

# H810MT-E 2.0 Motherboard



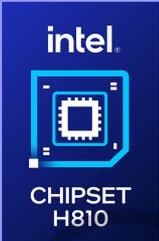
- Supports Intel Core Ultra 9/7/5 Processor
- Intel H810 single chip architecture
- Supports 2-DIMM DDR5 up to 128 GB Memory
- Supports PCIe 5.0
- Supports HDMI® Port & Display Port
- Supports USB 3.2 Gen1 Type C
- Supports WiFi 7 & 6E module (No WiFi card included)

## Specification

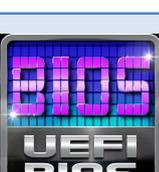
CPU SUPPORT	Support for Intel Core™ Ultra 9 / 7 / 5 processors in the LGA1851 package * Please refer to <a href="http://www.biostar.com.tw">www.biostar.com.tw</a> for CPU support list.
MEMORY	Supports Dual Channel DDR5 - 6400 MT/s, Non-ECC, Un-buffered ,Clocked Unbuffered DIMM (CUDIMM) Memory 2 x DDR5 DIMM Memory Slot, Max. Supports up to 128 GB Memory Support Intel® Extreme Memory Profile (XMP) memory modules * Please refer to <a href="http://www.biostar.com.tw">www.biostar.com.tw</a> 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 H810 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 RTL8111H 10/ 100/ 1000 Mb/s auto negotiation, Half / Full duplex capability
AUDIO CODEC	Realtek ALC897 7.1 Channels, High Definition Audio, Hi-Fi (front/rear)
USB	1 x USB 3.2 (Gen1) Type-C port (1 via internal header) 4 x USB 3.2 (Gen1) port (2 on rear I/O and 2 via internal header) 6 x USB 2.0 port (4 on rear I/O and 2 via internal header)
EXPANSION SLOT	Intel Core Ultra Processors 1 x PCIe 5.0 x16 Slot (x16 mode) Intel H810 Chipset 1 x PCIe 4.0 x1 Slot (x1 mode)

REAR I/O	<ul style="list-style-type: none"> <li>2 x WIFI Antenna Port</li> <li>1 x HDMI® Port</li> <li>1 x DP Port (DP1.2)</li> <li>2 x USB 3.2 (Gen1) Port</li> <li>4 x USB 2.0 Port</li> <li>1 x Gigabit LAN port</li> <li>3 x Audio Jack</li> </ul>
INTERNAL I/O	<ul style="list-style-type: none"> <li>4 x SATA III Connector (6Gb/s)</li> <li>1 x M.2 (E Key) Socket : Supports 2230 type Wi-Fi &amp; Bluetooth module and Intel GEN2 CNVi</li> <li>1 x USB 3.2 (Gen1) Type-C Header (each header supports 1 USB 3.2 (Gen1) Type-C ports)</li> <li>1 x USB 3.2 (Gen1) Header (each header supports 2 USB 3.2 (Gen1) ports)</li> <li>1 x USB 2.0 Header (each header supports 2 USB 2.0 ports)</li> <li>1 x 8-Pin Power Connector</li> <li>1 x 24-Pin Power Connector</li> <li>1 x CPU Fan Connector</li> <li>2 x System Fan Connector</li> <li>1 x Front Panel Header</li> <li>1 x Front Audio Header</li> <li>1 x Speaker Header</li> <li>1 x Clear CMOS Header</li> <li>1 x COM Port Header</li> <li>1 x TPM Header</li> <li>1 x CIO Header</li> <li>* M.2 (E Key) Wi-Fi card is not provided</li> </ul>
RAID	Supports RAID 0, 1, 5, 10 for SATA storage devices
DIMENSION	Micro ATX Form Factor Dimension: 21.8 cm x 24 cm ( W x L )
OS SUPPORT	<p>Supports Windows 10(64bit) / Windows 11(64bit)</p> <p>*Biostar reserves the right to add or remove support for any OS with or without notice.</p>
ACCESSORIES	<ul style="list-style-type: none"> <li>1 x SATA Cable</li> <li>1 x I/O Shield</li> <li>1 x WiFi antenna accessories(Wi-Fi accessories are optional, contact your local dealer to purchase.)</li> </ul>

## OVERVIEW

 <p><b>CHIPSET H810</b></p>	<p><b>Intel H810 chipset</b></p> <p>With the Intel® H810 chipset and the Intel® Core™ Ultra 9/ 7/ 5 processors , you will immediately be at the forefront of the battlefield, fueled by mind-blowing power and performance.</p> <p>From content creation to gaming, the Intel H810 chipset provides you with the power and performance you need.</p>
 <p><b>HD AUDIO</b></p>	<p><b>HD Audio</b></p> <p>Provides high quality sound with minimal loss of audio fidelity.</p>

	<h3>DisplayPort</h3> <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>
	<h3>Integrated HDMI® with HDCP</h3> <p>Onboard HDMI® connector allows full video &amp; audio support. It has industry-leading high definition video quality.</p>
	<h3>HDMI® 2.1</h3> <p>HDMI® 2.1 supports true 4K resolution- 4096*2160@120hz. A significant increase in bandwidth is up to 18mbps, and significant enhancements are added to support the continued increase consumer demands on video and audio experience.</p>
	<h3>SATAIII 6Gbps</h3> <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>DDR5</h3> <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>
	<h3>PCIe 5.0</h3> <p>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.</p>
	<h3>PCIe 4.0</h3> <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>
	<h3>PCIe 4.0 M.2</h3> <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>
	<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 Gen1 Type-C</h3> <p>USB 3.2 Gen1 offers up to at 5 Gbps that allows for much higher data transfer rates and more efficient data transfer. And the Type-C connector is reversible so it is easier to plug in.</p>
	<h3>WiFi 7</h3> <p>The latest version of WiFi utilizes three different frequency bands: 2.4GHz, 5GHz, and 6GHz. It offers lower latency, improved performance, and enhanced security, allowing more devices to smoothly operate on wireless networks simultaneously under optimal conditions.</p>
	<h3>Super Durable Solid Caps</h3> <p>The best quality solid state capacitors with ultra low ESR design, the Super Durable Solid Caps doubles the lifespan.</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>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>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>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>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 lead 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>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>Auto Installer</h3> <p>The Auto Installer is capable of automatically installing the required drivers on Windows OS, providing users with a more intuitive and convenient experience, eliminating the hassle of manually searching for drivers.</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!**

