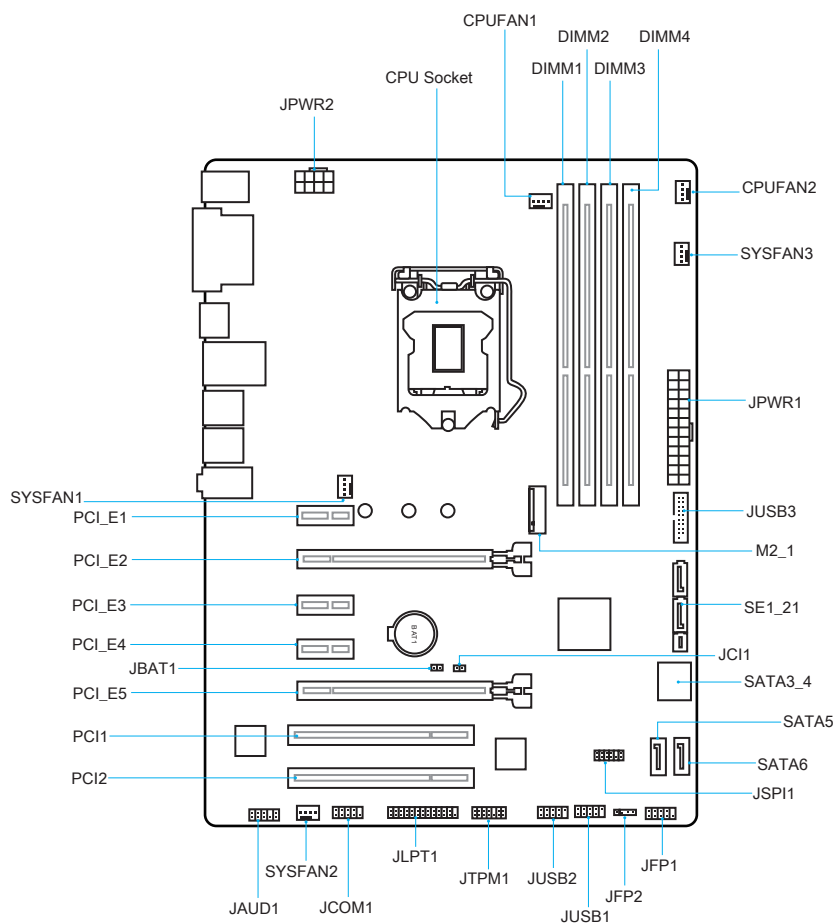


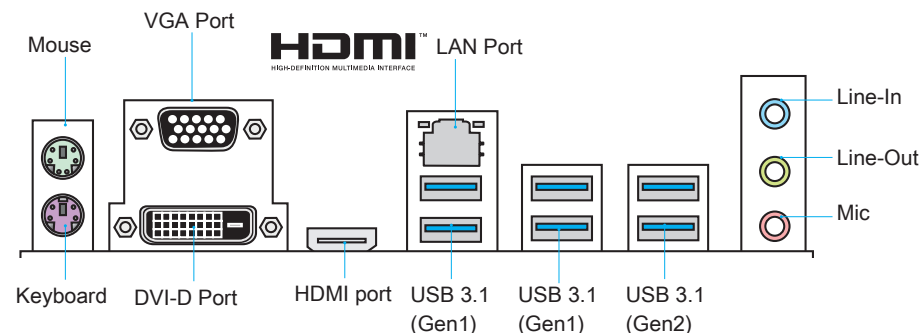
H170A PC MATE

(MS-7971v2.0)
ATX Motherboard

Motherboard Components Overview



Rear I/O Panel



Motherboard Specification

CPU Support

- Supports 6th Generation Intel® Core™ Processors, and Intel® Pentium® and Celeron® Processors for Socket LGA1151

