MOTHERBOARD

MAG B460M MORTAR WIFI

CONQUER THE BATTLEFIELD



FEATURES

M.2 SHIELD FROZR

Onboard M.2 thermal solution to keep M.2 SSDs safe while preventing throttling, making them run cooler & faster.

WIFI 6

The latest wireless solution supports MU-MIMO and BSS color technology, delivering speeds up to 2400Mbps.

Core Boost

With premium layout and fully digital power design to support more cores and provide better performance.

Extended Heatsink Design

MSI extended PWM heatsink and enhanced circuit design ensures even high-end processors to run in full speed.

2.5G LAN

Onboard 2.5G LAN with LAN manager, delivering the best online gaming experience.

Audio Boost

Reward your ears with studio grade sound quality for the most immersive audio experience.

DDR4 Boost

Advanced technology to deliver pure data signals for the best gaming performance and stability.

SPECIFICATIONS

CPU

Supports 10th Gen Intel® Core™ and Pentium® Gold / Celeron® processors for LGA1200 socket [1] [2]

1. Please go to intel.com for compatibility information
2. Onboard graphics output are disabled when using the F SKU processors.

See supported processors

Chipset

Intel® B460 Chipset

Memory

- 4x DDR4 memory slots, support up to 128GB [1]
- Intel® Core™ i7/i9
  - Support DDR4-2933 Memory (Max.)
- Intel® Core™ i5 (Below)
  - Supports DDR4-2666 Memory (Max.)
- Supports Dual-Channel mode
- Supports non-ECC, un-buffered memory

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- Supports Intel® Extreme Memory Profile (XMP)

1. Please refer www.msi.com for more information on compatible memory.

See supported memory

Expansion Slot

- 1x PCIe 3.0 x16 slot (from CPU)
- 1x PCIe 3.0 x16 slot (from PCH supports x4 mode)
- 1x PCIe 3.0 x1 slot (from PCH)

Onboard Graphics

- 1x HDMI™ port, supports a maximum resolution of 4096x2160 @ 30Hz
- 1x DisplayPort port supports a maximum resolution of 4096 x 2304 @ 60Hz

Storage

Intel® B460 Chipset

- 6x SATA 6Gb/s ports [1]
- 2x M.2 slots (Key M)
  - M2_1 supports up to PCIe 3.0 x4 and SATA 6Gb/s, 2242/ 2260/ 2280 storage devices[1]
  - M2_2 supports up to PCIe 3.0 x4, 2242/ 2260/ 2280 storage devices
  - Intel® Optane™ Memory Ready[2]
  - Supports Intel® Smart Response Technology for Intel Core™ processors

1. SATA1 will be unavailable when installing M.2 SATA SSD in the M2_1 slot.
2. Before using Intel® Optane™ memory modules, please ensure that you have updated the drivers and BIOS to the latest

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version from MSI website.

RAID

Intel® B460 Chipset

- Supports RAID 0, RAID 1, RAID 5 and RAID 10 for SATA storage devices

USB

Intel® B460 Chipset

- 2x USB 3.2 Gen 1 5Gbps Type-C ports (1 port on the back panel, 1 port through the internal USB connector)
- 5x USB 3.2 Gen 1 5Gbps Type-A ports (3 ports on the back panel, 2 ports through the internal USB connector)
- 6x USB 2.0 ports (2 Type-A ports on the back panel, 4 ports through the internal USB 2.0 connectors)

Audio

Realtek® ALC1200 Codec

- 7.1-Channel High Definition Audio
- Supports S/PDIF output

LAN

- 1x Realtek® RTL8125B 2.5G LAN Controller

WiFi & Bluetooth

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Intel® AX201

- Supports 802.11 a/b/g/n/ac/ax, MU-MINO Rx, 2.4GHz-5GHz (160MHz) up to 2.4Gbps
- WiFi 6 Pre-Certified
- Supports Bluetooth® 5.1 , FIPS, FISMA
- The Wireless module is pre-install in the M2 (Key-E) slot

