1.1.Packing Contents

- 1* Colorful Battle AXE C.AB350M-HD plus V14 motherboard
- 1* SATA cables and 1 power cable
- 1* Driver/Utility CD
- 1* User's Guide
- 1xI/O shield

1.2.MOTHERBOARD

Thanks for purchasing our based on AMD B350 Chipset motherboard. The motherboard based on AMD B350 Express Chipset, support AM4 AMD APUs, support dual channel DDR4 2666（OC）/2600（OC）/2400/2133MHZ memory, support PCI-E 3.0 standard。

The motherboard provides 1*HDMI port、1*VGA port、1*DVI port、2*DDR4 memory slots、4*SATA3.0 HDD ports、6*USB2.0&6*USB3.0 ports(including the header)、onboard 6-CH audio chipset、onboard 1000M LAN chipset, it's a Cost-effective motherboard !

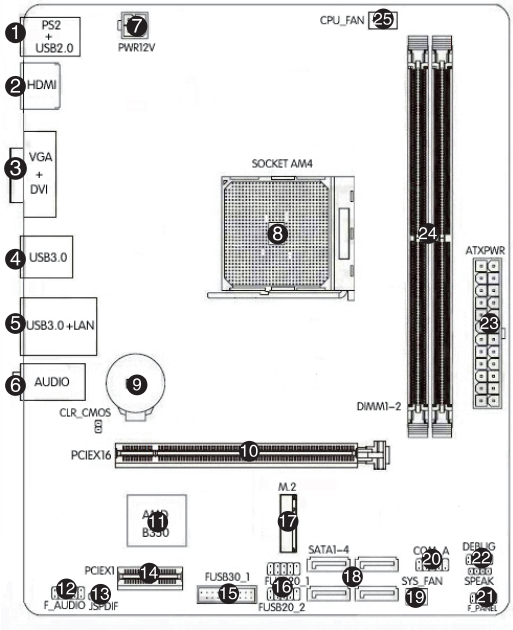
The motherboard provides 1*PCI Express x16 slot、1*PCI Express x1 slot、1*M.2 slot。

SPEC

CPU	. Supports Socket AM4 . Support AMD AM4 CPUS	**Other Connectors**	. 1x 9-pin Front panel audio connector（F_AUDIO） . 1 x System Panel (HD LED, Power LED, Power switch, Reset button)（F_PANEL） . 2*USB2.0 headers（FUSB20_1,FUSB20_2） . 1*USB3.0 header（FUSB30_1） . 1*CPU FAN（CPU_FAN） . 1*system FAN（SYS_FAN） . 1 PC speaker connector（SPEAK） . 1*Debug card header（DEBUG） . 1*COM header（COM_A） . 1*SPDIF header（JSPDIF） . 1*CMOS jumper（CLR_CMOS）
Chipset	. AMD B350		
Main Memory	. Offer 2 DIMM slots . Support dual channel DDR4 2666（OC）/ 2600（OC）/2400/2133MHZ memory		
Slots	. 1*PCI Express3.0 x16 slot . 1*PCI Express x1 slot . 1*M.2 slot（support MSATA channels M.2 SSD）		
Storage	. 4*SATA3.0 6Gb/s ports		
USB	. 6*USB2.0&6*USB3.0 ports(including the header)	**High Definition Audio**	. 6-CH audio devices . Onboard 6-ch audio chipset
Rear IO Connector	. 1*PS2 mouse and keyboard combo port . 2*USB2.0 ports . 1*HDMI port . 1*VGA+DVI ports . 4*USB3.0 ports . 1*RJ45 1000M LAN port . 1*3 jack 6-ch audio ports	**Onboard LAN**	. Onboard 1000M LAN . Provides 10/100/1000Mb Ethernet
		Form Factor	. mATX

