



# A320MH 6.x

- Support AMD Ryzen CPU / APU
- AMD A320 single chip architecture
- Support 2-DIMM DDR4-2933/2667/2400/2133/1866 up to 32G maximum capacity
- Support HDMI
- Support USB 3.1 Gen1

Chipset	• AMD A320
CPU SUPPORT	AMD A-series APU / Ryzen CPU / NPU for Socket AM4
MEMORY	Support Dual Channel DDR4 2933/2667/2400/2133/1866 MHz     Support Nam FOC & FOC His buffered DIMM Management and discount for the second point of the second poi
	<ul> <li>Support Non-ECC &amp; ECC Un-buffered DIMM Memory modules</li> <li>2 x DDR4 DIMM Memory Slot</li> </ul>
	Max. Supports up to 32GB Memory
	* DDR4 2933 for AMD Ryzen CPU
	**DDR4 speed depends on CPU type
INTEGRATED VIDEO	By CPU model
	Supports DX12
	Supports HDCP
STORAGE	4 x SATA III Connectors (6Gb/s)
	Support SATA RAID: 0,1,10
LAN	Realtek RTL8111H - 10/100/1000Mb/s Controller
AUDIO CODEC	Realtek ALC887 8-Channel HD Audio
	Support HD Audio
USB	2 x USB 3.1 Gen1 Ports
	1 x USB 3.1 Gen1 Header



	• 4 x USB 2.0 Ports
	2 x USB 2.0 Header
EXPANSION SLOT	<ul> <li>1 x PCI-E 3.0 x16 Slot(x16 for Ryzen CPU only, NPU/APU run at x8 speed)</li> <li>2 x PCI-E 3.0 x1 Slots</li> </ul>
REAR I/O	<ul> <li>1 x PS/2 Keyboard/Mouse</li> <li>2 x USB 3.1 Gen1 Ports</li> <li>4 x USB 2.0 Ports</li> <li>1 x HDMI Connector, resolution up to 4096 x 2160 @24Hz or 3840 x 2160 @30Hz</li> <li>1 x VGA Port, resolution up to 1920 x 1200 @60Hz</li> <li>1 x LAN Port</li> </ul>
INTERNAL I/O	<ul> <li>3 x Audio Jacks</li> <li>1 x USB 3.1 Gen1 Header</li> <li>2 x USB 2.0 Headers</li> </ul>
	<ul> <li>4 x SATA III Connectors (6Gb/s)</li> <li>1 x Front Audio Header</li> <li>1 x Front Panel Header</li> <li>1 x CPU Fan Connector</li> <li>1 x System Fan Connector</li> <li>1 x COM Port Header</li> </ul>
H/W MONITORING	<ul> <li>CPU / System Temperature Monitoring</li> <li>CPU / System Fan Monitoring</li> <li>Smart / Manual CPU Fan Control</li> <li>System Voltage Monitoring</li> </ul>
DIMENSION	Micro ATX Form Factor Dimension: 22.6cm x 17.4cm ( W x L )
OS SUPPORT	<ul> <li>Support Windows 10(x64) Support Windows 7 (x64) for Bristol / Summit /Pinnacle Ridge only</li> </ul>
BUNDLE SOFTWARE	BullGuard



	Smart Speed LAN(Windows 7 only)
ACCESSORIES	<ul> <li>2 x SATA Cable</li> <li>1 x I/O Shield</li> <li>1 x DVD Driver</li> <li>1 x Quick Guide</li> </ul>
FEATURES	<ul> <li>Supports 100% Solid capacitor</li> <li>Supports BIOS-Flasher</li> <li>Supports BIOS Online Update</li> </ul>

## Audio+

#### **HD Audio**

Provides high quality sound with minimal loss of audio fidelity.



## Video+

#### HDMI 4K2K

The new 4K2K resolution enables high-definition image display with four times the resolution of full HD ,4K2K display is faithfully express bright, highly detailed content that fills the entire screen with lifelike images. Connectivity with PCs via a single HDMI cable for displaying 4K2K data.



#### 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.





## Speed+

## 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.



#### PCI-E Gen 3.0

PCI-E 3.0 is the next evolution of the ubiquitous and general-purpose PCI Express I/O standard. At 8GT/s bit rate, the interconnect performance bandwidth is doubled over PCI-E 2.0, while preserving compatibility with software and mechanical interfaces.



## **Durable+**

#### **Moisture proof 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.



#### Low RdsOn P-Pak MOS

Low resistance design can significantly reduce the current out of energy loss. Low temperature, small size, excellent thermal conductivity.



### 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+

#### **ESD Protection**

ESD (Electrostatic Discharge) is the major factor to destroy PC by electrical overstress(EOS) condition, ESD occurred by PC users when touch any devices connect to PC, which may result in damage to motherboard or parts .ESD protection is designed to protect the motherboard and equipment from damage by EOS



#### **USB Polyswitch**

On board dedicated power fuse to help prevent USB port failure. It prevents USB Port overcurrent and safegurand your system and device lifespan.



#### OC / OV / OH Protection

All BIOSTAR special circuit 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. Over current protection, avoid motherboard from damage when doing overclock or an unusual current import. Over heat protection, avoid motherboard & CPU from burning when exceeding the temperature limitation.



## **CPU-Chipset Features**

#### AMD A320 chipset

AMD's A320 chipset provides a simple, stable platform and more than enough connectivity and bandwidth options to satisfy both demanding home users and media aficionados.

