



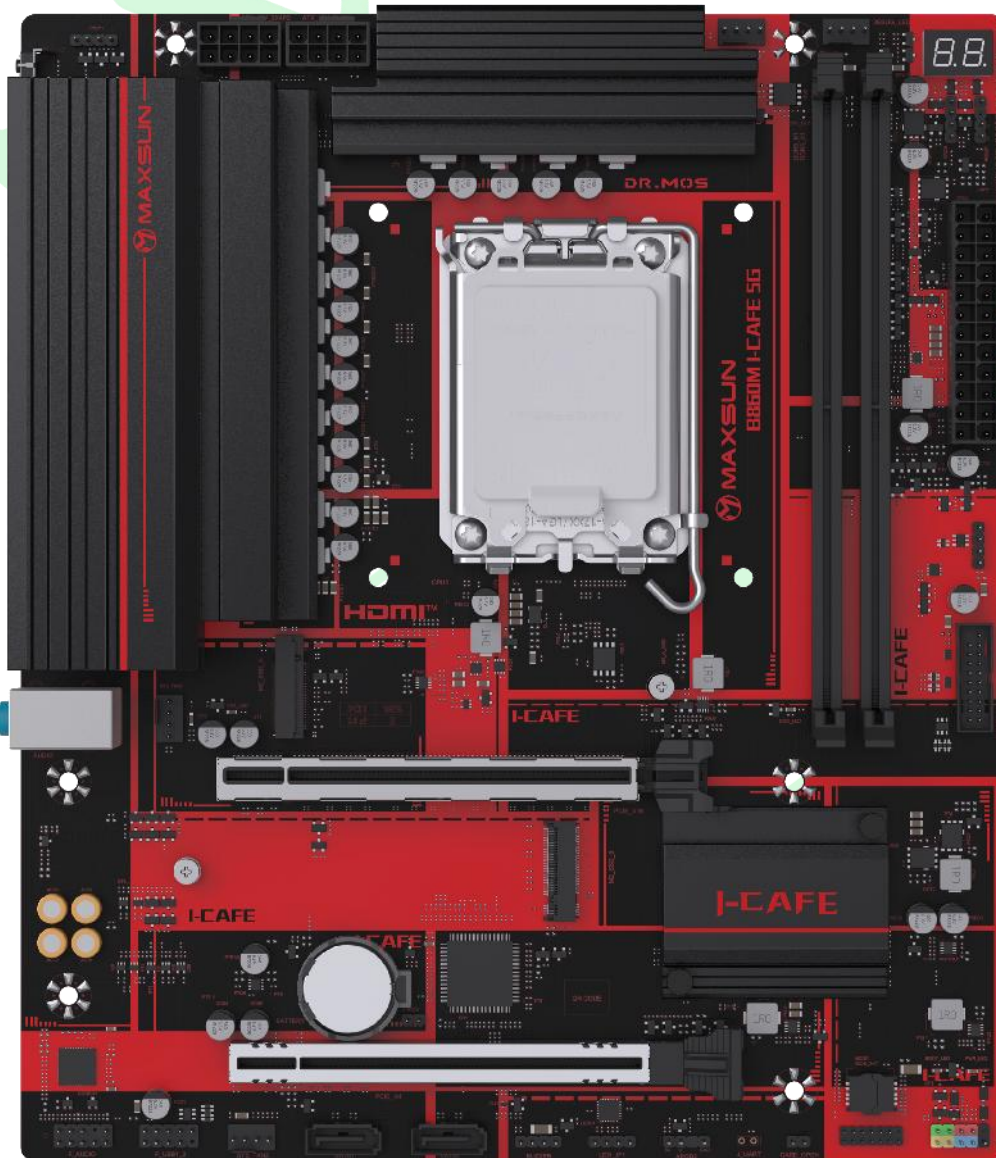
# MS-B860M I-CAFE 5G

Specification

Ver A0

Edited on 4/10, 2025

Editing Department: Overseas Operations 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)