1.3.Motherboard Layout

1. 1 x PS/2 Mouse/ Keyboard port and usb2.0 port
2.Connect to HDMI monitor
3.Connect to VGA and DVI monitor
4. Connect to USB devices
5. Connect to USB devices and LAN
6. Audio devices
7. 4-pin ATX 12V Power connector
8. AM4 socket
9. battery
10. PCI-Express 3.0 X16 slot, for VGA Card
11. AMD B350 chipset
12. Front panel audio connector
13.For SPDIF device
14. PCI-Express 3.0 X1 slot
15.USB3.0 Header
16. USB 1.1/2.0 port
17.M.2 Slot
18. SATA3.0 port
19.System FAN Connector
20.COM Header
21. Front panel connector
22. Debug and Speaker connector
23. 24-pin ATX Power connector
24. DIMM slots
25. CPU Fan connector



2.Hardware Installation

This section will guide you through the installation of the motherboard. The topics covered in this section are:

- Preparing the motherboard
  - . Installing the CPU
  - . Installing the CPU fan
  - . Installing the memory
- Installing the motherboard
- Connecting cables and setting switches

2.1.Safety Instructions

To reduce the risk of fire, electric shock, and injury, always follow basic safety precautions.

Remember to remove power from your computer by disconnecting the AC main source before removing or installing any equipment from/to the computer chassis.

2.2.Preparing the Motherboard

The motherboard shipped in the box does not contain a CPU or memory. You need to purchase a CPU, a CPU fan assembly, and memory to complete this installation.

2.2.1.Installing the CPU

When installing a APU, always remember to install a APU heatsink. An APU heatsink is necessary to prevent overheating and maintain system stability. Follow the steps below to ensure correct APU and heatsink installation. Wrong installation can damage both the APU and the motherboard.

1. Pull the lever sideways away from the socket. Make sure to raise the lever up to a 90-degree angle.
2. Look for the gold arrow of the APU. The gold arrow should point as shown in the picture. The APU can only fit in the correct orientation.
3. If the APU is correctly installed, the pins should be completely embedded into the socket and can not be seen. Please note that any violation of the correct installation procedures may cause permanent damages to your motherboard.
4. Press the APU down firmly into the socket and close the lever. As the APU is likely to move while the lever is being closed, always close the lever with your fingers pressing tightly on top of the APU to make sure the APU is properly and completely embedded into the socket.
5. Locate the CPU fan connector on the motherboard.
6. Position the cooling set onto the retention mechanism. Hook one end of the clip to hook first.
7. Then press down the other end of the clip to fasten the cooling set on the top of the retention mechanism. Locate the Fix Lever and lift up it.
8. Fasten down the lever.
9. Attach the APU Fan cable to the APU fan connector on the motherboard.




2.3.Installing Memory DIMMs

Your new motherboard has 2 slots for DDR4 memory. They support dual channel DDR4 memory technology. There must be at least one memory bank populated to ensure normal operation. Use the following the recommendations for installing memory.

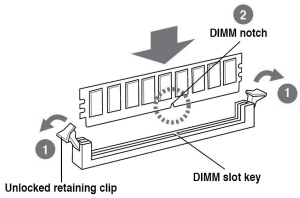
✓One DIMM: Install into DIMM 1. You can install the DIMM into any slot, however, slot 1 is preferred.

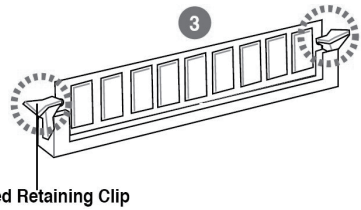
✓Two DIMMs: Install into slots 1, 2 .

Use the following procedure to install memory DIMMs into the slots on the motherboard. Note that there is only one gap near the center of the DIMM slot. This slot matches the slot on the memory DIMM to ensure the component is installed properly.

✓Unlock a DIMM slot by pressing the module clips outward.

✓Align the memory module to the DIMM slot, and insert the module vertically into the DIMM slot. The plastic clips at both sides of the DIMM slot automatically lock the DIMM into the connector.





2.4.Inslling the Motherboard

The sequence of installing the motherboard the chassis depends on the chassis you are using and if you are replacing an existing motherboard or working with an empty chassis. Determine if it would be easier to make all the connections prior to this step or to secure the motherboard and then make all the connections. Use the following procedure to install the I/O shiele and secure the motherboard into the chassis.

Be sure that the CPU fan assembly has enough clearance for the chassis covers to lock into place and for the expansion cards. Also make sure the CPU Fan assembly is aligned with the vents on the covers.

