

# **MS-Challenger B760M D5**

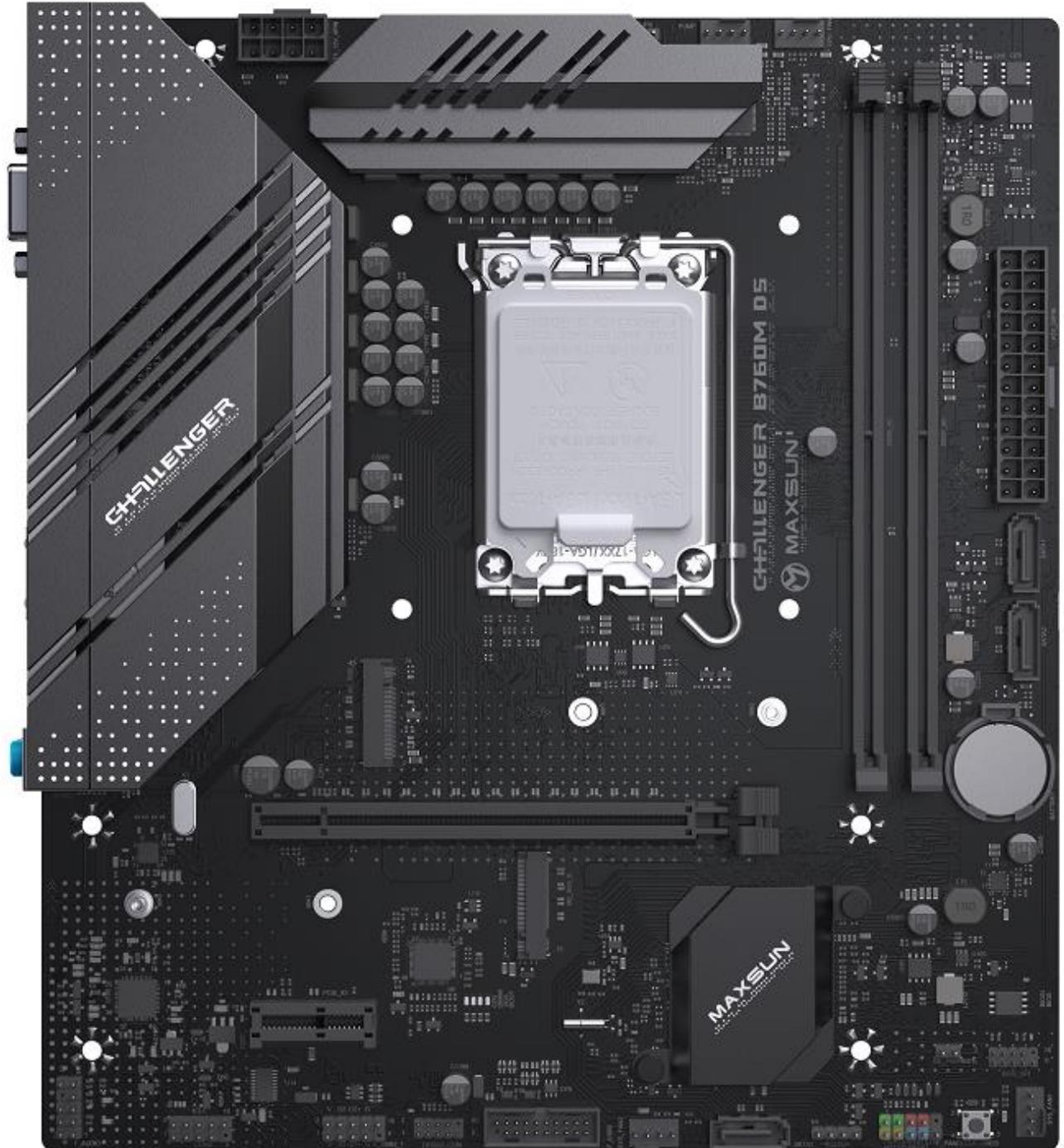
**Manual**

**VER:A0**

Edited on September 27, 2023

Editorial Department: Technology Department

# Chapter I Motherboard Configuration Chart



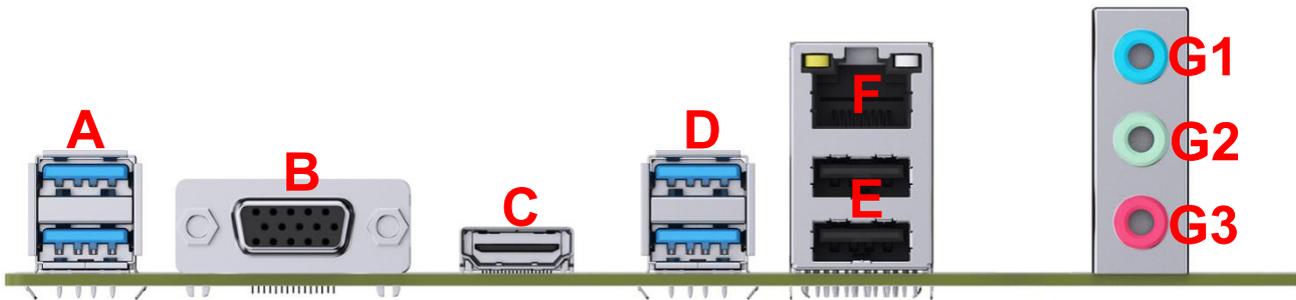
(This picture is for reference only, some details will be designed and adjusted according to the actual situation, please prevail in kind, our company reserves the right of interpretation)

