

# B760MZ-E PRO Motherboard



- Supports 12<sup>th</sup>/ 13<sup>th</sup>/ 14<sup>th</sup> Generation Intel Core™ Processor
- Intel B760 single chip architecture
- Supports 4-DIMM DDR5 up to 256 GB Memory
- Supports PCIe 4.0 M.2 (64Gb/s)
- Supports HDMI®
- Supports 2.5 GbE LAN
- Supports USB 3.2 Gen2 Type C
- Support WiFi 6 & 6E module (No WiFi card included)

## Specification

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 <a href="http://www.biostar.com.tw">www.biostar.com.tw</a> for CPU support list.
MEMORY	Supports Dual Channel DDR5 - 6000+(OC) MT/s, Non-ECC, Un-buffered ,Clocked Unbuffered DIMM (CUDIMM) Memory 4 x DDR5 DIMM Memory Slot, Max. Supports up to 256 GB Memory Support Intel® Extreme Memory Profile (XMP) memory modules * Please refer to <a href="http://www.biostar.com.tw">www.biostar.com.tw</a> for Memory support list.
INTEGRATED VIDEO	Supports DX12 Supports HDCP
STORAGE	Total supports 2 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 SSD Intel B760 Chipset 1 x M.2 (M Key) Socket (M2M_SB): Supports M.2 Type 2242/2260/2280 SSD module Supports PCIe 4.0 x4 (64Gb/s) - NVMe SSD 4 x SATA III Connector (6Gb/s): Supports AHCI, RAID 0, 1, 5, 10 & Intel Rapid Storage Technology
LAN	Realtek RTL8125B 10/ 100/ 1000/ 2500 Mb/s auto negotiation, Half / Full duplex capability
AUDIO CODEC	ALC897 7.1 Channels, High Definition Audio, Hi-Fi(Front)
USB	1 x USB 3.2 (Gen2) Type-C port (1 via internal header) 5 x USB 3.2 (Gen1) port (3 on rear I/Os and 2 via internal header) 6 x USB 2.0 port (2 on rear I/Os and 4 via internal header)

EXPANSION SLOT	<p>INTEL 12th/13th/14th Processors  1 x PCIe 4.0 x16 Slot (x16 mode)  INTEL B760 Chipset  1 x PCIe 3.0 x16 Slot (x4 mode)  1 x PCIe 3.0 x1 Slot</p>
REAR I/O	<p>2 x WIFI Antenna Port  1 x PS/2 Keyboard/ Mouse Port  1 x HDMI®  1 x DP  1 x VGA  1 x DVI Port  3 x USB 3.2 (Gen1) Port  2 x USB 2.0 port  1 x LAN port  3 x Audio Jack</p>
INTERNAL I/O	<p>4 x SATA III Connector (6Gb/s)  1 x M.2 (E Key) Socket : Supports 2230 type Wi-Fi &amp; Bluetooth module and Intel CNVi  2 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 (each header supports 1 USB 3.2 (Gen2) ports)  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  1 x COM Port Header  1 x TPM Header  2 x LED Header (5V)  1 x LED Header (12V)  * M.2 (E key) Wi-Fi card is not provided</p>
H/W MONITORING	<p>CPU / System Temperature Monitoring  Smart / Manual CPU Fan Control  CPU/DDR Voltage Monitoring</p>
DIMENSION	<p>Micro ATX Form Factor Dimension: 24.4 cm x 24.4cm ( W x L )</p>
OS SUPPORT	<p>Supports Windows Windows 10(64bit) / Windows 11(64bit)  *Biostar reserves the right to add or remove support for any OS with or without notice.</p>
BUNDLE SOFTWARE	<p>BullGuard</p>
ACCESSORIES	<p>2 x SATA Cable  1 x I/O Shield  1 x DVD Driver  1 x Quick Guide  1 x M.2 Anchor  1 x WiFi antenna accessories(Wi-Fi accessories are optional, contact your local dealer to purchase.)</p>
FEATURES	<p>VIVID LED DJ  BIO-FLASHER  A.I FAN  LED ROCK ZONE</p>

# OVERVIEW

 <p>intel CHIPSET B760</p>	<h2>Intel B760 chipset</h2> <p>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.</p>
 <p>HD AUDIO</p>	<h2>HD Audio</h2> <p>Provides high quality sound with minimal loss of audio fidelity.</p>
 <p>Hi-Fi GROUND</p>	<h2>Hi-Fi Ground</h2> <p>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.</p>
 <p>Hi-Fi AMP</p>	<h2>Hi-Fi AMP</h2> <p>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.</p>
 <p>SMART EAR</p>	<h2>Smart Ear</h2> <p>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.</p>
 <p>Hi-Fi CAP</p>	<h2>Hi-Fi Cap</h2> <p>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.</p>
 <p>HDMI</p>	<h2>HDMI® 4K2K</h2> <p>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.</p>
 <p>DVI</p>	<h2>DVI</h2> <p>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.</p>
 <p>DISPLAY PORT</p>	<h2>DisplayPort</h2> <p>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.</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>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>
	<p><b>DDR5</b></p> <p>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.</p>
	<p><b>PCIe 4.0</b></p> <p>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.</p>
	<p><b>PCIe 4.0 M.2</b></p> <p>PCIe 4.0 M.2 delivers the highest bandwidth and lower latency. It is 2 times faster compared with PCIe 3.0 M.2 .</p>
	<p><b>USB 3.2 Gen2 Type-C</b></p> <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>
	<p><b>USB 3.2 Gen1 Type-A</b></p> <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>
	<p><b>S-Hyper PWM</b></p> <p>The S-Hyper PWM has DCR current sensing architecture and lossless characteristic, offering excellent precision in delivering stable power with 100% fixed voltage to ensure that critical components of the motherboard are under protected with the maximum performance and reliability.</p>
	<p><b>Super Durable Solid Caps</b></p> <p>The best quality solid state capacitors with ultra low ESR design, the Super Durable Solid Caps doubles the lifespan.</p>

	<h3>Tough Power Connectors</h3> <p>Tough Power Connectors are very robust that have larger area to ensure stable and reliable power supply. They can pack more power and durability to make your PC last longer.</p>
	<h3>Super Durable Inductor</h3> <p>Super Durable Inductor brings the benefits of higher current capacity, lower energy loss and better power stability.</p>
	<h3>Moistureproof PCB</h3> <p>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.</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>
	<h3>2.5Guard</h3> <p>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.</p>
	<h3>VIVID LED DJ</h3> <p>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.</p>
	<h3>EZ Mode</h3> <p>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.</p>
	<h3>UEFI BIOS</h3> <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>
	<h3>BIO-Flasher</h3> <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>

	<h3>A.I FAN</h3> <p>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.</p>
	<h3>LED ROCK ZONE</h3> <p>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.</p>
	<h3>CPU OPT</h3> <p>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.</p>
	<h3>BIOSTAR RGB SYNC</h3> <p>BIOSOTAR RGB SYNC is designed to create your personalized lighting effects. Let all the RGB peripherals and components sync together.</p>
	<h3>Debug LED</h3> <p>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.</p>
	<h3>A.I TP Control</h3> <p>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.</p>
	<h3>Smart Update</h3> <p>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.</p>
	<h3>HDMI®</h3> <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!