

MS-H610M 666 WIFI6 D5

Manual

VER:A0

SHANGKE GROUP

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Chapter 1 Motherboard Configuration Diagram



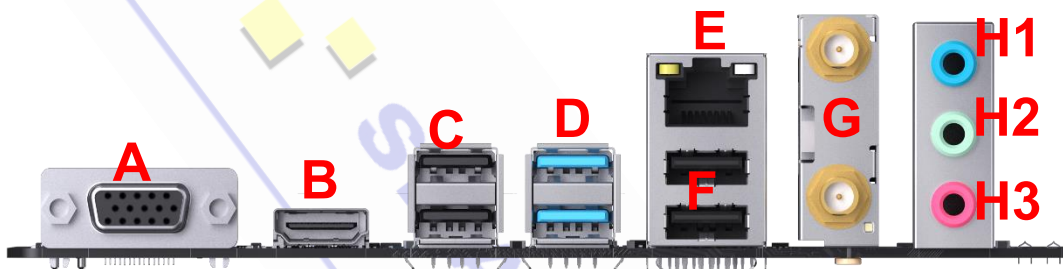
(This picture is for reference only, some details will be designed and adjusted according to the actual situation, please prevail in kind, our company reserves the right of interpretation)

Chapter II Specifications

2.1. Motherboard hardware specifications

Motherboard Size	Micro ATX(229*189mm)
CPU	Supports LGA1700 slot Supports 12th/13th/14th Gen processors TDP: 75W
Chipset	Intel® H610 High Speed Chipset
Memory (RAM)	2* DIMM DDR5 memory slots Supports up to 96GB Supports dual-channel memory technology Support 4800/5600MHz memory frequency
Display	Shared display memory technology based on display capabilities with integrated graphics processor 1* HDMI1.4 port. Support up to 4096x2160@30Hz resolution (support HDCP2.2) 1* VGA port, supports up to 1920*1080@60Hz resolution
Extended Interface	1* PCIEX16 4.0 slot 1* PCIEX1 3.0 slot Supports AMD and NVIDIA discrete graphics cards Supports PCIE Resizable bar technology (requires simultaneous CPU and graphics card support)
Audio	Integrated REALTEK ALC897 sound chip Supports simultaneous output of front and rear channels (requires setting in HD Audio Controller) Rear audio interfaces: 1* rear on-board LINE IN connector, 1* rear on-board LINE OUT connector, 1* rear on-board MIC_IN microphone connector. F_AUDIO pins: 1* set of front microphone pins, 1* set of front audio output 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 1* onboard Intel® AX101 WIFI6 wireless, supports Bluetooth 5.2
stockpile	1* M.2 slot (supports 2242/2280 PCIE X4/X2 3.0 channel SSD only) 3* SATA3.0 ports
USB	Onboard rear ports: 2* USB3.2 GEN1 ports, 4* 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 power connector, 12V input 1* set of system fan pins, 1* set of CPU fan pins 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



A: VGA port

Supports up to 1920x1080@60Hz resolution for connecting to a monitor.

B: HDMI port

HDMI 1.4 port, supports up to 4096x2160@30Hz resolution (supports HDCP2.2) for connecting to HDMI monitor ports.

C: Single-layer USB 2.0 TYPE A connector

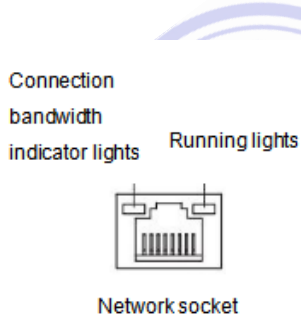
Supports up to USB 2.0 standard, backward compatible with USB 1.1 standard. For connecting USB TYPE A devices.

D: Dual-layer USB3.2 GEN1 port

Supports up to 5Gb theoretical transmission speed, backward compatible with USB1.1 and USB2.0 standards, for connecting USB TYPE A devices.

E: RJ45 port

Network cable port for accessing a network cable to connect 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	go out (of a fire etc)
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)

F: Dual-layer USB 2.0 TYPE A connector

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

G: WIFI interface

The WIFI interface has an integrated INTEL wireless and Bluetooth device inside, which requires the proper installation of the corresponding drivers for normal use.

H1: Audio-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

SHANGKE GROUP

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第一章 主板配置图



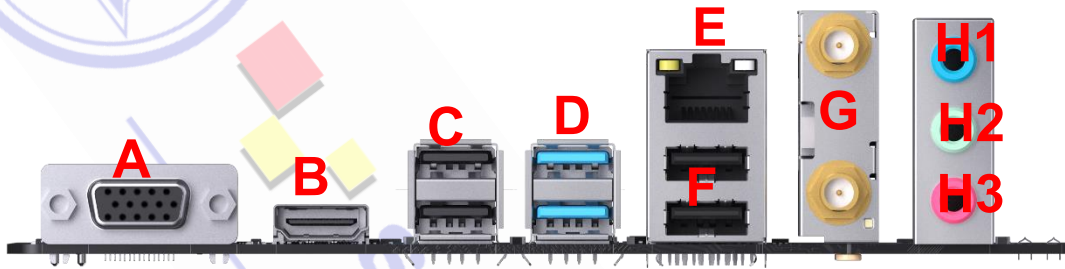
(此图仅供参考，部分细节会根据实际情况设计调整，请以实物为准，我司保留解释权)

第二章 规格

2.1、主板硬件规格

主板尺寸	MicroATX(229*189mm)
CPU	支持 LGA1700 插槽 支持 12 代处理器、13 代处理器、14 代处理器 TDP: 75W
芯片组	Intel®H610 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 4800/5600 MHz 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 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 支持 AMD 和 NVidia 独立显卡 支持 PCIe resizable bar 技术（需 CPU 和显卡同步支持）
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）
网络	集成 REALTEK8111H 网卡芯片(10/100/1000Mbit) 1 个板载 RJ45 接口 支持网络唤醒 支持 PXE 无盘、UEFI 无盘引导 1 个板载 Intel®AX101 WIFI6 无线网卡,支持蓝牙 5.2
存储	1 个 M.2 插槽（仅支持 2242/2280 PCIe X4/X2 3.0 通道 SSD） 3 个 SATA3.0 接口
USB	板载后置接口：2 个 USB3.2 GEN1 接口，4 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 组系统风扇插针、1 组 CPU 风扇插针 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



A: VGA 接口

最高支持 1920x1080@60Hz 分辨率，用于连接显示器。

B: HDMI 接口

HDMI1.4 接口，最高支持 4096x2160@30Hz 分辨率（支持 HDCP2.2），用于连接 HDMI 显示器接口。

C: 单层 USB2.0 TYPE A 接口

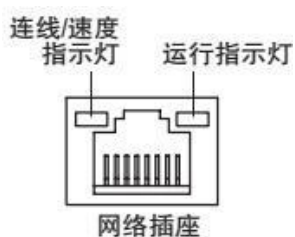
最高支持 USB2.0 标准，可向下兼容 USB1.1 标准。用于连接 USB TYPE A 设备。

D: 双层 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。

E: RJ45 接口

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。



连接带宽指示灯	
带宽	灯状态
无连接	灭
10Mbps	灭
100Mbps	绿色常亮
1000Mbps	橙色常亮

运行指示灯	
无数据传输	灭
数据传输中	闪烁

F: 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。

G: WIFI 接口

WIFI 接口内部集成了 INTEL 无线网卡和蓝牙设备，需要正确安装相应的驱动程序才能正常使用。

H1: Audio-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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