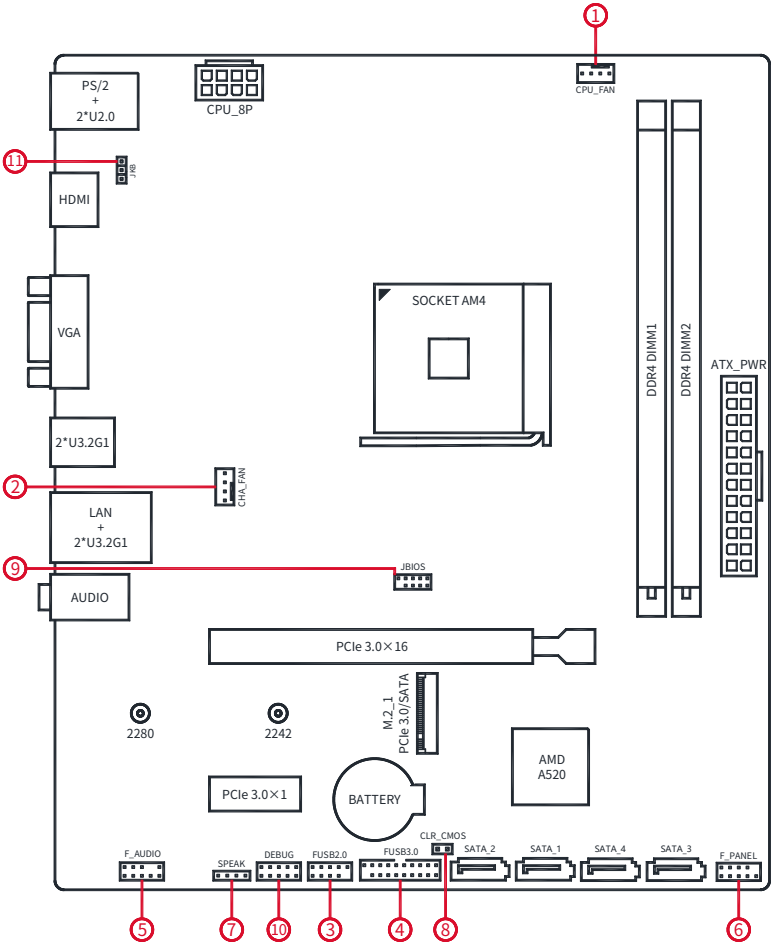
COLORFUL®

Motherboard User Manual

Version：V1.0

BATTLE-AX A520M-K M.2 V14



Product Features

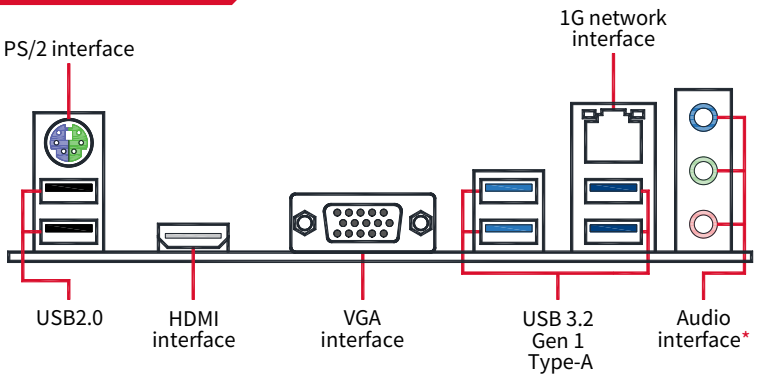
- ✓ AMD A520 chipset, Supports AMD Ryzen Processors that fit the AMD AM4 slot of the motherboard.
- ✓ There is 1 PCIe 3.0 x16 slot, 1 PCIe 3.0 x1 slot and 1 PCIe 3.0 x4 M.2 SSD slot on this motherboard, easily meet your expansion needs.
- ✓ There are 6 USB ports at the rear, and 4 USB ports at the front can be expanded, which can be connected to various devices at the same time.
- ✓ With Gigabit LAN and a 5.1-channel audio which provides excellent performance and experience.

Package Details

Please check if all thestandard accessories listed below are complete or not when opening the packaging box of the motherboard.

Motherboard	1×BATTLE-AX A520M-K M.2 V14 motherboard
Connecting cable	2×SATA 6Gb/s cable
Other accessories	1×Rear Panel I/O Shield
User manual	1×User manual for motherboard

Rear I/O Interface



(*Note: The blue in the audio interface is the audio input, the green is the audio output, and the pink is the microphone interface)

Product Specification

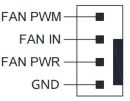
Chipset	AMD A520
CPU	Supports AMD Ryzen Processors that fit the AMD AM4 slot of the motherboard *Please visit the official website of Colorful (www.colorful.cn) for the latest supported processor list
Memory	2 DDR4 memory slots, supporting up to 64 GB of memory (a single slot can support a capacity of up to 32 GB) ●Support DDR4-3600(OC)/3200/2933/2800/2666/2400MHz memory ●Support Extreme Memory Profile (XMP) memory technology ●Support dual channel memory technology *Please visit the official website of Colorful (www.colorful.cn) for the latest memory compatibility list
Expansion slots	1×PCIe 3.0 x16 slot 1×PCIe 3.0 x1 slot
Storage device interfaces	A total of 1 M.2 slot and 4 SATA 6Gb/s hard disk interfaces are supported ●M.2_1 slot：support 2242/2280 specifications M.2 SSD (PCIe 3.0 x4/SATA，CPU channel)
Rear I/O interfaces	2×USB 2.0 interfaces 4×USB 3.2 Gen 1 Type-A interfaces 1×HDMI 2.0 interface, up to 4K 60Hz resolution supported 1×VGA interface 1×PS/2 interface 1×Gigabit network interface 3×Audio interfaces (audio input/audio output/microphone)
Onboard pin/jumper/key	1×CPU fan pin (CPU_FAN) 1×System fan pin (CHA_FAN) 1×Front audio pin (F_AUDIO) 1×Front panel pin (F_PANEL) 1×Speaker pin (SPEAK) 1×Clear CMOS jumper (CLR_CMOS) 1×BIOS burner pin (JBIOS) 1×Debug light pin (DEBUG) 1×USB live control jumper (JKB)
Front USB expansion interfaces	1×USB 2.0 pin, support additional 2 USB 2.0 Type-A interfaces (FUSB2.0) 1×USB 3.2 Gen 1 pin, support additional 2 USB 3.2 Gen 1 Type-A interfaces (FUSB3.0)
Audio	Realtek ALC897 High fidelity decoding chip ●Support up to 5.1 channels
Network function	RTL8111H gigabit LAN controller

