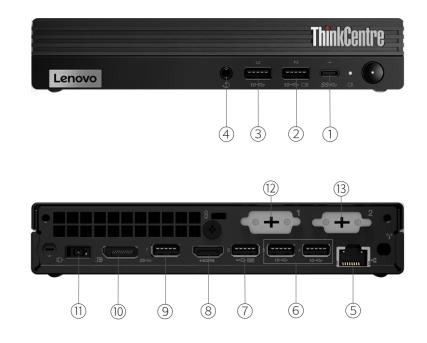
# **OVERVIEW**



1. USB-C 3.2 Gen 1	8. HDMI 2.1 TMDS
2. USB 3.2 Gen 2 (Always On and fast charge)	9. USB 3.2 Gen 1
3. USB 3.2 Gen 2	10. DisplayPort 1.4
4. Headphone / microphone combo jack (3.5mm)	11. Power connector
5. Ethernet (RJ-45)	12. Punch out port 1 *
6. 2x USB 3.2 Gen 2	13. Punch out port 2 *
7. 1x USB 2.0 (with smart power-on feature)	

Notes:

• Ports with \* are only available on selected models

# ThinkCentre M70q Gen 3

# PERFORMANCE

## **Processor**

### **Processor Family**

Intel® Celeron®, Intel Pentium®, or 12th Generation Intel Core™ i3 / i5 / i7 / i9 Processor

### Processor\*\*

Processor Name	Cores	Threads	Base Frequency	Max Frequency	Cache	Memory Support	Processor Graphics
Celeron G6900T	2	2	2.8GHz	-	4MB	DDR4-3200	Intel UHD Graphics 710
Pentium Gold G7400T	2	4	3.1GHz	-	6MB	DDR4-3200	Intel UHD Graphics 710
Core i3-12100T	4 (4 P-core + 0 E-core)	8	P-core 2.2GHz	P-core 4.1GHz	12MB	DDR4-3200	Intel UHD Graphics 730
Core i3-12300T	4 (4 P-core + 0 E-core)	8	P-core 2.3GHz	P-core 4.2GHz	12MB	DDR4-3200	Intel UHD Graphics 730
Core i5-12400T	6 (6 P-core + 0 E-core)	12	P-core 1.8GHz	P-core 4.2GHz	18MB	DDR4-3200	Intel UHD Graphics 730
Core i5-12500T	6 (6 P-core + 0 E-core)	12	P-core 2.0GHz	P-core 4.4GHz	18MB	DDR4-3200	Intel UHD Graphics 770
Core i5-12600T	6 (6 P-core + 0 E-core)	12	P-core 2.1GHz	P-core 4.6GHz	18MB	DDR4-3200	Intel UHD Graphics 770
Core i7-12700T	12 (8 P-core + 4 E-core)	20	P-core 1.4GHz / E- core 1.0GHz	P-core 4.6GHz / E- core 3.4GHz	25MB	DDR4-3200	Intel UHD Graphics 770
Core i9-12900T	16 (8 P-core + 8 E-core)	24	P-core 1.4GHz / E- core 1.0GHz	P-core 4.8GHz / E- core 3.6GHz	30MB	DDR4-3200	Intel UHD Graphics 770

## **Operating System**

### **Operating System**\*\*

- Windows<sup>®</sup> 11 Pro 64
- Windows 11 Home 64
- Windows 11 DG Windows 10 Pro 64
- Ubuntu Linux
- No operating system

## Graphics

### Graphics\*\*[1]

Graphics	Туре	Memory	Connector	Max Resolution	Key Features
Intel UHD graphics 710	Integrated	Shared	1x HDMI <sup>®</sup> 2.1 TMDS, 1x DP 1.4, 2x punch out ports([2x HDMI/VGA/DP] or [USB-C with DP function, HDMI/VGA/DP])	3840x2160@60Hz(HDMI), 1920x1200@60Hz(VGA), 3840x2160@60Hz(DP), 3840x2160@60Hz(USB-C with DP function)	DirectX® 12
Intel UHD graphics 730	Integrated	Shared	1x HDMI 2.1 TMDS, 1x DP 1.4, 2x punch out ports([2x HDMI/VGA/DP] or [USB-C with DP function, HDMI/VGA/DP])	3840x2160@60Hz(HDMI), 1920x1200@60Hz(VGA), 3840x2160@60Hz(DP), 3840x2160@60Hz(USB-C with DP function)	DirectX 12
Intel UHD graphics 770	Integrated	Shared	1x DP 1.4, 1x HDMI 2.1 TMDS, 2x punch out ports([2x HDMI/VGA/DP] or [USB-C with DP function, HDMI/VGA/DP])	3840x2160@60Hz(HDMI), 1920x1200@60Hz(VGA), 3840x2160@60Hz(DP), 3840x2160@60Hz(USB-C with DP function)	DirectX 12

## ThinkCentre M70q Gen 3

Lenovo

Notes:

1. The information of integrated graphics are not applicable for the models without integrated graphics (for the details, please refer to processor section)

## **Monitor Support**

### **Monitor Support**

Supports up to 4 independent displays via (onboard DP, onboard HDMI, punch out port 1[VGA / HDMI / DP / USB-C], and punch out port 2[VGA / HDMI / DP])

### Chipset

### Chipset

Intel Q670 Chipset

### Memory

### Max Memory<sup>[1]</sup>

Up to 64GB DDR4-3200

### Memory Slots

Two DDR4 SO-DIMM slots, dual-channel capable

### Memory Type

DDR4-3200

Notes:

1. The max memory is based on the test results with current Lenovo<sup>®</sup> memory offerings. The system may support more memory as the technology develops.

