

MS-Challenger A620A 2.5G

Manual

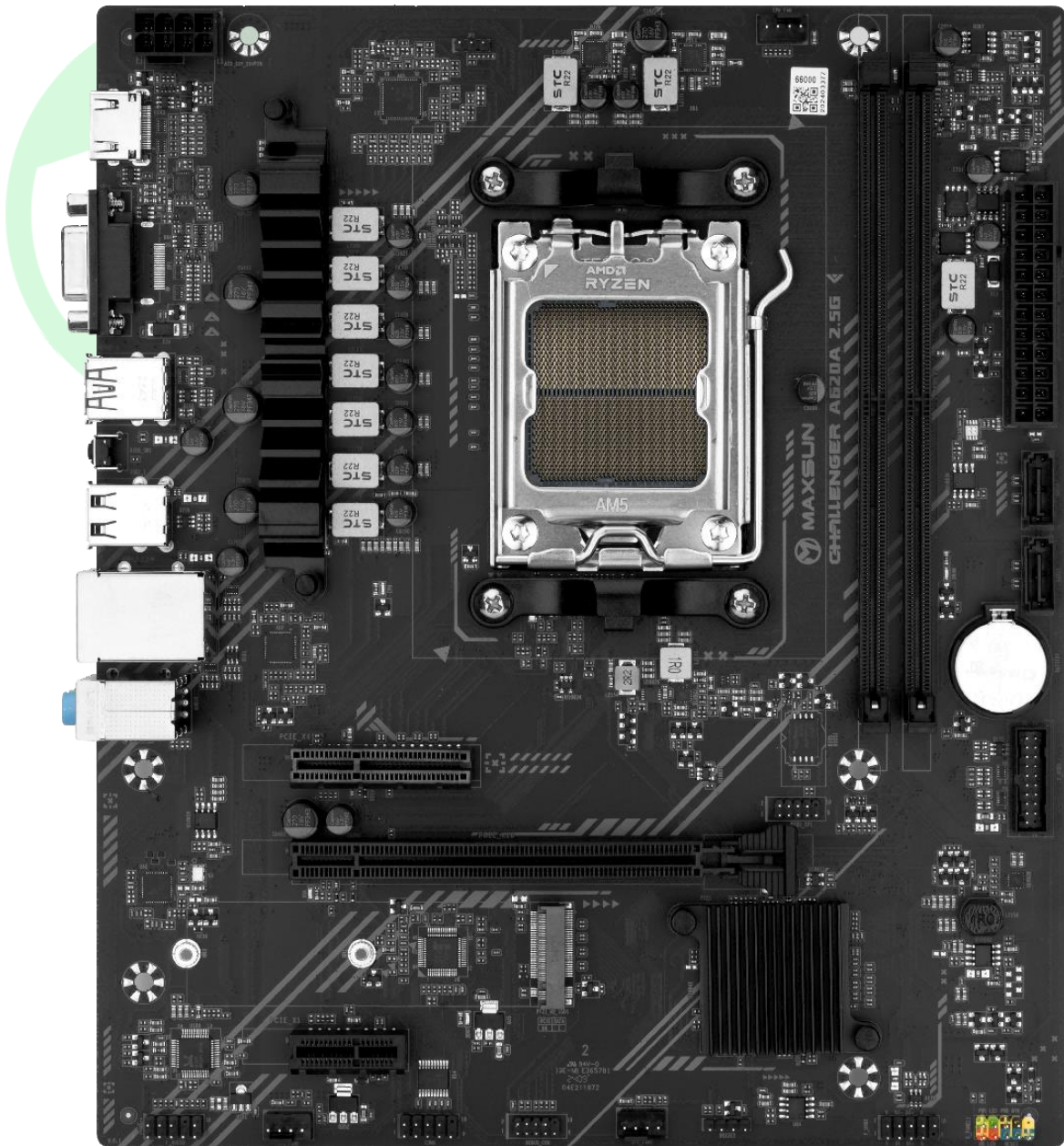
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Editorial Department: SK Group