1. Only support windows 10 64-bit

Internal connectors

- 1x 24-pin ATX main power connector
- 1x 8-pin ATX 12V power connector
- 6x SATA 6Gb/s connectors
- 1x USB 3.2 Gen 1 5Gbps connector (support additional 2 USB 3.2 Gen 1 5Gbps ports)
- 1x USB 3.2 Gen 1 5Gbps Type-C connector
- 2x USB 2.0 connectors (support additional 4 USB 2.0 ports)
- 1x 4-pin CPU fan connector
- 1x 4-pin water pump connector
- 2x 4-pin system fan connectors
- 1x front panel audio connector
- 2x system panel connectors
- 1x TPM module connector
- 1x Chassis Intrusion connector
- 1x Clear CMOS jumper
- 1x 4-pin RGB LED connector
- 1x 3-pin RAINBOW LED connector
- 1x TBT connector [1]
- 1x RTD3 connector[1]

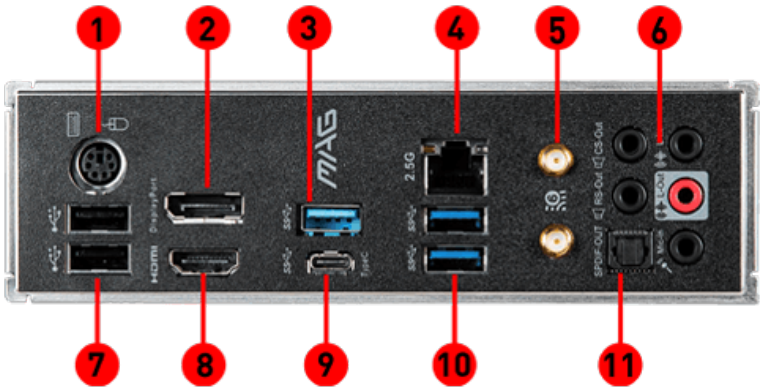
1. Thunderbolt card need support RTD3

Back panel ports

1. 1x PS/2 keyboard/ mouse combo port
2. 2x USB 2.0 ports
3. 3x USB 3.2 Gen 1 5Gbps Type-A ports
4. 1x USB 3.2 Gen 1 5Gbps Type-C port
5. 1x LAN(RJ45) port

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6. 1x DisplayPort 1.2
7. 1x HDMI™ port
8. 5x audio jacks
9. 1x Optical S/PDIF OUT connector
10. 2x Wi-Fi antenna connectors (MAG B460M MORTAR WIFI)



I/O Controller

NUVOTON NCT6687 Controller Chip

Hardware Monitor

- CPU/System temperature detection
- CPU/System fan speed detection
- CPU/System fan speed control

Form Factor

- mATX Form Factor
- 9.6 in. x 9.6 in. (24.3 cm x 24.3 cm)

BIOS Features

- 1x 128 Mb flash
- UEFI AMI BIOS
- ACPI 6.2, SM BIOS 3.2 •Multi-language

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MAG B460M MORTAR WIFI

CONQUER THE BATTLEFIELD

Box content





User Manual



Quick Installation Guide



MSI Case Badge



Product Registration Card



MSI Product Catalog



Driver DVD



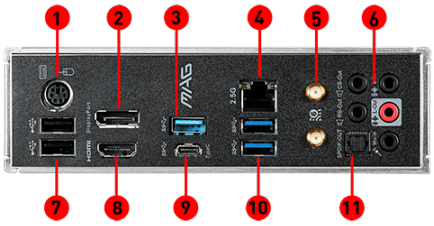
2 x SATA Cables



2 x WiFi antenna

1. MSI® does not guarantee the risks or damages caused by changing the cover.
2. These pictures are for reference only and may vary without notice.

CONNECTIONS



1. PS/2 Combo Port
2. DisplayPort
3. USB 3.2 Gen 1 5Gbps (Type-A)
4. 2.5G LAN Port
5. WiFi6
6. HD Audio Connectors
7. USB 2.0 Ports
8. HDMI™ Port
9. USB 3.2 Gen 1 5Gbps (Type-C)
10. USB 3.2 Gen 1 5Gbps (Type-A)
11. Optical S/PDIF OUT

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