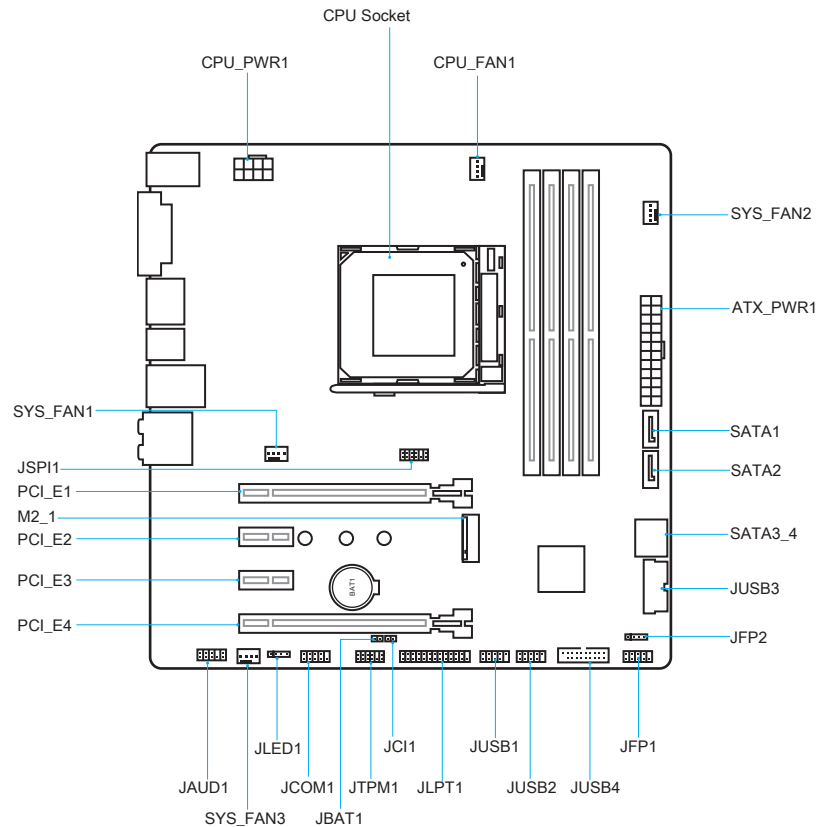


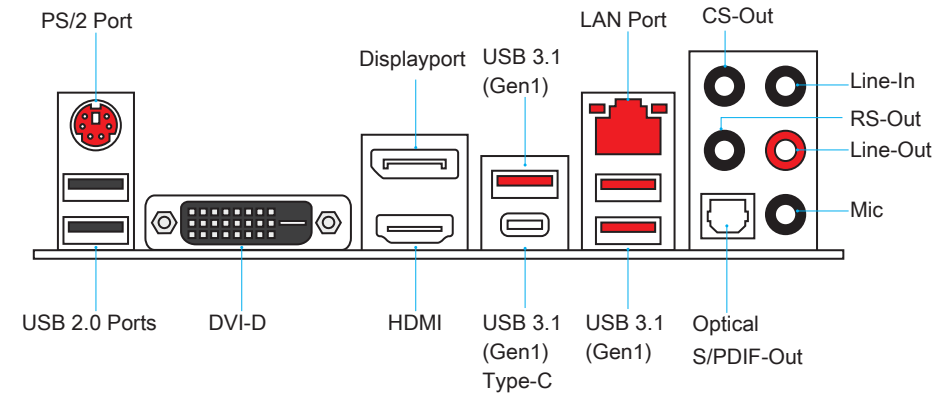
B350M MORTAR ARCTIC

(MS-7A37v2.0)
m-ATX Motherboard

Motherboard Components Overview



Rear I/O Panel



Motherboard Specification

CPU Support

- Supports AMD® RYZEN Series Processors and 7th Gen A-series/ Athlon™ processors for Socket AM4

Chipset

- AMD® B350 chipset

Memory Support

- 4x DDR4 memory slots supporting up to 64GB
- Supports DDR4 2667/ 2400/ 2133 MHz memory modules
- * 7th Gen A-series/ Athlon™ processors supporting max 2400 MHz
- Dual channel memory architecture
- Supports ECC U-DIMM memory (non-ECC mode)
- Support non-ECC, unbuffered memory

