayPort Alternate Mode), Port 2 for serial
- * Depending on many factors, actual data transfer speed may be lower than theoretical speed
- None

### I/O box

- High Definition (HD) Audio, Realtek ALC233-VB2-CG/ internal speaker (1.5 watt)

### Audio support

- High Definition (HD) Audio, Realtek ALC233-VB2-CG/ internal speaker (1.5 watt)

### WLAN

- Some: 11ac wireless, M.2 Card, Realtek RTL8822BE (dual band)
- Wi-Fi + Bluetooth 4.2® combo adapter, 2x2

### Bluetooth

- Some: 11ac wireless, M.2 Card, Qualcomm Atheros QCA6174A (dual band)
- Wi-Fi + Bluetooth 4.2® combo adapter, 2x2

### Ethernet Modem

- Gigabit ethernet, Realtek RTL8111H, Wake on LAN®

### Manageability

- None

### Security chip

- None

### Security features

- Security slot (in rear for optional Kensington® MicroSaver® cable)
- Smart USB protection, allows keyboard/ mouse only, blocks all storage devices
- Power-on password
- Administrator password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Chassis intrusion switch

### Mechanical

- Tiny (1L), black color; metal case
- Toolless chassis open (for models with optional toolless chassis screw)
- Toolless HDD, SSD, memory, Wi-Fi removal
- Optional dust filter

### VESA mount

- Optional VESA mount bracket kit, supports VESA 75mm and 100mm

### Floor Stand

- Optional system floor stand for vertical orientation

### Power supply

- 65 watts AC/DC adapter, autosensing, 88% PSU (not included for TIO models)

### Limited warranty

- Some: 1-year, depot service / service upgrades available
- Some: 1-year, limited onsite service / service upgrades available

### Preload

- Preloaded operating system
  - Some: Windows® 10 Pro 64-bit
  - Some: Windows 7 Professional 64 preinstalled through downgrade rights in Windows 10 Pro 64-bit

### Preloaded applications (only some listed)

- Windows 10 only
- Lenovo Vantage
- LinkedIn
- Microsoft Office preloaded;
  - purchase a product key to activate
- Windows 7 only
- Lenovo Solution Center
- Lenovo System Update
- Factory Recovery
- User Guide Viewer
- Microsoft Office preloaded;
  - purchase a product key to activate
- Adobe® Reader®

### Environment

- ENERGY STAR® 6.1®, EPEAT™ Silver rating® (*Not for non-OS models), ErP Lot 3, RoHS-compliant, WEEE, TCO

### MIL-SPEC test


### Accessories

- For compatible accessories, please go to [http://smartfind.lenovo.com](http://smartfind.lenovo.com)

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Lenovo, May 2018
## ThinkCentre M625 Tiny Thin Client Platform Specifications

**Product Specifications Reference (PSREF)**

Lenovo, May 2018

<table>
<thead>
<tr>
<th>Processor</th>
<th>AMD E2 series APU</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>APU</strong></td>
<td><strong>Cores</strong></td>
</tr>
<tr>
<td>E2-9000e</td>
<td>2</td>
</tr>
</tbody>
</table>

**Memory**
- 8GB max, DDR4-2666, one 260-pin SO-DIMM socket
- System frequency automatically clocks down for the lower capability of memory controller in processor

**Disk**
- Some: 32GB M.2 Solid State Drive (SSD) / SATA interface
- Some: 128GB M.2 Solid State Drive (SSD) / PCIe NVMe interface

**Optical Onboard SATA Media reader**
- None
- One SATA 6.0Gb/s connector on planar

**Graphics**
- **AMD Radeon** Graphics in processor, uses main memory, DirectX 12, two DisplayPort (one optional port (VGA or USB 2.0 Type-C with DisplayPort Alternate Mode), supports up to 2 independent displays;
- Max resolution: 3840x2160 (DP)@60Hz; 2048x1280 (VGA)@60Hz;
- 3840x2160 (USB 2.0 Type-C)@60Hz

**Monitor cable**
- Optional DP to VGA, DP to DVI-D (single link), or DP to HDMI 1.4 dongle

**Chipset**
- **AMD SoC platform**

**Front ports**
- Two USB 3.1 Gen1 (one is Always On and fast charge), one microphone (3.5mm), one headphone / microphone combo jack (3.5mm)

**Rear ports**
- One USB 3.1 Gen1, three USB 2.0, ethernet (RJ-45), two DisplayPort, two optional ports (Port 1 for VGA / USB 2.0 Type-C (with DisplayPort Alternate Mode), Port 2 for serial)
- * Depending on many factors, actual data transfer speed may be lower than theoretical speed

**I/O box**
- None

**Audio support**
- High Definition (HD) Audio, Realtek ALC233-VB2-CG / internal speaker (1.5 watt)

**WLAN**
- **Some:** 11ac wireless, M.2 Card, Realtek RTL8821CE (dual band), Wi-Fi + Bluetooth 4.2 combo adapter, 1x1
- **Some:** 11ac wireless, M.2 Card, Qualcomm Atheros QCA9377 (dual band)
- **Some:** 11ac wireless, M.2 Card, Realtek RTL8822BE (dual band), Wi-Fi + Bluetooth 4.2 combo adapter, 2x2
- **Some:** 11ac wireless, M.2 Card, Qualcomm Atheros QCA6174A (dual band)
- **Some:** 11ac wireless, M.2 Card, Intel Wireless-AC 9260 (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 2x2

**Bluetooth**
- **Some:** Bluetooth 4.2/5.0* wireless, integrated in Wi-Fi + BT combo adapter
- * Win 10 RS3 and Win10 earlier version only support Bluetooth 4.1

**Ethernet**
- Gigabit ethernet, Realtek RTL8111HN, Wake on LAN

**Manageability**
- None

**Security chip Security features**
- None
- Secure Boot
- PnP support

**Keyboard Mousse**
- Some: Fullsize USB Keyboard (USB connector), black, Lenovo logo
- Some: USB Optical Wheel Mouse, black, Lenovo logo

**Mechanical**
- Tiny (1L), fan-less design, black color, metal case
- Toolless chassis open (for models with optional toolless chassis screw)
- Toolless SSD, memory, Wi-Fi removal
- M625 Tiny Thin Client only:
  - 7.05" W X 7.20" D X 1.36" H
  - 179mm W X 182.9mm D X 34.5mm H
  - 2.9 lb (1.3 kg), weight may vary by configuration

**VESA mount Floor Stand**
- Optional VESA mount bracket kit, supports VESA 75mm and 100mm
- Optional system floor stand for vertical orientation

**Power supply**
- 65 watts AC/DC adapter, autosensing, 88% PSU (not included for TIO models)

**Limited warranty**
- Some: 1-year, depot service / service upgrades available
- Some: 1-year, limited onsite service / service upgrades available

**Preload**
- **Preloaded operating system**
  - Some: Windows Embedded Standard 7 V2 (WES 7 V2)
  - Some: Windows 10 IoT Enterprise
  - Some: LeTOS V2 (Lenovo Terminal Operating System, Linux-based)

**Environmental**
- ENERGY STAR 6.1*, EPEAT Silver rating* (*Not for non-OS models)
- ErP Lot 3, RoHS-compliant, WEEE, TCO

**MIL-SPEC test**

**Accessories**
- For compatible accessories, please go to http://smartfind.lenovo.com

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### Lenovo, May 2018
**Processor**

<table>
<thead>
<tr>
<th>Processor</th>
<th>Cores / Threads</th>
<th>Frequency Base/Max(GHz)</th>
<th>Cache</th>
<th>Memory Support (Up to)</th>
<th>Integrated Graphics</th>
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</table>

**Memory**

- 16GB max, DDR4-2666*, one 260-pin SO-DIMM sockets, non-ECC
- * System automatically clocks down for the processors with lower memory controller

**Storage**

- Some: Hard Drive / SATA 6.0Gb/s, 2.5", 5400 rpm or 7200 rpm
- Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5"
- Some: M.2 SSD (2280) / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s
- Some: M.2 SSD (2242) / PCIe NVMe, PCIe 3.0 x 2, 16Gb/s
- One onṁboard SATA 6.0Gb/s connector

**Onboard SATA**

- Gigabit ethernet, Realtek RTL8111HN-CG
- Bluetooth
- Optional DP to VGA dongle or DP to HDMI 1.4 dongle
- Optional dust filter
- Two USB 3.1 Gen1, two USB 2.0, one ethernet (RJ-45), one DisplayPort, one HDMI 1.4 dongle
- Optional system floor stand for vertical orientation

**Graphics**

- Intel HD Graphics 610/620 in processor, uses main memory, DirectX™ 12, one DisplayPort™, one HDMI, up to 2 independent displays;
- Max resolution: 4096x2304 (DP)@60Hz; 4096x2304 (HDMI)@24Hz
- Optional DP to VGA dongle or DP to HDMI 1.4 dongle
- Optional VESA mount bracket kit, supports VESA 75mm and 100mm

**Monitor cable**

- Optional dust filter
- Two USB 3.1 Gen1, two USB 2.0, one ethernet (RJ-45), one DisplayPort, one HDMI 1.4 dongle
- Optional system floor stand for vertical orientation

**Chipset**

- One USB 3.1 Gen1, one USB 3.1 Type-C Gen 1, one microphone (3.5mm),
- one headphone / microphone combo jack (3.5mm)
- Two USB 3.1 Gen1, two USB 2.0, one ethernet (RJ-45), one DisplayPort, one HDMI 1.4 dongle

**Audio support**

- Realtek ALC233VB / internal speaker (1.5 watt)

**WLAN**

- Some: 11ac wireless, M.2 Card, Realtek RTL8821CE (dual band),
- Wi-Fi + Bluetooth 4.2 combo adapter, 1x1
- Some: 11ac wireless, M.2 Card, Realtek RTL8822BE (dual band),
- Wi-Fi + Bluetooth 4.2 combo adapter, 2x2
- Some: 11ac wireless, M.2 Card, Intel Dual Band Wireless-AC 3165,
- Wi-Fi + Bluetooth 4.2 combo adapter, 1x1
- Some: 11ac wireless, M.2 Card, Intel Dual Band Wireless-AC 8265,
- Wi-Fi + Bluetooth 4.2 combo adapter, 2x2

**Bluetooth**

- Some: Bluetooth 4.2 wireless, integrated in Wi-Fi + BT combo adapter
- Gigabit ethernet, Realtek RTL8111HN-CG

**Ethernet**

- Some: Bluetooth 4.2 wireless, integrated in Wi-Fi + BT combo adapter
- Gigabit ethernet, Realtek RTL8111HN-CG

**Limited warranty**

- Some: 1-year, depot service / service upgrades available
- Some: 1-year, limited onsite service / service upgrades available

**Power supply**

- Some: 65 watts adapter, autosensing, 88% PSU

**Preload**

- Preloaded operating system
- Some: Windows 10 Pro 64-bit
- Some: Windows 10 Home 64-bit

**Preloaded applications (only some listed)**

- Lenovo Vantage
- Microsoft Office preloaded;
- purchase a product key to activate
- LinkedIn

**Environment**

- ENERGY STAR® 7.0, EPEAT™ Silver rating, ErP Lot 3, TCO, RoHS-compliant,
- WEEE, REACH

**MIL-SPEC test**

- Coming soon

**Accessories**

- For compatible accessories, please go to [http://smartfind.lenovo.com](http://smartfind.lenovo.com)

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

Lenovo, October 2019
## Processor

<table>
<thead>
<tr>
<th>Processor</th>
<th>Cores / Threads</th>
<th>Frequency Base/Max(GHz)</th>
<th>Cache</th>
<th>Memory Support (Up To)</th>
<th>Integrated Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel Celeron, Intel Pentium, or 6/7th Generation Intel Core™ i3 / i5 / i7 Processor</td>
<td>2 / 2</td>
<td>2.9G</td>
<td>3 MB</td>
<td>DDR4-2133</td>
<td>HD 510</td>
</tr>
<tr>
<td>Pentium G4400T</td>
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<td>2.9G</td>
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<tr>
<td>Pentium G4560T</td>
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<td>3 MB</td>
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<tr>
<td>Core i3-6100T</td>
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<td>3 MB</td>
<td>DDR4-2133</td>
<td>HD 530</td>
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<tr>
<td>Core i5-6500T</td>
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<td>3.5G, 3.1G</td>
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<td>DDR4-2133</td>
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<tr>
<td>Core i7-6700T</td>
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<td>Core i3-7100T</td>
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<td>3 MB</td>
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<td>Core i7-7700T</td>
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<td>2.9G, 3.8G</td>
<td>8 MB</td>
<td>DDR4-2133</td>
<td>HD 530</td>
</tr>
</tbody>
</table>

## Memory

- 32GB max, DDR4-2400, two 260-pin SO-DIMM sockets, non-ECC, dual-channel capable
- System automatically clocks down for the processors with lower memory controller

## Storage

- Some: Hard Drive / SATA 6.0Gb/s, 2.5", 5400 rpm or 7200 rpm
- Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5"
- Some: M.2 Solid State Drive (SSD) / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s
- Some: Intel Optane™ Memory (models with 7th gen Core processor, M.2)
- Some: DVD Burner (DVD±RW), slim (9.0mm), via USB external ODD box
- Some: One onboard SATA 6.0Gb/s connector

## Optical

- Some: DVD-ROM, slim (9.0mm), via USB external ODD box
- Some: DVD Burner (DVD±RW), slim (9.0mm), via USB external ODD box

## Graphics

- Intel HD Graphics 510/530/610/630 in processor, uses main memory, DirectX™ 12, two DisplayPort™, one optional video port (HDMI, VGA, 3rd DP or USB 3.1 Type-C with DisplayPort Alternate Mode), up to 3 independent displays; Max resolution: 4096x2304 (DP) @ 60Hz; 4096x2304 (Type-C) @ 60Hz; 4069x2160 (HDMI) @ 24Hz; 1920x1200 (VGA) @ 60Hz

## Monitor cable

- Optional DP to VGA, DP to DVI-D (single link), DP to dual DP, DP to HDMI 1.4

## Chipset

- **Intel B250 Chipset**

## Front ports*

- Two USB 3.1 Gen1 (one is Always On and fast charge), one microphone (3.5mm), one headphone / microphone combo jack (3.5mm)

## Rear ports*

- Four USB 3.1 Gen1 (optional external optical box or external I/O box occupies one or two specific USB 3.1 Gen1 on some models), Ethernet (RJ-45), two DisplayPort, two optional ports (Port 1 for VGA / 3rd DP / HDMI / serial / USB 3.1 Type-C Gen 1 (with DisplayPort Alternate Mode), Port 2 for serial)

## I/O box*

- Optional external I/O box, extends two USB 2.0, two USB 3.1 Gen1, and one serial on rear, two USB 2.0 on front, via USB cable (occupy two specific USB 3.1 Gen1 of Tiny)