Chipset

- Intel® H170 Express Chipset

Memory Support

- 4x DDR4 memory slots supporting up to 64GB
 - ▶ Supports DDR4 2133 MHz
- Dual channel memory architecture
- Supports ECC
- Supports un-buffered memory
- Supports Intel® Extreme Memory Profile (XMP)

Expansion Slots

- 2x PCIe 3.0 x16 slots (support x16, x4/x4 modes)
- 3x PCIe 3.0 x1 slots

- 2x PCI Slots

Onboard Graphics

- 1x HDMI port, supporting a maximum resolution of 4096x2160@24Hz
- 1x VGA port, supporting a maximum resolution of 2048x1536, 2048x1280, 1920x1200
- 1xDVI 1920x1200@60Hz

Multi-GPU Support

- Supports 2-Way AMD® CrossFire™ Technology

Storage

- Intel® H170 Express Chipset
- 4x SATA 6Gb/s ports
- 1x M.2 ports, supports PCIe 3.0 x4 and SATA 6Gb/s standards, 4.2cm/ 6cm/ 8cm length SSD cards¹

¹ M.2, SATA and SATAe ports maximum support 1x M.2_PCIe + 6x SATAs or 1x M.2_SATA + 1x M.2_PCIe + 4x SATAs. Please refer to M.2 slots with examples of various combination possibilities

Motherboard Specification

- 1x SATAe ports (PCIe3.0)
- Supports RAID 0, RAID1, RAID 5 and RAID 10
- Supports Intel® Smart Response Technology, Intel® Rapid Start Technology and Intel® Smart Connect Technology²

USB

- Intel H170 Express Chipset
- 4x USB2.0 (internal USB connectors)
- 6x USB3.1 Gen1 ports (4 ports on the back panel, 2 ports available through the internal USB connectors)
- ASMedia ASM1142 Chipset
- 2x USB3.1 Gen2 (10GT/s) ports

Audio

- Realtek® ALC887 Codec
- 7.1-Channel High Definition Audio

LAN

- 1x Realtek® RTL8111H Gigabit LAN controller

Back Panel Connectors

- 1x PS/2 keyboard/ mouse port
- 2x USB3.1 Gen2 (10GT/s) ports
- 4x USB3.1 Gen1 (5GT/s) ports
- 1x HDMI™ port
- 1x DVI port
- 1X D-SUB port
- 1x LAN (RJ45) port

Internal Connectors

- 1x 24-pin ATX main power connector
- 1x 8-pin ATX 12V power connector
- 4x SATA 6Gb/s connectors
- 2x USB 2.0 connectors (supports additional 4 USB 2.0 ports) For H170
- 1x USB3.1 Gen1 (5GT/s) connector
- 2x 4-pin CPU fan connectors
- 3x 4-pin system fan connectors
- 1x Front panel audio connector

² Supports Intel® Core processors on Windows® 7 and Windows® 8/ 8.1.

- 1x System panel connector
- 1x TPM module connector
- 1x Parallel port connector
- 1x Chassis Intrusion connector
- 1x Clear CMOS jumper
- 3x Debug Code LED

I/O Controller

- NUVOTON NCT6793D+ Controller Chip

Hardware Monitor

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

BIOS Features

- 1x 64 Mb flash
- UEFI AMI BIOS
- ACPI 5.0, PnP 1.0a, SM BIOS 2.8
- Multi-language

Special Features

- DDR4 Boost Support
- PCI Express 3.0 Support
- USB 3.1 Gen2 (10 Gb/s) Ready
- SATA Express Support
- AMD CrossFire
- Debug LED
- Smart Fan Control

MSI Exclusive features

- Click BIOS 5
- Military Class 5
- Command Center
- RAM Disk
- Live Update 6
- M-Cloud
- ECO Center
- USB Audio Power
- USB Redrivers
- BIOSFlashback+

Form Factor

- ATX Form Factor
- 12 in. x 8.9 in. (30.4 cm x 22.5 cm)