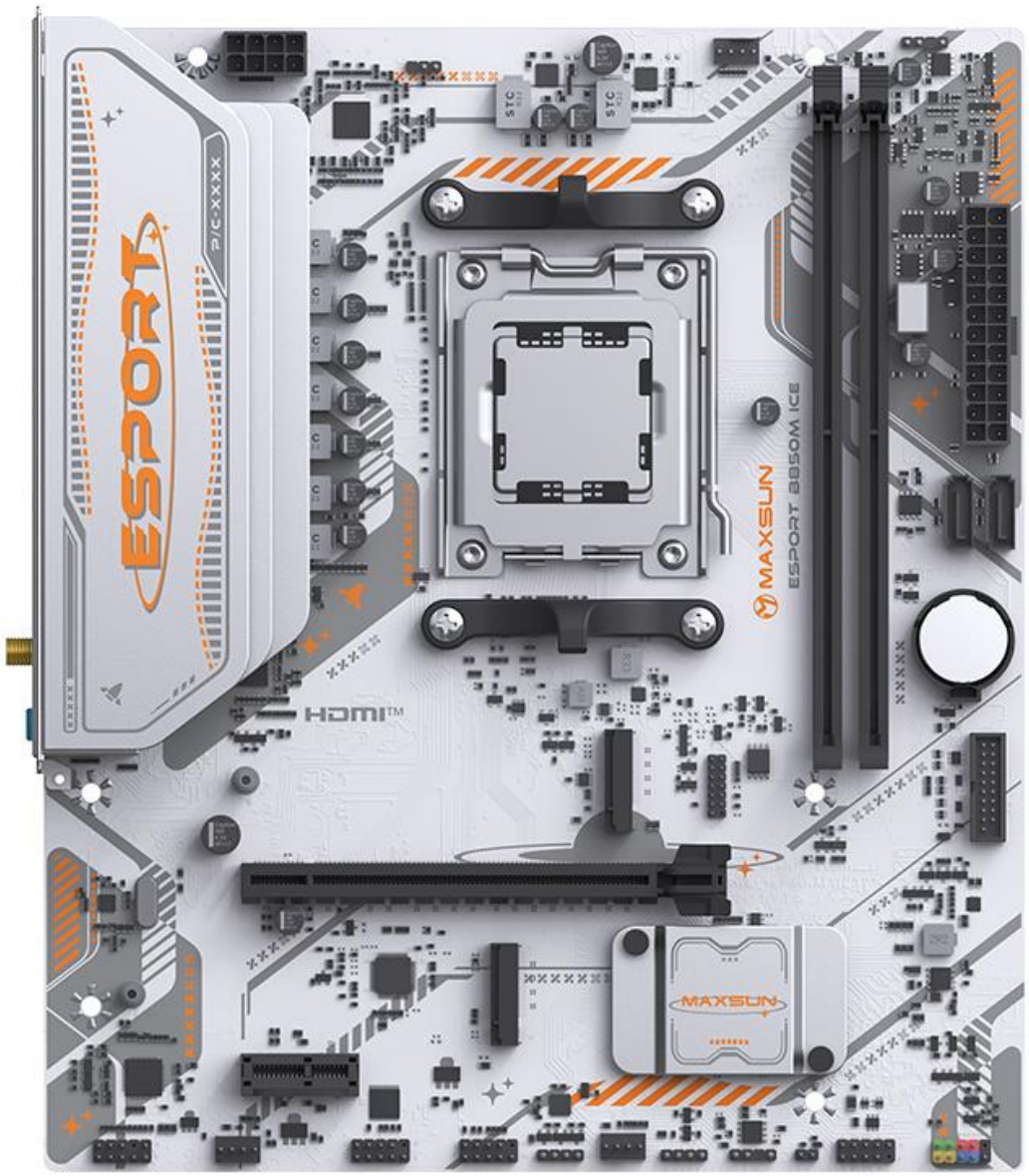
MS-eSport B650M WIFI ICE

Specification

VER:A0

铭瑄科技
Maxsun Technology

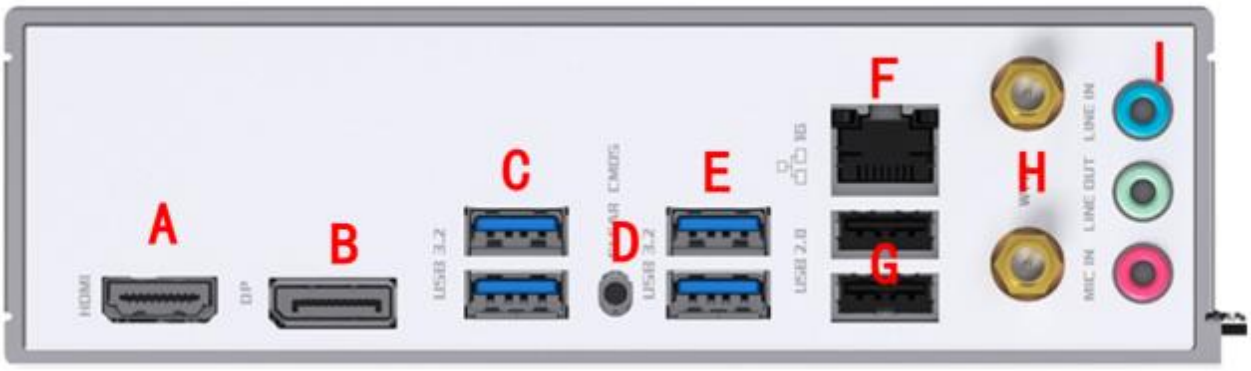
Edited on 03/05, 2025
Editing Department: Technology Department



(This drawing is for reference only, some details will be adjusted according to the actual situation, please refer to the actual design, our company reserves the right to explain)

Motherboard size	MicroATX(245*210mm)
CPU	Supports AM5 slots Ryzen7000/8000/9000 series processors TDP: 105-180W
Chipset	AMD®B550
Memory	2 U-DIMM DDR5 memory slots Up to 96GB is supported Support dual channel memory technology Support 4800/5200/5600(OC)/6000(OC)/6200(OC)/6400(OC)/6600(OC)/6800(OC)/7000 (OC) / 7200 (OC) /frequency of memory
Display	Based on the display function of integrated graphics processor, shared display memory technology is adopted 1 HDMI1.4 interface, maximum support 4096x2160@30Hz resolution 1 DP interface, the highest support 4096x2160@60Hz resolution
Extension interface	1 PCIEX16 5.0 slot 1 PCIEX1 3.0 slot Support AMD/Nvidia/intel independent graphics card
Audio	Integrated REALTEK ALC897 sound card chip Support simultaneous output of front and back channels (need to be set in HD audio controller) The rear is equipped with 3 audio interfaces: 1 rear on-board LINE IN interface, 1 rear on-board LINE OUT interface, and a rear on-board MIC_IN microphone interface. F_AUDIO pins: 1 set of front microphone pins, 1 set of front audio output pins (these 2 pins are F_Aduio pins) 1 set of 4pin horn Buzzer pins