## Audio support

- High Definition (HD) Audio, Realtek ALC294 / optional internal speaker (1w or 2w)

## WLAN™

- Some: 11ac wireless, M.2 Card, Qualcomm Atheros QCA8737A (dual band), Wi-Fi + Bluetooth 4.1 combo adapter, 1x1
- Some: 11ac wireless, M.2 Card, Qualcomm Atheros QCA6174A (dual band), Wi-Fi + Bluetooth 4.1 combo adapter, 2x2
- Some: 11ac wireless, M.2 Card, Intel Dual Band Wireless-AC 3165, Wi-Fi + Bluetooth 4.1 combo adapter, 1x1
- Some: 11ac wireless, M.2 Card, Intel Dual Band Wireless-AC 8265, Wi-Fi + Bluetooth 4.1 combo adapter, 2x2

## Bluetooth™

- Some: Bluetooth 4.1 wireless, integrated in Wi-Fi + BT combo adapter

## Ethernet Modem

- Gigabit ethernet, Intel Ethernet Connection i219-V (Jacksonville), Wake on LAN™

## Manageability

- None

## Security chip

- TPM (Trusted Platform Module) 2.0, TCG Certified
- *Downgrade to TPM1.2 for the models with Win10 DG Win7 32 OS

## Security features

- Security slot (in rear for optional Kensington® MicroSaver® cable)
- Smart USB protection, allows keyboard/mouse only, blocks all storage devices
- Power-on password
- Administrator password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disableness
- Chassis intrusion switch

## Keyboard

- Some: Lenovo Calliope Keyboard (USB connector), black
- Some: Lenovo Traditional Keyboard (USB connector), black
- Some: Lenovo Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Some: Lenovo Calliope Mouse (USB connector), black
- Some: Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black

## Mouse

- Tiny (1L), black color; metal case
- Touchless chassis open
- Touchless HDD, SSD, memory removal
- Optional touchless chassis screw
- Optional dust filter

## Mechanical

- Dimensions (WxDxH) Weight (Approx.)
- M710 Tiny only 7.05” X 7.20” X 1.36” 2.91 lb (1.32 kg)
- 179mm X 182.9mm X 34.5mm

## Power supply

- 65 watts AC/DC adapter, autosensing, 88% PSU (not included for TIO models)
- 90 watts AC/DC adapter, autosensing, 88% PSU (only for models with I/O box)

## Limited warranty

- Some: 1-year or 3-year, depot service / service upgrades available
- Some: 1-year or 3-year, limited onsite service / service upgrades available

## Preload

- Some: Windows® 7 Professional 32/64 preinstalled through downgrade rights in Windows 10 Pro 64-bit (not available with 7th Gen Intel processor)
- Some: Windows 10 Pro 64-bit
- Some: Windows 10 Home 64-bit
- Some: Windows 10 Home 64-bit
- Preloaded applications (only some listed)
- Microsoft Office preloaded; purchase a product key to activate
- Only for Windows 10
- Lenovo Companion
- Only for Windows 7
- Lenovo Solution Center
- Lenovo ThinkVantage Tools
- Create Recovery Media
- Adobe® Reader
- Lenovo Smart USB protection, allows keyboard/mouse only, blocks all storage devices
- *Downgrade to TPM1.2 for the models with Win10 DG Win7 32 OS

## Environment

- ENERGY STAR® 6.1, EPEAT® Gold rating (North America), ErP Lot 3, ENERGY STAR®, RoHS-compliant, TÜV low noise verified (on some models)

## MIL-SPEC test


## Accessories

- For compatible accessories, please go to [http://www.lenovoquickpick.com](http://www.lenovoquickpick.com)
## ThinkCentre M715 Tiny (2nd Gen) Platform Specifications

### Product Specifications Reference (PSREF)

<table>
<thead>
<tr>
<th>Processor</th>
<th>AMD Athlon, A6, A10, A12, or Ryzen processor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Processor</strong></td>
<td><strong>Cores / Threads</strong></td>
</tr>
<tr>
<td>Athlon 200GE</td>
<td>2 / 4</td>
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<tr>
<td>Athlon PRO 200GE</td>
<td>2 / 4</td>
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<tr>
<td>PRO A6-8570E</td>
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<td>PRO A10-8770E</td>
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<td>PRO A6-9600E</td>
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<td>PRO A10-9700E</td>
<td>4 / 4</td>
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<tr>
<td>PRO A12-9800E</td>
<td>4 / 4</td>
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<tr>
<td>Ryzen 3 2200GE</td>
<td>4 / 4</td>
</tr>
<tr>
<td>Ryzen 5 2400GE</td>
<td>4 / 8</td>
</tr>
<tr>
<td>Ryzen 3 2200GE</td>
<td>4 / 4</td>
</tr>
<tr>
<td>Ryzen 5 2400GE</td>
<td>4 / 6</td>
</tr>
<tr>
<td>Ryzen 5 PRO 2400GE</td>
<td>4 / 6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Memory</th>
<th>32GB max, DDR4 2666*; two 260-pin SO-DIMM sockets, dual-channel capable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disk</td>
<td>Some: Hard Drive / SATA 6.0Gb/s, 2.5&quot;, 5400 rpm or 7200 rpm</td>
</tr>
<tr>
<td></td>
<td>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5&quot;</td>
</tr>
<tr>
<td></td>
<td>Some: M.2 SSD / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s</td>
</tr>
<tr>
<td></td>
<td>* 128GB SSD M.2 (2242) PCIe NVMe only supports PCIe 3.0 x 2, 16Gb/s</td>
</tr>
<tr>
<td></td>
<td>Some: DVD-R/W, 9.0mm high, via USB external ODD box</td>
</tr>
<tr>
<td></td>
<td>Some: DVD±RW, 9.0mm high, via USB external ODD box</td>
</tr>
</tbody>
</table>

| Optical | AM Radeon™ Graphics in processor, uses main memory, DirectX® 12, two DisplayPort®, one optional port (HDMI, VGA, or 3rd DP), supports integrated displays (supports maximum of 2 concurrent HDMI/DVI displays when using HDMI port or DP to DVI/HDMI dongles, and Athlon / Athlon PRO only support 2 displays); Max resolution: 4096x2160 (DP)@60Hz; 4096x2160 (HDMI)@30Hz; 1920x1200 (VGA)@60Hz |

| Monitor cable | Optional DP to VGA dongle, DP to DVI-D dongle, or DP to HDMI 1.4 dongle |

| Chipset | AM B300 Chipset |

| Front ports* (Std.) | Two USB 3.1 Gen1 (one is Always On and fast charge), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm) |
| Rear ports* (Std.) | One USB 3.1 Gen1 and three USB 2.0, ethernet (RJ-45), two DisplayPort, one headphone |
| Rear ports* (Opt.) | One optional port (VGA**, 3rd DP**, HDMI**), or serial on some models |
| * Depending on many factors, actual data transfer speed may be lower than theoretical speed |
| ** Not supported VGA, 3rd DP, HDMI for the models with Athlon / Athlon PRO |

| Audio support | High Definition (HD) Audio, Realtek ALC233-VB2 / internal speaker (1.5 watt) |

| WLAN | Some: 11ac wireless, M.2 Card, Realtek RTL8821CE (dual band), Wi-Fi + Bluetooth 4.2 combo adapter, 1x1 |
| | Some: 11ac wireless, M.2 Card, Qualcomm Atheros QCA9377 (dual band), Wi-Fi + Bluetooth 4.2 combo adapter, 1x1 |
| | Some: 11ac wireless, M.2 Card, Realtek RTL8822BE (dual band), Wi-Fi + Bluetooth 4.2 combo adapter, 2x2 |
| | Some: 11ac wireless, M.2 Card, Qualcomm Atheros QCA6174A (dual band), Wi-Fi + Bluetooth 4.2 combo adapter, 2x2 |

| Bluetooth | Some: Bluetooth 4.2 wireless, integrated in Wi-Fi + BT combo adapter |
| Ethernet | Gigabit ethernet, Realtek RTL8111E PV, Wake on LAN® |

| Manageability | DASH 1.0/1.1 |
| Security chip | Discrete TPM 2.0, TCG Certified |

| Security features | • Security slot (in rear for optional Kensington® MicroSaver® cable) |
| | • Padlock loop |
| | • Smart USB protection, allows keyboard/mouse only, blocks all storage devices |
| | • Power-on password |

| Keyboard | Some: Lenovo Calliope Keyboard (USB connector), black |
| | Some: Lenovo Traditional Keyboard (USB connector), black |
| | Some: Lenovo Calliope Wireless Keyboard (2.4GHz via USB receiver), black |
| | Some: Lenovo Calliope Mouse (USB connector), black |
| | Some: Lenovo Fingerprint Mouse (USB connector), Windows Hello support, black |

| Mouse | Lenovo Calliope Mouseless Mouse (2.4GHz via USB receiver), black |

| Mechanical | Tiny (1L), black color; metal case |
| | • Toolless chassis open (need optional toolless chassis screw) |
| | • Optional dust filter |

| VESA mount | M715 Gen2 Tiny only: 7.05" W X 7.20" D X 1.36" H |
| | 179mm W X 182.9mm D X 34.5mm H |

| Limited warranty | 1-year or 3-year, limited onsite service / service upgrades available |

| Preload | Preloaded operating system |
| Windows 10 Home 64-bit |
| Windows 7 Professional 64 |
| preinstalled through downgrade rights in Windows 10 Pro 64-bit |

| Preloaded applications (only some listed) | - Windows 10 only |
| Lenovo Vantage | Microsoft Office preloaded; purchase a product key to activate |
| CyberLink PowerDVD (only for models with DVD / DVDs) | CyberLink Power2GO (only for models with DVD / DVDs) |
| LinkedIn | Windows 7 only |
| Lenovo Solution Center | Lenovo, July 2018 |
| ThinkVantage System Update | Microsoft Office preloaded; purchase a product key to activate |
| Create Recovery Media | Adobe® Reader® |

| Environment | ENERGY STAR® 7.0, EPEAT Silver rating® (*Not for non-QS models) |
| ErP Lot 3; RoHS-compliant |

| MIL-SPEC test | MIL-STD-810G military certification (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock) |

**Note:** The specifications above may not be available in all regions.
### ThinkCentre M715 Tiny Thin Client (2nd Gen) Platform Specifications

<table>
<thead>
<tr>
<th>Processor</th>
<th>AMD Athlon, A6, A10, or Ryzen processor</th>
</tr>
</thead>
<tbody>
<tr>
<td>APU</td>
<td>Athlon PRO 200GE 2 / 4, 3.2 GHz, 1 MB / 4 MB, DDR4-2666 Radeome 3, Radeon Vega 3</td>
</tr>
<tr>
<td>Memory</td>
<td>8GB max, DDR 4 2666*, two 260-pin SO-DIMM sockets, dual-channel capable</td>
</tr>
<tr>
<td>Graphics</td>
<td>AMD Radeon Graphics in processor, uses main memory, DirectX 12, two DisplayPort*, one optional port (HDMI, VGA, or 3rd DP), supports 3 independent displays (supports maximum of 2 concurrent HDMI/DVI displays when using HDMI port or DP to DVI/HDMI dongles, and Athlon / Athlon PRO only support 2 displays); Max resolution: 4096x2160 (DP) @ 60Hz; 4096x2160 (HDMI) @ 30Hz; 1920x1200 (VGA) @ 60Hz</td>
</tr>
<tr>
<td>Monitor cable</td>
<td>Optional DP to VGA dongle, DP to DVI-D dongle, or DP to HDMI 1.4 dongle</td>
</tr>
<tr>
<td>Chipset</td>
<td>AMD B300 Chipset</td>
</tr>
<tr>
<td>Front ports** (Std.)</td>
<td>Two USB 3.1 Gen1 (one is Always On and fast charge), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)</td>
</tr>
<tr>
<td>Rear ports** (Std.)</td>
<td>One USB 3.1 Gen1 and three USB 2.0, ethernet (RJ-45), two DisplayPort, one headphones</td>
</tr>
<tr>
<td>Rear ports** (Opt.)</td>
<td>One optional port (VGA**, 3rd DP**, HDMI**, or serial on some models)</td>
</tr>
<tr>
<td>Audio support</td>
<td>High Definition (HD) Audio, Realtek ALC223-VB / internal speaker (1.5 watt)</td>
</tr>
<tr>
<td>WLAN</td>
<td>Some: 11ac wireless, M2 Card, Realtek RT8821CE (dual band), Wi-Fi + Bluetooth 4.2* combo adapter, 1x1</td>
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<tr>
<td>Bluetooth Ethernet</td>
<td>* Hardware supports BT 4.2, but Win10 RS3 and earlier only supports BT 4.1</td>
</tr>
<tr>
<td>Manageability</td>
<td>DASH 1.0/1.1</td>
</tr>
<tr>
<td>Security chip</td>
<td>Discrete TPM 2.0, TCG Certified</td>
</tr>
<tr>
<td>Security features</td>
<td>Security slot (in rear for optional Kensington® MicroSaver® cable, Padlock loop, Smart USB protection, allows keyboard/ mouse only, blocks all storage devices, Power-on password, Administrator password, Hard disk password, Boot sequence control, Boot without keyboard and mouse, Individual USB port disablement, Chassis intrusion switch</td>
</tr>
<tr>
<td>Mechanical</td>
<td>Tiny (1L), black color, metal case</td>
</tr>
<tr>
<td>VESA mount</td>
<td>Optional VESA mount bracket kit, supports VESA 75mm and 100mm</td>
</tr>
<tr>
<td>Floor Stand</td>
<td>Optional system floor stand for vertical orientation</td>
</tr>
<tr>
<td>Power supply</td>
<td>65 watts AC/DC adapter, autosensing, 88% PSU (not included for TIO models)</td>
</tr>
<tr>
<td>Limited warranty</td>
<td>1-year or 3-year, limited onsite service / service upgrades available</td>
</tr>
<tr>
<td>Preload</td>
<td>Preloaded operating system</td>
</tr>
<tr>
<td>Environment</td>
<td>ENERGY STAR® 6.1*, EPEAT™ Silver rating* (*not for non-OS models); EEp Lot 3; RoHS-compliant</td>
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<tr>
<td>MIL-STD test</td>
<td>MIL-STD-810G military certification (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock)</td>
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<tr>
<td>Accessories</td>
<td>For compatible accessories, please go to <a href="http://smartfind.lenovo.com">http://smartfind.lenovo.com</a></td>
</tr>
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Note: The specifications above may not be available in all regions.

