

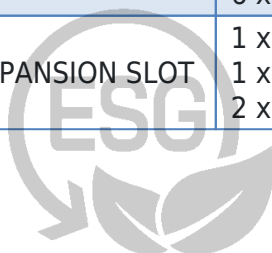
# B450GT3 Motherboard



- Support AMD Ryzen CPU / APU
- AMD B450 single chip architecture
- Support 4-DIMM DDR4-1866/2133/2400/2666/2933/3200(OC) up to 64G maximum capacity
- Realtek Gigabit LAN
- Support USB 3.2 Gen2
- Support M.2(32Gb/s)
- Support HDMI®, DVI-D Ports

## 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 Processors
MEMORY	Support Dual Channel DDR4 1866/2133/2400/2666/2933/3200(OC) MHz Max. Supports up to 64GB Memory Each DIMM supports non-ECC 8/16 GB DDR4 module
INTEGRATED VIDEO	By CPU model Supports DX12 Supports HDCP
STORAGE	6 x SATA III Connectors (6Gb/s) : Supports AHCI & RAID 0, 1, 10 1 x M.2 (M Key) 32Gb/s Connector: Support PCI-E (32Gb/s) & SATA III (6Gb/s) SSD * M.2 (32Gb/s) : The bandwidth is depended on CPU, Ryzen is 32Gb/s ; APU & CPU is 16Gb/s. * When PCIE-M2_1 slot is occupied, the SATAIII_1 / SATAIII_2 connector will be disabled.
LAN	Realtek RTL8118AS - 10/100/1000Mb/s Controller
AUDIO CODEC	Realtek ALC1150 7.1-Channel Audio Support HD Audio Support SPDIF_out
USB	1 x USB 3.2 Gen2 Type-C Port(10Gb/s) (1 on rear I/O) 1 x USB 3.2 Gen2 Type-A Port(10Gb/s) (1 on rear I/O) 4 x USB 3.2 Gen1 Ports (5Gb/s) (2 on rear I/Os and 2 via internal headers) 6 x USB 2.0 Ports (2 on rear I/Os and 4 via internal headers)
EXPANSION SLOT	1 x PCI-E 3.0 x16 Slot 1 x PCI-E 2.0 x16 Slot(x4) 2 x PCI-E 2.0 x1 Slots



REAR I/O	<ul style="list-style-type: none"> <li>1 x PS/2 Keyboard/ Mouse</li> <li>1 x DVI-D Port</li> <li>1 x VGA Port</li> <li>1 x HDMI® Port</li> <li>1 x LAN port</li> <li>1 x USB 3.1 Gen2 (10Gb/s) Type-C Port</li> <li>1 x USB 3.1 Gen2 (10Gb/s) Type-A Port</li> <li>2 x USB 3.1 Gen1 (5Gb/s) Port</li> <li>2 x USB 2.0 Port</li> <li>6 x Audio Jack</li> </ul>
INTERNAL I/O	<ul style="list-style-type: none"> <li>1 x USB 3.2 Gen1 Header(5Gb/s) (each header supports 2 USB 3.2 Gen1 ports)</li> <li>2 x USB 2.0 Header (each header supports 2 USB 2.0 ports)</li> <li>6 x SATA III Connector (6Gb/s)</li> <li>1 x Front Audio Header</li> <li>1 x Front Panel Header</li> <li>1 x S/PDIF-Out Header</li> <li>1 x CPU Fan Connector</li> <li>2 x System Fan Connector</li> <li>2 x 5050 LED Header</li> <li>1 x 8-Pin Power Connector</li> <li>1 x 24-Pin Power Connector</li> <li>1 x Clear CMOS Header</li> <li>1 x COM Port Header</li> </ul>
H/W MONITORING	<ul style="list-style-type: none"> <li>CPU / System Temperature Monitoring</li> <li>System Fan Monitoring</li> <li>Smart / Manual CPU Fan Control</li> </ul>
DIMENSION	Micro ATX Form Factor Dimension: 24.4cm x 24.4cm ( W x L )
OS SUPPORT	<ul style="list-style-type: none"> <li>Supports Windows 10(64bit) / 11(64bit)</li> <li>Windows 7(64bit) for Bristol Ridge/ Summit Ridge/ Pinnacle Ridge only</li> <li>*Biostar reserves the right to add or remove support for any OS with or without notice.</li> </ul>
BUNDLE SOFTWARE	<ul style="list-style-type: none"> <li>Racing GT-EVO Utility</li> <li>FLY.NET</li> <li>BullGuard</li> <li>BIO-Remote2</li> <li>Smart Speed LAN</li> </ul>
ACCESSORIES	<ul style="list-style-type: none"> <li>4 x SATA Cable</li> <li>1 x I/O Shield</li> <li>1 x DVD Driver</li> <li>1 x User Manual</li> </ul>
FEATURES	<ul style="list-style-type: none"> <li>VIVID LED DJ</li> <li>5050 LED FUN ZONE</li> <li>Dual BIOS</li> <li>BIO-FLASHER</li> <li>Iron Slot Protection</li> </ul>

## OVERVIEW



### AMD B450 chipset

AMD B450 is the high-end chipset for overclockers and tweekers who need robust platforms. This chip provides the ultimate low-level control to its users and delivers ultimate graphics card bandwidth.