Chapter I Motherboard Configuration Chart



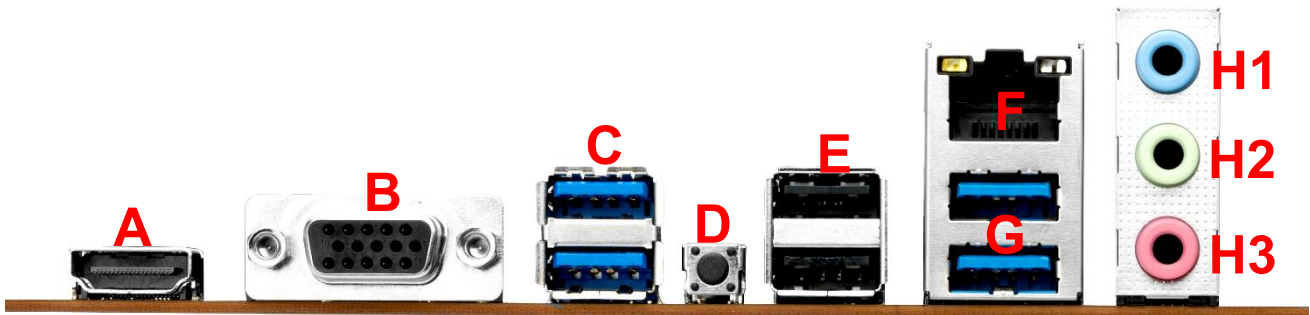
(This picture is for reference only, some details will be designed and adjusted according to the actual situation, please prevail in kind, our company reserves the right of interpretation)

Chapter II Specifications

2.1. Motherboard hardware specifications

Motherboard Size	Micro ATX(245*210mm)
CPU	Supports LGA1718 slot AMD RYZEN7000\8000 Series TDP: 105W (6+2+1 phases)
Chipsets	AMD®A620A High-Speed Chipset
Memory (RAM)	2* DIMM DDR5 memory slots Supports up to a total of 96 GB Supports dual-channel memory technology Support 4800MHZ/5200MHZ/5600MHZ OC Memory Frequency
Display	Shared display memory technology based on display capabilities with integrated graphics processor 1* HDMI port, supports up to 3840*1920@30Hz resolution 1* VGA connector, supports up to 1920*1080@60Hz resolution
Extended Interface	1* PCIEX16 4.0 slot, 1 PCIE X1 3.0 slot, 1* open PCIE X4 4.0 slot Supports AMD and NVIDIA and INTEL discrete graphics cards Supports PCIE resizable bar technology
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 (these 2-pin are F_AUDIO pins) 1* set of 4-pin speaker BUZZER pins
LAN	1* onboard RJ45 connector, onboard REALTEK 8125 2.5G LAN Supports Wake-on-LAN Support PXE diskless, UEFI diskless boot
SSD	1* M.2 X4 3.0 slot (supports 2242/2280 PCIE X4/X2 3.0 protocol SSD) 2* 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 1* 8-PIN Motherboard ATX 12V Supply /12V Input 1* COM_A pin 2* system fan pins, 1* CPU fan pin (except SYS_FAN2 pin which supports intelligent fan adjustment) 1* set of CLR_CMOS pins 1* Debug 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	Support 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: 289*245*65mm Outer box size: 510*302*347mm



A: HDMI Port

Supports up to 3840*1920@30Hz resolution (HDMI version 1.4) for connecting to a monitor.

B: VGA Port

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

C: Dual-layer USB3.2 GEN1 TYPE A Port

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

D: CLR_CMOS Button

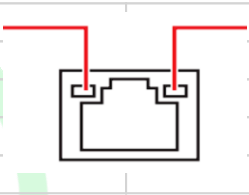
Restore BIOS settings button, when you need to restore the settings, you need to disconnect the AC power and press the button for 3-5S.