2.5.Installing the I/O Shield

The motherboard kit comes with an I/O shield that is used to block radio frequency transmissions, protects internal components from dust and foreign objects, and promotes correct airflow within the chassis.

Before installing the motherboard, install the I/O shield from the inside of the chassis. Press the I/O shield into place and make sure it fits securely. If the I/O shield does not fit into the chassis, you would need to obtain the proper size from the chassis supplier.

2.6.Securing the Motherboard into the Chassis

Most computer chassis have a base with mounting studs or spacers to allow the mother board to be secured to the chassis and help to prevent short circuits. If there are studs that do not align with a mounting hole on the motherboard, it is recommended that you remove that stud to prevent the possibility of a short circuit.

1.Carefully place the motherboard onto the studs/spacers located inside the chassis.
2.Align the mounting holes with the studs/spacers.
3.Align the connectors to the I/O shield.
4.Ensure that the fan assembly is aligned with the chassis vents according to the fan assembly instruction.
5.Secure the motherboard with a minimum of eight-to-ten screws.

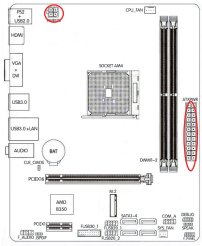
2.7.Connecting Cables and Setting Switches

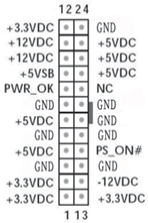
This section takes you through all the connections and switch settings necessary on the motherboard. This will include:

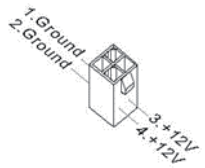
- Power Connections
  - 24-pin ATX power
  - 4-pin ATX 12V power
- Internal Headers
  - Front panel
  - USB Headers
  - Audio
- Serial ATA II
- Chassis Fans
- Rear panel USB 2.0 Adapter
- Expansion slots

2.7.1.ATX power connectors (24-pin ATXPWR, 4-pin ATX12V)

These connectors are for an ATX power supply. The plugs from the power supply are designed to fit these connectors in only one orientation. Find the proper orientation and push down firmly until the connectors completely fit.

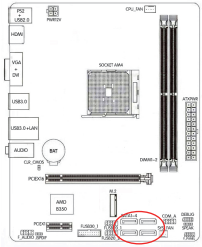


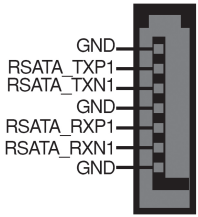


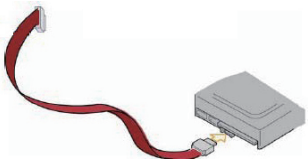


2.7.2.Serial ATA 3.0/6.0 Gb/s connectors (7-pin)

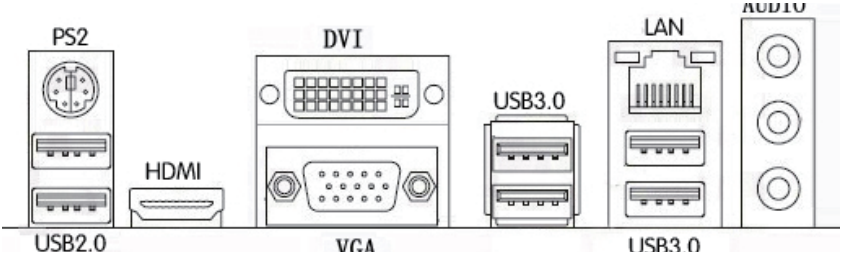
These connectors connect to Serial ATA 3.0/6.0 Gb/s hard disk drives and optical drives via Serial ATA 3.0/6.0 Gb/s signal cables.