Lenovo, July 2018
## ThinkCentre M720 Tiny Platform Specifications

### Processor

<table>
<thead>
<tr>
<th>Processor</th>
<th>Celeron G4900T</th>
<th>Pentium G5400T</th>
<th>Core i3-8100T</th>
<th>Core i3-8300T</th>
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<th>Core i7-8700T</th>
<th>Core i5-9400T</th>
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<tr>
<td>Cores / Threads</td>
<td>2 / 2</td>
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<td>4 / 4</td>
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<td>UHD 630</td>
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</tr>
</tbody>
</table>

### Memory

- 32GB max, DDR4-2666*, two 260-pin SO-DIMM sockets, non-ECC, dual-channel capable
- * System automatically clocks down for the processors with lower memory controller speed

### Storage

- Some: Hard Drive / SATA 6.0Gb/s, 2.5", 5400 rpm or 7200 rpm
- Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" SSD
- Some: M.2 / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s
- * 128GB SSD M.2 (2242) PCIe NVMe only supports PCIe 3.0 x 2, 16Gb/s

### Optical

- Some: Intel Optane Memory (not support Celeron / Pentium Processor), M.2 DVD-RW, slim (9.0mm), via USB external OD box
- Some: DVD Burner (DVB+RW), slim (9.0mm), via USB external OD box

### Onboard SATA

- One onboard SATA 6.0Gb/s connector

### Graphics

- Intel HD Graphics 610/630 in processor, uses main memory, DirectX® 12, one DisplayPort™, one HDMI, one optional video port (2nd HDMI, VGA, 2nd DP, or USB 3.1 Type-C Gen1 with DisplayPort function), up to 3 independent displays; Max resolution: 4096x2304 (DP) @ 60Hz; 4096x2304 (Type-C) @ 60Hz;

### Monitor cable

- Optional DP to VGA dongle, DP to DVI-D dongle, DP to dual DP dongle (for Collage Display with Intel integrated graphics), or DP to HDMI 1.4 dongle

### Chipset

- Intel B360 Chipset

### Front ports (Std.)

- one USB 3.1 Gen1 (Always On and fast charge), one USB 3.1 Type-C Gen 1, one microphone (3.5mm), one headphone / microphone combo jack (3.5mm)

### Rear ports (Std.)

- 2x USB 3.1 Gen2, 2x USB 3.1 Gen1, 1x ethernet (RJ-45), 1x DisplayPort, 1x HDMI

### Rear ports (Opt.)

- Two optional ports (mutually exclusive with PCIe card): Port 1 for VGA / 2nd DP / 2nd HDMI / serial / USB 3.1 Type-C Gen1 with DP function); Port 2 for serial; Optional ports via PCIe card: 2x USB 3.1 Gen1 via PCIe x1, 4x serial (9-pin) via PCIe x1

### Audio support

- Realtek ALC233VB2 / optional internal speaker (1.5 watt or 2 watt)

### WLAN

- Some: 11ac wireless, M.2 Card, Realtek RTL8828CE (dual band), Wi-Fi + Bluetooth 4.2 combo adapter, 1x
- Some: 11ac wireless, M.2 Card, Realtek RTL8828BE (dual band), Wi-Fi + Bluetooth 4.2 combo adapter, 2x

### Bluetooth

- Some: Bluetooth 4.2 wireless, integrated in Wi-Fi + BT combo adapter

### Ethernet (Opt.)

- Some: Intel Ethernet Server Adapter I350-T4, gigabit ethernet, 4x RJ-45, PCIe x4

### Keyboard

- Lenovo Calliope Keyboard (USB connector), black
- Lenovo Traditional Keyboard (USB connector), black
- Lenovo Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Lenovo Calliope Mouse (USB connector), black
- Lenovo Fingerprint Mouse (USB connector), Windows Hello support, black
- Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black

### Mouse

- Tiny (1L), black color; metal case
- Touchless chassis open (need optional touchless chassis screw)
- Touchless HDD, SSD, memory removal
- Optional dust filter

### Mechanical

- 2.5" bay for HDD/SSD, one PCIe 3.0 x slot (low-profile), two M.2 slots (one for WLAN, one for M.2 SSD), 2.5" HDD/SSD and PCIe card are mutually exclusive

### Power supply

- 65 watts AC/DC adapter, autosensing, 88% PSU
- 90 watts AC/DC adapter, autosensing, 88% PSU
- 135 watts AC/DC adapter, autosensing, 88% PSU

### Limited warranty

- 1-year or 3-year, depot service / service upgrades available
- 1-year or 3-year, limited onsite service / service upgrades available

### Preload

- Windows® 10 Pro 64-bit
- Windows® 10 Home 64-bit
- Preloaded applications (only some listed)
  - Lenovo Vantage
  - Microsoft Office preloaded
  - Cyberlink PowerDVD (only for models with DVD / DVD+RW)
  - Lenovo Power2GO (only for models with DVD+RW)
  - LinkedIn

### Environment

- ENERGY STAR® 7.0, EPEAT™ Gold rating (North America), ErP Lot 3, TCO, TUV ultra low noise verified (coming soon, on some models), RoHS-compliant

### MIL-STD test


### Accessories

- For compatible accessories, please go to [http://smartfind.lenovo.com](http://smartfind.lenovo.com)

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

Lenovo, June 2019
### Processor

<table>
<thead>
<tr>
<th>Processor</th>
<th>Cores / Threads</th>
<th>Frequency Base/Max</th>
<th>L2 / L3 Cache</th>
<th>Memory Support (Up to)</th>
<th>Integrated Graphics</th>
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<td>2 MB / 4 MB</td>
<td>DDR4-2930</td>
<td>Radeon Vega 11</td>
</tr>
</tbody>
</table>

### Memory

- 32GB max, DDR4-2666, two 260-pin SO-DIMM sockets, dual-channel capable
- * System automatically clocks down for the lower memory controller
- Note: The specifications above may not be available in all regions.

### Disk

- Some: Hard Drive / SATA 6.0Gb/s, 2.5", 5400 rpm or 7200 rpm
- Some: M.2 SSD (2242 / 2280) / PCIe NVMe, PCIe 3.0 x2 or PCIe 3.0 x4
- * System automatically clocks down for the lower memory controller

### Graphics

- **AMD Radeon™ Graphics** in processor, uses main memory, DirectX 12, one DisplayPort™, one HDMI; one optional port (VGA, 2nd DP, or 2nd HDMI), supports 2 independent displays (supports maximum of 2 concurrent HDMI/DVI displays when using HDMI port or port to DVI/HDMI dongles, and Athlon / Athlon PRO only support 2 displays);
- **Max resolution:** 4096x2160 (DP)@60Hz; 4096x2160 (HDMI)@30Hz; 1920x1200 (VGA)@60Hz

### Monitor cable

- Optional DP to VGA dongle, DP to DVI-D dongle, DP to dual DP dongle, or DP to HDMI 1.4 dongle

### Chipset

- **AMD B300 Chipset**

### Front ports (Std.)

- One USB 3.1 Gen1 (Always On and fast charge), one USB 3.1 Type-C Gen1, one microphone (3.5mm), one headphone / microphone jack (3.5mm)
- Rear ports* (Opt.): Two optional ports: Port 1 for VGA / 2nd DP / 2nd HDMI / serial; Port 2 for serial; * Depending on many factors, actual data transfer speed may be lower than theoretical speed

### Audio support

- High Definition (HD) Audio, Realtek ALC222CG / internal speaker (1.5 watt)

### WLAN

- **Some:** 11ac wireless, M.2 Card, Realtek RTL8822CE (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, 2x2
- **Some:** 11ac wireless, M.2 Card, Qualcomm Atheros QCA6174A (dual band), Wi-Fi + Bluetooth 4.2 combo adapter, 2x2

### Bluetooth Ethernet

- **Some:** Bluetooth 4.2 / 5.0 wireless, integrated in Wi-Fi + BT combo adapter

### Manageability

- DASH 1.0/1.1
- Security chip
- Discrete TPM 2.0, TCG Certified

### Security features

- Security slot (in rear for optional Kensington® MicroSaver® cable)
- Smart USB protection, allows keyboard/ mouse only, blocks all storage devices
- Power-on password
- Administrator password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Chassis intrusion switch

### Keyboard

- **Some:** Lenovo Traditional Keyboard (USB connector), black
- **Some:** Lenovo Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- **Some:** Lenovo Calliope Mouse (USB connector), black
- **Some:** Lenovo Fingerprint Mouse (USB connector), Windows Hello support, black (only available via special bid models)
- **Some:** Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black

### Mouse

- **Some:** Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black

### Mechanical

- Tiny (1L), black color; metal case
- * Toolless chassis open (need optional toolless chassis screw)
- * Toolless HDD, SSD, memory removal
- * Optional dust filter
- M75q Tiny only:
- 7.05" W X 7.20" D X 1.36" H
- 179mm W X 182.9mm D X 34.5mm H
- 2.91 lb (1.32 kg), weight may vary by configuration
- With VESA mount & ODD box:
- 7.42" W X 7.30" D X 2.48" H
- 188.4mm W X 185.38mm D X 63mm H
- 3.66 lb (1.66 kg), weight may vary by configuration

### VESA mount

- Optional VESA mount bracket kit, supports VESA 75mm and 100mm

### Floor Stand

- Optional system floor stand for vertical orientation

### Power supply

- **Some:** 65 watts adapter, autosensing, 88% PSU (not included for TIO models)
- **Some:** 135 watts adapter, autosensing, 88% PSU (not included for TIO models)

### Limited warranty

- 1-year or 3-year, limited onsite service / service upgrades available

### Preload

- **Preloaded operating system**
  - **Some:** Windows® 10 Pro 64-bit
  - **Some:** Windows 10 Home 64-bit
  - **Some:** Windows 10 IoT Enterprise
  - **Some:** Linux Ubuntu

### Environment

- **ENERGY STAR® 7.1**, EPEAT™ Silver rating* (*Not for non-OS models);
- ErP Lot 3; RoHS-compliant; TUV low noise verified

### MIL-SPEC test


### Accessories

- For compatible accessories, please go to [http://smartfind.lenovo.com](http://smartfind.lenovo.com)
### Processor

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<td>4 / 4</td>
<td>2.50 / 3.1G</td>
<td>6 MB</td>
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<tr>
<td>Core i7-6700T</td>
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<td>Core i7-7600T</td>
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<td>2.9G / 3.8G</td>
<td>8 MB</td>
<td>DDR4-2400</td>
<td>HD 630</td>
</tr>
</tbody>
</table>

### Memory

- 32GB max, DDR4-2400*, two 260-pin SO-DIMM sockets, non-ECC, dual-channel capable
- * System automatically clocks down for the processors with lower memory controller

### Storage

- Some: Hard Drive / SATA 6.0Gb/s, 2.5", 5400 rpm or 7200 rpm, APS
- Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5"
- Some: M.2 Solid State Drive (SSD) / PCie NVMe, PCIe 3.0 x 4, 32Gb/s
- Some: Intel Optane™ Memory (models with 7th gen Core processor), M.2
- Some: DVD-ROM, slim (9.9mm), via USB external ODD box
- Some: DVD Burner (DVD+RW), slim (9.9mm), via USB external ODD box
- One onboard SATA 6.0Gb/s connector

### Optical

- Optional to VGA, DP to DVI-D, single link, DP to dual DP, or DP to HDMI 1.4

### Chipset

- Intel Q270 Chipset

### Monitor cable

- Two USB 3.1 Gen1 (one is Always On and fast charge), one microphone (3.5mm), one headphone / microphone jack (3.5mm)

### Rear ports

- Four USB 3.1 Gen1 (optional external optical box or external I/O box occupies one or two specific USB 3.1 Gen1, on some models), ethernet (RJ-45), two DisplayPort, two optional ports (Port 1 for VGA / 3rd DP / HDMI / serial / USB 3.1 Type-C Gen 1 (with DisplayPort Alternate Mode), Port 2 for serial)

### I/O box

- Optional external I/O box, extends two USB 2.0, two USB 3.1 Gen1, and one serial port, two USB 2.0 on front, via USB cable (occupy two specific USB 3.1 Gen1 of Tiny)
- * Depending on many factors, actual data transfer speed may be lower than theoretical speed

### Audio support

- High Definition (HD) Audio, Realtek ALC294 / optional internal speaker (1w or 2w)

### WLAN

- Some: 11ac wireless, M.2 Card, Qualcomm Atheros QCA9377A (dual band), Wi-Fi + Bluetooth 4.2 combo adapter, 1x1
- Some: 11ac wireless, M.2 Card, Qualcomm Atheros QCA6174A (dual band), Wi-Fi + Bluetooth 4.2 combo adapter, 2x2
- Some: 11ac wireless, M.2 Card, Intel Dual Band Wireless-AC 3165, Wi-Fi + Bluetooth 4.2 combo adapter, 1x1
- Some: 11ac wireless, M.2 Card, Intel Dual Band Wireless-AC 8265, Wi-Fi + Bluetooth 4.2 combo adapter, 2x2
- Some: 11ac wireless, M.2 Card, Intel Dual Band Wireless-AC 8265, Wi-Fi + Bluetooth 4.2 combo adapter, 2x2
- Some: 11ac wireless, M.2 Card, Intel Dual Band Wireless-AC 8265, Wi-Fi + Bluetooth 4.2 combo adapter, 2x2

### Bluetooth

- Some: Bluetooth 4.2 wireless, integrated in Wi-Fi + BT combo adapter
- * Hardware supports BT 4.2, but Win10 RS3 and earlier only supports BT 4.1

### Ethernet

- Gigabit ethernet, Intel Ethernet Connection (219-1LJ-Jacksonville), Wake on LAN*

### Manageability

- Intel Active Management Technology 11.0 (Intel AMT 11.0)
- Intel vPro technology on some models (require choosing a vPro-support Wi-Fi adapter to enable vPro function through wireless connection)

### Security chip

- TPM (Trusted Platform Module) 2.0*, TCG Certified
- * Downgrade to TPM1.2 for the models with Win10 DG Win7 32 OS

### Security features

- Security slot (in rear for optional Kensington® MicroSaver® cable)
- Smart USB protection, allows keyboard / mouse only, blocks all storage devices
- Power-on password
- Administrator password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disableness
- Chassis intrusion switch

### Mechanical

- Tiny (1L), black color; metal case
- Toolless chassis open
- Toolless HDD, SSD, memory removal
- Optional toolless chassis screw
- Optional dust filter

### Dimensions (WxDxH)

- M910 Tiny only
- 7.05” X 7.20” X 1.36”
- 179mm X 182.9mm X 34.5mm
- 2.91 lb (1.32 kg), vary by config

### Power supply

- 65 watts AC/DC adapter, autosensing, 88% PSU (not included for TIO models)
- 90 watts AC/DC adapter, autosensing, 88% PSU (only for models with I/O box)

### Limited warranty

- Some: 1-year or 3-year, depot service / service upgrades available
- Some: 1-year or 3-year, limited onsite service / service upgrades available

### Preload

- Some: Windows® 7 Professional 32/64 preinstalled through downgrade rights in Windows 10 Pro 64-bit (not available with 7th Gen Intel processor)
- Some: Windows 10 Pro 64-bit
- Some: Windows 10 Home 64-bit

### Preloaded applications (only some listed)

- Microsoft Office preloaded; purchase a product key to activate
- - Only for Window 10
- Lenovo Companion
- Intel Unite download link (vPro models only)
- - Only for Window 7
- Lenovo Solution Center
- Lenovo ThinkVantage Tools
- Create Recovery Media
- Adobe® Reader®
- Cyberlink PowerDVD Create (DVO+RW)
- Intel Unite (vPro models only)

### Environment

- ENERGY STAR® 6.1, EPEAT® Gold rating (North America), ErP Lot 3, GREENGUARD®, RoHS-compliant, TUV low noise verified (on some models)

### MIL-SPEC test


### Accessories

- For compatible accessories, please go to [http://www.lenov quickpick.com](http://www.lenov quickpick.com)
### ThinkCentre M920 Tiny Platform Specifications

#### Processor

<table>
<thead>
<tr>
<th>Processor</th>
<th>Cores / Threads</th>
<th>Frequency Base/Max(GHz)</th>
<th>Cache</th>
<th>Memory Support (Up to)</th>
<th>Integrated Graphics</th>
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</tr>
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</table>

#### Memory

32GB max, DDR4-2666*, two 260-pin SO-DIMM sockets, dual-channel capable  
* System automatically clocks down for the processors with lower memory controller speed.