Network	Integrated REALTEK8111H NIC chip (10/100/1000Mbit) Onboard Realtek 8852BE WiFi6 wireless card with Bluetooth 5.2 support 1 onboard RJ45 interface 1 onboard M.2 E-Key PCI-E 2230 WIFI network card interface Support network wake-up Support PXE diskless, UEFI diskless boot
Storage	1 M.2 slot (2242/2280 PCIE 4.0X4 /X2 channel SSD only) 1 M.2 slot (2242/2280 PCIE 4.0X4 /X2 channel SSD only) Two SATA3.0 interfaces
USB	Onboard rear interface: 4 USB3.2 GEN1 interface, 2 USB2.0 interface Plate inserts: 1 set (2) USB2.0 inserts, 1 set (2) USB3.2 GEN1 inserts
In-board socket	1 24PIN motherboard ATX power supply interface 1 8PIN motherboard ATX 12V power supply interface with 12V input 2 sets of system fan pins, 1 set of CPU fan pins 1 set of front control panel pin (F_PANEL)

Hardware monitoring	Voltage monitoring Temperature monitoring Fan monitoring Intelligent fan speed control (supported by the motherboard, intelligent fan speed control also requires fan support)
Operating system	Windows10 64bit， Windows11 64bit Ubuntu 64bit
ESD protection	Air discharge ± 8KV C level ±6KV class B Contact discharge ± 6KV C level ± 3KV B class * Test the whole machine under the condition of good grounding
others	One rear CLR_CMOS button 1 set of TPM pins 1 set of COM_A pins 2 sets of 5V ARGB pins 1 set of 12V NRGB pins
Packing	Color box size: 289*245*66mm Net weight: 734.8g Gross weight: 1083.5g



A: HDMI interface

The highest support 4096x2160@30Hz resolution, can support audio and video output at the same time.