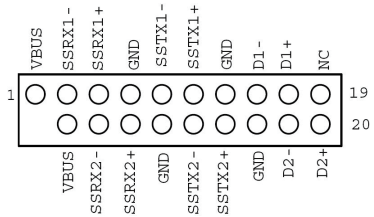
2.7.3.Back Panel IO Connector



Parts	Use
PS/2 Mouse Connector	This connector is for a PS/2 mouse.
PS/2 Keyboard Connector	This connector is for a PS/2 keyboard.
LAN Jack	The standard RJ-45 jack is for connection to single Local Area Network (LAN). You can connect a network cable to it.
Lie-In(Blue)	Used for external CD player, tape player or other audio devices.
Line Out(Green)	This connector for speakers or headphones.
Side R/L(Gray)	Side surround speakers connector.
VGA	Onboard VGA, connect to Monitor
DVI	Onboard DVI port, connect to DVI Monitor
HDMI	Onboard HDMI port, connect to HDMI Monitor
USB Ports	These connectors are for attaching USB devices such as keyboard, mouse, or other USB-compatible devices.

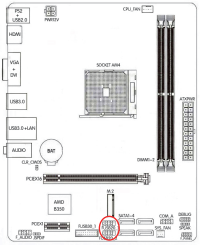
2.7.4.USB 3.0 connectors

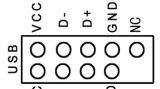
USB 3.0 has transmission speeds of up to 5 Gbit/s, which is 10 times faster than USB2.0 (480 Mbit/s). USB 3.0 significantly reduces the time required for data transmission, reduces power consumption, and is backward compatible with USB 2.0. The USB 3.0 Promoter Group announced on 17 November 2008 that the specification of version 3.0 had been completed and had made the transition to the USB Implementers Forum (USB-IF), the managing body of USB specifications. This move effectively opened the specification to hardware developers for implementation in future products. A new feature is the "SuperSpeed" bus, which provides a fourth transfer mode at 5.0 Gbit/s. The raw throughput is 4 Gbit/s, and the specification considers it reasonable to achieve 3.2 Gbit/s (0.4 GB/s or 400 MB/s), or more.



2.7.5.USB2.0 connectors

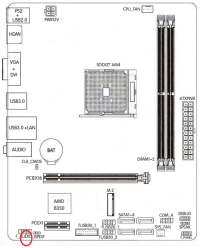
These connectors are for USB 2.0 ports. Connect the USB module cable to any of these connectors, then install the module to a slot opening at the back of the system chassis. These USB connectors comply with the USB 2.0 specification that supports up to 480Mbps connection speed.

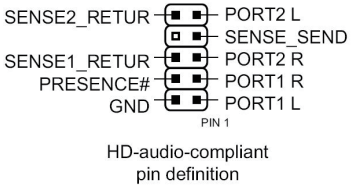




2.7.6.Front panel audio connector

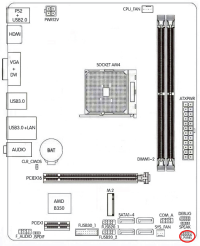
This connector is for a chassis-mounted front panel audio I/O module that supports either High Definition Audio or AC`97 audio standard. Connect one end of the front panel audio I/O module cable to this connector.

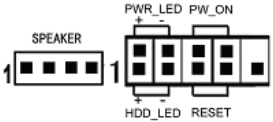




2.7.7.System panel connector

This connector supports several chassis-mounted functions.





System power LED (2-pin PLED)

This 2-pin connector is for the system power LED. Connect the chassis power LED cable to this connector. The system power LED lights up when you turn on the system power, and blinks when the system is in sleep mode.

Hard disk drive activity LED (2-pin IDE_LED)

This 2-pin connector is for the HDD Activity LED. Connect the HDD Activity LED cable to this connector. The IDE LED lights up or flashes when data is read from or written to the HDD.

System warning speaker (4-pin SPEAKER)

This 4-pin connector is for the chassis-mounted system warning speaker. The speaker allows you to hear system beeps and warnings.

ATX power button/soft-off button (2-pin PWRSW)

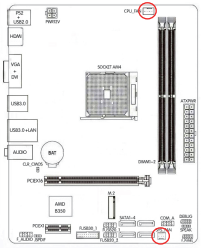
This 2-pin connector is for the system power button.

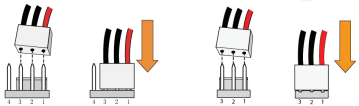
Reset button (2-pin RESET)

This 2-pin connector is for the chassis-mounted reset button for system reboot without turning off the system power.

