

## H81MLC Motherboard



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

## **H81MLC** Specifcation

CPU SUPPORT	Intel® Core™ i7 LGA 1150 Processor Intel® Core™ i5 LGA 1150 Processor Intel® Core™ i3 LGA 1150 Processor Intel® Pentium® LGA 1150 Processor Maximum CPU TDP (Thermal Design Power): 95Watt
MEMORY	Support Dual Channel DDR3 1600/1333/1066 MHz 2 x DDR3 DIMM Memory Slot Max. Supports up to 16GB Memory
INTEGRATED VIDEO	By CPU model Supports DX11.1
STORAGE	2 x SATA III Connector 2 x SATA II Connector
LAN	Realtek RTL8106E - 10/100 Controller
AUDIO CODEC	Realtek ALC892 8-Channel Blu-ray Audio
USB	2 x USB 3.0 Port 2 x USB 2.0 Port 2 x USB 2.0 Header
EXPANSION SLOT	1 x PCI-E 2.0 x16 Slot 1 x PCI-E 2.0 x1 Slot

REAR I/O	1 x PS/2 Mouse 1 x PS/2 Keyboard 2 x USB 3.0 Port 2 x USB 2.0 Port 1 x VGA Port 1 x LAN Port 3 x Audio Jacks
INTERNAL I/O	2 x USB 2.0 Header 2 x SATA III Connector (6Gb/s) 2 x SATA II Connector (3Gb/s) 1 x Front Audio Header 1 x Front Panel Header 1 x CPU Fan Connector 1 x System Fan Connector 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: 22.6cm x 17cm ( W x L )
OS SUPPORT	Supports Windows 7 / 8 / 8.1 / 10(x64)
BUNDLE SOFTWARE	BIO-Remote2 Smart Speed LAN
ACCESSORIES	2 x SATA Cable 1 x I/O Shield 1 x DVD Driver 1 x Quick Guide
FEATURES	Windows 8 Ready Supports Solid capacitor Supports Charger Booster Supports BIOS Online Update

# H81MLC 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.

## Intel LGA 1150 4th Generation Intel Core™ Processor support

The 4th generation Intel® Core™ processors are based on 4th generation Intel® Core™ processor architecture, with the latest 22nm process to maximize the processor platform. Based on the new LGA 1150 socket, 4th generation Intel® Core™ processors with graphics with DX11.1 & OCL1.2 cores , the overall performance will meet your demand.

## Audio+



#### Blu-ray Audio

Upgrading your Audio performance in the easiest way is choosing BIOSTAR ultimate Motherboard. It does support Blu-ray audio DRM (compatible driver/software) and provide the higher audio output of 24 bit/ 192KHz than the 16 bit/ 48KHz from the normal MB. You will experience the high quality sound effect with pure Blu-Ray Audio.

#### Video+



#### DX11.1

Direct3D 11.1 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.

## Speed+



## **SmartSpeedLAN**

SmartSpeedLAN is a free software application which monitors and manages your PC's network behavior. With user-friendly GUI, it allows you to select and prioritize different types of network traffic, including gaming, media streaming, communications or web surfing. You can also set any specific applications, choosing to prioritize or block accordingly. SmartSpeedLAN can feature automatic management options that use adaptive networking intelligence to ensure that you are getting the best online experience possible.



#### **USB 3.0**

Experience Fastest data transfers at 5 Gbps with USB 3.0--the new latest connectivity standard. Built to connect easily with next-generation components and peripherals, USB 3.0 transfers data 10X faster and backward compatible with previous USB 2.0 components.



## **Charger Booster**

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.



#### PCIe 3.0

PCIe 3.0 is the ubiquitous and general-purpose PCI Express I/O standard. At 8GT/s bit rate, the interconnect performance bandwidth is doubled over PCIe 2.0, while preserving compatibility with software and mechanical interfaces.



#### 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.



#### **Intel Smart Connect**

Smart Connect will periodically wake the computer is in sleep state, the things to check for updates and information.



#### intel Rapid Start

## **Intel Rapid Start**

Rapid Start is a free utility that Biostar motherboard 8 series designed simply to install. Can quickly start to make rapid system recovery from a deep sleep at about 5 seconds.



#### **Dual DDR3-1600**

It supports 2 or 4 DIMM Slots DDR3 memory that features data transfer rates of DDR3 1600/1333. The processor support 2 memory channels and setting the memory multiplier, allows selection of the channel speed. These clearly uplift the band width and boost the overall system performance.

#### 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  $6.25 \times 10^{-2}$  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.





#### **BIOS Virus Protection**

When enabled, the BIOS will protect the boot sector and partition table by halting the system and flashing a warning message whether there's an attempt to write to these areas.



#### 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.



## **High Quality ESD**

BIOSTAR Hi-Fi series motherboards provide high quality ESD (Electro-Static Discharge) solution for its front I/O panel. This function prevents static electricity and reduces the damage to the motherboards when you are plugging or unplugging your headphone.



# 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.



#### **Header Zone**

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



#### **BIO-Remote 2**

BIO-Remote2 Technology is featuring users a better Home Theater environment. Users who own either Android mobile or Apple goods are able to access and control your PC remotely; At this moment, you're smart device became a intelligent and functional remote controller; more than that, BIO-Remote2 also includes both function of mouse pad and power point presentation mode.



#### **MX SUITE**

As an Biostar customer you can download MAGIX multimedia tools designed to enhance your music, videos and photos for free. From music and website creation to video editing and photo management. Four products that cover all of your multimedia needs. Simply do more with your media than you ever thought possible.





"Simplitec" offers premium solutions to ensure your PC is faster, more reliable and free of security gaps - automatically or with customized setups. "Simplitec" is a free bundle software to scan your computer for problems and offers a professional solution for each problem to put your PC back in top form.



#### **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.



## eHot-Line Utiltiy

Integrated e-service automatically sends your technical support request to Biostar Globe tech support without any delay.



#### **BIOScreen Utility**

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.

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