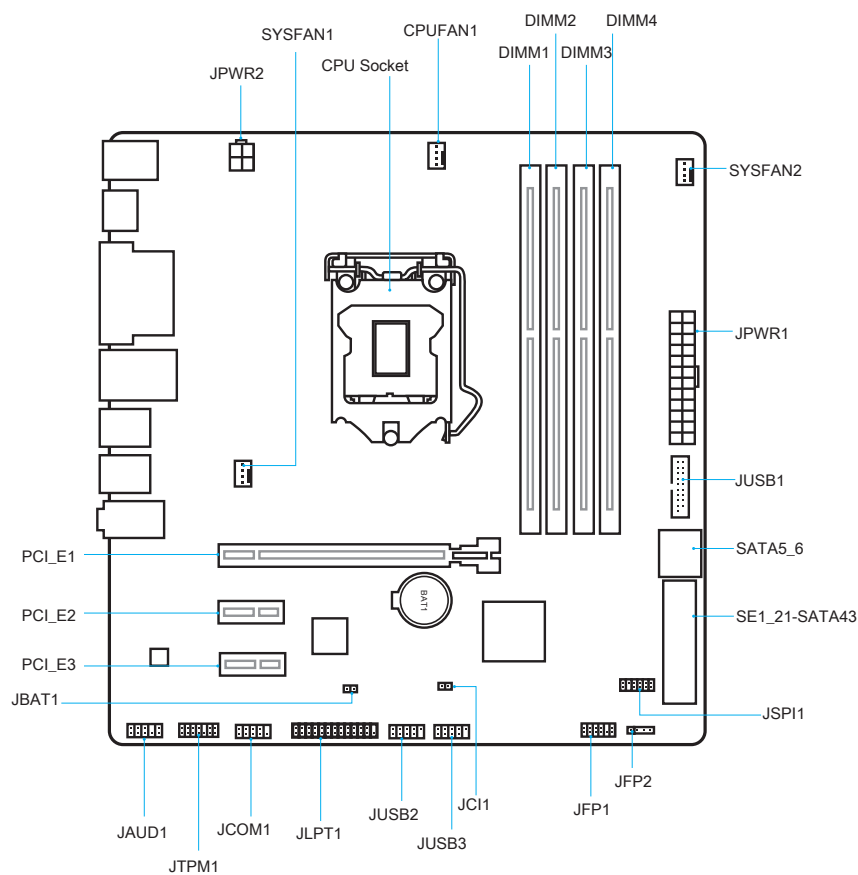


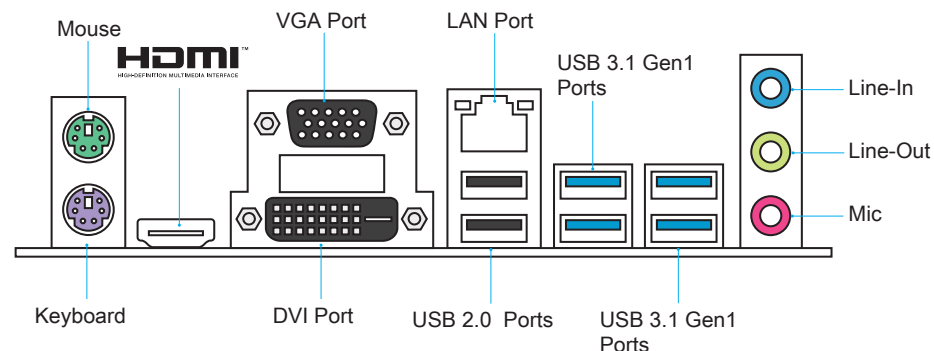
# B150M PRO-VDH

(MS-7982v1.1)  
m-ATX Motherboard

## Motherboard Components Overview



## Rear I/O Panel



## Motherboard Specification

### CPU Support

- Supports 6th Gen Intel® Core™ i3/i5/i7 processors, and Intel® Pentium® and Celeron® processors for Socket LGA1151

### Chipset

- Intel® B150 Express Chipset

### Memory Support

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

### Expansion Slots

- 1x PCIe 3.0 x16 slot (support x16 mode)
- 2x PCIe 3.0 x1 slots

### Onboard Graphics

- 1x HDMI port, supporting a maximum resolution of 4096x2160@24Hz, 2560x1600@60Hz
- 1x VGA port, supporting a maximum resolution of 2048x1536@50Hz, 2048x1280@60Hz, 1920x1200@60Hz
- 1x DVI-D port, supporting a maximum resolution of 1920x1200@60Hz

### Storage

- Intel B150 Express Chipset
- 6x SATA 6Gb/s ports
- 1x SATA Express port (PCIe 3.0 x2)<sup>1</sup>

### USB

- Intel B150 Express Chipset
- 6x USB 3.1 Gen1 Ports (4 ports on the back panel, 2 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)

<sup>1</sup> SATA Express port is backward compatible with SATA.

# Motherboard Specification

connectors)

## Audio

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

## LAN

- 1x REALTEK/RTL 8111H Gigabit LAN controller

## Back Panel Connectors

- 1x PS/2 keyboard/ mouse port
- 2x USB 2.0 ports
- 4x USB 3.1 Gen1 (5GT/s) Ports
- 1x HDMI port
- 1x VGA port
- 1x DVI-D 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)
- 1x USB 3.1 Gen1 connector (supports additional 2 USB 3.1 Gen1 (5GT/s) 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
- 1x Parallel port connector

## 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 128 Mb flash
- UEFI AMI BIOS
- ACPI 5.0, PnP 1.0a, SM BIOS 2.8
- Multi-language

## Special Features

- Debug LED(for CPU,DRAM,VGA)
- Smart Fan Control
- PCI Express 3.0 Support
- SATA Express Support
- Intel® Small Business Advantage

## MSI Exclusive features

- Click BIOS 5
- Military Class 4
- Command Center
- RAM Disk
- Live Update 6
- M-Cloud

## Form Factor

- m-ATX Form Factor
- 23.5cm x 22.8cm