

B450GT Motherboard



- Support AMD Ryzen CPU / APU
- AMD B450 single chip architecture
- Support 4-DIMM DDR4-1866/2133/2400/2667/2933/3200(OC) up to 128G maximum capacity
- Realtek Gigabit LAN
- Support USB 3.2 Gen1
- Support M.2(32Gb/s)
- Support HDMI®, DVI-D Ports

Specification

CPU SUPPORT	支援 AMD AM4 插槽 for 3 rd , 2 nd and 1 st Gen Ryzen/2 nd and 1 st Gen Ryzen with Radeon Vega Graphics/Athlon with Radeon Vega Graphics Processors * 請瀏覽映泰網站 www.biostar.com.tw 獲得CPU的支援列表
MEMORY	支援雙通道 DDR4 1866/ 2133/ 2400/ 2667/ 2933/ 3200(OC) 4 x DDR4 DIMM插槽, 支援最高容量為128GB 每根DIMM支援non-ECC 8/ 16/ 32 GB DDR4記憶體模組 * DDR4 - 2667 僅適用於 Ryzen CPU. * 請瀏覽映泰網站 www.biostar.com.tw 獲得記憶體的支援列表
INTEGRATED VIDEO	By CPU model Supports DX12 Supports HDCP
STORAGE	4 x SATA III 接頭(6Gb/s): 支援 AHCI & RAID 0, 1, 10 1 x M.2 (M Key) 插槽(M2_PCIE): 支援 M.2 Type 2242/ 2260/ 2280 SSD 模組 支援 PCIe 3.0 x 4 (32Gb/s) - NVMe/ AHCI SSD 1 x M.2 (M Key) 插槽 (M2_SATA): 支援 M.2 Type 2242/ 2260/ 2280 SSD 模組 支援 SATA III (6Gb/s) SSD * M.2插槽(M2_PCIE): 頻寬取決於CPU, Ryzen為32Gb/s; APU為16Gb/s. * 當安裝SATA SSD模組於M2_SATA插槽, SATA3接頭將會被禁用.
LAN	Realtek RTL8111H 10/ 100/ 1000 Mb/s 半/全雙功能, 自動協商模式
AUDIO CODEC	ALC887 7.1 聲道, 支援高解析音效輸出, Hi-Fi (前)
USB	6 x USB 3.2 (Gen1) 連接埠(後側面板4個連接埠, 內建接頭支援2個連接埠) 6 x USB 2.0 連接埠(後側面板2個連接埠, 內建接頭支援4個連接埠)
EXPANSION SLOT	1 x PCIe 2.0 x1 插槽 1 x PCIe 2.0 x16 插槽(x4) 1 x PCIe 3.0 x16 插槽(當使用APU時, 頻寬為 x 8)

REAR I/O	1 x PS/2 鍵盤/ 滑鼠連接埠 1 x DVI-D 連接埠 1 x VGA 連接埠 1 x HDMI® 連接埠 1 x LAN 連接埠 4 x USB 3.2 (Gen1) 連接埠 2 x USB 2.0 連接埠 3 x 音效連接埠
INTERNAL I/O	4 x SATA III 接頭 (6.0Gb/s) 2 x USB 2.0 連接埠(每個接頭支援2個USB2.0連接埠) 1 x USB 3.2 (Gen1) 連接埠(每個接頭支援2個USB3.2(Gen1)連接埠) 1 x 電源插槽(8-Pin) 1 x 電源插槽(24-Pin) 1 x CPU 風扇接頭 1 x CPU 水冷接頭 (CPU_OPT) 2 x 系統風扇接頭 1 x 前置面板接頭 1 x 前置音效接頭 1 x 清除CMOS組態資料接頭 1 x S/PDIF 輸出接頭 1 x 序列埠接頭 2 x LED 接頭 (5V) 1 x LED 接頭 (12V)
H/W MONITORING	CPU / System Temperature Monitoring CPU / System Fan Monitoring Smart / Manual CPU Fan Control CPU/DDR Voltage Monitoring
DIMENSION	Micro ATX Form Factor Dimension: 24.4cm x 24.4cm (W x L)
OS SUPPORT	Supports Windows 7(64bit)/ 10(64bit) / 11(64bit) Windows 7(64bit) for Summit Ridge/ Pinnacle Ridge only ※如有增加或減少任何OS支援，Biostar保留不預先通知的權利。
BUNDLE SOFTWARE	Racing GT-EVO Utility BullGuard BIO-Remote2 Smart Speed LAN
ACCESSORIES	4 x SATA Cable 1 x I/O Shield 1 x DVD Driver 1 x Quick Guide
FEATURES	

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.
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	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 AMP The built-in amplifier can drive major high-end headphones with over 100dB loads and offer wide band-width, low noise, high slew rate and low distortion audio source from front panel I/O. Gaming enthusiasts can enjoy a fuller range of dynamic sound with crisper details and less distortion.
	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.
	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.
	ATI CrossFire X™ Technology ATI CrossFireX™ is the ultimate multi-GPU performance gaming platform. With game-dominating power, ATI CrossFireX technology enables two or more discrete graphics processors to work together to improve system performance. It supports up to four ATI Radeon™ HD graphics cards, making it the most scalable gaming platform ever!
	Integrated HDMI® with HDCP Onboard HDMI® connector allows full video & audio support. It has industry-leading high definition video quality.
	PCIe M.2 PCIe M.2 32Gb/s delivers the highest bandwidth and lower latency. It is 3 times faster compared with PCIe M.2 10Gb/s.
	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.
	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 II.
	Dual DDR4 The primary advantages of DDR4 over DDR3, include higher module density, lower voltage requirements, coupled with higher data transfer rate.
	USB 3.2 Gen1 Type-A 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.
	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.
	Iron Bar Protection BIOSTAR's exclusive Iron Bar Protection can reinforce PCI-E x16 slots to handle heavier graphics cards, prevent bending, and extend longevity of the slot, making the new-gen BIOSTAR motherboards 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 DJ New VIVID LED DJ with more customizability and options to control multiple RGB/ARGB LED lighting zones independently. Users can control color, speed and brightness for different modes at ease.
	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 lead users into the setup layer directly.
	EZ Mode BIOSTAR EZ Mode makes everything as simple and efficient as possible. It has an attractive easy-to-use BIOS system interface that guides users to solve their problems with ease. It lays out the things which you often do in BIOS system to make the flow smooth and seamless.
	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.
	CPU OPT BIOSTAR offers one more fan header which is called CPU OPT. Users can use it to connect any kind of water coolers for a liquid cooling system. Keep your computer stable and enjoy your machine at the utmost potential.
	BIOSTAR RGB SYNC BIOSOTAR RGB SYNC is designed to create your personalized lighting effects. Let all the RGB peripherals and components sync together.
	HDMI® 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.

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