B： DP interface

The highest support 4096x2160@60Hz resolution, can support audio and video output at the same time.

C： Double-layer USB3.2 GEN1 interface

It supports up to 5Gb speed transmission, and is compatible with USB1.1 and USB2.0 standards. It is used to connect USB TYPE A devices.

D: CLR_CMOS button

One key to clear the motherboard BIOS function Settings, restore the motherboard BIOS default initialization

Settings.

E: Double-layer USB3.2 GEN1 interface

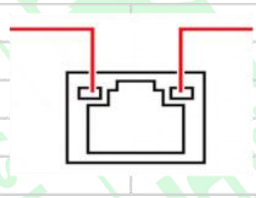
It supports up to 5Gb speed transmission, and is compatible with USB1.1 and USB2.0 standards. It is used to connect USB TYPE A devices.

F: Double-layer USB2.0 TYPE A interface

It supports up to USB2.0 standard, and can be backward compatible with USB1.1 standard. Used to connect USB TYPE A devices.

F：RJ45 network cable interface, used for access network cable to connect the host system to the network, the highest bandwidth of 1000Mbps.

Activity Link LED	
Status	Description
Off	No link
Yellow	Linked
Blinking	Data activity



Speed LED	
Status	Description
Off	10Mbps connection
Green	100Mbps connection
Orange	1000Mbps/2.5Gbps connection

G: Double-layer USB2.0 TYPE A interface

It supports up to USB2.0 standard, and can be backward compatible with USB1.1 standard. Used to connect USB TYPE A devices.

H: WIFI interface

The WIFI interface is integrated with Realtek 8852BE WiFi6 wireless network card internally and supports Bluetooth 5.2, which requires proper installation of the corresponding driver for normal use. .

I： Audio-in interface (blue)

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

Audio-out interface (light green)

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

Audio- Microphone interface (pink)

It is used to access audio input devices such as radio devices such as microphones.