E: Dual-layer USB2.0 TYPE A Port

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 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	

G: Dual-layer USB3.2 GEN1 TYPE A Port

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

H1: LINE IN connector (blue)

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

H2: Audio-out connector (light green)

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

H3: Audio-Microphone connector (pink)

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

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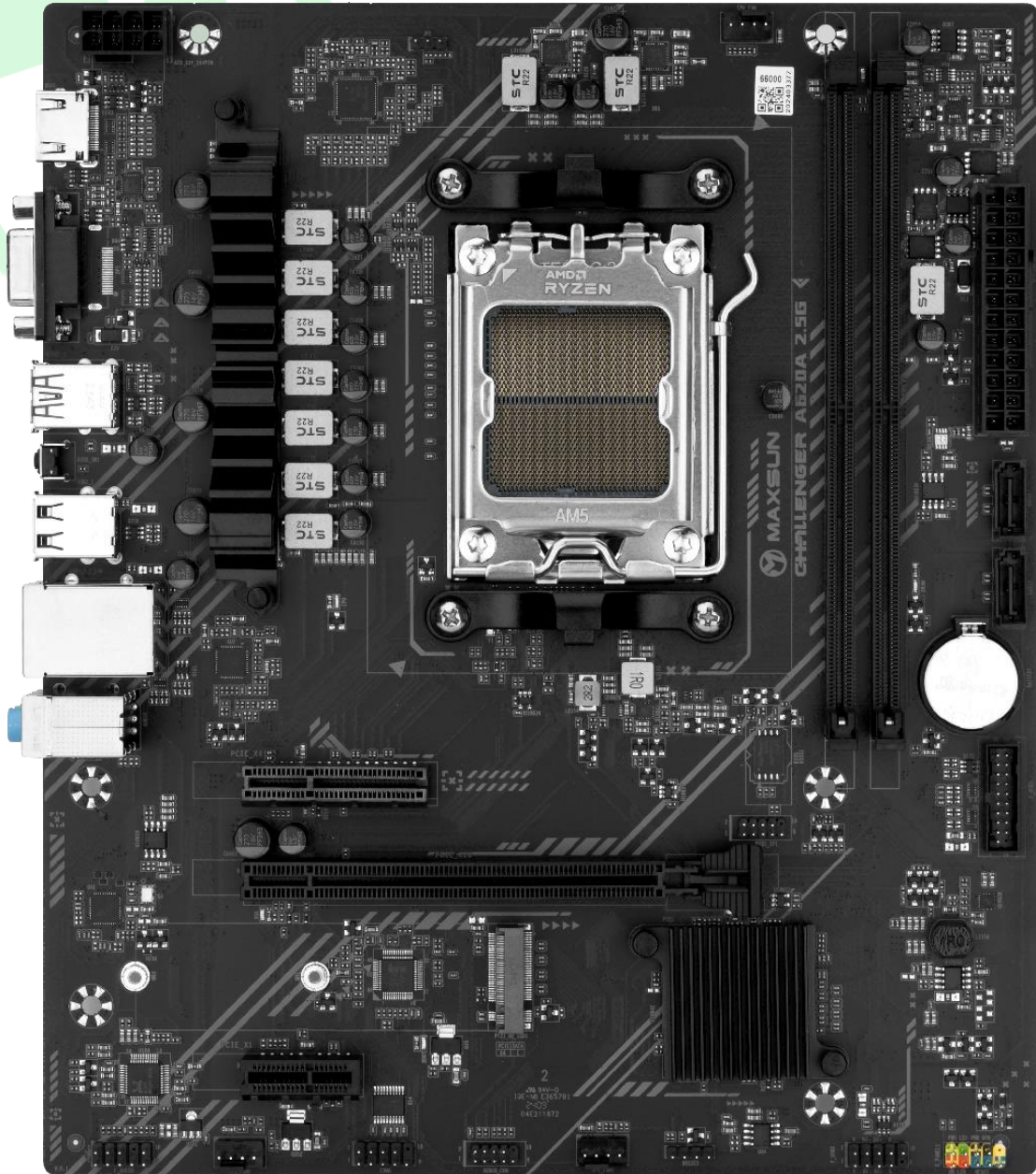
使用手册

VER:A0

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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)