#### Storage

| Some: Hard Drive / SATA 6.0Gb/s | 2.5", 5400 rpm or 7200 rpm |
| Some: Solid State Drive (SSD) / SATA 6.0Gb/s | 2.5" |
| Some: M.2 SSD / PCIe NVMe, PCIe 3.0 x 4, 32GB/s |
| * 128GB SSD M.2 (2242) PCIe NVMe only supports PCIe 3.0 x 2, 16GB/s |

#### Optical

| Some: Intel Optane™ Memory (not support Celeron / Pentium Processor), M.2 |
| | Some: DVD-ROM, slim (9.0mm), via USB external ODD box |
| Some: DVD Burner (DVD±RW), slim (9.0mm), via USB external ODD box |

#### Onboard SATA

| One onboard SATA 6.0Gb/s connector |

#### Graphics

In processor, uses main memory, DirectX 12, one DisplayPort™, one HDMI, one optional video port (2nd HDMI, VGA, 2nd DP, or USB 3.1 Type-C Gen1 with DisplayPort function), up to 3 independent displays,  
Max resolution: 4096x2304 (DP) @ 60Hz, 4096x2304 (Type-C) @ 60Hz, 4096x2160 (onboard HDMI) @ 24Hz, 2048x1536 (VGA) @ 50Hz

#### Monitor cable

Optional DP to VGA dongle, DP to DVI-D dongle, DP to dual DP dongle (for Collage Display with intel integrated graphics), or DP to HDMI 1.4 dongle

#### Chipset

Intel Q370 Chipset

#### Front ports (Std.)*

| one USB 3.1 Gen 1 (Always On and fast charge), one USB 3.1 Type-C Gen 1, one microphone (3.5mm), one headphone / microphone combo jack (3.5mm) |
| 2x USB 3.1 Gen2, 2x USB 3.1 Gen1, 1x ethernet (RJ-45), 1x DisplayPort, 1x HDMI |

#### Rear ports (Opt.)*

Two optional ports (mutually exclusive with PCIe card): Port 1 for VGA / 2nd DP / 2nd HDMI / serial / USB 3.1 Type-C Gen 1 with DP function); Port 2 for serial; Optional PCIe card: 2x USB 3.1 Gen1 via PCIe x1, 4x serial (9-pin) via PCIe x1, 1x Thunderbolt 3 (combo USB3.1 Type-C Gen 2 / DisplayPort) via PCIe x4  
* Depending on many factors, actual data transfer speed may be lower than theoretical speed

#### Audio support

Realtek ALC233VB2 / optional internal speaker (1.5 watt or 2 watt)

#### WLAN

| Some: 11ac wireless, M.2 Card, Realtek RTL8882CE (dual band), Wi-Fi + Bluetooth 4.2 combo adapter, 1x1 |
| Some: 11ac wireless, M.2 Card, Realtek RTL8822BE (dual band), Wi-Fi + Bluetooth 4.2 combo adapter, 2x2 |
| Some: 11ac wireless, M.2 Card, Intel Dual Band Wireless-AC 3165, Wi-Fi + Bluetooth 4.2 combo adapter, 1x1 |
| Some: 11ac wireless, M.2 Card, Intel Dual Band Wireless-AC 8265, Wi-Fi + Bluetooth 4.2 combo adapter, 2x2 |
| Some: 11ac wireless, M.2 Card, Intel Wireless-AC 9560 (dual band) |
| Wi-Fi + Bluetooth 5.0 combo adapter, Intel vPro technology support, 2x2 |

#### Bluetooth

Some: Bluetooth 4.2/5.0 wireless, integrated in Wi-Fi + BT combo adapter  
Gigabit ethernet, Intel Ethernet Connection I219-LM(Jacksonville), Wake on LAN®  
Intel Ethernet Server Adapter I350-T4, gigabit ethernet, 4x RJ-45, PCIe x4

#### Manageability

Intel Active Management Technology 12 (Intel AMT 12); Intel vPro technology on some models (require choosing a vPro-support Wi-Fi adapter to enable vPro function through wireless connection)

#### Security chip

Discrete TPM 2.0, TCG Certified  
- Security slot (in rear for optional Kensington® MicroSaver® cable)  
- Chassis intrusion switch  
- Power-on password  
- Administrator password  
- Hard disk password

#### Keyboard

Some: Lenovo Calliope Keyboard (USB connector), black  
Some: Lenovo Fingerprint Mouse (USB connector), Windows Hello support, black

#### Mouse

Some: Lenovo Calliope Mouse (USB connector), black  
Some: Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black

#### Mechanical

Tiny (1L), black color; metal case  
Towelless chassis open (need optional towelless chassis screw)  
Towelless SSD, SSD, memory removal  
Optional dust filter

#### Power supply

<table>
<thead>
<tr>
<th>Dimensions (WxDxH)</th>
<th>Weight (Approx.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.05&quot; X 7.20&quot; X 1.36&quot;</td>
<td>2.91 lb (1.32 kg), vary by config</td>
</tr>
<tr>
<td>179mm X 182.9mm X 34.5mm</td>
<td>3.66 lb (1.66 kg), vary by config</td>
</tr>
</tbody>
</table>

#### VESA mount & ODD box

8.74" X 7.30" X 2.48"  
184.4mm X 185.38mm X 63mm  
Optional VESA mount bracket kit, supports VESA 75mm and 100mm  
Optional system floor stand for vertical orientation

#### Preload

Preloaded operating system: Windows 10 Pro 64-bit  
Some: Windows 10 Home 64-bit

#### Preloaded applications (only some listed)

- Lenovo Vantage  
- Microsoft Office preloaded; purchase a product key to activate  
- Cyberlink PowerDVD (only for models with DVD / DVD±RW)  
- Cyberlink Power2Go (only for models with DVD±RW)  
- LinkedIn  
- Intel Unite (Machine Type 10VB models only)

#### Environment

ENERGY STAR® 7.0, EPEAT™ Gold rating (North America), ErP Lot 3, TCO, TUV ultra low noise verified (coming soon, on some models), RoHS-compliant

#### MIL-STD test

MIL-STD-810G military certification (Low Pressure [Altitude], High Temperature, Low Temperature, Temperature Shock, Humidity, Sand and Dust, Vibration, Shock, Fungus, Solar Radiation)

#### Accessories

For compatible accessories, please go to [http://smartfind.lenovo.com](http://smartfind.lenovo.com)

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

Lenovo, June 2019
## ThinkCentre M920x Tiny Platform Specifications

### Processor

<table>
<thead>
<tr>
<th>Processor</th>
<th>Intel® Celeron®, Intel® Pentium®, or 8th / 9th Gen Intel® Core™ i3 / i5 / i7 / i9 Processor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celeron G4900</td>
<td>2 / 2</td>
</tr>
<tr>
<td>Celeron G4900T</td>
<td>2 / 2</td>
</tr>
<tr>
<td>Celeron G4930</td>
<td>2 / 2</td>
</tr>
<tr>
<td>Celeron G4950</td>
<td>2 / 2</td>
</tr>
<tr>
<td>Pentium Gold G5400T</td>
<td>2 / 2</td>
</tr>
<tr>
<td>Pentium Gold G5400T</td>
<td>2 / 2</td>
</tr>
<tr>
<td>Pentium Gold G5600T</td>
<td>2 / 2</td>
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<tr>
<td>Core i3-8100</td>
<td>4 / 4</td>
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<tr>
<td>Core i3-8300</td>
<td>4 / 4</td>
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<tr>
<td>Core i5-8400</td>
<td>6 / 6</td>
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<tr>
<td>Core i5-8500</td>
<td>6 / 6</td>
</tr>
<tr>
<td>Core i5-8600</td>
<td>6 / 6</td>
</tr>
<tr>
<td>Core i7-8700</td>
<td>6 / 12</td>
</tr>
<tr>
<td>Core i3-9100</td>
<td>4 / 4</td>
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<tr>
<td>Core i3-9320</td>
<td>4 / 4</td>
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<tr>
<td>Core i5-9400</td>
<td>6 / 6</td>
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<td>Pentium Gold G5600T</td>
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<tr>
<td>Core i3-8400T</td>
<td>4 / 4</td>
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<td>Core i5-8400T</td>
<td>6 / 6</td>
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<td>Core i5-8500T</td>
<td>6 / 6</td>
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<tr>
<td>Core i5-8600T</td>
<td>6 / 6</td>
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<tr>
<td>Core i7-8700T</td>
<td>6 / 12</td>
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<tr>
<td>Core i3-9100T</td>
<td>4 / 4</td>
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<td>Core i5-9400T</td>
<td>6 / 6</td>
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<td>Core i5-9500T</td>
<td>6 / 6</td>
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<tr>
<td>Core i5-9600T</td>
<td>6 / 6</td>
</tr>
<tr>
<td>Core i7-9700T</td>
<td>8 / 8</td>
</tr>
<tr>
<td>Core i9-9900T</td>
<td>8 / 16</td>
</tr>
</tbody>
</table>

### Memory

- **32GB max**, DDR4-2666, two 260-pin SO-DIMM sockets, dual-channel capable
- * System automatically clocks down for the processors with lower memory controller

### Storage

- **Some:**
  - Hard Drive / SATA 6.0Gb/s, 2.5", 5400 rpm or 7200 rpm
  - Solid State Drive (SSD) / SATA 6.0Gb/s
  - M.2 SSD (support up to two M.2 SSD) / PCIE NVMe, PCIe 3.0 x 4, 32Gb/s

### RAID 0/1 (support only available via special bid model)

- **Some:**
  - 128GB SSD M.2 (2242) PCIE NVMe only
  - 16Gb/s

### Optical

- **Some:**
  - Intel Optane™ Memory (not support Celeron / Pentium Processor), M.2
  - SED SSDs
  - 1TB SSDs

### Optical

- **Some:**
  - DVD-R / DVD-RW, DVD+/ -RW, DVD+RDL
  - Support for DVD-RW and CD-RW

### Onboard SATA

- * One onboard SATA 6.0Gb/s connector

### Graphics

- **Intel HD Graphics 610/630** in processor, uses main memory, DirectX® 12, one DisplayPort™, one HDMI, one optional video port (2nd HDMI, VGA, 2nd DP, or USB 3.1 Type-C Gen1 with DisplayPort function), up to 3 independent displays:
  - Max resolution: 1920x1080 (up to 2 DisplayPort); 1080p (up to 4 DisplayPort)
  - 4096x2160 @ 60Hz (up to 4 DisplayPort)

### Chipset

- **Intel Q370 Chipset**

### Audio support

- **Realtek ALC3235VB** / optional internal speaker (1.5 watt or 2 watt)

### Display

- **4x Mini DisplayPort**, up to 4 independent displays, works along with onboard DP and HDMI to support up to 6 independent displays:
  - Max resolution: 5120x2880@60Hz (up to 2 Mini DisplayPort); 4096x2160@60Hz (up to 4 Mini DisplayPort)

### Chipset

- Optional DP to VGA dongle, DP to DVI-D dongle, DP to dual DP dongle (for Collage Display with integrated graphics), or DP to HDMI 1.4 dongle, Mini DP to DP

### Manageability

- Intel Active Management Technology 12 (Intel AMT 12)
- Intel vPro technology on some models (require choosing a vPro-support Wi-Fi adapter to enable vPro function through wireless connection)
- Discrete TPM 2.0, TCG Certified
- Security features:
  - Security slot (in rear for optional)
  - Kensington® MicroSaver® cable
  - Chassis intrusion switch
  - Power-on password
  - Administrator password
  - Hard disk password

### Mechanical

- Tiny (1L), black color; metal case
- Toolless chassis open (need optional toolless chassis screw)
- Toolless HDD, SSD, memory removal
- Optional dust filter
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Smart USB protection, allows keyboard/mouse only, blocks all storage devices

### Power supply

- 135 watts AC/DC adapter, autosensing, 88% PSU

### Warranty

- **3-year limited warranty**
- **3-year limited service upgrade**

### VESA mount

- Optional VESA mount bracket kit, supports VESA 75mm and 100mm
- System optional floor stand for vertical orientation

### Environment

- ENERGY STAR® 7.0, EPEAT® Gold rating (North America), EPR Lot 3, TCO, TUV ultra low noise verified (coming soon, on some models), RoHS-compliant

### MIL-SPEC test


### Accessories

- For compatible accessories, please go to http://smartfind.lenovo.com
## ThinkSmart Edition Tiny M920q for Zoom Rooms Platform Specifications

### Processor
- **Intel® 9th Gen Core™ i7 Processor**

<table>
<thead>
<tr>
<th>Processor</th>
<th>Cores / Threads</th>
<th>Frequency Base/Max(GHz)</th>
<th>Cache (Up to)</th>
<th>Integrated Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i7-9700T</td>
<td>8 / 8</td>
<td>2.0G / 4.3G</td>
<td>12 MB</td>
<td>DDR4-2666 UHD 630</td>
</tr>
</tbody>
</table>

