

## B45M2 Motherboard



- Socket AM4 supports AMD Ryzen & A-series APU / CPU
- AMD B350 single chip architecture
- Support 2-DIMM DDR4-3200(OC)/ 2933/ 2666/ 2400/ 2133/ 1866 up to 32G maximum capacity
- Support USB 3.1 Gen1
- Support M.2(32Gb/s)
- Support HDMI 4K resolution

## B45M2 Specification

CPU SUPPORT	Supports AMD AM4 Socket for 3 <sup>rd</sup> , 2 <sup>nd</sup> and 1 <sup>st</sup> Gen Ryzen/2 <sup>nd</sup> and 1 <sup>st</sup> Gen Ryzen with Radeon Vega Graphics/Athlon with Radeon Vega Graphics/7 <sup>th</sup> Gen A-Series/Athlon X4 Processors
MEMORY	Support Dual Channel DDR4 1866/ 2133/ 2400/ 2666/ 2933/ 3200(OC) MHz 2 x DDR4 DIMM Memory Slot Max. Supports up to 32GB Memory Each DIMM supports non-ECC 8/16 GB DDR4 module *Please refer to <a href="http://www.biostar.com.tw">www.biostar.com.tw</a> for Memory support list.
INTEGRATED VIDEO	By CPU model Supports DX12 Supports HDCP
STORAGE	4 x SATA III Connectors (6Gb/s) : Supports AHCI & RAID 0, 1, 10 1 x M.2 (M Key) 32Gb/s Connector Supports PCI-E (32Gb/s) & SATA III (6Gb/s) SSD (Ryzen series - Summit Ridge / Pinnacle Ridge / Raven Ridge); Supports SATA III (6Gb/s)SSD (A-series APU - Bristol Ridge)
LAN	Realtek RTL8111H - 10/100/1000Mb/s Controller Support Super LAN Surge Protection

AUDIO CODEC	Realtek ALC887 8-Channel HD Audio Support HD Audio Support 7.1-channel
USB	6 x USB 3.1 Gen1 Port(4 on rear I/Os and 2 via internal headers) 6 x USB 2.0 Port(2 on rear I/Os and 4 via internal headers)
EXPANSION SLOT	1 x PCI-E 3.0 x16 Slot 2 x PCI-E 2.0 x1 Slot
REAR I/O	1 x PS/2 Mouse 1 x PS/2 Keyboard 4 x USB 3.1 Gen1 (5Gb/s) Ports 2 x USB 2.0 Port 1 x HDMI Connector ,resolution up to 4096 x 2160@24Hz, compliant with HDMI 1.4 1 x VGA Port ,resolution up to 1920 x 1200 @60Hz 1 x LAN Port 3 x Audio Jacks
INTERNAL I/O	1 x USB 3.1 Gen1 Header (each header supports 2 USB 3.1 Gen1 ports) 2 x USB 2.0 Header (each header supports 2 USB 2.0 ports) 4 x SATA III Connector(6Gb/s) (6Gb/s) 1 x Front Audio Header 1 x Front Panel Header 1 x CPU Fan Connector 1 x System Fan Connector 1 x 8-Pin Power Connector 1 x 24-Pin Power Connector 1 x Clear CMOS Header 1 x COM Port Header
DIMENSION	Micro ATX Form Factor Dimension: 198 mm x 244 mm ( W x L )
OS SUPPORT	Supports Windows 10(x64) Support Windows 7 (x64) for Bristol / Summit /Pinnacle Ridge only *Biostar reserves the right to add or remove support for any OS with or without notice.
ACCESSORIES	2 x SATA Cable 1 x I/O Shield 1 x DVD Driver 1 x Quick Guide

## B45M2 OVERVIEW

**CPU-Chipset**



## AMD B350 chipset

AMD B350 is the mainstream chipset and offers the most value in terms of I/O and functionality.

### Audio+



## HD Audio

Provides high quality sound with minimal loss of audio fidelity.



