

# X570GTA Motherboard



- Supports AMD Ryzen 5000 Vermeer / Ryzen APU processors
- AMD X570 single chip architecture
- Supports 4-DIMM DDR4-1866/ 2133/ 2400/ 2667/2933(OC)/ 3200(OC)/ 3600(OC)/ 4000+(OC) up to 128GB maximum capacity
- Supports USB 3.1 Gen1
- Supports PCI-e M.2 4.0 (64Gb/s)
- Supports HDMI® 4K resolution

| Specifcation     |   |
|------------------|---|
| CPU SUPPORT      | Supports AMD AM4 Socket for 3 <sup>rd</sup> and 2 <sup>nd</sup> Gen Ryzen/3 <sup>rd</sup> , 2 <sup>nd</sup> and 1 <sup>st</sup> Gen Ryzen with Radeon Vega Graphics Processors Supports AMD AM4 Socket for 4th Gen (Vermeer) processors   |
| MEMORY           | Supports Dual Channel DDR4 1866/ 2133/ 2400/ 2667 Supports Dual Channel DDR4 2933(OC)/ 3200(OC)/ 3600(OC)/ 4000+(OC) 4 x DDR4 DIMM Memory Slot, Max. Supports up to 128 GB Memory Each DIMM supports non-ECC and ECC Un-buffered 8/ 16/ 32 GB DDR4 module * DDR4 - 2667 only for Ryzen CPU * Please refer to www.biostar.com.tw for Memory support list   |
| INTEGRATED VIDEO | By CPU model Supports DX12 Supports HDCP  |
| STORAGE          | 6x SATA III Connector (6Gb/s): Supports AHCI & RAID 0, 1, 10 1x M.2 (Key M) Slot: Supports SATA III (6.0Gb/s) SSD Supports PCI-E 4.0 x4 (64Gb/s) speed, which depends only on Ryzen 3rd Gen Matisse   |
| LAN              | RTL8111H<br>10/ 100/ 1000 Mb/s auto negotiation, Half / Full duplex capability  |
| AUDIO CODEC      | ALC887 7.1 Channels, High Definition Audio  |
| USB              | 8x USB 3.1 Gen1 (5Gb/s) port (4 on rear I/Os and 4 via internal headers) 6x USB 2.0 port (2 on rear I/Os and 4 via internal headers)  |
| EXPANSION SLOT   | 2x PCle 3.0 x1 Slot 1x PCle 3.0 x16 Slot: Supports x4 mode (PEX16_2): Supports x4 lanes with AMD® Ryzen™ 2nd and 3rd Gen processors 1x PCle 4.0 x16 Slot (PEX16_1)* Note: Supports x16 (x16, x8) lanes with AMD® Ryzen™ 2nd and 3rd Gen processors Supports x8 lanes with AMD® Ryzen™ with Radeon Vega Graphics processors * According to different CPUs will have different speeds * Note: PCle 4.0 speed only for AMD® Ryzen™ 3rd Gen Matisse |

| REAR I/O        | 1x PS/2 Keyboard Port 1x HDMI® Port 1x VGA Port 1x LAN port 4x USB 3.1 Gen1 (5Gb/s) Port 2x USB 2.0 Port 3x Audio Jack  |
|-----------------|---|
|                 | 6x SATA III (6.0Gb/s) Connectors 2x USB 2.0 Header (each header supports 2 USB 2.0 ports) 2x USB 3.1 Gen1 (5Gb/s) Header (each header supports 2 USB 3.1 Gen1 ports) 1x 8-Pin Power Connector   |
| INTERNAL I/O    | 1x 24-Pin Power Connector 1x CPU Fan Connector 1x System Fan Connector  |
|                 | 1x System Fan Connector (Southbridge Heatsink Fan Header : This connector is only available for Southbridge Heatsink Fan) 1x Front Panel Header 1x Front Audio Header 1x Clear CMOS Header 1x COM Port Header 2x LED Header (12V/ 5V) |
| H/W MONITORING  | CPU / System Temperature Monitoring CPU / System Fan Monitoring Smart / Manual CPU Fan Control System Voltage Monitoring  |
| DIMENSION       | ATX Form Factor Dimension: 305mm x 243mm ( W x L )  |
| OS SUPPORT      | Supports Windows 10(64bit) / 11(64bit)<br>*Biostar reserves the right to add or remove support for any OS with or without notice  |
| BUNDLE SOFTWARE | Racing GT EVO Utility BullGuard   |
| ACCESSORIES     | 4 x SATA Cable 1 x I/O Shield 1 x DVD Driver 1 x User Manual  |
| FEATURES        | VIVID LED DJ Supports Solid capacitor A.I FAN Iron Slot Protection PCIe M.2 4.0   |

# OVERVIEW



# AMD X570 chipset

AMD X570 is the high-end chipset for overclockers and tweakers who need robust platforms. This chip provides the ultimate low-level control to its users and delivers ultimate graphics card bandwidth. It also supports PCI-E Gen4 bandwidth



#### Hi-Fi



A combination of exclusive hardware & 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.



#### **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.



#### Hi-Fi Sound

BIOSTAR Hi-Fi series motherboards have a sampling rate of 192kHz/24-bit which delivers a high quality audio through an analog connection to your home theater system, multi-channel speakers and high-end headphone. You can enjoy real Bluray grade high-definition sound that you've never experienced before.



#### Smart Ear

Smart EAR is a windows-based audio utility which allows you to easily adjust system volume. With its user-friendly GUI, you can also increase or decrease impedance setting (Low/High Gain) to optimize your headphone performance. You can easily enjoy high-quality and awesome sound.



# Hi-Fi Cap

Hi-Fi Cap delivers low noise, low distortion, and wide bandwidth to achieve the highest sound resolution and sound expansion. It ensures the most realistic sound effects to gaming enthusiasts.



#### 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.



## Integrated HDMI® with HDCP

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



# 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.



#### **Dual DDR4**

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



#### **PCIe 4.0**

PCIe 4.0 is the ubiquitous and general-purpose PCI Express I/O standard. At 16GT/s bit rate, the interconnect performance bandwidth is doubled over PCIe 3.0, while preserving compatibility with software and mechanical interfaces.



## PCIe 4.0 M.2

PCle 4.0 M.2 delivers the highest bandwidth and lower latency. It is 2 times faster compared with PCle 3.0 M.2 .



# Super Durable Ferrite Choke

Super Durable Ferrite Choke brings the benefits of higher current capacity, lower energy loss and better power stability.



# Super Durable Solid Caps

The best quality solid state capacitors with ultra low ESR design, the Super Durable Solid Caps doubles the lifespan.



# 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.



#### Iron Slot Protection

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.



# **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!



#### VIVID LED DI

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.



#### **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.



#### A.I FAN

With A.I FAN users can ensure that their gaming PC can maintain its performance while staying cool. According to different cooling needs and usage scenarios, users can control speed modes. Allows users to have more customizability of fan modes and automatically detects different temperatures to make fan operate at defined speed for optimal cooling performance.



#### LED ROCK ZONE

LED ROCK ZONE comes with the RGB 12V LED header and Digital 5V LED header which offer more colorful lighting options to DIY lovers. Adjusting the color of LED and changing system colors by VIVID LED DJ will make you fully enjoy the process of PC modding developing your personal style.



#### **HDMI®**

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