### Memory
- 16GB (8GB x 2) DDR4-2666, two 260-pin SO-DIMM sockets, dual-channel capable

### Storage
- 128GB SSD M.2 (2242) PCIe NVMe
- None

### Optical Onboard SATA
- One onboard SATA 6.0Gb/s connector

### Graphics
- **Intel HD Graphics 630** in processor, uses main memory, DirectX 12, one DisplayPort™, one HDMI (onboard), one 2nd HDMI (internal DP to HDMI dongle), up to 3 independent displays;
  - **Max resolution:** 4096x2304 (DP) @ 60Hz; 4096x2160 (onboard HDMI) @ 24Hz

### Monitor cable
- None

### Chipset
- **Intel Q370 Chipset**

### Front ports (Std.)
- One USB 3.1 Gen1 (Always On and fast charge), one USB 3.1 Type-C Gen 1, one microphone (3.5mm), one headphone / microphone combo jack (3.5mm)

### Rear ports (Std.)
- Two USB 3.1 Gen2, two USB 3.1 Gen1, 1x ethernet (RJ-45), 1x DisplayPort, 2x HDMI
  - Depending on many factors, actual data transfer speed may be lower than theoretical speed

### Audio support
- Realtek ALC233VB2 / optional internal speaker (1.5 watt or 2 watt)

### WLAN
- 11ac wireless, M.2 Card, Intel Wireless-AC 9560 (dual band), Wi-Fi + Bluetooth 5.0 combo adapter, Intel vPro technology support, 2x2

### Bluetooth Ethernet
- Bluetooth 5.0 wireless, integrated in Wi-Fi + BT combo adapter
- Gigabit ethernet, Intel Ethernet Connection 219-LM(Jacksonville), Wake on LAN

### Manageability
- Intel Active Management Technology 12 (Intel AMT 12);
- Intel vPro technology on some models (require choosing a vPro-support Wi-Fi adapter to enable vPro function through wireless connection)

### Security chip
- Discrete TPM 2.0, TCG Certified

### Security features
- Security slot (in rear for optional Kensington® MicroSaver® cable)
- Chassis intrusion switch
- Power-on password
- Administrator password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Smart USB protection, allows keyboard/ mouse only, blocks all storage devices

### Keyboard Mouse
- Lenovo Traditional Keyboard (USB connector), black
- Lenovo Calliope Mouse (USB connector), black

### Mechanical
- **Tiny (1L), black color; metal case**

### Dimensions (WxDxH)
- **Tiny only:** 7.05” X 7.20” X 1.36”
- 179mm X 182.9mm X 34.5mm
- Weight (Approx.): 2.91 lb (1.32 kg), vary by config

### VESA mount Floor Stand
- VESA mount bracket kit, supports VESA 75mm and 100mm
- Optional system floor stand for vertical orientation

### Power supply
- 135 watts AC/DC adapter, autosensing, 88% PSU

### Limited warranty
- 3-year, limited onsite service with premier support / service upgrades available

### Preload
- Preloaded operating system
- Windows® 10 IoT Enterprise with Zoom Rooms preload

### Environment
- ENERGY STAR® 7.0, EPEAT™ Silver rating, ErP Lot 3, TCO, TUV ultra low noise verified (on some models), RoHS-compliant

### MIL-SPEC test

### Accessories
- For compatible accessories, please go to [http://smartfind.lenovo.com](http://smartfind.lenovo.com)

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

Lenovo, January 2020
ThinkCentre Tiny-in-One (TIO) 22 Gen3

Product Specifications Reference (PSREF)

Lenovo, October 2019

Model
Non-touch model: 10R1PAR1++/10R1PAT1++;
Touch model: 10R0PAR1++/10R0PAT1++;

Form factor
Tiny-in-One, offers a full All-In-One experience when optional Tiny slots into the back of TIO, clean cabling and effortless setup

Compatible Tiny:
P330 / P320 / M920(x) / M720 / M910(x) / M710 / M900(x) / M700 / M630e / M625 / M600 / M75q / M715 / M93p / M83 / M73 / M63 / Chromebox Tiny

* Non-TIO models can’t be turned on by pressing power button of TIO

Panel
TFT-LCD, In-Plane Switching technology**, White LED backlight
Notes: In-Plane Switching may refer to VA, PLS, and IPS panels

Viewable image size
21.5” (546.1mm) diagonal
Max view area (W x H)
18.74” x 10.54” / 476.1mm x 267.8mm
Bezel Width
Top / Side: 2mm, Bottom: 22.1mm
Native resolution
1920x1080
Multi-touch
Optional 10-point multi-touch, supports Wake on Touch
Aspect ratio
16:9
Pixel pitch (mm)
0.24795mm
Dot/Pixel per inch
102.4 dpi
Brightness
250 nits or cd/m² (typical)
Contrast ratio
1000:1 (typical)
Pixel response time
14ms (default), over drive to 4ms, 6ms
Color gamut
72%
Anti-reflective
Anti-glare
Viewing angle at 10:1 CR
178° (+/- 89°) horizontal, 178° (+/- 89°) vertical

Preset resolutions
640x480 @ 70Hz
640x480 @ 60Hz, 66Hz, 72Hz, 75Hz
720x400 @ 70Hz
800x600 @ 60Hz, 72Hz, 75Hz
1024x768 @ 60Hz, 70Hz, 75Hz
1152x864 @ 75Hz
1280x800 @ 60Hz
1280x1024 @ 60Hz, 72Hz, 75Hz
1366x768 @ 60Hz
1440x900 @ 60Hz, 75Hz
1600x1200 @ 60Hz, 70Hz, 75Hz
1680x1050 @ 60Hz
1920x1080 @ 60Hz

Presets / user settings
Presets: 25; user settings: 25

On screen display
Control features
Front: Exit button, Left / Mode-switching button (TIO / monitor mode), Right / Brightness button, Enter / Menu button, Power button
Bottom: Volume up button, Volume down button

Tiny-in-One Power On
Pressing Alt + P on keyboard or pressing Power button positioned on TIO can turn on both TIO and Tiny (only some Tiny support, see compatible list)
One USB 3.1 Gen1 / USB 2.0 (when M73 or M53 installed or USB 2.0 connected via USB upstream port)

Notes: The USB port is only available when a Tiny is installed or a PC is connected via USB upstream port

Side ports (TIO)
One DisplayPort in port, one USB upstream port, one power connector
Undetachable 3-in-1 cable (Power connector, USB [supports USB 3.1 Gen1 / USB 2.0], DisplayPort), only for connecting to Tiny installed (optional)
One 2-watt dual microphone for VOIP, LED indicator

Camera
Internal Speaker
2 watt x2

Security
Security keyhole for attachment of optional cable lock (Kensington® lock compatible), locks optional Tiny with TIO together, more security features offered by Tiny installed (optional)

Mechanical
Dimensions
TIO without stand
TIO with stand

W x D x H (inch)
19.26 x 2.85 x 13.35
19.26 x 10.76 x 14.59 - 18.93
W x D x H (mm)
489.3 x 72.5 x 339
489.3 x 273.3 x 370.7 - 480.7
Weight (Approx.)
7.01 lb / 3.19 kg
11.77 lb / 5.34 kg

Mounting features
Wall or desk mounting using the extend arm or third-party accessories meeting the VESA FPMPM™ (100mm mount)

Adjustable stand
Tilt: 30° back, -5° forward;
swivel: +/-45°;
Pivot: clockwise 0° to 90°

Power supply
90 watts AC/DC adapter, 88% PSU, universal
Power consumption
19 watts typical, 32 watts maximum, <0.5 watts standby / suspend

Limited warranty
3-years, Customer Carry-In or Mail-In via Rapid Replacement Service

Emission standards
VESA-compliant
Ergonomics
ISO 9241-307, TUE Eye Comfort certified
EPEAT
TCO 7.0, TCO Edge 2.0, WEEE, ENERGY STAR® 7.0, EPEAT™ Silver rating, ULE Gold, TUV, VOC

Windows certifications
Windows 7 and Windows 10 certified

Ship group
TIO (Monitor), detachable stand, AC/DC power adapter, power cord, user’s guide and driver CD, quick start and safety poster

Accessories
For compatible accessories, please go to http://www.lenovoquickpick.com

ThinkCentre Tiny-in-One 22 Gen3 Compatible list

<table>
<thead>
<tr>
<th>Model</th>
<th>P330 / P320 / M920(x) / M720 / M910(x) / M710 / M900(x) / M700 / M630e / M625 / M600 / M75q / M715 / M93p Tiny M90n Nano (with TIO kit)</th>
</tr>
</thead>
</table>
| M93p Tiny | Chromebox

Turn on TIO and Tiny together via
Alt + P on USB KB

Turn on TIO and Tiny together via
TIO Power Button

Notes:

* Non-TIO models can’t be turned on by pressing power button of TIO

** In-Plane Switching may refer to VA, PLS, and IPS panels

Lenovo, October 2019
**ThinkCentre Tiny-in-One (TIO) 24 Gen3**

**Model**
- Non-touch model: 10QYPAR1++/10QYPAT1++
- Touch model: 10QXPAR1++/10QXPAT1++

**Form factor**
- Tiny-in-One, offers a full All-In-One experience when optional Tiny slots into the back of TIO, clean cabling and effortless setup

**Compatible Tiny:**
- P330 / P320 / M920(x) / M720 / M910(x) / M710 / M900(x) / M700 / M630e / M625 / M600 / M75q / M715 / M93p / M83 / M73 / M90n / M33 Tiny / Chromebox Tiny
- Non-TIO models can’t be turned on by pressing power button of TIO

**Panel**
- TFT-LCD, In-Plane Switching technology**, White LED backlight
- Notes: In-Plane Switching may refer to VA, PLS, and IPS panels

**Viewable image size**
- 23.8" (604.7mm) diagonal
- Max view area (W x H): 21.06" x 12.32" / 535.0mm x 313.0mm

**Bezel Width**
- Top / Side: 2mm, Bottom: 22.1mm

**Native resolution**
- 1920x1080

**Multi-touch**
- Optional 10-point multi-touch, supports Wake on Touch

**Aspect ratio**
- 16:9

**Pixel pitch (mm)**
- 0.2745mm

**Dot/Pixel per Inch**
- 92.6 dpi

**Brightness**
- 250 nits or cd/m² (typical)

**Contrast ratio**
- 1000:1 (typical)

**Pixel response time**
- 14ms (default), over drive to 4ms, 6ms

**Color gamut**
- 72%

**Anti-reflective**
- Anti-glare

**Viewing angle at 10:1 CR**
- 178° (+/- 89°) horizontal, 178° (+/- 89°) vertical

**Preset resolutions**
- 640x350 @ 70Hz
- 640x480 @ 60Hz, 67Hz, 72Hz, 75Hz
- 720x400 @ 70Hz
- 800x600 @ 60Hz, 67Hz, 72Hz, 75Hz
- 1024x768 @ 60Hz, 70Hz, 75Hz
- 1152x864 @ 75Hz
- 1280x800 @ 60Hz
- 1280x1024 @ 60Hz, 72Hz, 75Hz
- 1366x768 @ 60Hz
- 1440x900 @ 60Hz, 75Hz
- 1600x1200 @ 60Hz, 70Hz, 75Hz
- 1680x1050 @ 60Hz
- 1920x1080 @ 60Hz

**Presets / user settings**
- Presets: 25; user settings: 25

**On screen display**
- On screen display with digital user controls (8 languages)

**Control features**
- Front: Exit button, Left / Mode-switching button (TIO / monitor mode), Right / Brightness button, Enter / Menu button, Power button
- Bottom: Volume up button, Volume down button

**Tiny-in-One Power On**
- Pressing Alt + P on keyboard or pressing Power button positioned on TIO can turn on both TIO and Tiny (only some Tiny support, see compatible list)

**Side ports (TIO)**
- One USB 3.1 Gen1 / USB 2.0 (when M73 or M53 installed or USB 2.0 connected via USB upstream port)

**Notes:** The USB port is only available when a Tiny is installed or a PC is connected via USB upstream port

**Side ports (Tiny)**
- Side ports offered by installed Tiny (optional)

**Rear ports**
- One DisplayPort in port, one USB upstream port, one power connector
- Undetachable 3-in-1 cable (Power connector, USB [supports USB 3.1 Gen1 / USB 2.0], DisplayPort), only for connecting to Tiny installed (optional)

**Camera**
- 1080p camera with dual microphone for VOIP, LED indicator

**Internal Speaker**
- 2 watt x2

**Security**
- Security keyhole for attachment of optional cable lock (Kensington® lock compatible), locks optional Tiny with TIO together, more security features offered by Tiny installed (optional)

**Mechanical**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>TIO without stand</th>
<th>TIO with stand</th>
</tr>
</thead>
<tbody>
<tr>
<td>W x D x H (inch)</td>
<td>21.25 x 2.85 x 14.47</td>
<td>21.25 x 11.11 x 15.72 - 20.06</td>
</tr>
<tr>
<td>W x D x H (mm)</td>
<td>539.8 x 72.5 x 367.6</td>
<td>539.8 x 282.3 x 399.4 - 509.4</td>
</tr>
<tr>
<td>Weight (Approx.)</td>
<td>7.96 lb /3.61 kg</td>
<td>12.92 lb /5.86 kg</td>
</tr>
</tbody>
</table>

**Power supply**
- 90 watts AC/DC adapter, 88% PSU, universal
- 19 watts typical, 32 watts maximum, <0.5 watts standby / suspend

**Limited warranty**
- 3-years, Customer Carry-In or Mail-In via Rapid Replacement Service

**VESA-compliant**
- VESA DDC2B/Ci, VESA DPMS-compliant

**Ergonomics**
- ISO 9241-307, TUV Eye Comfort certified

**Emission standards**
- FCC Class B
- TCO 7.0, TCO Edge 2.0, WEEE, RoHS, ENERGY STAR® 7.0, EPEAT™ Silver rating, ULE Gold, TUV, VOC

**Windows certifications**
- Windows 7 and Windows 10 certified

**Ship group**
- TIO 24 (Monitor), detachable stand, AC/DC power adapter, power cord, user's guide and driver CD, quick start and safety poster

**Accessories**
- For compatible accessories, please go to http://www.lenovouquickpick.com

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**ThinkCentre Tiny-in-One 24 Gen3 Compatible list**

<table>
<thead>
<tr>
<th>Model</th>
<th>P330 / P320 / M920(x) / M720 / M910(x) / M710 / M900(x) / M700 / M630e / M625 / M600 / M75q / M715 / M83 / M53 Tiny / M90n Nano (with TIO kit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turn on TIO and Tiny together via Alt + P on USB KB</td>
<td>All models                                                                                           All models                                                                 Not support</td>
</tr>
<tr>
<td>Turn on TIO and Tiny together via TIO Power Button</td>
<td>All models                                                                                           TIO models                                                                 All models</td>
</tr>
</tbody>
</table>