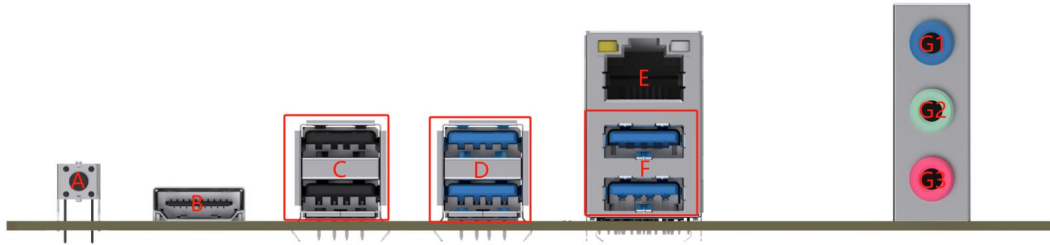


Model Name	MS-B860M I-CAFE 5G		
Motherboard Size	M-ATX 245mm x 210mm		
CPU	Intel® LGA1851 slot for Intel® Core™ Ultra processor		
Chipset	Intel® B860 chipset		
Power Limit	Intel Default :	PL1:125W	PL2:200W TimeWindows: 28S
	Maxsun Profile (Factory Setting) :	PL1:200W	PL2:250W TimeWindows: 8S
	Performance Profile:	PL1:250W	PL2:280W TimeWindows: 5S
Memory (RAM)	2x DIMM DDR5, maximum capacity 96GB Dual channel memory architecture is supported Supports Intel® Extreme Memory Profile (XMP) Support 8400(OC)/8200(OC)/8000(OC)/7600(OC)/7400(OC)/ 7200(OC)/7000(OC)/6800(OC)/6600(OC)/6400/5600/4800/ OC+ MHz does not support ECC Memory		
Display	1 x HDMI™ 1.4 display interface with maximum 4K@60Hz support * Graphics specifications may vary for different CPU types, see <a href="http://www.intel.com">www.intel.com</a> * for more details		
Extended Interface	From Intel® Core™ Ultra processor: 1 x PCIe X16 slot (supports PCIe 5.0X16 mode) From Intel® B860 chipset: 1x PCIe X4 open slot (supports PCIe 4.0X4 mode)		
Audio	Realtek ALC897 HD audio codec Support simultaneous output of front and back channels (need to be set in HD audio controller) The rear is equipped with 3 audio ports: 1 rear on-board LINE IN interface, 1 rear on-board LINE OUT interface, 1 rear on-board MIC_IN microphone interface. F_AUDIO pin: 1 set of front microphone pins, 1 set of front audio output pins (These two pins are F_Audio pins)		
Network	1 * Realtek RTL8126 5Gb Ethernet interface Support network wake-up Support PXE diskless, UEFI diskless boot		
stockpile	A total of 2 * M.2 slots and 3 * SATA 6Gb/s interfaces are supported From Intel® Core™ Ultra processor: M.2_A slot (Key_M) : supports PCIe 5.0X4 /X2 mode and supports 2280 lengths From Intel® B860 chipset: M.2_B slot (Key_M) : supports PCIe 4.0X4 /X2 mode and supports 2280 lengths 2 * SATA 6Gb/s interface		
USB	Onboard USB (5 ports) :		



	<ul style="list-style-type: none"> <li>1 * USB 5G 19Pin pin, supports 2 additional USB 5G ports</li> <li>1 * USB 2.0 9Pin, supports 2 additional USB 2.0 ports</li> <li>1 * USB 2.0 4Pin, supports 1 additional USB 2.0 ports</li> <li>Rear USB (total 6 ports) :</li> <li>4 * USB 5G Type-A interface</li> <li>2* USB 2.0 Type-A interface</li> </ul>
I/O Panel	<ul style="list-style-type: none"> <li>1 * HDMI™ 1.4</li> <li>1 * CLR_CMOS shortcut button</li> <li>4 * USB 5G Type-A interface</li> <li>2* USB 2.0 Type-A interface</li> <li>1 * Realtek 5Gb Ethernet interface</li> <li>3 * Audio jack</li> </ul>
Hardware monitoring	<ul style="list-style-type: none"> <li>Voltage monitoring</li> <li>Temperature monitoring</li> <li>Fan monitoring</li> <li>Intelligent fan speed control (supported by the motherboard, intelligent fan speed control also requires fan support)</li> </ul>
Operating system	<ul style="list-style-type: none"> <li>Supports Windows11 64bit</li> <li>It supports Ubuntu 64bit</li> </ul>
ESD protection	<ul style="list-style-type: none"> <li>Air discharge ± 8KV C level</li> <li>±4KV class B</li> <li>Contact discharge ± 6KV C level</li> <li>± 4KV class B</li> <li>* Test the whole machine under the condition of good grounding</li> </ul>
In-board I/O ports	<ul style="list-style-type: none"> <li>Power related interface</li> <li>1 *24 Pin ATX power connector</li> <li>2 * 8 Pin +12V power connector</li> <li>Fan related interface</li> <li>1 * 4 Pin CPU fan connector</li> <li>1 * 4 Pin PUMP connector (support DC speed regulation)</li> <li>2 * 4 Pin case fan connector</li> <li>Storage related interfaces</li> <li>2 * M.2 slots (Key_M)</li> <li>2 * SATA 6Gb/s interface</li> <li>Onboard USB interface</li> <li>1 * USB 5G 19Pin pin, supports 2 additional USB 5G ports</li> <li>1 * USB 2.0 9Pin, supports 2 additional USB 2.0 ports</li> <li>1 * USB 2.0 4Pin, supports 1 additional USB 2.0 ports</li> <li>Other interfaces</li> <li>2 * 3 Pin ARGB interface</li> <li>1 * 4 Pin NRGB interface</li> <li>1 * COM port connection pin</li> <li>1 * 4pin Buzzer</li> <li>1 * Front panel audio interface</li> <li>1 * 10-1 Pin system panel interface</li> <li>1 * CLR_CMOS reset pin</li> <li>1 * TPM port connection pin</li> </ul>
Features	<ul style="list-style-type: none"> <li>Distributed Debug lights</li> <li>Maxsun Sync lighting control</li> <li>CLR_CMOS shortcut button</li> <li>Resizable bar technique</li> </ul>