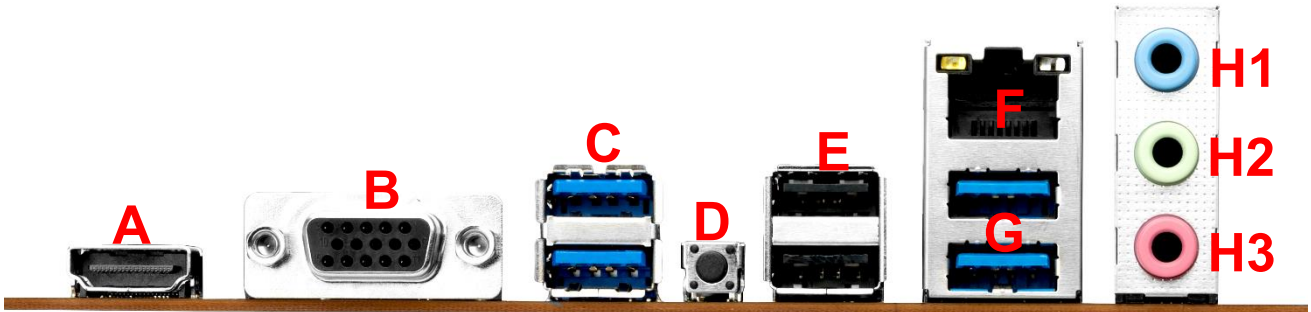


第二章 规格

2.1、主板硬件规格

主板尺寸	MicroATX(245*210mm)
CPU	支持 LGA1718 插槽 AMD RYZEN7000\8000 系列 TDP: 105W (6+2+1 相)
芯片组	AMD®A620A 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 4800MHZ/5200MHZ/OC Memeroy 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 HDMI 接口, 最高支持 3840*1920@30Hz 分辨率 1 个 VGA 接口, 最高支持 1920*1080@60Hz 分辨率
扩展接口	1 个 PCIEX16 4.0 插槽, 1 个 PCIEX1 3.0 插槽, 1 个开放式 PCIEX4 4.0 插槽 支持 AMD 和 NVidia 和 INTEL 独立显卡 (不支持 DG1) 支持 PCIE resizable bar 技术
音频	集成 ALC897 声卡芯片 支持前后声道同时输出 后置音频接口: 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_Audio 插针组) 1 组 4pin 喇叭 BUZZER 插针
网络	1 个板载 RJ45 接口, 板载 REALTEK 8125 2.5G 网卡 支持网络唤醒 支持 PXE 无盘、UEFI 无盘引导
存储	1 个 M.2 X4 3.0 插槽 (支持 2242/2280 PCIE X4/X2 3.0 协议 SSD) 2 个 SATA 3.0 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 1 个 COM_A 插针 2 组系统风扇插针、1 组 CPU 风扇插针 (除 SYS_FAN2 插针外都支持智能风扇调节) 1 组 CLR_CMOS 插针 1 个 Debug 插针 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	空气放电 ±8KV C 级

护	±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
包装尺寸及重量	彩盒尺寸: 289*245*65mm 外箱尺寸: 510*302*347mm



A: HDMI 接口

最高支持 3840*1920@30Hz 分辨率 (HDMI1.4 版本), 用于连接显示器。

B: VGA 接口

最高支持 1920*1080@60Hz 分辨率, 用于连接显示器。

C:双层 USB3.2 GEN1 TYPE A 接口

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

D:CLR_CMOS 按钮

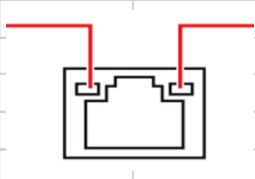
还原 BIOS 设置按钮, 需要还原设置时需断 AC 电源, 并且长按按钮 3-5S。

E: 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。

F: RJ45 接口

网线接口, 用于接入网线将主机系统链接到网络, 最高带宽 2500Mbps。

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	1000Mbps/2.5Gbps 连接	

G: 双层 USB3.2 GEN1 TYPE A 接口

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

H1: LINE IN 接口(蓝色)

用于接收音频输入设备, 如手机音频输入。

H2: 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。

H3: 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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