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Lenovo, October 2019
## ThinkCentre Tiny-in-One (TIO) 27

| Form factor | Tiny-in-One, offers a full All-In-One experience when optional Tiny slots into the back of TIO, clean cabling and effortless setup |
| Compatible Tiny | ThinkCentre Tiny, ThinkCentre Nano, and ThinkStaion Tiny |
| Panel | TFT-LCD, In-Plane Switching technology**, White LED backlight |
| Viewable image size | 27" (685.8mm) diagonal |
| Max view area (W x H) | 23.49" x 13.22" / 596.7mm x 335.7mm |
| Bezel Width | Top / Side: 2mm, Bottom: 23.3mm |
| Native resolution | 2560x1440 |
| Aspect ratio | 16:9 |
| Brightness | 350 nits or cd/m² (typical) |
| Contrast ratio | 1000:1 (typical) |
| Pixel response time | 11ms (default), over drive to 4ms, 6ms |
| Color gamut | 99% sRGB |
| Anti-glare | Yes (25%) |
| Viewing angle at 10:1 CR | 178° (+/- 89°) horizontal, 178° (+/- 89°) vertical |
| Preset resolutions | 640x350 @ 70Hz, 640x480 @ 60Hz, 66Hz, 72Hz, 75Hz, 720x400 @ 70Hz, 800x600 @ 60Hz, 72Hz, 75Hz, 1024x768 @ 60Hz, 70Hz, 75Hz, 1152x864 @ 75Hz, 1280x768 @ 60Hz, 1280x800 @ 60Hz, 1280x1024 @ 60Hz, 72Hz, 75Hz, 1366x768 @ 60Hz, 1440x900 @ 60Hz, 1600x1200 @ 60Hz, 70Hz, 75Hz, 1680x1050 @ 60Hz, 1920x1080 @ 60Hz, 2560x1440 @ 60Hz |
| Presets / user settings | Presets: 27; user settings: 25 |
| On screen display and controls | On screen display with digital user controls (8 languages) |
| Control features | Front: Exit button, Left / Mode-switching button (TIO / monitor mode), Right / Brightness button, Enter / Menu button, Power button |
| Tiny-in-One Power On | Pressing Alt + P on keyboard or pressing Power button positioned on TIO can turn on both TIO and Tiny (only some support, see Compatible Matrix) |
| Side ports (TIO) | Two USB 3.1 Gen1 (downgrade to USB 2.0 when installing M73 or M53 or connecting USB 2.0 via USB upstream port), one headphone / microphone combo jack |
| Side ports (Tiny) | Side ports offered by the installed Tiny (optional) |
| Rear ports | One DisplayPort(in) port, one HDMI(in) port, one USB (Type-B) upstream port, one power connector |
| 3-in-1 Cable | Undetachable 3-in-1 cable, connecting to the power connector, one USB, and one DisplayPort of the installed Tiny (optional) |
| Camera | RGBIR camera with dual microphone, supports Window Hello and Facial Recognition, Think Shutter for Privacy Security, LED indicator |
| Internal Speaker | 2 watt x2 |
| Security | Security keyhole for attachment of optional cable lock (Kensington® lock compatible), locks optional Tiny with TIO together, more security features offered by Tiny installed (optional) |

### Mechanical

<table>
<thead>
<tr>
<th>Dimensions (W x D x H / mm / inch)</th>
<th>TIO without stand</th>
<th>TIO with stand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight (Approx.)</td>
<td>4.91 kg / 10.82 lb</td>
<td>7.95 kg / 17.53 lb</td>
</tr>
<tr>
<td>Mounting features</td>
<td>Wall or desk mounting using the extend arm or third-party accessories</td>
<td></td>
</tr>
<tr>
<td>Adjustable stand</td>
<td>meeting the VESA FPMPMF (100mm mount)</td>
<td></td>
</tr>
<tr>
<td>Tilt</td>
<td>32° back, -3° forward;</td>
<td></td>
</tr>
<tr>
<td>Lift</td>
<td>4.3° (110mm);</td>
<td></td>
</tr>
<tr>
<td>Swivel</td>
<td>+/-45°;</td>
<td></td>
</tr>
<tr>
<td>Pivot</td>
<td>clockwise -5° to 90°</td>
<td></td>
</tr>
<tr>
<td>Power supply</td>
<td>170 watts adapter, 88% PSU, universal</td>
<td></td>
</tr>
<tr>
<td>Power consumption</td>
<td>37 watts typical, 57 watts maximum, &lt;0.5 watts standby / suspend</td>
<td></td>
</tr>
<tr>
<td>Limited warranty</td>
<td>3-years, Product Exchange Service (US and EMEA) or Customer Carry-In Service (EMEA)</td>
<td></td>
</tr>
</tbody>
</table>

### Environmental

- VESA-compliant: VESA DDC/CI, VESA DPMS-compliant |
- Ergonomics: ISO 9241-307, TUV Eye Comfort certified |
- Emission standards: FCC Class B |
- Environmental: TCO 6.0, TCO Edge 2.0, WEEE, RoHS, ENERGY STAR® 7.0, EPEAT™ Silver rating, ULE Gold, TUV, VOC |
- Windows certifications: Windows 7 and Windows 10 certified |
- Ship group: TIO 27 (Monitor), detachable stand, power adapter, power cord, reference and driver CD |
- Accessories: For compatible accessories, please go to [http://smartfind.lenovo.com](http://smartfind.lenovo.com)

### ThinkCentre Tiny-in-One 27 Compatible Matrix

<table>
<thead>
<tr>
<th>Model</th>
<th>P330 / P320 / M920(x) / M720 / M910(x) / M710 / M900(x) / M700 / M630e / M625 / M600 / M75q / M715 / M83 / M5 Tiny / M90n Nano (with TIO kit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turn on TIO and Tiny together via Alt + P on USB KB</td>
<td>All models</td>
</tr>
<tr>
<td>Turn on TIO and Tiny together via TIO Power Button</td>
<td>All models</td>
</tr>
</tbody>
</table>

---

Lenovo, October 2019
# ThinkCentre M710 Tower Platform Specifications

**Processor**

<table>
<thead>
<tr>
<th>Processor</th>
<th>Cores / Threads</th>
<th>Frequency Base/Max(GHz)</th>
<th>Cache</th>
<th>Memory Support (Up to)</th>
<th>Integrated Graphics</th>
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</thead>
<tbody>
<tr>
<td>Intel G4400</td>
<td>2 / 2</td>
<td>3.3G</td>
<td>3 MB</td>
<td>DDR4-2133</td>
<td>HD 510</td>
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<tr>
<td>Intel G4560</td>
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<td>3.5G</td>
<td>3 MB</td>
<td>DDR4-2133</td>
<td>HD 610</td>
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<tr>
<td>Intel G4600</td>
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<td>3.6G</td>
<td>3 MB</td>
<td>DDR4-2133</td>
<td>HD 630</td>
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<tr>
<td>Core i3-6100</td>
<td>2 / 4</td>
<td>3.7G</td>
<td>3 MB</td>
<td>DDR4-2133</td>
<td>HD 530</td>
</tr>
<tr>
<td>Core i5-6500</td>
<td>4 / 8</td>
<td>3.2G / 3.6G</td>
<td>6 MB</td>
<td>DDR4-2133</td>
<td>HD 630</td>
</tr>
<tr>
<td>Core i7-6700</td>
<td>4 / 8</td>
<td>3.4G / 4.0G</td>
<td>8 MB</td>
<td>DDR4-2133</td>
<td>HD 530</td>
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<tr>
<td>Core i3-7100</td>
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<td>3.9G</td>
<td>3 MB</td>
<td>DDR4-2133</td>
<td>HD 630</td>
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<tr>
<td>Core i5-7400</td>
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<td>3.0G / 3.5G</td>
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<td>DDR4-2133</td>
<td>HD 630</td>
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<tr>
<td>Core i5-7500</td>
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<td>3.4G / 3.8G</td>
<td>6 MB</td>
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<td>HD 630</td>
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<tr>
<td>Core i5-7600</td>
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<td>3.5G / 4.0G</td>
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<td>DDR4-2133</td>
<td>HD 630</td>
</tr>
<tr>
<td>Core i7-7700</td>
<td>4 / 8</td>
<td>3.6G / 4.2G</td>
<td>8 MB</td>
<td>DDR4-2133</td>
<td>HD 630</td>
</tr>
</tbody>
</table>

**Memory**

- 64GB max, UDIMM, DDR4-2400*, four 288-pin DIMM sockets, non-ECC, dual-channel capable
  * System automatically clocks down for the processors with lower memory controller.

**Storage**

- Some: Hard Drive / SATA 6.0Gb/s, 2.5", 3.5", 5400 rpm or 7200 rpm
- Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5"
- Some: M.2 Solid State Drive (SSD) / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s
- Some: Intel Optane™ Memory (models with 7th gen Core processor), M.2
- Some: DVD Burner (DVD±RW), SATA 1.5Gb/s Drive, slim (9.0mm)
- Some: M.2 card slots: Two (one for WLAN, one for SSD/Optane)
- Some: Slot 4: no slot, only bracket for optional port extension*
- Some: Slot 1: half-length full-height (length < 189mm, height < 104mm), PCIe 3.0 x16*
- Some: Slot 2: half-length full-height (length < 189mm, height < 104mm), PCIe 3.0 x 1
- Some: Slot 3: half-length full-height (length < 189mm, height < 104mm), PCIe 3.0 x 1*
- Some: Slot 4: no slot, only bracket for optional port extension*
- Some: M.2 card slots: Two (one for WLAN, one for SSD/Optane)
- Some: Optional 2 front USB3.1 Type-C ports module occupies PCIe x16 slot (x4 card), optional rear 2x USB2.0 / parallel occupies one expansion slot

**Optical**

- Intel HD Graphics 510/530/610/630 in processor, uses main memory, DirectX® 12, one VGA, two DisplayPort™, supports 3 independent displays, works along with discrete graphics to support more displays;
- Max resolution: 4096x2304 (DP) @ 60Hz; 2048x1536 (VGA) @ 50Hz
- Some: NVIDIA GeForce® GT 730, DirectX 12, 2GB, PCIe 2.0 x8 adapter, two DisplayPort, 35 watts; Max resolution: 3840x2160 (DisplayPort) @ 60Hz;
- Some: AMD Radeon™ R7 370, DirectX 11, 2GB, PCIe 3.0 x8 adapter, one VGA, one HDMI, 75 watts, occupies two slots;
- Max resolution: 4096x2160 (HDMI) @ 24Hz, 2048x1536 (VGA) @ 85Hz
- Optional DP to VGA, DP to DVI-D (single link), DP to dual DP, or DP to HDMI 1.4

**Chipset**

- Intel B250 Chipset

**Monitor**

- Four USB 3.1 Gen1, optional two USB 3.1 Type-C Gen 2 (only available via special bid), microphone (3.5mm), headphone (3.5mm)
- Two USB 3.1 Gen1, two USB 2.0, optional two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), one VGA, two DisplayPort, two PS/2 ports (keyboard/mouse);
- Line-in (3.5mm), line-out (3.5mm), microphone-in (3.5mm)
- Optional dust filter

**Audio support**

- High Definition (HD) Audio, Realtek ALC662 / optional internal speaker (1.5 watt )

**WLAN**

- Some: 11ac wireless, M.2 Card, Qualcomm Atheros QCA9377A (dual band), Wi-Fi + Bluetooth 4.1 combo adapter, 1x1
- Some: 11ac wireless, M.2 Card, Qualcomm Atheros QCA6174A (dual band), Wi-Fi + Bluetooth 4.1 combo adapter, 2x2
- Some: 11ac wireless, M.2 Card, Intel Dual Band Wireless-AC 3165, Wi-Fi + Bluetooth 4.1 combo adapter, 1x1
- Some: 11ac wireless, M.2 Card, Intel Dual Band Wireless-AC 8265, Wi-Fi + Bluetooth 4.1 combo adapter, 2x2
- Bluetoothwireless, integrated in Wi-Fi + BT combo adapter

**Bluetooth**

- Gigabit ethernet, Realtek RTL8111E/GN, Wake on LAN®

**Modem**

- None

**Preload**

- Windows® 7 Professional 32/64 preinstalled through downgrade rights in Windows 10 Pro 64-bit (not available with 7th Gen Intel processor)
- Windows 10 Pro 64-bit
- Windows 10 Home 64-bit
- Preloaded applications (only some listed)
  - Microsoft Office preloaded;
  - Lenovo Companion;
  - Lenovo Solution Center;
  - Lenovo ThinkVantage Tools;
  - Create Recovery Media;
  - Adobe® Reader®;
  - Cyberlink PowerDVD Create (DVD±RW)

**Environment**

- ENERGY STAR® 6.1, EPEAT™ Gold rating (North America), ErP Lot 3, GREENGUARD®, RoHS-compliant, TUV low noise verified (on some models)

**Accessories**

- For compatible accessories, please go to [http://www.lenovoquickpick.com](http://www.lenovoquickpick.com)

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

<table>
<thead>
<tr>
<th>APU / processor</th>
<th>Cores / Threads</th>
<th>Frequency (Base/Max)</th>
<th>L2 Cache</th>
<th>Integrated Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ryzen 3 PRO 1200</td>
<td>4 / 4</td>
<td>3.1 / 3.4</td>
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<td>None</td>
</tr>
<tr>
<td>Ryzen 3 PRO 1300</td>
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<td>3.5 / 3.7</td>
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<td>None</td>
</tr>
<tr>
<td>Ryzen 5 PRO 1500</td>
<td>4 / 4</td>
<td>3.5 / 3.7</td>
<td>2MB</td>
<td>None</td>
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<tr>
<td>Ryzen 7 PRO 1700</td>
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<td>None</td>
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<tr>
<td>PRO A6-8570</td>
<td>2 / 2</td>
<td>3.5 / 3.8</td>
<td>1MB</td>
<td>Radeon R5 Series</td>
</tr>
<tr>
<td>PRO A10-8770</td>
<td>4 / 4</td>
<td>3.5 / 3.8</td>
<td>2MB</td>
<td>Radeon R7 Series</td>
</tr>
<tr>
<td>PRO A12-8870</td>
<td>4 / 4</td>
<td>3.7 / 4.2</td>
<td>2MB</td>
<td>Radeon R7 Series</td>
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<tr>
<td>PRO A6-9500</td>
<td>2 / 2</td>
<td>3.5 / 3.8</td>
<td>1MB</td>
<td>Radeon R7 Series</td>
</tr>
<tr>
<td>PRO A8-9600</td>
<td>4 / 4</td>
<td>3.3 / 4.0</td>
<td>1MB</td>
<td>Radeon R7 Series</td>
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<td>PRO A10-9700</td>
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<td>3.5 / 3.8</td>
<td>2MB</td>
<td>Radeon R7 Series</td>
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<tr>
<td>PRO A12-9800</td>
<td>4 / 4</td>
<td>3.8 / 4.2</td>
<td>2MB</td>
<td>Radeon R7 Series</td>
</tr>
</tbody>
</table>

Memory

64GB max, UDIMM, DDR4-2400*, four 288-pin DIMM sockets, non-ECC, dual-channel capable. * System automatically clocks down for the processors with lower memory controller.