MS-eSport B850M WIFI ICE

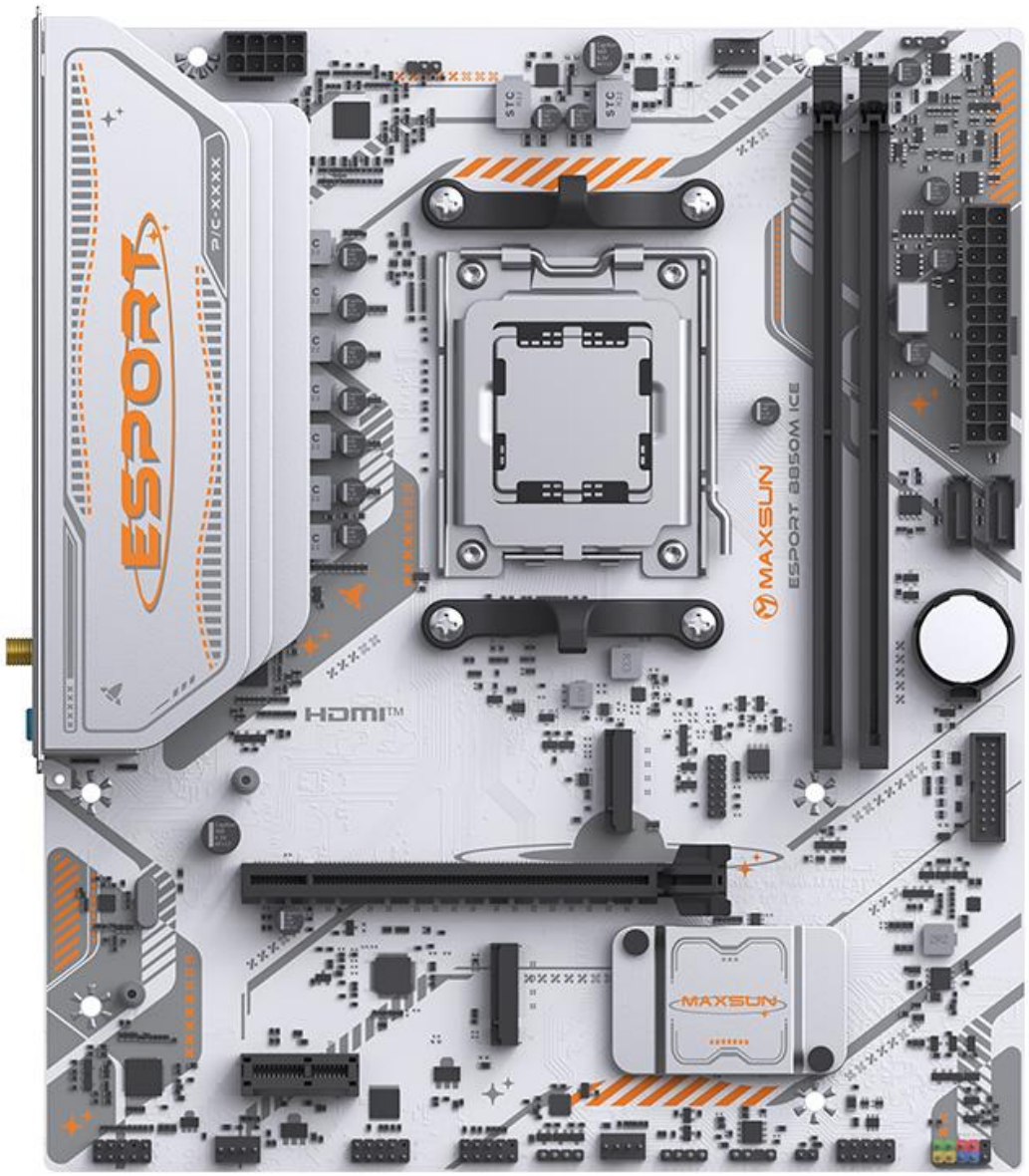
使用手册

VER:A0

铭瑄科技
Maxsun Technology

编辑时间：2025 年 03 月 05 日
编辑部门：商科集团产品部

第一章 主板配置图



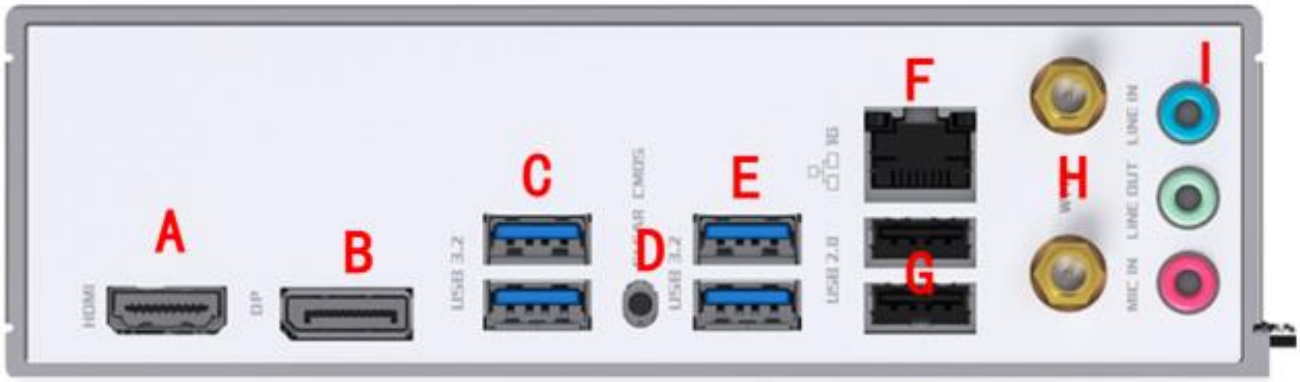
（此图仅供参考，部分细节会根据实际情况设计调整，请以实物为准，我司保留解释权）

第二章 规格

2.1、主板硬件规格

主板尺寸	MicroATX(245*210mm)
CPU	支持 AM5 插槽 Ryzen7000、Ryzen8000、Ryzen9000 系列处理器
芯片组	AMD®B850 高速芯片组
内存	2 个 DIMM DDR5 内存槽 最高支持共 96GB 支持双通道内存技术 支持 4800/5200/OC+ 内存频率
显示	基于具备集成显卡处理器的显示功能，采用共享显示内存技术 1 个 HDMI1.4 接口，最高支持 4096x2160@30Hz 分辨率（支持 HDCP2.2） 1 个 DP 接口，最高支持 4096x2160@60Hz 分辨率
扩展接口	1 个 PCIEX16 5.0 插槽 1 个 PCIEX1 3.0 插槽 支持 AMD 和 NVidia 独立显卡
音频	集成 REALTEK ALC897 声卡芯片 支持前后声道同时输出（需要高清音频控制器中设置） 后置配备 3 个音频接口：1 个后置板载 LINE IN 接口，1 个后置板载 LINE OUT 接口，一个后置板载 MIC_IN 麦克风接口 F_AUDIO 插针： 1 组前置麦克风插针，1 组前置音频输出插针（此 2 个插针为 F_Aduio 插针组） 1 组 4pin 喇叭 Buzzer 插针
网络	集成 REALTEK8111H/8111M 网卡芯片(100/1000Mbit) 1 个板载 RJ45 接口 1 个板载 M.2 E-Key PCI-E 8852BE WIFI 网卡接口 支持网络唤醒 支持 PXE 无盘、UEFI 无盘引导
存储	1 个 M.2 插槽（仅支持 2280 PCIE X4/X2 4.0 通道 SSD） 1 个 M.2 插槽（仅支持 2280 PCIE X4/X2 4.0 通道 SSD） 2 个 SATA3.0 接口
USB	板载后置接口：4 个 USB3.2 GEN1 接口，2 个 USB2.0 接口 板内插针：1 组（2 个）USB2.0 插针，1 组（2 个）USB3.2 GEN1 插针
板内插座	1 个 24PIN 主板 ATX 供电接口 1 个 8PIN 主板 ATX 12V 供电接口，12V 输入 2 组系统风扇插针（支持智能温控调节）、1 组 CPU 风扇插针（支持智能温控调节）1 组机箱前置控制面板插针（F_PANEL）