## Storage

### Storage Support<sup>[1]</sup>

Up to two drives, 1x 2.5" HDD + 1x M.2 SSD • 2.5" HDD up to 1TB • M.2 SSD up to 2TB

### Storage Type\*\*\*

Disk Type	Interface	RPM	Security
2.5" SATA HDD	SATA 6Gb/s	7.2K	-
M.2 2242 SSD	PCIe® NVMe®, PCIe 3.0 x2	-	-
M.2 2280 SSD	PCIe NVMe, PCIe 4.0 x4	-	Opal2

### RAID

No support

Notes:

1. The storage capacity supported is based on the test results with current Lenovo storage offerings. The system may support larger storage as the technology develops.

## **Removable Storage**

### **Optical**\*\*

- DVD-ROM, slim (9.0mm), via USB external ODD box
- DVD burner (DVD±RW), slim (9.0mm), via USB external ODD box
- None

### **Card Reader**

No card reader

## **Multi-Media**

## Audio Chip

High Definition (HD) Audio, Realtek® ALC256VB codec

### Speakers\*\*

Single speaker, 2W x1

• Premium single speaker, 2W x1

## **Power Supply**

### Power Supply\*\*[1]

Power	Туре	Efficiency	Key Features
65W	Adapter	89%	Autosensing
90W	Adapter	89%	Autosensing
135W	Adapter	89%	Autosensing
No power supply	-	-	-

Notes:

1. The optional 90w adapter may increase performance scores when 12500T/12400T CPUs are installed.

# DESIGN

## **Input Device**

### Keyboard\*\*

- Lenovo Calliope Keyboard (USB connector), black
- Lenovo Calliope Wireless Keyboard, black
- Lenovo Traditional Keyboard (USB connector), black
- No keyboard

### Mouse\*\*

- Lenovo Calliope Mouse (USB connector), black
- Lenovo Calliope Wireless Mouse (2.4GHz via USB receiver), black
- Lenovo Fingerprint Mouse (USB connector), black
- No mouse

## Mechanical

Form Factor

Tiny (1L)

### Dimensions (WxDxH)

Models	Dimensions
Tiny only	179 x 182.9 x 36.5 mm with rubber feet (7.05 x 7.2 x 1.44 inches with rubber feet)
Tiny & ODD	204.2 x 186.6 x 64 mm with rubber feet (8.04 x 7.35 x 2.52 inches with rubber feet)

### Packaging Dimensions (WxDxH)\*\*

- Tiny only : 490 x 268 x 141 mm (19.29 x 10.55 x 5.55 inches)
- Tiny & ODD : 490 x 268 x 166 mm (19.29 x 10.55 x 6.54 inches)

### Weight

Models	Weight
Tiny only	1.25 kg (2.76 lbs)
With VESA mount & ODD box	1.74 kg (3.84 lbs)

### Packaging Weight\*\*

- Tiny & ODD: 3.58 kg (7.89 lbs)
- Tiny only: 2.85 kg (6.28 lbs)

### Case Color

Raven black

### Bays

1x 2.5" disk bay

### **Expansion Slots**

Two M.2 slots (one for WLAN, one for SSD)

## EOU

(Optional) toolless chassis open (toolless chassis screw required) and toolless M.2 SSD, HDD, memory assembly / removal **Stand** 

- Vertical stand
- No stand

### IO Box

No IO box

### Mounting

• VESA mount bracket kit, supports VESA mount 75mm and 100mm

## None

- Others
- (Optional) Dust filter
- (Optional) Power adapter cage
- Supports Smart Power On

# CONNECTIVITY

## Network

### **Onboard Ethernet**

Gigabit Ethernet, Intel Ethernet Connection I219-LM, 1x RJ-45, supports Wake-on-LAN

### Optional Ethernet<sup>[1]</sup>

- No optional Ethernet
- 2.5 Gigabit Ethernet, Realtek RTL8125BGS, 1x RJ-45, supports Wake-on-LAN

### WLAN + Bluetooth®\*\*[2]

- Realtek RTL8822BE, 802.11ac Dual Band 1x1 Wi-Fi® + Bluetooth 5.2, M.2 card
- Realtek RTL8822CE, 802.11ac Dual Band 2x2 Wi-Fi + Bluetooth 5.0, M.2 card
- Intel Wireless-AC 9560, 802.11ac Dual Band 2x2 Wi-Fi + Bluetooth 5.1, M.2 card
- Intel Wi-Fi 6 AX201, 802.11ax 2x2 Wi-Fi + Bluetooth 5.2, M.2 Card
- No WLAN and Bluetooth