Expansion Slots

- 1x PCIe 3.0 x16 slot

- 1x PCIe 2.0 x16 slot (supports x4 mode)
- 2x PCIe 2.0 x1 slots
- * (RYZEN Series Processors support x16, x16/ x4 mode; 7th Gen A-series/ Athlon™ processors support x8/x4 mode)
- * PEIE_2 slot will be unavailable when installing PCIE_3

Onboard Graphics

- 1x DVI-D port, supporting a maximum resolution of 1920x1200@60Hz
- 1x DP 1.2 port, supporting a maximum resolution of 4096x2160@60Hz
- 1x HDMI 1.4 port, supporting a maximum resolution of 4096x2160@30Hz
- * Only support when using a 7th Gen A-series/ Athlon™ processor

Storage

- AMD® B350 chipset
- ▶ 4x SATA 6Gb/s ports

Motherboard Specification

- AMD® RYZEN Series Processors/ 7th Gen A-series/ Athlon™ processors
 - ▶ 1x M.2 port, supports PCIe 3.0 x4 (RYZEN Series Processors) or PCIe 3.0 x2 (7th Gen A-series/ Athlon™ processors) and SATA 6Gb/s standards, 4.2cm/ 6cm/ 8cm length SSD cards.
- Supports RAID 0, RAID1, RAID10

USB

- AMD® RYZEN Series Processors/ 7th Gen A-series/ Athlon™ processors
- AMD® B350 chipset
 - ▶ 8x USB 3.1 Gen1 ports (4 ports on the back panel, 4 ports available through the internal)
 - ▶ 6x USB 2.0 ports (2 ports on the back panel, 4 ports available through the internal USB connectors)

Audio

- Realtek® ALC892 Codec
- 7.1-Channel High Definition Audio

LAN

- 1x Realtek® 8111H Gigabit LAN controller

Back Panel Connectors

- 1x PS/2 keyboard/ mouse combo port
- 2x USB 2.0 ports
- 1x DVI-D port
- 1x Display port
- 1x HDMI™ 1.4 port
- 4x USB 3.1 Gen1 ports (Type A*1+Type C*1)
- 1x LAN (RJ45) port
- 1x Optical S/PDIF OUT connector
- 5x OFC audio jacks

Internal Connectors

- 1x 24-pin ATX main power connector
- 1x 8-pin ATX 12V power connector
- 4x SATA 6Gb/s connectors

- 4x USB 2.0 connectors (supports additional 4 USB 2.0 ports)
- 4x USB 3.1 Gen1 connectors (supports additional 4 USB 3.1 Gen1 ports)
- 1x 4-pin CPU fan connector
- 3x 4-pin system fan connectors
- 1x Front panel audio connector
- 2x System front panel connectors
- 1x TPM module connector
- 1x Chassis Intrusion connector
- 1x LED connector

I/O Controller

- NUVOTON NCT6795D-M Controller Chip

Hardware Monitor

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

BIOS Features

- 1x 128 Mb flash
- UEFI AMI BIOS
- Multi-language

Special Features

- VR Ready
- DDR4 Boost Support
 - * Dual-Channel DDR4 Memory Support
 - * Isolated DDR4 Circuit Design
- Multi GPU with Steel Armor
- M.2
- EZ Debug LED
- Audio Boost
- HDMI 1.4 Support

MSI Exclusive Features

- COMMAND CENTER
- LIVE UPDATE 6
- SUPER CHARGER
- GAMING APP

- RAMDISK
- X-Boost
- MSI SMART TOOL
- GAMING LAN Manager
- XSplit Gamecaster V2
- SteelSeriesEngine 3
- CPU-Z MSI GAMING
- Dragon eye
- WTFast
- Norton Internet Security Solution
- Google Chrome™ ,Google Toolbar, Google Drive

Form Factor

- m-ATX Form Factor
- 24.3 cm x 24.3 cm