TA320-BTC Motherboard

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

Specifcation

CPU SUPPORT	Supports AMD AM4 Socket for 3rd, 2nd and 1st Gen Ryzen/2nd and 1st Gen Ryzen with Radeon Vega Graphics/Athlon with Radeon Vega Graphics/7th Gen A-Series/Athlon X4 Processors
MEMORY	Support Dual Channel DDR4 2667/ 2400/ 2133/ 1866 MHz Support Non-ECC & ECC Un-buffered DIMM Memory modules 2 x DDR4 DIMM Memory Slot Max. Supports up to 32GB Memory * DDR4 2667 for AMD Ryzen CPU Ryzen - DDR Maximum Frequency Support Table(For better DDR4 compatibility, it is recommended to follow the table below to install DDR4 modules. Please refer to memory support list for more details.)

Maximum	DIMMA1	DIMMB1
DDR4-2667	SR	-
DDR4-2667	DR	-
DDR4-2667	SR	SR
DDR4-2400	DR	DR

SR:Single-rank DIMM, 1R x4 or 1R x8
DR:Dual-rank DIMMs, 2R x4 or 2R x8

INTEGRATED VIDEO	By CPU model Supports DX12 Supports HDCP
STORAGE	4 x SATA III Connector Support SATA RAID: 0,1,10
LAN	Realtek RTL8111H - 10/100/1000Mb/s Controller Support Super LAN Surge Protection
AUDIO CODEC	Realtek ALC887 8-Channel HD Audio

BIOSTAR
BIOSTAR International Corp.

USB	4 x USB 3.1 Gen1 Port 1 x USB 3.1 Gen1 Header 2 x USB 2.0 Port 2 x USB 2.0 Port(only 5V power, up to 1.5A) 2 x USB 2.0 Header
EXPANSION SLOT	1 x PCI-E 3.0 x16 Slot(x16 for Ryzen CPU only, NPU/APU run at x8 speed) 2 x PCI-E 3.0 x1 Slot 3 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 Port 2 x USB 2.0 Port 2 x USB 2.0 Port(only 5V power, up to 1.5A) 1 x DVI-D Connector, 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 2 x USB 2.0 Header 4 x SATA III Connector (6Gb/s) 1 x SATA Power Connector(for rear USB power enhancement) 1 x Front Audio Header 1 x Front Panel Header 1 x CPU Fan Connector 1 x System Fan Connector 2 x PCI-E 12V 4Pin Connector(Must be installed when using for bitcoin mining.) 1 x COM Port Header
H/W MONITORING	CPU / System Temperature Monitoring CPU / System Fan Monitoring Smart / Manual CPU / System Fan Control System Voltage Monitoring
DIMENSION	ATX Form Factor Dimension: 29.5cm x 21cm (W x L)
OS SUPPORT	Supports Windows 10(x64) / 11(x64) Support Windows 7 (x64) for Bristol / Summit /Pinnacle Ridge only
BUNDLE SOFTWARE	BullGuard Smart Speed LAN(Windows 7 only)
ACCESSORIES	2 x SATA Cable 1 x I/O Shield 1 x DVD Driver 1 x User Manual
FEATURES	Supports 100% Solid capacitor BIO-FLASHER Supports BIOS Online Update

OVERVIEW

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.

BIOSTAR
BIOSTAR Microtech International Corp.

HD Audio

Provides high quality sound with minimal loss of audio fidelity.

AudioArt Capacitors

PRO series comes with Nichicon high-end audio capacitors. Nichicon Capacitors offer artistic-like sound resolution and Hi-Fi audio amplification effect, making your room a live concert.

DVI

DVI is better than VGA for LCD displays since it is digital while VGA is analog. For LCD displays, the picture is digitized pixel per pixel. Through DVI, the panel gets data for each pixel, so the picture generated in the Graphics device matches the pixels on the panel itself.

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.

USB 3.0

Experience Fastest data transfers at 5 Gbps with USB 3.0--the new latest connectivity standard. Built to connect easily with next-generation components and peripherals, USB 3.0 transfers data 10X faster and backward compatible with previous USB 2.0 components.

PCIe 3.0

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

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.

Low RdsOn P-Pak MOS

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

USB Power Engine

USB POWER Engine supports SATA power interface with ultra-high load of USB connectors and offers sufficient power to the system for stable operating.

Tough Power Enhanced

To ensure the longevity of motherboard, PRO series with Tough Power Enhanced can endure massive electric current and ensure full energy output without additional energy loss, just like a super man protecting your PC system.

POSTAR
Post Star Microelectronics International Corp.

Super Anti-Surge Protection

BIOSTAR exclusive Anti-Surge design provides the best protection of board and extends the product life. Having the latest model of "Transient Voltage Suppressor" on- board can effectively protect the board circuit, reducing the shocks caused by ESD as well as other damages arising from overvoltage transients to enhance system durability.

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.

Iron Heart Protection

Iron Heart Protection is to strengthen the back PCB of CPU, so that the motherboard would not be bended because of the pressure of heavy CPU cooler. This design could reduce the potential risk of damages on circuit as well as on PCB. Furthermore, the newly designed Iron Heart Protection could help remove thermal air out of VRM and other key components through its special metal material. Iron Heart Protection is perfect solution of cooling and reinforcing motherboard.

ESD Protection

ESD (Electrostatic Discharge) is the major factor to destroy the PC by electrical overstress (EOS) condition. ESD occurred by PC users when touch any devices connect to a PC, which may result in damage to the 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 safe guard your system and device lifespan.

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.

UEFI BIOS

Unified Extensible Firmware Interface (UEFI) is a brand new framework that provides a revolutionary interface. It is a modern clear and easy-to-use graphical user interface. The UEFI comes with a colorful easy-understand icons leads users into the setup layer directly.

Header Zone

Users can easily assemble their own computer, a simple-swap data discs and other accessories.

*The specification and pictures are subject to change

BIOSTAR
BIOSTAR Photech International Corp.

without notice and the package contents may differ by area or your motherboard version!

BIOSTAR
BIOSTAR Microtech International Corp.