### Notes:

- 1. Optional Ethernet card occupied puch out port 2
- 2. Bluetooth 5.2 is hardware ready but may run at lower version due to OS limitation

## **Ports**<sup>[1]</sup>

### **Front Ports**

- 1x USB 3.2 Gen 2
- 1x USB 3.2 Gen 2 (Always On and 5V@2.1A charging)
- 1x USB-C 3.2 Gen 1 (support data transfer and 5V@0.9A charging)
- 1x headphone / microphone combo jack (3.5mm)

## **Optional Front Ports**

## None

- Rear Ports<sup>[2]</sup>
- 1x USB 2.0
- 1x USB 3.2 Gen 1
- 2x USB 3.2 Gen 2
- 1x HDMI 2.1 TMDS
- 1x DisplayPort<sup>™</sup> 1.4
- 1x Ethernet (RJ-45)

## Optional Rear Ports\*\*[3]

- Punch out port 1 (one of VGA / DisplayPort / HDMI / serial / USB-C 2.0 with DisplayPort function)
- Punch out port 2 (one of VGA / DisplayPort / HDMI / serial / RJ-45)

### Notes:

1. The transfer speed of following ports will vary and, depending on many factors, such as the processing speed of the host device, file attributes and other factors related to system configuration and your operating environment, will be slower than theoretical speed.

Lenovo

USB 2.0: 480 Mbit/s;

- USB 3.2 Gen 1 (SuperSpeed USB 5Gbps, formerly USB 3.0 / USB 3.1 Gen 1): 5 Gbit/s;
- USB 3.2 Gen 2 (SuperSpeed USB 10Gbps, formerly USB 3.1 Gen 2): 10 Gbit/s;
- USB 3.2 Gen 2x2 (SuperSpeed USB 20Gbps): 20 Gbit/s;
- Thunderbolt™ 3/4: 40 Gbit/s;
- FireWire 400: 400 Mbit/s;
- FireWire 800: 800 Mbit/s
- 2. For video ports on discrete graphics, please see graphics section
- 3. USB-C 3.2 Gen 1 only available for models with 135W adapters

## **Monitor Cable**

### Monitor Cable\*\*\*

- DP to dual DP dongle
- DP to DVI-D dongle
- DP to HDMI dongle
- DP to VGA dongle
- HDMI to HDMI cable (1.5m)
- HDMI to VGA dongle
- No monitor cable

# **SECURITY & PRIVACY**

## Security

### **Security Chip**

Discrete TPM 2.0, TCG certified

#### **Physical Locks**

Kensington® Security Slot

#### **Chassis Intrusion Switch**

Chassis intrusion switch

### **Fingerprint Reader**

- Touch style fingerprint reader on mouse
- No fingerprint reader

#### **BIOS Security**

- Administrator password
- Power-on password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Certificate based BIOS management
- Cover presence switch
- Self-healing BIOS
- Smart USB protection (allows keyboard / mouse only, blocks all storage devices)
- Individual USB port disablement

## MANAGEABILITY

## System Management

### System Management<sup>[1]</sup>

- Intel vPro Essentials
- Non-vPro

Notes:

1. Intel vPro offers a superset of DASH's defined capabilities.

# SERVICE

## Warranty

### Base Warranty\*\*[1]

- 1-year depot service
- 1-year limited onsite service
- 3-year limited onsite service
- No base warranty

Notes:

1. More information of warranty policy, please access https://pcsupport.lenovo.com/warranty

# ENVIRONMENTAL

## **Operating Environment**

### Temperature

- Operating: 5°C (41°F) to 35°C (95°F)
- Storage: -40°C (-40°F) to 60°C (140°F)

### Humidity

- Operating: 20% to 80%
- Storage: 10% to 90%

### Altitude

- Operating: 0 m (0 ft) to 3048 m (10,000 ft)
- Storage: 0 m (0 ft) to 12192 m (40,000 ft)

# CERTIFICATIONS

## **Green Certifications**

### **Green Certifications**

- (Optional) EPEAT<sup>™</sup> Gold
- ENERGY STAR<sup>®</sup> 8.0
- ErP Lot 3
- TCO Certified 9.0
- RoHS compliant

## **Other Certifications**

### Other Certifications

- (Optional) TÜV Rheinland<sup>®</sup> Low Noise
- (Optional) TÜV Rheinland Ultra Low Noise

### Mil-Spec Test

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

- Feature with \*\* means that only one offering listed under the feature is configured on selected models.
- Feature with \*\*\* means that one or more offerings listed under the feature could be configured on selected models.
- Lenovo reserves the right to change specifications or other product information without notice. Lenovo is not responsible for photographic or typographical errors. LENOVO PROVIDES THIS PUBLICATION "AS IS," WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore this disclaimer may not apply to you.
- The specifications on this page may not be available in all regions, and may be changed or updated without ThinkCentre M70q Gen 3 - April 08 2022

notice.





intel.







intel





intel

intel



intel