Storage

Some: Hard Drive / SATA 6.0Gb/s, 2.5" or 3.5", 5400 rpm or 7200 rpm
Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5"
Some: M.2 Solid State Drive (SSD) / PCie NVMe, PCie 3.0 x 4, 32Gb/s
Some: DVD-ROM SATA 1.5Gb/s Drive, slim (9.0mm)
Some: DVD Burner (DVDs,RW), SATA 1.5Gb/s Drive, slim (9.0mm)

Onboard SATA Media reader

Optional 7-in-1 media reader

Graphics

AMD Radeon™ Graphics in processor (not for AMD Ryzen processor), uses main memory. DirectX® 12, one VGA, two DisplayPort™ (Onboard VGA and DP ports are available on the models with AMD Ryzen processor, supports 3 independent displays, works along with AMD discrete graphics to support more displays; Max resolution: 4096x2160 (DP) @ 60Hz; 1920x1200 (VGA) @ 60Hz
Some: NVIDIA GeForce® GT 730, DirectX 12, 2GB, PCie 2.0 x 8 adapter, two DisplayPort, 35 watts;
Some: AMD Radeon™ RX 550, DirectX 12, 2GB, PCie 3.0 x 8 adapter, one VGA, one HDMI, one DisplayPort. 50 watts, occupies two slots;
Max resolution: 4096x2160 (HDMI) @ 60Hz; 2048x1536 (VGA) @ 60Hz; 5120x2880 (DP) @ 60Hz

Monitor Cable

Optional DP to VGA, DP to DVI-D (single link), DP to dual DP, or DP to HDMI 1.4

Chipset

AMD B350 Chipset

Front ports*
Two USB 3.1 Gen2, two USB 3.1 Gen1, optional two USB 3.1 Type-C Gen 2 (only available via special bid), microphone (3.5mm), headphone (3.5mm)

Rear ports*
Two USB 3.1 Gen1, two USB 2.0, optional two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), one VGA and two DisplayPort (not available on models with AMD Ryzen processor), two PS/2 ports (keyboard / mouse);
additional VGA, DisplayPort, or HDMI on optional graphics on some models

Rear audio ports* IEEE 1394a
Line-in (3.5mm), line-out (3.5mm), microphone-in (3.5mm)
None
* Depending on many factors, actual data transfer speed may be lower than theoretical speed

Audio support
High Definition (HD) Audio, Realtek ALC662 / optional internal speaker (1.5 watt )

WLAN
Some: 11ac wireless, M.2 Card, Realtek RTL8821AE (dual band), Wi-Fi + Bluetooth 4.0 combo adapter, 1x1
Some: 11ac wireless, M.2 Card, Qualcomm Atheros QCA6174A (dual band), Wi-Fi + Bluetooth 4.1 combo adapter, 2x2
Some: 11ac wireless, M.2 Card, Qualcomm Atheros QCA9377 (dual band), Wi-Fi + Bluetooth 4.1 combo adapter, 1x1

Bluetooth™
Some: Bluetooth 4.0 or 4.1 wireless, integrated in Wi-Fi + BT combo adapter

Ethernet & Modem
Gigabit ethernet, Realtek RTL8111E PV, Wake on LAN®

Environmental
ENERGY STAR® 6.1, EPEAT™ Gold rating (North America), ErP Lot 3, GREENGUARD®, RoHS-compliant

Accessories
For compatible accessories, please go to http://www.lenovoquickpick.com

Lenovo, July 2017
## ThinkCentre M720 Tower Platform Specifications

**Product Specifications Reference (PSREF)**

### Processor

<table>
<thead>
<tr>
<th>Processor</th>
<th>Cores / Threads</th>
<th>Frequency Base/Max(GHz)</th>
<th>Cache</th>
<th>Memory Support (Up to)</th>
<th>Integrated Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celeron G4900</td>
<td>2 / 2</td>
<td>3.1G</td>
<td>2 MB</td>
<td>DDR4-2400</td>
<td>UHD 610</td>
</tr>
<tr>
<td>Celeron G4920</td>
<td>2 / 2</td>
<td>3.2G</td>
<td>2 MB</td>
<td>DDR4-2400</td>
<td>UHD 610</td>
</tr>
<tr>
<td>Pentium G5420</td>
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<td>3.7G</td>
<td>4 MB</td>
<td>DDR4-2400</td>
<td>UHD 630</td>
</tr>
<tr>
<td>Pentium G5500</td>
<td>2 / 4</td>
<td>3.8G</td>
<td>4 MB</td>
<td>DDR4-2400</td>
<td>UHD 630</td>
</tr>
<tr>
<td>Pentium G5600</td>
<td>2 / 4</td>
<td>3.9G</td>
<td>4 MB</td>
<td>DDR4-2400</td>
<td>UHD 630</td>
</tr>
<tr>
<td>Core i3-8100</td>
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<td>3.6G</td>
<td>6 MB</td>
<td>DDR4-2400</td>
<td>UHD 630</td>
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<tr>
<td>Core i3-8300</td>
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<td>3.7G</td>
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<td>DDR4-2400</td>
<td>UHD 6663</td>
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<tr>
<td>Core i5-8400</td>
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<td>2.8G / 4.0G</td>
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<td>DDR4-2666</td>
<td>UHD 6663</td>
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<tr>
<td>Core i5-8500</td>
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<td>3.0G / 4.1G</td>
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<td>DDR4-2666</td>
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</tr>
<tr>
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<td>9 MB</td>
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<td>UHD 6663</td>
</tr>
<tr>
<td>Core i7-8700</td>
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<td>3.2G / 4.6G</td>
<td>12 MB</td>
<td>DDR4-2666</td>
<td>UHD 6663</td>
</tr>
<tr>
<td>Core i9-9100</td>
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<td>UHD 630</td>
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<td>UHD 6663</td>
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<td>16 MB</td>
<td>DDR4-2666</td>
<td>UHD 6663</td>
</tr>
</tbody>
</table>

### Memory

- 64GB max. UDIMM, DDR4-2666, four 288-pin DIMM sockets, non-ECC, dual-channel capable
- System automatically clocks down for the processors with lower memory controller

### Storage

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some:</td>
<td>Hard Drive / SATA 6.0Gb/s, 2.5” or 3.5”, 5400 rpm or 7200 rpm</td>
</tr>
<tr>
<td>Some:</td>
<td>Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5”</td>
</tr>
<tr>
<td>Some:</td>
<td>224GB PCIe NVMe, 3.0 x2 or PCIe 3.0 x4</td>
</tr>
<tr>
<td>Some:</td>
<td>Intel Optane Memory (not support Celeron / Pentium Processor), M.2</td>
</tr>
<tr>
<td>Some:</td>
<td>DVD-ROM SATA 1.5Gb/s Drive, slim (9.0mm)</td>
</tr>
<tr>
<td>Some:</td>
<td>DVD Burner (DVD+RW), SATA 1.5Gb/s Drive, slim (9.0mm)</td>
</tr>
<tr>
<td>Some:</td>
<td>Three onboard SATA 6.0Gb/s connectors</td>
</tr>
<tr>
<td>Optional:</td>
<td>7-in-1 media reader</td>
</tr>
</tbody>
</table>

### Graphics

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some:</td>
<td>Intel UHD Graphics 600 in processor, uses main memory, DirectX® 12, one VGA (up to 2048x1536@50Hz), two DisplayPort™ (up to 4096x2304@60Hz), supports 3 independent displays, more displays support via discrete graphics</td>
</tr>
<tr>
<td>Some:</td>
<td>AMD Radeon™ 5500, DirectX 12, 2GB GDDR5, PCIe 3.0 x8, 50 watts, one DisplayPort (up to 3840x2160@60Hz)</td>
</tr>
<tr>
<td>Some:</td>
<td>AMD Radeon™ 520, DirectX 12, 2GB GDDR5, PCIe 3.0 x8, 30 watts, one DisplayPort (up to 4096x2160@60Hz)</td>
</tr>
<tr>
<td>Some:</td>
<td>NVIDIA GeForce® GT 730 (End Of Life), DirectX 12, 2GB, PCIe 2.0 x16, 35 watts, two DisplayPort (up to 3840x2160@60Hz)</td>
</tr>
<tr>
<td>Some:</td>
<td>NVIDIA GeForce® GT 730 (End Of Life), DirectX 12, 2GB, PCIe 2.0 x16, 35 watts, two DisplayPort (up to 3840x2160@60Hz)</td>
</tr>
<tr>
<td>Some:</td>
<td>Intel Oplume™ Memory (not support Celeron / Pentium Processor), M.2</td>
</tr>
<tr>
<td>Some:</td>
<td>Some:</td>
</tr>
<tr>
<td>Some:</td>
<td>DVD Burner (DVD+RW), SATA 1.5Gb/s Drive, slim (9.0mm)</td>
</tr>
<tr>
<td>Some:</td>
<td>Three onboard SATA 6.0Gb/s connectors</td>
</tr>
<tr>
<td>Optional:</td>
<td>7-in-1 media reader</td>
</tr>
</tbody>
</table>

### Monitor Cable

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optional:</td>
<td>DisplayPort (up to 4096x2160@60Hz)</td>
</tr>
<tr>
<td>Optional:</td>
<td>Optional DP to VGA dongle, DP to DVI-D dongle, DP to dual DP dongle (for Collage Display with integrated graphics), or DP to HDMI 1.4 dongle</td>
</tr>
</tbody>
</table>

### Chipset

**Intel B360 Chipset**

### Preload

Preloaded operating system
- Windows® 10 Pro 64-bit
- Windows® 10 Home 64-bit

Preloaded applications (only some listed)
- Lenovo Vantage
- Microsoft Office preloaded
- Cyberlink PowerDVD (only for models with DVD / DVD±RW)
- Cyberlink Power2GO (only for models with DVD±RW)

### Environment

ENERGY STAR® 6.1, EPEAT® Silver rating (North America), ErP Lot 3, TCO, TUV low noise verified (coming soon, on some models), RoHS-compliant

### Accessories

For compatible accessories, please go to [http://smartfind.lenovo.com](http://smartfind.lenovo.com)
<table>
<thead>
<tr>
<th>Processor</th>
<th>Cores / Threads</th>
<th>Frequency Base/Max(GHz)</th>
<th>Cache</th>
<th>Memory Support (Up to)</th>
<th>Integrated Graphics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core i5-6500</td>
<td>4 / 4</td>
<td>3.2G / 3.6G</td>
<td>6 MB</td>
<td>DDR4-2133</td>
<td>HD 530</td>
</tr>
<tr>
<td>Core i7-6700</td>
<td>4 / 8</td>
<td>3.4G / 4.0G</td>
<td>8 MB</td>
<td>DDR4-2133</td>
<td>HD 530</td>
</tr>
<tr>
<td>Core i3-7300</td>
<td>2 / 4</td>
<td>4.0G / - -</td>
<td>4 MB</td>
<td>DDR4-6400</td>
<td>HD 630</td>
</tr>
<tr>
<td>Core i5-7400</td>
<td>4 / 8</td>
<td>3.0G / 3.5G</td>
<td>8 MB</td>
<td>DDR4-2400</td>
<td>HD 630</td>
</tr>
<tr>
<td>Core i5-7500</td>
<td>4 / 8</td>
<td>3.4G / 3.8G</td>
<td>8 MB</td>
<td>DDR4-2400</td>
<td>HD 630</td>
</tr>
<tr>
<td>Core i7-7600</td>
<td>4 / 8</td>
<td>3.5G / 4.1G</td>
<td>8 MB</td>
<td>DDR4-2400</td>
<td>HD 630</td>
</tr>
<tr>
<td>Core i7-7700</td>
<td>4 / 8</td>
<td>3.6G / 4.2G</td>
<td>8 MB</td>
<td>DDR4-2400</td>
<td>HD 630</td>
</tr>
</tbody>
</table>

**Memory**
- 64GB max, UDIMM, DDR4-2400*, four 288-pin DIMM sockets, non-EEC, dual-channel capable
- * System automatically clocks down for the processors with lower memory controller

**Storage**
- Some: Hard Drive / SATA 6.0Gb/s, 2.5" or 3.5", 5400 rpm or 7200 rpm
- Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5"
- Some: M.2 / M.2 B / M.2 B State Drive (SSD) / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s
- Some: Intel Optane™ Memory (models with 7th gen Core processor), M.2
- Some: Front accessible and removable HDD, 3.5", lockable via physical key
- Some: DVD-ROM, SATA 1.5Gb/s, 5.25" or slim (9.0mm)
- Some: Wi-Fi Burner (DVsD-RW), SATA 1.5Gb/s, 5.25" or slim (9.0mm)
- Onboard SATA: Four onboard SATA 6.0Gb/s connectors (1x eSATA and 3x SATA), RAID 0/1 support (RAID preset only available via special bid model)

**Chipset**
- Intel Q270 Chipset

**Graphics**
- Intel HD Graphics 510/530/510/630 in processor, uses main memory, DirectX® 12, one VGA, two DisplayPort™, supports 3 independent displays, works along with discrete graphics to support more displays;
- *Max resolution: 4096x2304 (DP) @ 60Hz; 2048x1536 (VGA) @ 50Hz*
- *Some: NVIDIA GeForce® GT 730, DirectX 12, 2GB, PCIe 2.0 x 8 adapter, two DisplayPort; 35 watts, Max resolution: 3840x2160 (DisplayPort) @ 60Hz;*  
- *Some: AMD Radeon™ R7 350, DirectX 11, 2GB, PCIe 3.0 x8 adapter, one VGA, one HDMI, 75 watts, occupies two slots; Max resolution: 4096x2160 (HDMI) @ 24Hz; 2048x1536 (VGA) @ 85Hz*  
- *Some: NVIDIA GeForce GTX™ 1080 (only available via special bid model), DirectX 12, 8GB, PCIe 3.0 x16 adapter, one DVI-D, one HDMI, three DisplayPort, 180 watts, occupies two slots; Max resolution: 2560x1600 (DVI-D) @ 60Hz; 4096x2160 (HDMI) @ 60Hz 7680x4320 (with Single DP) @ 60Hz*

**Monitor Cable**
- Optional DP to VGA, DP to DVI-D (single link), DP to dual DP, or DP to HDMI 1.4

**Media reader**
- Optional 7-in-1 media reader

**Processor**
- Intel® Celeron®, Intel® Pentium®️, or 6/7th Generation Intel® Core™️ i3 / i5 / i7 Processor

**Manageability**
- Intel Active Management Technology 11.0 (Intel AMT 11.0);
- Intel vPro technology on some models (require choosing a vPro-support Wi-Fi adapter to enable vPro function through wireless connection)