<b>Pakaging specification</b>	<b>Net weight: 0.74 kg</b> <b>Outer box size: 518*332*295mm</b> <b>FCL weight: 0.99kg</b> <b>Packing quantity: 10PCS</b>
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**A: Four-layer USB 2.0 Type-A interface**

Supports up to USB 2.0 standard, backward compatible with USB 1.1 standard. For connecting USB TYPE A devices.

**B: CLR\_CMOS button**

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

**C: DP interface**

The highest support supports the provisions of 4K@60Hz, can support audio and video output at the same time.

**D: HDMI interface**

The highest support supports the provisions of 4K@60Hz, can support audio and video output at the same time.

**E: A USB 40G Type-C® interface**

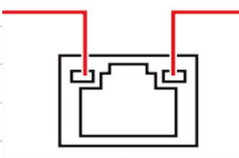
Up to 40Gb theoretical speed transmission, support PD protocol, support display audio output.

**F: Double layer USB 5G Type-A 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.

**G: RJ45 network cable interface**

Used for access network cable to connect the host system to the network, the maximum bandwidth of 2500Mbps.

Activity Link LED			Speed LED	
Status	Description		Status	Description
Off	No link		Off	10Mbps connection
Yellow	Linked		Green	100Mbps connection
Blinking	Data activity		Orange	1000Mbps/2.5Gbps connection

H: Double layer USB 5G Type-A 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.

I: WiFi antenna interface

The WIFI interface is integrated with Intel<sup>®</sup> AX101 wireless network card, which supports Wi-Fi 6 and Bluetooth<sup>®</sup> 5.2. The corresponding driver must be installed correctly to use it normally.

J1: Audio-in interface (blue)

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

J2: Audio-out interface (light green)

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

J3: Audio-Microphone interface (pink)

