

## Hi-Fi B85W Motherboard



- Support the Intel 4th generation Core i7 and Core i5 processors in the 1150 package
- Intel B85 single chip architecture
- Support 4-DIMM DDR3-1600/1333up to 32G maximum capacity
- On board HDMI supported 4K2K resolution enables highdefinition image display
- 100% Solid Capacitors
- BIOSTAR Hi-Fi Technology
- Built-in powerful headphone Amplifier
- Intel SBA(Small Business Advantage) Technology
- Intel Rapid Start Technology
- Intel Smart Connect Technology

## Hi-Fi B85W Specifcation

CPU SUPPORT	Intel® Core <sup>™</sup> i7 LGA 1150 Processor Intel® Core <sup>™</sup> i5 LGA 1150 Processor Intel® Core <sup>™</sup> 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 4 x DDR3 DIMM Memory Slot Max. Supports up to 32GB Memory
INTEGRATED VIDEO	By CPU model Supports DX11.1 Supports HDCP
STORAGE	4 x SATA III Connector 2 x SATA II Connector
LAN	Realtek RTL8111F - 10/100/1000 Controller
AUDIO CODEC	Realtek ALC892 8-Channel Blu-ray Audio
USB	2 x USB 3.0 Port 1 x USB 3.0 Header 4 x USB 2.0 Port 2 x USB 2.0 Header

EXPANSION SLOT	1 x PCI-E 3.0 x16 Slot 1 x PCI-E 2.0 x16 Slot(x4) 2 x PCI-E 2.0 x1 Slot 2 x PCI Slot
REAR I/O	1 x PS/2 Keyboard 2 x USB 3.0 Port 4 x USB 2.0 Port 1 x HDMI Connector 1 x DVI Connector 1 x VGA Port 1 x LAN Port 6 x Audio Jacks
INTERNAL I/O	1 x USB 3.0 Header 2 x USB 2.0 Header 4 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 S/PDIF-Out Header 1 x CPU Fan Connector 4 x System Fan Connector 1 x CIR 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	ATX Form Factor Dimension: 30.5cm x 22cm ( W x L )
OS SUPPORT	Supports Windows 7 / 8 / 10(x64)
BUNDLE SOFTWARE	BIO-Remote2 BIO-Remote Smart Speed LAN
ACCESSORIES	4 x SATA Cable 1 x I/O Shield 1 x DVD Driver 1 x User Manual
FEATURES	Windows 8 Compatible Supports PURO Hi-Fi Supports 100% Solid capacitor Supports Rapid Switch2 Rapid Debug3 Supports Charger Booster Supports BIOS Online Update
Hi-Fi B85W OVERVIEW	

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## **CPU-Chipset**







Intel® B85 Express Chipset delivers improved performance and responsiveness. It add the Intel® Smart Response Technology and RST caching technology, B85 delivers an agile PC response for fast system boot time and application load time when used in conjunction with a SSD.

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

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

## Audio+



#### Hi-Fi

A combination of exclusive hardware & software design including "ground-isolation circuit design", "an independent audio power", and "a built=on-board amplifier", with all these hardware features gives you the best audio quality and performance. As for software, we offer you a free bundle utility "Multi-Channel Calibration" which normally you'll find in high level sound systems; this feature allows you to auto detect your location; with a user friendly interface, you can easily adjust the volume of every speakers to make a well balanced surround sound. And of course, the built-on-board amplifier always gives you a super powerful sound comparing to other motherboards.



## Blu-ray Audio

Upgrading your Audio performance in the easiest way is choosing BIOSTAR ultimate Motherboard. It does support Bluray 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.



#### Hi-Fi Power

Audio power is an important factor in audio quality. Most AV equipment isolates the power supply for each analog and digital signal to gather high-quality sound reproduction. Equipped with BIOSTAR Hi-Fi Power technology, it will utilize audio components with independent power design for a significant reduction in electronic noise and superb sound quality.