## Hi-Fi Ground

BIOSTAR Hi-Fi Ground ( Golden Line ) is noise-blocking multi-layer PCB design to isolates analog audio signals from digital sources. Unique PCB layout is ideal for exceptional clarity and high fidelity sound.

### Video+



## DX12

DirectX 12 introduces the next version of Direct3D, the graphics API at the heart of DirectX. Direct3D is one of the most critical pieces of a game or game engine, and we've redesigned it to be faster and more efficient than ever before. Direct3D 12 enables richer scenes, more objects, and full utilization of modern GPU hardware.



## Integrated HDMI with HDCP

Onboard HDMI connector allows full video & audio support. It has industry-leading high definition video quality.

### Speed+



## SmartSpeedLAN

SmartSpeedLAN is a free software application which monitors and manages your PC's network behavior. With user-friendly GUI, it allows you to select and prioritize different types of network traffic, including gaming, media streaming, communications or web surfing. You can also set any specific applications, choosing to prioritize or block accordingly. SmartSpeedLAN can feature automatic management options that use adaptive networking intelligence to ensure that you are getting the best online experience possible.



## USB 3.1 Gen 1 Type-A

Experience Fastest data transfers at 5 Gbps with USB 3.1 Gen 1--the new latest connectivity standard. Built to connect easily with next-generation components and peripherals, USB 3.1 Gen 1 transfers data 10X faster and backward compatible with previous USB 2.0 components.



## PCIe M.2

PCIe M.2 32Gb/s is the latest storage interface, it delivers the highest bandwidth and lower latency. It's 3 times faster compared with PCIe M.2 10Gb/s.



## SATAIII 6Gbps

SATAIII 6Gbps provides a higher bandwidth to retrieve and transfer HD media. With this super speed data transfer, SATAIII allows an incredible data boost which is 2x faster than the SATA 3G.



## Dual DDR4

The primary advantages of DDR4 over DDR3, include higher module density, lower voltage requirements, coupled with higher data transfer rate.

**Durable+**



## Moistureproof of PCB

The popularity of PC usage and working environment is getting deteriorating and moist (rural, coastal, etc.). The PCB will be oxidizing easily by damp or absorbed moisture, and ionic migration or CAF (Conductive Anodic Filament) will be generated. Moisture-proof PCB meets high density and high reliability requirements for moisture proof.



## 100% Solid Caps

With armor-plated Biostar Technology, all capacitors are placed with 100% solid capacitors that have a lasting life cycle, durability and stability for crucial components.

## Protection+



## Super LAN Surge Protection

Super LAN Surge Protection, providing LAN port with more advanced antistatic protection capabilities by adding an integrated chip to strengthen electrical stability and prevent damage from lightning strikes and electrical surges. SLSP (Super LAN Surge Protection) series motherboard upgrades the existing system protection standards with maximum 4X protection comparing to other board makers.



## OC / OV / OH Protection

OC / OV / OH Protection design detects overvoltage conditions and prevents voltage surges from spreading in real time. It also actively cuts off the overvoltage supply to protect your system.



## BullGuard Internet Security (90 days FREE trial)

BullGuard Internet Security comes with the broadest line-up of internet security features on the market, including: a cutting-edge dual Antivirus engine, Online Backup for your precious files, PC Tune Up to speed up your system, a Game Mode for a seamless gaming experience, Parental Control, Firewall, Safe Browsing and many more. Make the most of your digital life with BullGuard!

DIY+



## BIOS-Flasher

BIOS-Flasher is a convenient BIOS update tool. Just launch this tool and put the BIOS on USB pen driver before entering the OS. You can update your BIOS with only a few clicks without preparing an additional floppy disk or other complicated flash utility.



## eHot-Line Utility

Integrated e-service automatically sends your technical support request to Biostar Globe tech support without any delay.



## BIOScreen Utility

Personalize your desktop with customizable boot logo. BIOScreen is the new feature that lets you personalize and create your own style with unique, custom-made boot logo.

**\*The specification and pictures are subject to change without notice and the package contents may differ by area or your motherboard version!**