**Security chip**
- TPM (Trusted Platform Module) 2.0, TCG Certified
- * Downgrade to TPM1.2 for the models with Win10 DG Win7 32 OS

**Security features**
- Security slot (in rear for optional Kensington® MicroSaver® cable)
- Power-on password
- Administrator password
- Smart disk password
- Boot sequence control
- * Boot without keyboard and mouse
- Individual USB port disablement
- Optional chassis intrusion switch

**Keyboard**
- Lenovo Calliope Keyboard (USB connector), black
- Lenovo Traditional Keyboard (USB connector), black
- Lenovo Calliope Wireless Keyboard (2.4GHz via USB receiver), black
- Lenovo Calliope Mouse (USB connector), black

**Mouse**
- Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black

**Mechanical**
- Tower (18L), black color, metal case
- * (WxDxH) 6.5" x 12.65" x 16.15"; 165mm X 321.35mm X 410.25mm
- Approx. 15.45 lb (7 kg), weight may vary by configuration
- Tastless cover, disk, optical, graphic card removal
- Optional carry handle, dust filter
- Optional keyboard and mouse, only with optional SSD/SSD (optional bay, bay comes with desk)
- Optional 2 front USB3.1 Type-C ports module occupies PCIe x16 (x4 signal) slot, optional rear 2x USB2.0 / parallel / 2nd serial occupies one expansion slot

**Graphics**
- 4096x2304 (DP) @ 60Hz; 2048x1536 (VGA) @ 50Hz
- *Some: NVIDIA GeForce® GT 730, DirectX 12, 2GB, PCIe 2.0 x 8 adapter, two DisplayPort; 35 watts, Max resolution: 3840x2160 (DisplayPort) @ 60Hz;*  
- *Some: AMD Radeon™ R7 350, DirectX 11, 2GB, PCIe 3.0 x8 adapter, one VGA, one HDMI, 75 watts, occupies two slots; Max resolution: 4096x2160 (HDMI) @ 24Hz; 2048x1536 (VGA) @ 85Hz*  
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**Modem**
- None
- * Some: Ethernet modem, Intel Ethernet Connection I219-LM(Jacksonville), Wake on LAN®

**Power supply**
- 180 watts, autensing, 85% PSU (optimal bay, bay comes with desk)
- 250 watts, autensing, 85% PSU
- 400 watts, autensing, 92% PSU (only available via special bid)

**Limited warranty**
- 1-year or 3-year, depot service / service upgrades available
- 1-year or 3-year, limited onsite service / service upgrades available

**Preload**
- Preloaded operating system
- * Windows 7 Professional 32/64 (not available with 7th Gen Intel processor)
- Windows 10 Pro 64-bit
- Windows 10 Home 64-bit

**Preloaded applications**
- * Some: Adobe Reader, Microsoft Office preloaded;
- lenovo Companion
- Lenovo Solution Center
- lenovo ThinkVantage Tools
- Create Recovery Media
- Individual USB port disablement
- Boot without keyboard and mouse
- * Boot without keyboard and mouse
- Optional chassis intrusion switch
- Optional keyboard and mouse, only with optional SSD/SSD (optional bay, bay comes with desk)
- Optional 2 front USB3.1 Type-C ports module occupies PCIe x16 (x4 signal) slot, optional rear 2x USB2.0 / parallel / 2nd serial occupies one expansion slot

**Audio support**
- High Definition (HD) Audio, Realtek ALC662 / optional internal speaker (1.5 watt )
- * Depending on many factors, actual data transfer speed may be lower than theoretical speed

**WLAN**
- Some: 11ac wireless, M.2 Card, Qualcomm Atheros QCA9377A7 (dual band), Wi-Fi + Bluetooth 4.1 combo adapter, 1x1  
- Some: Intel Dual Band Wireless-AC 3165, Wi-Fi + Bluetooth 4.1 combo adapter, 1x1  
- Some: Intel Dual Band Wireless-AC 8265 , Wi-Fi + Bluetooth 4.1 combo adapter, 1x1  
- Some: Bluetooth 4.1 wireless, integrated in Wi-Fi + BT combo adapter

**Ethernet Modem**
- Gigabit ethernet, Intel Ethernet Connection I219-LM(Jacksonville), Wake on LAN®

**Lenovo, August 2017**
### ThinkCentre M920 Tower Platform Specifications

<table>
<thead>
<tr>
<th>Processor</th>
<th>Intel® Celeron®, Intel® Pentium®, or 8th/9th Gen Intel® Core™ i3 / i5 / i7 / i9 Processor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celeron G4900</td>
<td>2 / 2 3.1G 2 MB DDR4-2400 UHD 610</td>
</tr>
<tr>
<td>Celeron G4902</td>
<td>2 / 2 3.2G 2 MB DDR4-2400 UHD 610</td>
</tr>
<tr>
<td>Celeron G4900</td>
<td>2 / 2 3.2G 2 MB DDR4-2400 UHD 610</td>
</tr>
<tr>
<td>Celeron G4950</td>
<td>2 / 3 3.3G 4 MB DDR4-2400 UHD 630</td>
</tr>
<tr>
<td>Pentium Gold G5400</td>
<td>2 / 4 3.7G 4 MB DDR4-2400 UHD 630</td>
</tr>
<tr>
<td>Pentium Gold G5600</td>
<td>2 / 4 3.9G 4 MB DDR4-2400 UHD 630</td>
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<tr>
<td>Core i3-8100</td>
<td>4 / 4 3.6G 6 MB DDR4-2400 UHD 630</td>
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<tr>
<td>Core i3-8350</td>
<td>4 / 4 3.7G 8 MB DDR4-2400 UHD 630</td>
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<tr>
<td>Core i5-8400</td>
<td>6 / 6 2.8G / 4.0G 9 MB DDR4-2400 UHD 630</td>
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<tr>
<td>Core i5-8500</td>
<td>6 / 6 3.0G / 4.1G 9 MB DDR4-2400 UHD 630</td>
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<td>Core i5-8600</td>
<td>6 / 6 3.1G / 4.3G 9 MB DDR4-2400 UHD 630</td>
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<td>Core i7-8700</td>
<td>6 / 6 3.2G / 4.6G 12 MB DDR4-2400 UHD 630</td>
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<td>Core i3-9100</td>
<td>4 / 4 3.6G / 4.2G 6 MB DDR4-2400 UHD 630</td>
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<td>Core i3-9320</td>
<td>4 / 4 3.7G / 4.3G 8 MB DDR4-2400 UHD 630</td>
</tr>
<tr>
<td>Core i9-9400</td>
<td>6 / 6 2.9G / 4.1G 9 MB DDR4-2400 UHD 630</td>
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</tr>
<tr>
<td>Core i9-9900</td>
<td>8 / 16 3.1G / 5.0G 16 MB DDR4-2400 UHD 630</td>
</tr>
</tbody>
</table>

### Memory
- 64GB max, DDR4-2666, four 288-pin DIMM sockets, dual-channel capable
- System automatically clocks down for the processors with lower memory controller

### Storage
- Some: Hard Drive / SATA 6.0Gb/s, 2.5" or 3.5", 5400 rpm or 7200 rpm
- Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5"
- Some: M.2 SSD (2242 / 2280) / PCIe NVMe, PCIe 3.0 x2 or PCIe 3.0 x4
- Some: Intel Optane™ Memory (not support Celeron / Pentium Processor), M.2 Optional DVD-ROM or DVD Burner (DVD+RW), SATA 1.5Gb/s Drive, slim (9.0mm)

### Optical Onboard SATA
- Four onboard SATA 6.0Gb/s connectors, RAID 0/1/0 support (RAID preset only available via special bid model)

### Media Reader
- Optional 7-in-1 media reader

### Graphics
- Intel UHD Graphics 610/630 in processor, uses main memory, DirectX® 12, up to 1.5GB, one VGA (up to 2048x1536@60Hz), two DisplayPort (up to 4096x2160@60Hz), supports 3 independent displays, more displays support via discrete graphics
- NVIDIA GeForce® GT 730 (End Of Life), DirectX 12, 2GB GDDR5, 128 bits, 35 watts, 35w, 30 watts, 20 watts, DisplayPort (up to 4096x2160@60Hz)
- AMD Radeon™ R720, DirectX 12, 2GB GDDR5, PCIe 3.0 x8, 30 watts, DisplayPort (up to 4096x2160@60Hz)
- AMD Radeon RX 550X, DirectX 12, 4GB GDDR5, PCIe 3.0 x8, 50 watts, DisplayPort (up to 4096x2160@60Hz)
- NVIDIA GeForce GTX 1060 (special bid only), DirectX 12, 6GB GDDR5, PCIe 3.0 x16, 120 watts, 1x DVI-D (up to 2560x1600@60Hz), 1x HDMI (up to 4096x2160@60Hz), optional 2 slots Optional DP to VGA/DP, DP to DVI-D, DVI-D, DisplayPort (for Collage Display with Intel integrated graphics), or DP to HDMI 1.4 dongle

### Chipset
- Intel® Q370 Chipset

### Front ports* (Std.):
- 2x USB 3.1 Gen2
- 2x USB 3.1 Gen1
- 1x USB 3.1 Type-C Gen1 (15W charging)
- 1x microphone (3.5mm)
- 1x headphone / microphone combo jack (3.5mm)

### Front ports* (Opt.):
- Optional: 1x media reader

### Rear ports* (Std.):
- 4x USB 3.1 Gen1, 1x serial (9-pin), 1x ethernet (RJ-45), 1x VGA, 2x DisplayPort, 1x line-out (3.5mm)

### Rear ports* (Opt.):
- Optional: 2x USB 2.0, 2x USB 3.1 Gen1 via PCIe x1, 2x USB 3.1 Type-C Gen2 via PCIe x4 (special bid only), 1x 2nd serial (9-pin), 4x serial (9-pin) via PCIe x1, 1x parallel (25-pin), 2x PS/2 ports (keyboard/mouse), 1x Thunderbolt 3 (combo)

### Audio support
- High Definition (HD) Audio, Realtek ALC233VB2 / internal speaker (2 watt)

### WLAN
- Some: 11ac Wi-Fi + BT 4.2, M.2 Card
- Some: 11ac Wi-Fi + BT 4.2, M.2 Card, Realtek RTL8821CE (dual band), 1x1
- Some: 11ac Wi-Fi + BT 4.2, M.2 Card, Intel Dual Band Wireless-AC 3165, 1x1
- Some: Intel 9560, M.2 Card, Intel Dual Band Wireless-AC 8265, 2x2
- Some: 11ac Wi-Fi + BT 5.0, M.2 Card, Intel Wireless-AC 9560 (dual band)

### Bluetooth™
- Ethernet
- Ethernet (Opt.)
- Some: Bluetooth 4.2/5.0 wireless, integrated in Wi-Fi + BT combo adapter
- Gigabit ethernet, Intel Ethernet Connection I219-LM(Jacksonville), Wake on LAN™
- Some: Intel Ethernet Server Adapter I350-T4, gigabit ethernet, 4x RJ-45, PCIe x4

### Manageability
- Intel Active Management Technology 12 (Intel AMT 12)
- Intel vPro technology on some models (require choosing a vPro-support Wi-Fi adapter to enable vPro function through wireless connection)

### Security chip
- Discrete TPM 2.0, TCG Certified

### Security features
- Security lock (in rear for optional Kensington® MicroSaver™ cable)
- Power-on password
- Padlock loop
- Hard disk password
- Optional chassis intrusion switch
- Boot sequence control
- Boot without keyboard and mouse
- Individual USB port disablement
- Smart USB protection, allows keyboard/ mouse only, blocks all storage devices

### Mechanical
- Tower (18L), black color, metal case
- (WxHxD) 6.5” X 12.65” X 16.15”; 165mm X 321.35mm X 410.25mm
- Approx. 15.45 lb (7 kg), weight may vary by configuration
- Toolless cover, disk, optical, extension card removal
- Optional carry handle, dust filter
- Bay 1: Slim external ODD bay
- Bay 2: 5.25" 1.5" high, external, ODD / optional front access HDD
- Bay 3: 3.5" 1.5" high, internal, HDD/SSD
- Bay 4: 3.5" 1.5" high, internal, HDD/SSD (optional bay, bay comes with disk)
- Bay 5: 2.5" 0.8" high, internal, HDD/SSD (optional bay)
- Note: some Tower supports up to 3 SATA devices (ODD/HDD/SSD) and 1 eSATA device (front access HDD)
- Slot 1: full-length (< 268mm) full-height (< 112mm), PCIe 3.0 x16
- Slot 2: full-length (< 268mm) full-height (< 112mm), PCIe 3.0 x16
- Slot 3: full-length (< 268mm) full-height (< 112mm), PCIe 3.0 x16 (x4 signal)
- Slot 4: no slot, only bracket for optional port extension

### Power supply
- M.2 card slots: Two (one for WLAN, one for SSD/Optane)
- Some: Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Some: Lenovo Calliope Mouse (USB connector), black
- Some: Lenovo Calliope Mouse (PS/2 connector), black (only available via special bid)
- Some: Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Some: Lenovo Calliope Mouse (PS/2 connector), black (only available via special bid)

### Preload
- Windows 10 Home 64-bit
- Some: Windows 10 Pro 64-bit
- Some: Windows 10 Home 64-bit

### Environment
- ENERGY STAR
- Intel Core™ i3 / i5 / i7 / i9 Processor
- Intel Celeron®, Intel Pentium®, or 8th/9th Gen Intel® Core™ i3 / i5 / i7 / i9 Processor
- Intel® Q370 Chipset

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

Lenovo, November 2019
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Limited warranty: Support unrelated to a warranty issue may be subject to additional charges.

Lenovo Services:

**Carry-in or Mail-in Service:** Parts and labor repair coverage where the customer is responsible for shipping (including packaging) or delivery to authorized warranty provider or repair center.

**Depot or Courier Service:** Parts and labor repair coverage where shipping (including packaging) or delivery to the repair center is paid for by Lenovo.

**Expedited Depot:** Parts and labor coverage with expedited turnaround. Shipping (including packaging) or delivery to the repair center is paid for by Lenovo.

**Onsite / In-home Service:** Parts and labor repair coverage where labor is provided onsite at your place of business.

If Lenovo determines your product problem is covered by the product warranty and cannot be resolved over the telephone, a technician will be dispatched to arrive onsite, typically the next day.


Visit www.lenovo.com/warranty for Lenovo Warranty Services terms and conditions for complete details and restrictions.

**Included software:** may differ from its retail version (if available), and may not include user manuals or all program functionality. Software license agreements may apply.

**Battery life:** Battery life (and recharge times) will vary based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.


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