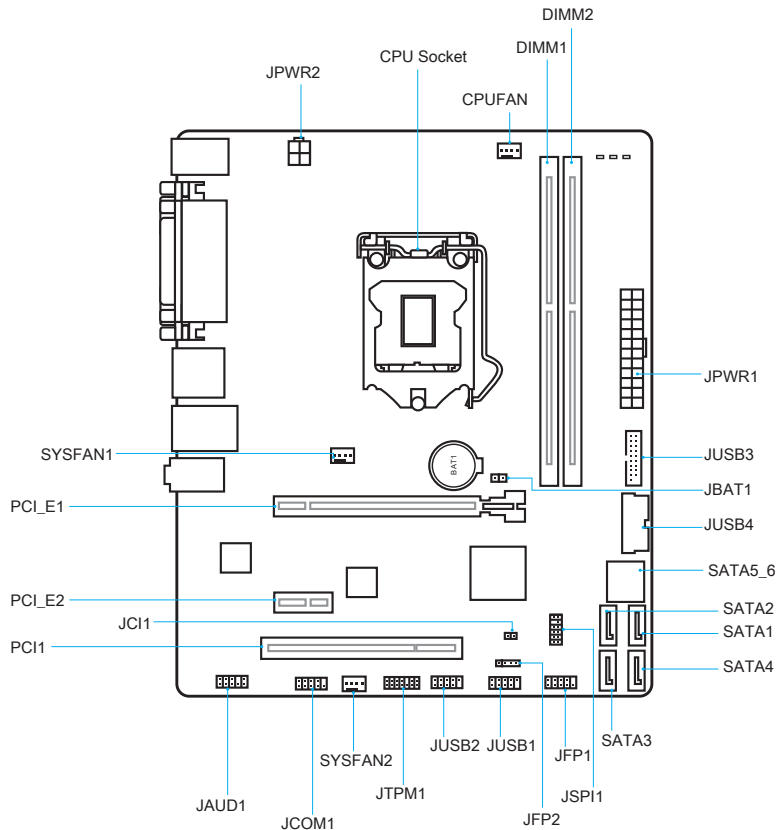


CSM-B150M PRO-VHL

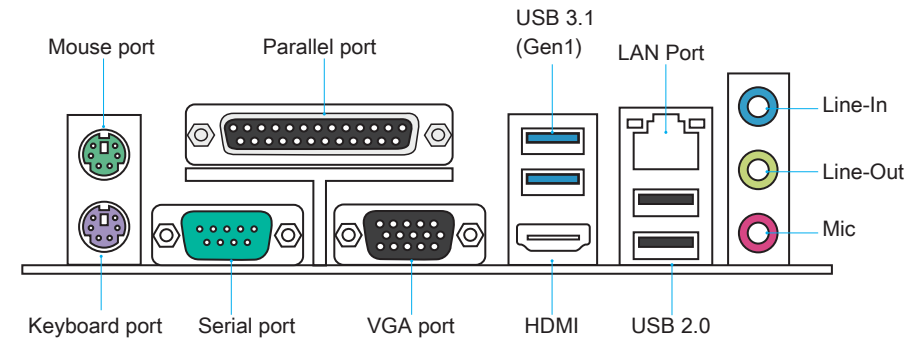
(MS-7990v1.1)

mATX 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® B150 Chipset

Memory Support

- 2x DDR4 memory slots supporting up to 32 GB
- Dual channel memory architecture
- Supports non-ECC memory, un-buffered memory
- Supports Intel® Extreme Memory Profile (XMP)

Expansion Slots

- 1x PCIe 3.0 x16 slot
- 1x PCIe 3.0 x1 slot
- 1x PCI slot

Onboard Graphics

- 1x HDMI port, supporting a maximum resolution of 4096x2160@24Hz, 2560x1600@60Hz
- 1x VGA port, supporting a maximum resolution of 2048x1536, 2048x1280, 1920x1200

Storage

- Intel B150 Chipset
- 6x SATA 6Gb/s ports

USB

- Intel B150 Chipset
- 6x USB 3.1 Gen 1 ports (2 ports on the back panel, 4 ports available through the internal USB connectors)
- 6x USB 2.0 ports (2 ports on the back panel, 4 ports available through the internal USB connectors)

Audio

- Realtek® ALC887 Codec

Motherboard Specification

- 7.1-Channel High Definition Audio

LAN

- 1x Realtek 8111H Gigabit LAN controller

Back Panel Connectors

- 1x PS/2 Mouse port
- 1x PS/2 Keyboard port
- 2x USB 2.0 ports
- 2x USB 3.1 Gen 1 ports
- 1x serial port (COM1)
- 1x VGA Port
- 1x parallel port
- 1x HDMI port
- 1x LAN (RJ45) port
- 3x Audio Jacks

Internal Connectors

- 1x 24-pin ATX main power connector
- 1x 4-pin ATX 12V power connector
- 6x SATA 6Gb/s connectors
- 2x USB 2.0 connectors (supports additional 4 USB 2.0 ports)
- 2x USB 3.1 Gen 1 connector (supports additional 4 USB 3.1 Gen 1 ports)
- 1x 4-pin CPU fan connector
- 2x 4-pin system fan connectors
- 1x Clear CMOS jumper
- 1x Front panel audio connector
- 2x System panel connectors
- 1x TPM module connector
- 1x Chassis Intrusion connector
- 1x Serial port connector

I/O Controller

- NUVOTON/NCT6793D-M 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 2.7, DMI 2.0
- Multi-language

Special Features

- PCI Express 3.0 Support
- EZ Debug LED
- Smart Fan Control

MSI Exclusive Features

- Click BIOS 5
- Command Center
- RAMDisk
- Super Charger
- Fast boot
- Live Update 6
- M-Cloud
- Intel Small Business Basics(SBB)
- Network Genie
- Intel Extreme Tuning Utility
- CPU-Z MSI GAMING

Form Factor

- mATX Form Factor
- 24.3 cm x 20.5 cm