#### Hi-Fi Ground

BIOSTAR Hi-Fi Ground (Golden Line) is noise-blocking multilayer PCB design to isolates analog audio signals from digital sources. Unique PCB layout is ideal for exceptional clarity and high fidelity sound.



#### Hi-Fi AMP

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.



#### **Smart Far**

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.



#### Hi-Fi Resistor

Metal-oxide film resistors are made of metal oxides such as tin oxide. The electric characteristics are greater stability and reliability than regular metal film resistors when operating in an extremely broad working temperature range. This special component is used in applications with high endurance audio demands.



### Hi-Fi Cap

BIOSTAR Hi-Fi series motherboards come with high quality 'Non-Polarized Electrolysis Electric audio capacitors' for each audio channel circuit. The customized audio capacitors deliver low noise, low distortion, and wide bandwidth to achieve the highest sound resolution and sound expansion. The critical component will ensure the most realistic sound effects to gaming enthusiasts.



#### Hi-Fi 110dB+

Embrace exceptional sound quality for the win with 110dB SNR and stylish and efficient EMI shield blocks electromagnetic interference to help provide cleaner audio. It has achieved a signal-to-noise ratio (SNR) of 110dB, yielding almost loss-less audio form rear audio connectors.













#### 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.

#### DX11.1

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.

## ATI CrossFire X<sup>™</sup> Technology

ATI CrossFireX<sup>™</sup> is the ultimate multi-GPU performance gaming platform. With game-dominating power, ATI CrossFireX technology enables two or more discrete graphics processors to work together to improve system performance. It supports up to four ATI Radeon<sup>™</sup> HD graphics cards, making it the most scalable gaming platform ever!

## Integrated HDMI with HDCP

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

### **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.



#### PCle 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

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.

#### Durable+



## 10 Phase Power Phase Design

10-phase VRM design with high quality power components such as low RDS (on) Mosfet for lower temperature has the advantage to raise the overclocking ability.



#### 100% Solid Caps

With armor-plated Biostar Technology, all capacitors are placed with 100% solid capacitors that have a lasting life cycle, durability and stability for crucial components.

## Protection+



# Intel® Small Business Advantage 2.0

Intel® Small Business Advantage 2.0 (Intel® SBA2.0) is a new computing platform, consisting of hardware, software, and firmware for small businesses without a managed network. Once configured, the technology will continually monitors your security and alarms you if it's been compromised viruses or malware. It will also automatically back-up your company's data and manager routine maintenance tasks.

Intel SBA2.0 also includes five main applications: Software Monitor Software Monitor helps keep critical security software running by monitoring it at the hardware level and alerting the business if there has been an attack. The Software Monitor also maintains an event log that shows status information and any errors generated, so businesses can know what happened.



Data Backup and Restore Data Backup and Restore provides reliable after-hours backup of critical data using the local maintenance timer to power on the computer. Data can be backed up to a designated location.



USB Blocker The optional USB Blocker lets businesses control access to their infrastructure, preventing unauthorized USB devices or file imports or exports on company computers.



PC Health Center PC Health Center can schedule and do PC maintenance tasks after hours, without interrupting employee work time. Tasks such as updating the operating system, deleting temporary internet files, and running disk defragmentation can be done at night. PC Health Center works even if the computer is powered-down, as long as it is

plugged in.



Energy SaverWith the optional Energy Saver, businesses can save energy by scheduling PCs to power-down at the end of the day and turn on before the work day begins - ready for

employees as they arrive in the morning.



New EnhancementsImport/Export, Enhancements with

Windows 8, Easier Customizations



Intel Appup for ResellersAn app store built for business, featuring Intel® SBA enhanced apps.







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.



## **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!













#### **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-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.

#### **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.

## Rapid Switch

No more meddling with the power and reset jumpers onboard. The power and reset buttons are already built onboard. It is convenient for DIY users to test the board without short-circuiting the wrong pins.

#### Rapid Debug 3

Rapid Debug 3 posts critical POST code information in a digital LED display. When system malfunction occurs, it autodetects the device's failure and translates the error codes on the digital LED.

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