

# H310MHD PRO2 Motherboard



- Supports 9th & 8th Generation Intel® Core™ Processor
- Intel H310 single chip architecture
- Support 2-DIMM DDR4-1866/ 2133/ 2400/ 2666 up to 32G maximum capacity
- Support USB 3.1 Gen1
- Support HDMI® display port
- Support GbE LAN

## Specification

CPU SUPPORT	9th Gen Intel® Core™ i9 LGA 1151 Processor 9th Gen Intel® Core™ i7 LGA 1151 Processor 9th Gen Intel® Core™ i5 LGA 1151 Processor 9th Gen Intel® Core™ i3 LGA 1151 Processor 8th Gen Intel® Core™ i7 LGA 1151 Processor 8th Gen Intel® Core™ i5 LGA 1151 Processor 8th Gen Intel® Core™ i3 LGA 1151 Processor 8th Gen Intel® Pentium® LGA 1151 Processor 8th Gen Intel® Celeron® LGA 1151 Processor Maximum CPU TDP (Thermal Design Power) : 95Watt
MEMORY	Support Dual Channel DDR4 1866/2133/2400/2666 MHz 2 x DDR4 DIMM Memory Slot Max. Supports up to 32GB Memory Each DIMM supports non-ECC 4/8/16GB DDR4 module
INTEGRATED VIDEO	By CPU model Supports DX12 Supports HDCP
STORAGE	4 x SATA III Connectors (6Gb/s) 1 x M.2 (M Key) Connector (10Gb/s) : Supports PCI-E (10Gb/s) SSD
LAN	Realtek RTL8111H - 10/100/1000Mb/s Controller
AUDIO CODEC	Realtek ALC887 8-Channel HD Audio Support HD Audio
USB	4 x USB 3.1 Gen1 Ports (2 on rear I/Os and 2 via internal header) 6 x USB 2.0 Ports (4 on rear I/Os and 2 via internal header)
EXPANSION SLOT	1 x PCI-E 3.0 x16 Slot 2 x PCI-E 2.0 x1 Slots



REAR I/O	1 x PS/2 Mouse 1 x PS/2 Keyboard 2 x USB 3.1 Gen1 Ports 4 x USB 2.0 Ports 1 x HDMI® Connector, resolution up to 4096*2160@24Hz 1 x DVI-D Connector, resolution up to 1920*1200@60Hz 1 x VGA Port, resolution up to 1920*1200@60Hz 1 x LAN Port 3 x Audio Jacks
INTERNAL I/O	1 x USB 3.1 Gen1 Header (each header support 2 USB 3.1(Gen1) ports) 1 x USB 2.0 Header (each header supports 2 USB 2.0 ports) 4 x SATA III Connectors (6Gb/s) 1 x Front Audio Header 1 x Front Panel Header 1 x CPU Fan Connector 1 x System Fan Connector 1 x 4-Pin Power Connector 1 x 24-Pin Power Connector 1 x Clear CMOS Header 1 x COM Port Header
H/W MONITORING	CPU / System Temperature Monitoring CPU / System Fan Monitoring Smart / Manual CPU Fan Control System Voltage Monitoring
DIMENSION	Micro ATX Form Factor Dimension: 22.8 cm x 17.7 cm ( W x L )
OS SUPPORT	Supports Windows 11(64bit) / 10(x64) / Windows 7 *Biostar reserves the right to add or remove support for any OS with or without notice.
ACCESSORIES	2 x SATA Cable 1 x I/O Shield 1 x DVD Driver 1 x Quick Guide

## OVERVIEW

	<h3>Intel H310 chipset</h3> <p>The Intel® H310 chipset is a single-chipset design to support socket 1151 Intel® 8th generation Intel® Core™ processor-based platform. Provides excellent performance and increased bandwidth and stability. The PC platform features improved adaptive performance that adds speed when you need it. When combined with advanced system responsiveness, the platform delivers the ultimate PC experience.</p>
	<h3>HD Audio</h3> <p>Provides high quality sound with minimal loss of audio fidelity.</p>
	<h3>AudioArt Capacitors</h3> <p>PRO series comes with Nichicon high-end audio capacitors. Nichicon Capacitors offer artistic-like sound resolution and Hi-Fi audio amplification effect, making your room a live concert.</p>

	<h3>DX12</h3> <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>
	<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>USB 3.1 Gen 1 Type-A</h3> <p>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.</p>
	<h3>PCIe M.2 (10Gb/s)</h3> <p>it delivers faster performance compared with SATA interface 6Gb/s.</p>
	<h3>Charger Booster</h3> <p>Charger booster is the best and efficient charger solution for apple devices such as iPad, iPhone. Basically, Charger booster Technology is able to boost the charging time to be more efficiency and faster once any apple goods connecting to our Motherboard. With charger booster technology, you are able to charge your apple devices up to 42 % faster.</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>Dual DDR4</h3> <p>The primary advantages of DDR4 over DDR3, include higher module density, lower voltage requirements, coupled with higher data transfer rate.</p>
	<h3>Moistureproof of PCB</h3> <p>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.</p>
	<h3>Low RdsOn P-Pak MOS</h3> <p>Low resistance design can significantly reduce the current out of energy loss. Low temperature, small size, excellent thermal conductivity.</p>



## Tough Power Enhanced

To ensure the longevity of motherboard, PRO series with Tough Power Enhanced can endure massive electric current and ensure full energy output without additional energy loss, just like a super man protecting your PC system.



## Super Anti-Surge Protection

BIOSTAR exclusive Anti-Surge design provides the best protection of board and extends the product life. Having the latest model of "Transient Voltage Suppressor" on- board can effectively protect the board circuit, reducing the shocks caused by ESD as well as other damages arising from overvoltage transients to enhance system durability.



## 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.



## Nano Carbon Coating Heatsink

Nano carbon coating heatsink enlarges the heat dissipation area to increase heat conductivity efficiently, compared to the aluminum-extruded heatsink.



## 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.



## 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.



## 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.



## Header Zone

Users can easily assemble their own computer, a simple-swap data discs and other accessories.

	<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>eHot-Line Utility</h3> <p>Integrated e-service automatically sends your technical support request to Biostar Globe tech support without any delay.</p>
	<h3>BIOScreen Utility</h3> <p>Personalize your desktop with customizable boot logo. BIOScreen is the new feature that lets you personalize and create your own style with unique, custom-made boot logo.</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!