2.7.8.CPU, Chassis, and Power fan connectors (4-pin CPU_FAN, 3-pin PWR_FAN)

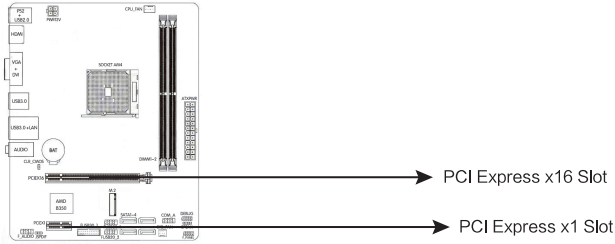
Connect the fan cables to the fan connectors on the motherboard, making sure that the black wire of each cable matches the ground pin of the connector.





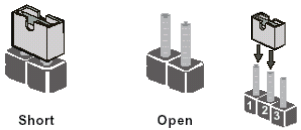
2.7.10.PCI Express x16 Slots

The PCI Express x16 slot is reserved for a graphics or video card. The bandwidth of the x16 slot is up to 4GB/sec (8GB/sec concurrent).
When installing a PCI Express x16 card, be sure the retention clip snaps and locks the card into place. If the card is not seated properly, it could cause a short across the pins. Secure the card's metal bracket to the chassis back panel with the screw used to hold the blank cover.



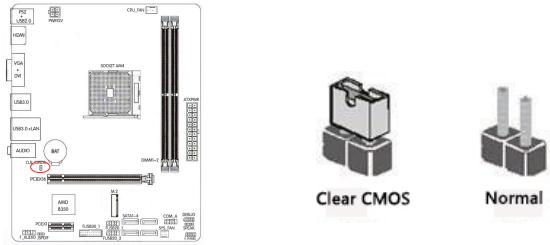
2.7.11.Clear CMOS Jumper: CLR_CMOS

There is a CMOS RAM on board that has a power supply from external battery to keep the system configuration data. With the CMOS RAM, the system can automatically boot OS every time it is turned on. If you want to clear the system configuration, use the JBAT Jumper to clear data.



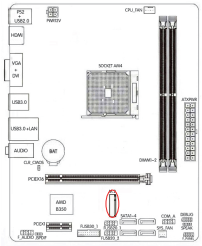
Clear CMOS PROCEDURE

You can clear CMOS by shorting 1-2 pin. Before you clearing the CMOS, following next procedure:
1.Turn off the AC power supply and connect pins 1 and 2 together using the jumper cap.
2.Return the jumper setting to normal (pin 2) or Remove the jumper cap
3.Turn the AC power supply back on.



M.2 Slot

the motherboard has 1*M.2 slot（support MSATA channels M.2 SSD）



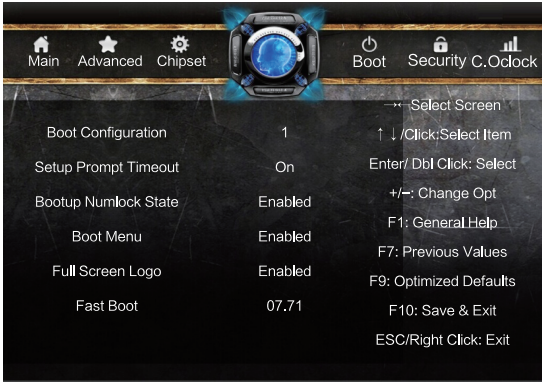
Entering BIOS Setup

Power on the computer and the system will start the Power On Self Test (POST)process. When the message below appears on the screen, press <DEL> key to enter BIOS:

Press DEL to Run Setup,Press F2 to Load default values and continue

Boot Option Priorities（how to install operating system）

Boot device Priority Setting。If user will install operating system, please put “Boot Option #1” set to your CD-ROM or your USB device, After setting, press "F10" key to save and exit, System boot from CD-ROM or U disk。



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Technical Support

If a problem arises with your system and no solution can be obtained from the user's manual, please contact your place of purchase or local distributor. Or our engineer, send the follow information to us!

Customer name_____ Purchase date_____

Contacts _____ Contact phone_____

Contact address_____ Product model_____

Product SN _____ Dealer name_____

Dealer phone _____ Dealer address _____

Website: www.colorful.cn

Service hotline: +86400-678-5866