硬件监控	电压监测 温度监测 风扇监测 智能风扇控速（主板已作支持，智能风扇控速也需风扇支持）

操作系统	支持 Windows10 64bit， Windows11 64bit 支持 Ubuntu 64bit
ESD 防护	空气放电 ± 8KV C 级 ±6KV B 级 接触放电 ± 6KV C 级 ± 3KV B 级 *整机接地良好的情况下测试
其他	后置 CLR_CMOS 按钮一个 TPM_SPI1 插针 1 组 COM_A 插针 1 组 1 个 12V NRGB 插针，2 个 5V ARGB 插针
包装尺寸及重量	彩盒尺寸：289*245*66mm 单板重量：734.8g 单片彩包重量：1083.5g



A：HDMI 接口

最高支持 4096x2160@30Hz 分辨率，可支持声像同时输出。

B：DP 接口

最高支持 4096x2160@60Hz 分辨率，可支持声像同时输出。

C：双层 USB3.2 GEN1 接口

最高支持理论 5Gb 速度传输，可向下兼容 USB1.1、USB2.0 标准,用于连接 USB TYPE A 设备。

D：CLR_CMOS 按钮

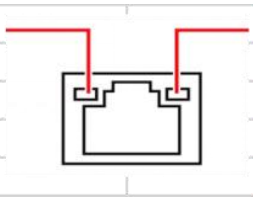
一键清除主板 BIOS 功能设置，还原主板 BIOS 默认初始化设置。

E：双层 USB3.2 GEN1 接口

最高支持理论 5Gb 速度传输，可向下兼容 USB1.1、USB2.0 标准,用于连接 USB TYPE A 设备。

F：RJ45 网线接口，用于接入网线将主机系统连接到网络，最高带宽 1000Mbps。

Activity Link LED	
Status	Description
Off	No link
Yellow	Linked
Blinking	Data activity



Speed LED	
Status	Description
Off	10Mbps connection
Green	100Mbps connection
Orange	1000Mbps/2.5Gbps connection

G：双层 USB2.0 TYPE A 接口

最高支持 USB2.0 标准，可向下兼容 USB1.1 标准。用于连接 USB TYPE A 设备。

H：WIFI 接口

WIFI 接口内部集成了 8852BE WIFI6 无线网卡，需要正确安装相应的驱动程序才能正常使用。.

I：音频接口

Audio-in 接口(蓝色)

用于接收音频输入设备，如手机音频输入。

Audio-out 接口（浅绿色）

用于接入音频输出设备，如耳机、音箱等外放设备。

Audio-麦克风接口（粉红色）

用于接入音频输入设备，如麦克风等收音设备。