

B760NH-E Motherboard



- Supports 12th/ 13th/ 14th Generation Intel Core™ Processor
- Intel B760 single chip architecture
- Supports 2-DIMM DDR5 up to 128 GB Memory
- Supports PCIe 5.0
- Supports PCIe 4.0 M.2 (64Gb/s)
- Supports HDMI® 4K resolution
- Supports 2.5 GbE LAN
- Supports USB 3.2 Gen2 Type C
- Support WiFi 6 & 6E module (No WiFi card included)

Specification

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CPU SUPPORT	Support for 12th/13th/14th Generation Intel Core™ i9/ i7/ i5/ i3 processors and Intel Pentium processors/ Intel Celeron processors in the LGA1700 package * Please refer to www.biostar.com.tw for CPU support list.
MEMORY	Supports Dual Channel DDR5 - 6400+(OC) MT/s, Non-ECC, Un-buffered ,Clocked Unbuffered DIMM (CUDIMM) Memory 2 x DDR5 DIMM Memory Slot, Max. Supports up to 128 GB Memory Support Intel® Extreme Memory Profile (XMP) memory modules * Please refer to www.biostar.com.tw for Memory support list.
INTEGRATED VIDEO	By CPU model Supports DX12 Supports HDCP
STORAGE	Total supports 1 x M.2 socket and 4 x SATA III (6Gb/s) ports Intel 12th/13th/14th Processors 1 x M.2 (M Key) Socket (M2M_CPU): Supports M.2 Type 2280 SSD module Supports PCIe 4.0 x4 (64Gb/s) - NVMe/ AHCI SSD & SATA III (6Gb/s) SSD Intel B760 Chipset 4 x SATA III Connector (6Gb/s): Supports AHCI & Intel Rapid Storage Technology
LAN	Realtek RTL8125B 10/ 100/ 1000/ 2500 Mb/s auto negotiation, Half / Full duplex capability
AUDIO CODEC	ALC1220-VB 7.1 Channels, High Definition Audio, Hi-Fi(Front + Rear)
USB	3 x USB 3.2 (Gen1) ports (1 on rear I/Os and 2 via internal header) 2 x USB 3.2 (Gen2) ports (2 on rear I/Os) 1 x USB 3.2 Type-C (Gen2) port (1 via internal header) 4 x USB 2.0 ports (2 on rear I/Os and 2 via internal header)
EXPANSION SLOT	INTEL 12th/13th/14th Processors 1 x PCIe 5.0 x16 Slot (x16 mode)

REAR I/O	2 x WIFI Antenna Ports 1 x PS/2 Keyboard/ Mouse Port 1 x HDMI® Port 1 x DP Port 1x LAN Port 1 x USB 3.2 (Gen1) Port 2 x USB 3.2 (Gen2) Ports 2 x USB 2.0 ports 3 x Audio Jack
INTERNAL I/O	4 x SATA III Connectors (6Gb/s) 1 x M.2 (E Key) Socket : Supports 2230 type Wi-Fi & Bluetooth module and Intel CNVi 1 x USB 2.0 Header (each header supports 2 USB 2.0 ports) 1 x USB 3.2 (Gen1) Header (each header supports 2 USB 3.2 (Gen1) ports) 1 x USB 3.2 (Gen2) Type-C Header 1 x 8-Pin Power Connector 1 x 24-Pin Power Connector 1 x CPU Fan Connector 1 x CPU water cooling connector (CPU_OPT) 1 x System Fan Connector 1 x Front Panel Header 1 x Front Audio Header 1 x Speaker Header 1 x Clear CMOS Header * M.2 (E key) Wi-Fi card is not provided
H/W MONITORING	CPU / System Temperature Monitoring CPU / System Fan Monitoring Smart / Manual CPU Fan Control CPU/DDR Voltage Monitoring
DIMENSION	Mini ITX Form Factor Dimension: 17cm x 17cm (W x L)
OS SUPPORT	Supports Windows 10(64bit) / Windows 11(64bit) ※Biostar reserves the right to add or remove support for any OS with or without notice.
BUNDLE SOFTWARE	BullGuard
ACCESSORIES	2 x SATA Cable 1 x I/O Shield 1 x DVD Driver 1 x Quick Guide 1 x WiFi antenna accessories(Wi-Fi accessories are optional, contact your local dealer to purchase.)
FEATURES	BIO-FLASHER A.I FAN

OVERVIEW

	Intel B760 chipset With the Intel® B760 chipset and the 12th/13th generation Intel® Core™ i9/ i7/ i5/ i3 processors and Intel® Pentium® processors, you will immediately be at the forefront of the battlefield, fueled by mind-blowing power and performance. From content creation to gaming, the Intel B760 chipset provides you with the power and performance you need.
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	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.
	DisplayPort DisplayPort is a digital display interface developed by the Video Electronics Standards Association (VESA). The interface is primarily used to connect a video source to a display device such as a computer monitor, though it can also be used to carry audio.
	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.
	DDR5 DDR5 provides 50% higher bandwidth than DDR4, the frequency can be up to 6000+(OC)MHz, and can boasts the largest memory capacity available. It also supports dual channels and has lower power consumption, which can provide better performance and experience for overclockers.

	PCIe 5.0 PCIe 5.0 increases the data rate from 16GT/s to 32GT/s, which is twice as fast as PCIe 4.0. The maximum data transfer of bandwidth for two-way communication can reach 128GB/s. In addition, synchronized compatible with PCIe 4.0 and previous versions of devices.
	PCIe 4.0 M.2 PCIe 4.0 M.2 delivers the highest bandwidth and lower latency. It is 2 times faster compared with PCIe 3.0 M.2 .
	USB 3.2 Gen2 Type-C 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.
	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.
	USB 3.2 Gen2 Type-A 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.
	Dr. MOS Dr. MOS integrates driver ICs and high-side / low-side MOSFETs into a small package to reduce switching losses that enables superior efficiency and performance at higher switching frequencies.
	Digital PWM Digital PWM controller is with dual-output multiphase that faster transient performance and accurately regulated frequency control. It can be enabled to greatly increase system efficiency.
	Super Durable Solid Caps The best quality solid state capacitors with ultra low ESR design, the Super Durable Solid Caps doubles the lifespan.
	Super Durable Inductor Super Durable Inductor brings the benefits of higher current capacity, lower energy loss and better power stability.

	Moistureproof PCB The PCB will be oxidizing easily by damp or absorbed moisture, and ionic migration or CAF (Conductive Anodic Filament) will be generated. Moistureproof PCB meets high density and high reliability requirements for moisture proof.
	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.
	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.
	2.5Guard 2.5GUARD features 2.5G having higher data transfer speeds and can strengthen electrical stability and prevent damage from lightning strikes and electrical surges. It's 2.5X improvement than standard Ethernet connections.
	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.
	BIO-Flasher 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.
	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.
	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.
	Debug LED Debug LED helps you identify any issues going with your board or hardware. When error occurs, the corresponding LED lights will inform you on the status of your board or hardware to shorten the test time effectively.

	A.I TP Control A.I TP Control is designed for overclockers. It provides a user-friendly BIOS environment that overclockers can adjust the temperature setting to keep your PC safe and enjoy extreme overclocking performance.
	Smart Update Biostar Smart Update is a utility that can help users run online update. It can download the drivers for your motherboard from Biostar official website and install them automatically.
	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!