Dimension of motherboard	M-ATX Form Factor 230mm x 197mm

Pins and Jumpers

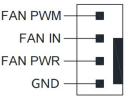
① CPU fan pin (CPU_FAN)

There is one 4-pin CPU fan pin on the motherboard. The socket comes with a foolproof design, and the correct direction must be checked before installation. The cooling fan with a speed control function can reduce the temperature of the CPU and provide cooling function, improve CUP stability.



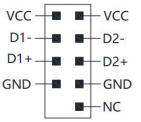
② System fan pin (CHA_FAN)

The motherboard provides one 4-pin system fan sockets which has foolproof design and please pay attention to the direction when installing. The cooling fan with the rotating speed control function can lower the temperature in the chassis and help the chassis to dissipate heat.



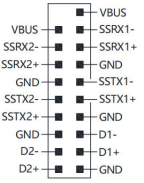
③ Front USB 2.0 pin (FUSB2.0)

There is one front USB 2.0 expansion pin on the motherboard, which can be expanded to two USB 2.0 interfaces.



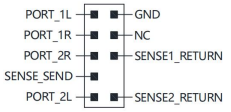
④ Front USB 3.2 Gen 1 pin (FUSB3.0)

There is one front USB 3.2 Gen 1 expansion pin on the motherboard, which can be expanded to two USB 3.2 Gen 1 Type-A and it's compatible with USB 2.0 devices.



⑤ Front audio pin (F_AUDIO)

The audio interface on the front panel of the case can be connected to the front audio pin through the audio cable in the case, allowing audio input/output and other functions through the audio interface on the front panel.



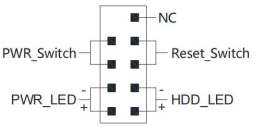
⑥ Front panel pin (F_PANEL)

PWR_Switch：Power switch, short connect to be power on.

Reset_Switch：Restart switch, short connect to restart the computer.

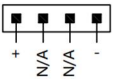
PWR_LED：Power indicator.The LED will light up when the power is on.

HD_LED：Hard disk indicator. The LED will light up when the hard disk is accessing data.



⑦ Speaker pin (SPEAK)

Speaker pin can be used to connect speakers located in the case.



⑧ Clear CMOS jumper (CLR_CMOS)

Clear CMOS jumper can be used to clear data in the CMOS memory of the motherboard. In CMOS memory it stores the BIOS setting parameters and is powered by the battery on the main board independently. If you need to clear CMOS data, first turn off the computer and unplug the power cord, insert the jumper cap onto the CMOS pin, and make the two pins Short connect the feet for 5 seconds, then pull out the jumper cap, wait for 5 minutes, and then start the computer to enter the BIOS Reset BIOS parameters.



⑨ BIOS burner pin (JBIOS)

BIOS burner pins can be used to upgrade the motherboard BIOS by connecting to the BIOS burner.

⑩ Debug light pin (DEBUG)

The debug light pin can be used to connect to the motherboard debug light, And analyze the cause of abnormal motherboard based on the status displayed by the debugging light.

⑪ USB live control jumper (JKB)

The USB powered control jumper can control whether the two USB 2.0 interfaces below the PS/2 interface are powered off. When the motherboard leaves the factory, the two USB 2.0 interfaces below the PS/2 interface are not charged by default, and the jumper caps are inserted on pins ② and ③. If you need to power up two USB 2.0 interfaces, first turn off the computer and unplug the power cord. Pull out the jumper cap and plug it into pins ① and ②, and then reconnect the power cord. At this time, both USB 2.0 interfaces are in a live state.



Driver Installation

You can visit the official website of Colorful (http://www.colorful.cn), search for the product model, and find the corresponding driver in the technical support list to download. The onboard LAN Driver can also be downloaded by scanning the QR code below.

A520M-K M.2 V14

BIOS

Every time a new motherboard is released, its motherboard BIOS will also be updated iteratively. The main function of such a process is to support the latest released hardware, optimize its compatibility with the released hardware, improve its running stability, or support new BIOS functions.

- There are potential risks in updating the BIOS program. If your computer works normally, we do not recommend that you update the BIOS program.
- If you need to update BIOS, please read this operation guide carefully and operate under the guidance of professionals to avoid system damage or data loss due to improper operation.
- If you need a more detailed BIOS program update procedure, please scan the QR code on the right to download the official BIOS update guide of Colorful.

Service and Support

Please visit the official website of Colorful, click the Service and Support, or directly scan the QR code on the right, you can check our services, warranty regulations and download support provided by Colorful.

Shenzhen Colorful Yugong Technology Development Co., Ltd.

Official website: https://www.colorful.cn

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