# Chapter II Specifications

## 2.1. Motherboard hardware specifications

Motherboard Size	Micro ATX(230*205mm)
CPU	Supports LGA1700 slot Supports 12th / 13th / 14th Gen processors (CPU overclocking not supported) TDP: 125W (8+1+1)
Chipset	Intel® B760 High Speed Chipset
Memory (RAM)	2* DIMM DDR5 memory slots Supports up to 96GB Supports dual-channel memory technology Support 4800/5600/6400MHz/OC+ memory frequency
Display	Shared display memory technology based on display capabilities with integrated graphics processor 1* HDMI port, supports up to 2560*1440@60Hz resolution (HDMI version 1.4) 1* VGA port, supports up to 1920*1080@60Hz resolution
Extended Interface	1* PCIE X16 4.0 slot, 1* PCIE X1 3.0 slot Support for AMD and NVIDIA and INTEL discrete graphics cards Supports PCIE Resizable bar
Audio	Integrated ALC897 sound chip Support front and rear channel outputs at the same time Rear audio interfaces: 1* rear onboard LINE IN connector, 1* rear onboard LINE OUT connector, 1* rear onboard MIC_IN microphone connector F_AUDIO pins: 1* front microphone pin, 1* front audio output pin 1* set of 4-pin speaker BUZZER pins
Network	Integrated REALTEK8111H NIC chip (10/100/1000Mbit) 1* on-board RJ45 port Supports Wake-on-LAN Support PXE disk-less, UEFI disk-less boot
SSD	2* M.2 4.0 slots (supporting 2242/2280 PCIE X4/X2 channel SSD) 3* SATA3.0 ports
USB	Onboard rear ports: 4* USB3.2 GEN1 ports, 2* USB2.0 ports On-board pins: 1* set (2 pcs) of USB2.0 pins, 1* set (2 pcs) of USB3.2 GEN1 pins
In-board sockets	1* 24-PIN motherboard ATX power connector 1* 8-PIN Motherboard ATX 12V Supply Connector, 12V Input 1* COM_A pin 2* system fan pins, 1* CPU fan pin, 1* PUMP fan pin (all except PUMP pins support intelligent fan adjustment) 1* group CLR_CMOS button 1* Debug Pin 1* BIOS_SPI burn-in pin

	1* ME protection pin 1* set of chassis front control panel pins (F_PANEL)
Hardware monitoring	Voltage monitoring Temperature monitoring Fan monitoring Intelligent fan speed control (supported by motherboard, intelligent fan speed control also requires fan support)
Operating system	Supports Windows 10 64bit, Windows 11 64bit Ubuntu 64bit support
ESD protection	Air discharge $\pm 8KV$ Class C $\pm 6KV$ Class B Contact discharge $\pm 6KV$ Class C $\pm 3KV$ Class B *Tested with the whole machine well grounded
Package Size and Weight	Color box size: 265*246*55mm Veneer weight: 578g Weight of single piece color package: 874.6g Outer box size: 510*280*300mm Weight of the whole box: 9.7kg



**A:** Double-layer USB3.2 GEN1 TYPE A connector

Supports up to 5Gb theoretical transfer speed and is backward compatible with USB1.1 standard for connecting USB TYPE A devices.

**B:** VGA port

Supports up to 1920\*1080@60Hz resolution for connecting to a monitor.

**C:** HDMI connector

Supports up to 2560\*1440@60Hz resolution (HDMI version 1.4) for connecting to a monitor.

**D:** Double-layer USB3.2 GEN1 TYPE A connector

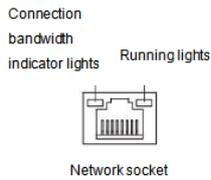
Supports up to 5Gb theoretical transfer speed and is backward compatible with USB1.1 standard for connecting USB TYPE A devices.

**E: Dual-layer USB2.0 TYPE A connector**

Supports up to USB2.0 standard and is backward compatible with USB1.1 standard. For connecting USB TYPE A devices.

**F: RJ45 port**

Network cable interface for accessing a network cable to link the host system to the network with a maximum bandwidth of 1000Mbps.



Connection bandwidth indicator	
bandwidths	lamp state
Connection-less	go out (of a fire etc)
10Mbps	Green Always On
100Mbps	Green Always On
1000Mbps	Orange color is always on

Operation Indicator Light	
No data transmission	go out (of a fire etc)
during data transmission	vague (of speech)

**G1: LINE IN connector (blue)**

Used to receive audio input devices, such as cell phone audio input.

**G2: Audio-out connector (light green)**

Used to access audio output devices, such as headphones, speakers and other external amplification devices.

**G3: Audio-Microphone connector (pink)**

Used to access audio input devices, such as microphones and other radio devices.