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



# MS-B860M I-CAFE 5G

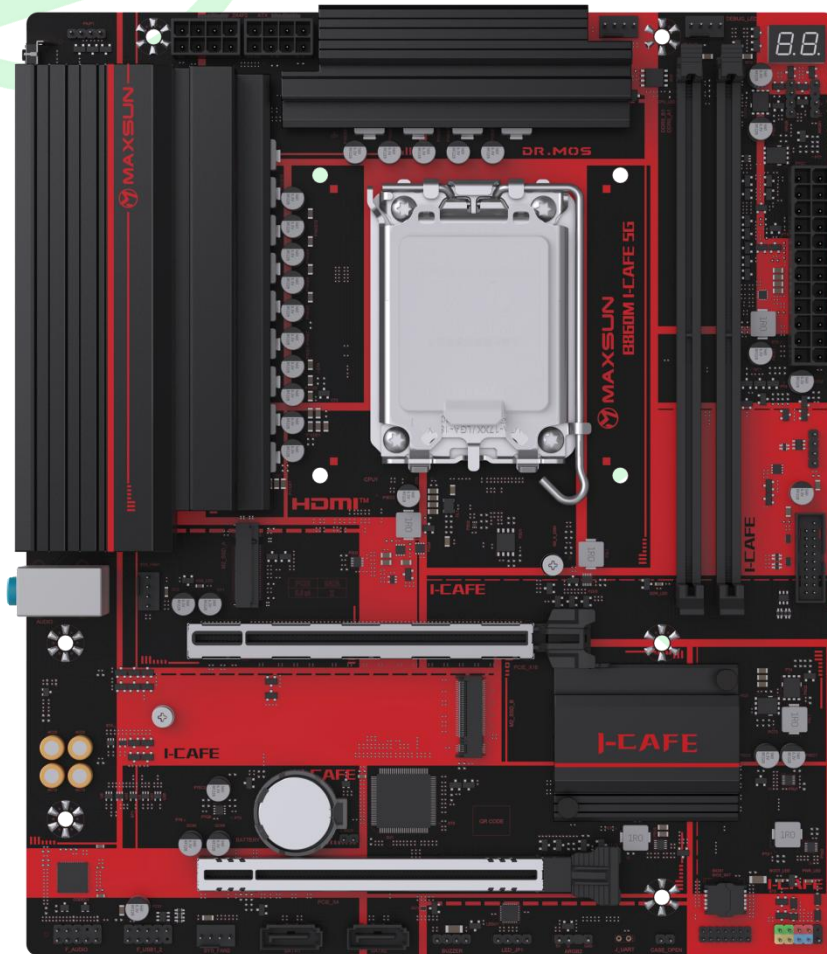
规格书

VER:A0

编辑时间：2025 年 04 月 10 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)



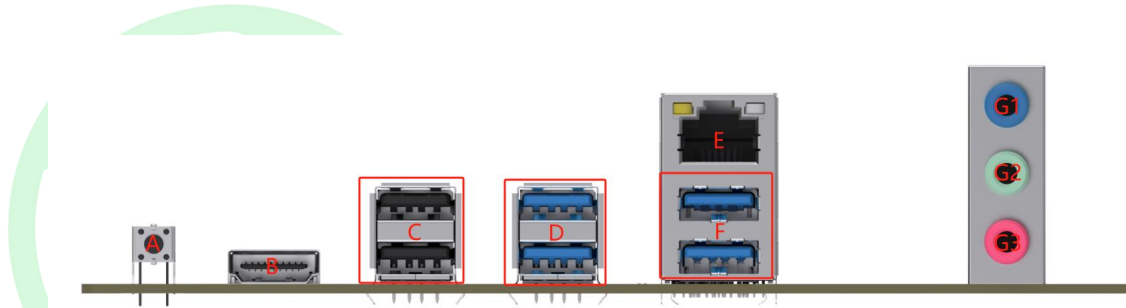
## 第二章 规格

### 2.1、主板硬件规格

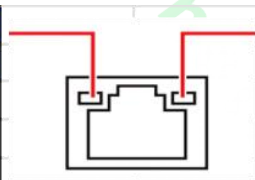
主板尺寸	M-ATX 板型 245mm x 210mm
CPU	英特尔® LGA1851 插槽, 适用于英特尔® 酷睿™ Ultra 处理器
芯片组	英特尔® B860 芯片组
功耗设定	英特尔默认: PL1:125W PL2:200W TimeWindows: 28S 铭瑄档案 (出厂挡位): PL1:200W PL2:250W TimeWindows: 8S 性能档案: PL1:250W PL2:280W TimeWindows: 5S
内存	2x DIMM DDR5, 最大容量 96GB 支持双通道内存架构 支持 Intel® Extreme Memory Profile (XMP) 支持 8400(OC)/8200(OC)/8000(OC)/7600(OC)/7400(OC)/ 7200(OC)/7000(OC)/6800(OC)/6600(OC)/6400/5600/4800/ OC+ MHz 不支持 ECC Memory
显示	1 x HDMI™ 1.4 显示接口, 支持规定的最高 4K@60Hz * 不同类型 CPU 的图形规格可能有所不同, 详情请参阅 <a href="http://www.intel.com">www.intel.com</a> *
扩展接口	来自英特尔® 酷睿™ Ultra 处理器 : 1 x PCIe X16 插槽 (支持 PCIe 5.0 X16 模式) 来自英特尔® B860 芯片组 : 1x PCIe X4 开放插槽 (支持 PCIe 4.0 X4 模式)
音频	Realtek ALC897 高清音频编解码器 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, 1 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_Audio 插针组)
网络	1 * Realtek RTL8126 5Gb Ethernet 接口 支持网络唤醒 支持 PXE 无盘、UEFI 无盘引导
存储	共支持 2 * M.2 插槽 和 2 * SATA 6Gb/s 接口 来自英特尔® 酷睿™ Ultra 处理器 : M.2_A 插槽 (Key_M): 支持 PCIe 5.0 X4/X2 模式, 支持 2280 长度 来自英特尔® B860 芯片组 : M.2_B 插槽 (Key_M): 支持 PCIe 4.0 X4/X2 模式, 支持 2280 长度 2* SATA 6Gb/s 接口
USB	板载 USB (共 5 个接口) : 1 * USB 5G 19Pin 接针, 支持 2 个额外的 USB 5G 接口



