



# MS-Challenger A620A 2.5G

**Manual**

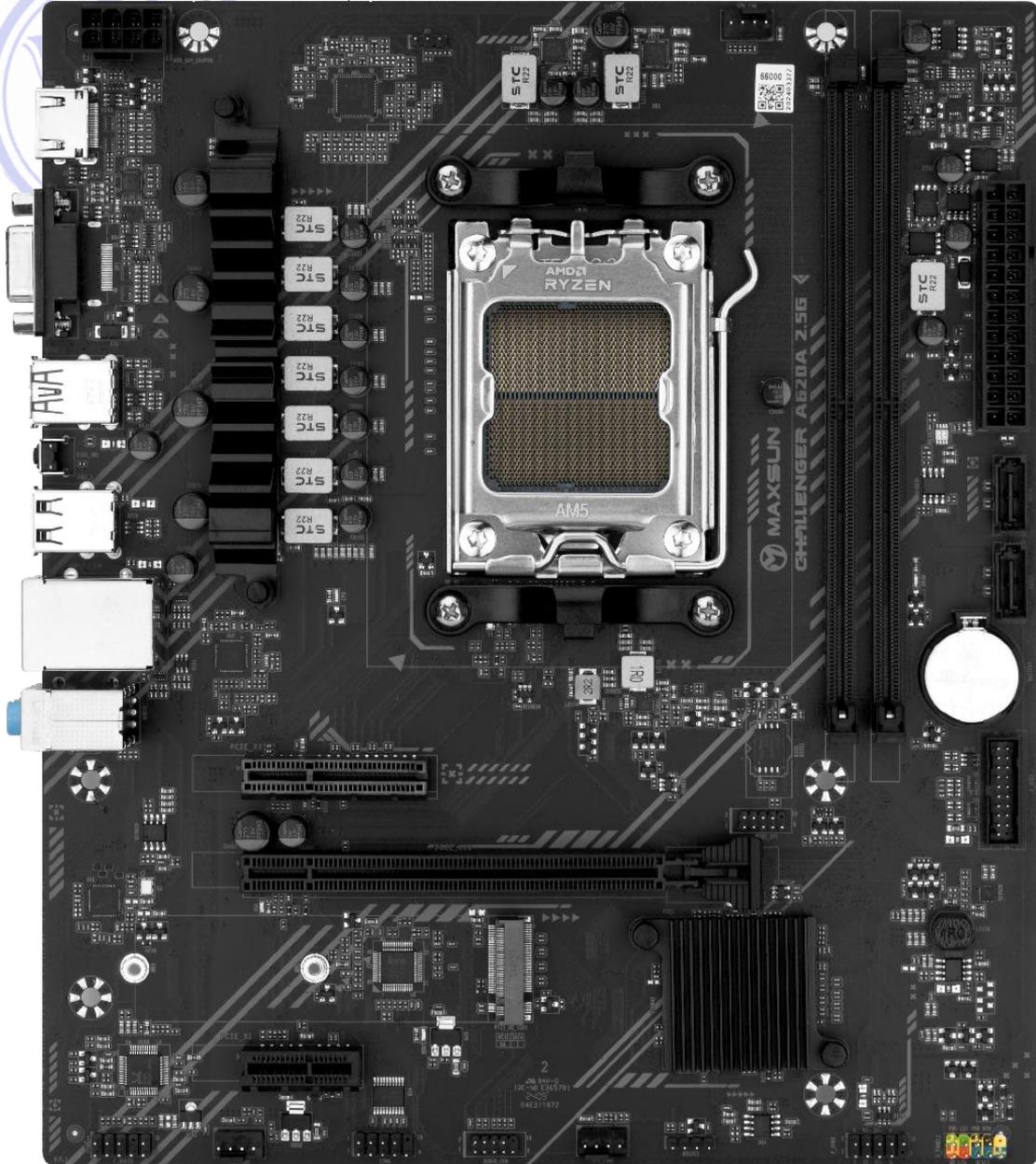
**VER:A0**

SHANGKE GROUP

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# 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 3.0 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 4.0 slot (supports 2242/2280 PCIE X4/X2 4.0 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 $\pm 8\text{KV}$ Class C $\pm 6\text{KV}$ Class B Contact discharge $\pm 6\text{KV}$ Class C $\pm 3\text{KV}$ 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**

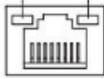
Supports up to USB2.0 standard and is backward compatible with USB1.1 standard. For connecting USB TYPE A devices.

**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.

Connection bandwidth indicator lights

Running lights



Network socket

Connection bandwidth indicator	
bandwidths	lamp state
connectionless	go out (of a fire etc.)
10Mbps	go out (of a fire etc.)
100Mbps	Green Always On
1000Mbps	Orange color is always on
2500Mbps	Orange color is always on

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

**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.