	<p><b>Hi-Fi</b></p> <p>A combination of exclusive hardware &amp; software design including "ground-isolation circuit design", "an independent audio power", and "a built-on-board amplifier", with all these hardware features gives you the best audio quality and performance. As for software, we offer you a free bundle utility "Multi-Channel Calibration" which normally you'll find in high level sound systems; this feature allows you to auto detect your location; with a user friendly interface, you can easily adjust the volume of every speakers to make a well balanced surround sound. And of course, the built-on-board amplifier always gives you a super powerful sound comparing to other motherboards.</p>
	<p><b>HD Audio</b></p> <p>Provides high quality sound with minimal loss of audio fidelity.</p>
	<p><b>DX12</b></p> <p>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.</p>
	<p><b>Integrated HDMI® with HDCP</b></p> <p>Onboard HDMI® connector allows full video &amp; audio support. It has industry-leading high definition video quality.</p>
	<p><b>FLY.NET</b></p> <p>This exclusive utility will automatically detect the bandwidth of other software and increase the internet speed for online games.</p>
	<p><b>SmartSpeedLAN</b></p> <p>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.</p>
	<p><b>PCIe M.2</b></p> <p>PCIe M.2 32Gb/s delivers the highest bandwidth and lower latency. It is 3 times faster compared with PCIe M.2 10Gb/s.</p>
	<p><b>SATAIII 6Gbps</b></p> <p>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 II.</p>

	<h3>Dual DDR4</h3> <p>The primary advantages of DDR4 over DDR3, include higher module density, lower voltage requirements, coupled with higher data transfer rate.</p>
	<h3>USB 3.2 Gen2 Type-C</h3> <p>USB 3.2 Gen2 offers up to double the transfer speed of USB 3.2 Gen1 at 10 Gbps that allows for much higher data transfer rates and more efficient data transfer. And the Type-C connector is reversible so it's easier to plug in.</p>
	<h3>USB 3.2 Gen1 Type-A</h3> <p>USB 3.2 Gen1 delivers a compelling performance boosts and can be used to connect multiple devices without worrying about compatibility. It is capable of data transfer speeds up to 5Gbps and backwards compatible with all existing USB products.</p>
	<h3>USB 3.2 Gen2 Type-A</h3> <p>USB 3.2 Gen2 is a new standard called SuperSpeed USB 10Gbps to address increased performance and improve data transmission speed. It is for a max data transfer rate of 10Gbps and creates the best possible connection between your devices.</p>
	<h3>Iron Slot Protection</h3> <p>The exclusive Iron Slot Protection can reinforce PCI-E x16 slots to handle heavier graphics cards, prevent bending, and extend longevity of the slot, making the new-gen RACING Series much more robust.</p>
	<h3>Dual BIOS</h3> <p>Dual BIOS technology offers a backup BIOS chip to take over the failed main BIOS and recover the system automatically without factory repair.</p>
	<h3>ESD Protection</h3> <p>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.</p>
	<h3>USB Polyswitch</h3> <p>On board dedicated power fuse to help prevent USB port failure. It prevents USB Port overcurrent and safe guard your system and device lifespan.</p>
	<h3>OC / OV / OH Protection</h3> <p>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.</p>

	<p><b>BullGuard Internet Security (90 days FREE trial)</b></p> <p>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!</p>
	<p><b>VIVID LED DJ</b></p> <p>New VIVID LED DJ with more customizability and options to control multiple RGB LED lighting zones independently. Users can control color, speed and brightness for different modes at ease. Moreover, have more possibilities for users to create unlimited creativity with 5050 LED FUN ZONE which comes with dual RGB LED products.</p>
	<p><b>5050 LED Fun ZONE</b></p> <p>The brand-new 5050 LED FUN ZONE comes with two 5050 LED headers to bring more colorful lighting options to DIY lovers. They can fully enjoy the DIY fun of modding their PCs with uniquely personal style and LED strip or any kind of LED product to adjust the color of LED and change system color scheme by VIVID LED DJ application. Vivid LED DJ fun, Vivid LED lighting style!</p>
	<p><b>UEFI BIOS</b></p> <p>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.</p>
	<p><b>BIO-Flasher</b></p> <p>BIO-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.</p>
	<p><b>eHot-Line Utilitiy</b></p> <p>Integrated e-service automatically sends your technical support request to Biostar Globe tech support without any delay.</p>
	<p><b>HDMI®</b></p> <p>The terms HDMI® and HDMI® High-Definition Multimedia Interface, and the HDMI® Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. in the United States and other countries.</p>

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