	<p>1 * USB 2.0 9Pin 接针, 支持 2 个额外的 USB 2.0 接口</p> <p>1* USB 2.0 4Pin 接针, 支持 1 个额外的 USB 2.0 接口</p> <p>后置 USB (共 6 个接口) :</p> <p>4 * USB 5G Type-A 接口</p> <p>2 * USB 2.0 Type-A 接口</p>
后置面板 I/O 设备接口	<p>1 * HDMI™ 1.4</p> <p>1 * CLR_CMOS 快捷按钮</p> <p>4 * USB 5G Type-A 接口</p> <p>2 * USB 2.0 Type-A 接口</p> <p>1 * Realtek 5Gb Ethernet 接口</p> <p>3 * 音频插孔</p>
硬件监控	<p>电压监测</p> <p>温度监测</p> <p>风扇监测</p> <p>智能风扇控速 (主板已作支持, 智能风扇控速也需风扇支持)</p>
操作系统	<p>支持 Windows11 64bit</p> <p>支持 Ubuntu 64bit</p>
ESD 防护	<p>空气放电 ±8KV C 级</p> <p>±4KV B 级</p> <p>接触放电 ±6KV C 级</p> <p>±4KV B 级</p> <p>*整机接地良好的情况下测试</p>
内置 I/O 设备接口	<p>电源相关接口</p> <p>1 *24 Pin ATX 电源连接器</p> <p>2 * 8 Pin +12V 电源连接器</p> <p>风扇相关接口</p> <p>1 * 4 Pin CPU 风扇接头</p> <p>1 * 4 Pin PUMP 水泵接头 (支持 DC 调速)</p> <p>2 * 4 Pin 机箱风扇接头</p> <p>存储相关接口</p> <p>2 * M.2 插槽 (Key_M)</p> <p>2 * SATA 6Gb/s 接口</p> <p>板载 USB 接口</p> <p>1 * USB 5G 19Pin 接针, 支持 2 个额外的 USB 5G 接口</p> <p>1 * USB 2.0 9Pin 接针, 支持 2 个额外的 USB 2.0 接口</p> <p>1 * USB 2.0 4Pin 接针, 支持 1 个额外的 USB 2.0 接口</p> <p>其他接口</p> <p>2 * 3 Pin ARGB 接口</p> <p>1 * 4 Pin NRGB 接口</p> <p>1 * 4pin Buzzer 蜂鸣器插针</p> <p>1 * 前面板音频接口</p> <p>1 * 10-1 Pin 系统面板接口</p> <p>1 * CLR_CMOS 重置接针</p> <p>1 * TPM 端口接针</p>
特有功能	<p>分布式 Debug 灯</p> <p>Maxsun Sync 灯光控制</p> <p>CLR_CMOS 快捷按钮</p> <p>Resizable bar 技术</p>
包装尺寸及重量	<p>单板重量: 0.74 kg</p> <p>外箱尺寸: 518*332*219mm</p> <p>整箱重量: 9.99kg</p> <p>装箱数量: 10PCS</p>



- A: 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。
- B: HDMI 接口**  
最高支持支持规定的 4K@60Hz，可支持声像同时输出。
- C: 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。
- D: 双层 USB 5G Type-A 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。
- E: 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 5000Mbps。

运行指示灯			速度指示灯	
状态	描述		状态	描述
关闭	无链接		关闭	10Mbps 连接
黄色	已链接		绿色	100Mbps 连接
闪烁	数据传输	橙色	1.0/2.5/5.0Gbps 连接	

- F: 双层 USB 5G Type-A 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。
- G1: Audio-in 接口(蓝色)**  
用于接收音频输入设备，如手机音频输入。
- G2: 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。
- G3: 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。



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