

## H81MHV3 2.0 Motherboard



- Supports the Intel 4<sup>th</sup> generation Core i7 and Core i5 processors in the 1150 package
- Intel H81 single chip architecture
- Supports 2-DIMM DDR3-1600/1333 up to 16G maximum capacity

## H81MHV3 2.0 Specification

CPU SUPPORT	Support Intel Core™ i7/ i5/ i3 processors and Intel Pentium processors/ Intel Celeron processors in the LGA1150 package * Please refer to <a href="http://www.biostar.com.tw">www.biostar.com.tw</a> for CPU support list.
MEMORY	Supports Dual Channel DDR3 1066/ 1333/ 1600 2 x DDR3 DIMM Memory Slot, Max. Supports up to 16 GB Memory Each DIMM supports non-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3 module * 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 DX11.1
STORAGE	Supports AHCI 2 x SATA II (3Gb/s) 2 x SATA III (6Gb/s)
LAN	Realtek RTL8111H-CG 10/ 100/ 1000 Mb/s auto negotiation, Half / Full duplex capability
AUDIO CODEC	ALC897 5.1 Channels, High Definition Audio
USB	2 x USB 3.0 ports (2 on rear I/Os) 6 x USB 2.0 ports (2 on rear I/Os and 4 via internal headers)

EXPANSION SLOT	<ul style="list-style-type: none"> <li>1 x PCIe 2.0 x1</li> <li>1 x PCIe 2.0 x16 Slot (x16 mode)</li> </ul>
REAR I/O	<ul style="list-style-type: none"> <li>1 x PS/2 Keyboard</li> <li>1 x PS/2 Mouse</li> <li>1 x VGA Port</li> <li>1 x HDMI Port</li> <li>2 x USB 3.0 Ports</li> <li>2 x USB 2.0 Ports</li> <li>1 x LAN port</li> <li>3 x Audio Jack</li> </ul>
INTERNAL I/O	<ul style="list-style-type: none"> <li>2 x SATA II (3Gb/s)</li> <li>2 x SATA III (6Gb/s)</li> <li>2 x USB 2.0 Header (each header supports 2 USB 2.0 ports)</li> <li>1 x 4-Pin Power Connector</li> <li>1 x 24-Pin Power Connector</li> <li>1 x CPU Fan Connector</li> <li>1 x System Fan Connector</li> <li>1 x Front Panel Header</li> <li>1 x Front Audio Header</li> <li>1 x Internal Stereo Speaker Header</li> <li>1 x Clear CMOS Header</li> <li>1 x COM Port Header</li> </ul>
H/W MONITORING	<ul style="list-style-type: none"> <li>CPU / System Temperature Monitoring</li> <li>CPU / System Fan Monitoring</li> <li>Smart / Manual CPU Fan Control</li> <li>System Voltage Monitoring</li> </ul>
DIMENSION	Micro ATX Form Factor Dimension: 17cm x 19cm ( W x L )
OS SUPPORT	<ul style="list-style-type: none"> <li>Supports Windows 7 / 8 / 8.1 /10</li> <li>※Biostar reserves the right to add or remove support for any OS with or without notice.</li> </ul>
BUNDLE SOFTWARE	<ul style="list-style-type: none"> <li>BIO-Remote2</li> <li>Smart Speed LAN</li> </ul>
ACCESSORIES	<ul style="list-style-type: none"> <li>2 x SATA Cable</li> <li>1 x I/O Shield</li> <li>1 x DVD Driver</li> <li>1 x Quick Guide</li> </ul>
FEATURES	<ul style="list-style-type: none"> <li>Supports Solid capacitor</li> <li>Supports Charger Booster</li> <li>Supports BIOS Online Update</li> </ul>

## H81MHV3 2.0 OVERVIEW

### CPU-Chipset



## Intel H81 chipset

The latest Intel H81 Express chipset is a single-chipset design that supports socket LGA1150 4th generation Intel® Core™ i7/i5/i3/Pentium/Celeron processors. It natively supports up to two USB 3.0 ports for up to 10 times faster transfer rates than previous USB 2.0. Intel H81 Express chipset also supported iGPU such as Intel processors with DX11 graphics allow you enjoy the higher frame rate in Gaming experience.

## Audio+



## HD Audio

Provides high quality sound with minimal loss of audio fidelity.

## Video+



## 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.



## DX11

Direct3D 11 enables Direct3D 10 APIs and Direct3D 11 APIs to use one underlying rendering device. And it allows developers to achieve a high speed, fully conformant software rasterizer.



## Integrated HDMI with HDCP

Onboard HDMI connector allows full video & audio support. It has industry-leading high definition video quality.

## Speed+



## 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.



## 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.

## Durable+



## 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.



## Low RdsOn P-Pak MOS

Low resistance design can significantly reduce the current out of energy loss. Low temperature, small size, excellent thermal conductivity.



## X.D.C (eXtreme Durable Capacitors)

Biostar adopts low ESR and high ripple conductive solid state caps that provide sufficient, stable power supply to the CPU. The life span can also be more than 6.25 x of ordinary liquid caps.

## Protection+



## 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.



## USB Polyswitch

On board dedicated power fuse to help prevent USB port failure. It prevents USB Port overcurrent and safe guard your system and device lifespan.



## 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!

DIY+



## 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.

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