

Hi-Fi B85N 3D Motherboard



- Support the Intel 4th generation Core i7 and Core i5 processors in the 1150 package
- Intel B85 single chip architecture
- Support 2-DIMM DDR3-1600/1333up to 16G maximum capacity
- On board HDMI® supported 4K2K resolution enables high-definition image display
- 100% Solid Capacitors
- BIOSTAR Hi-Fi 3D Technology
- Built-in powerful headphone Amplifier
- mSATA/Mini PCI-E Combo Connector
- Intel SBA(Small Business Advantage) Technology
- Intel Rapid Start Technology
- Intel Smart Connect Technology

Hi-Fi B85N 3D Specification

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 Supports HDCP
STORAGE	2 x SATA III Connector 2 x SATA II Connector 1 x mSATA Connector

LAN	Realtek RTL8111G - 10/100/1000 Controller ※Dual GbE
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
REAR I/O	1 x PS/2 Keyboard/Mouse 2 x USB 3.0 Port 4 x USB 2.0 Port 1 x HDMI® Connector 1 x DVI Connector 1 x VGA Port 2 x LAN Port 5 x Audio Jacks 1 x S/PDIF Out Port
INTERNAL I/O	1 x USB 3.0 Header 2 x USB 2.0 Header 2 x SATA III Connector (6Gb/s) 2 x SATA II Connector (3Gb/s) 1 x mSATA/Mini PCI-E Combo Connector 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	Mini ITX Form Factor Dimension: 17cm x 17cm (W x L)
OS SUPPORT	Supports Windows 7 / 8 / 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 PURO Hi-Fi 3D
Supports 100% Solid capacitor
Supports Charger Booster
Supports BIOS Online Update

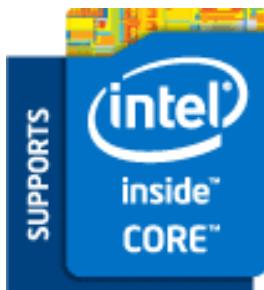
Hi-Fi B85N 3D OVERVIEW

CPU-Chipset



Intel B85 chipset

Intel® B85 Express Chipset delivers improved performance and responsiveness. It adds 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™ 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+



Hi-Fi 3D

Hi-Fi 3D Technology enables high definition multi-dimensional sound where it matters the most with height, width and depth in front of the listener. It's based on the physics of reproduced sound and the basic human perception of sound. The high resolution sound reproduction stands above existing sound enhancements or virtualization technologies.



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.



Smart Ear 3D

Smart Ear 3D provides true reproduction of virtual 3D space using any headphones! It delivers the true 3D sounds for music, movies and also games. It's fantastically, especially if you've never experienced this kind of acoustic phenomenon before.



Hi-Fi Pre AMP

Hi-Fi 3D Technology is built-in power amplifier to boost the speaker volume. It will increase double volume level with high-quality HD audio output. Hi-Fi 3D Technology not only improves on the headphone but also enhances your speakers' sound volume.

Hi-Fi preamp can boost the line level audio signals from analog and digital sources to levels that a power amplifier can detect and boost again to successfully power up the loadspeaker.



Hi-V Caps

Hi-V Caps is "Metalized Polypropylene Film Capacitor" 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.



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 multi-layer PCB design to isolates analog audio signals from digital sources. Unique PCB layout is ideal for exceptional clarity and high fidelity sound.



Hi-Fi Sound

BIOSTAR Hi-Fi series motherboards have a sampling rate of 192kHz/24-bit which delivers a high quality audio through an analog connection to your home theater system, multi-channel speakers and high-end headphone. You can enjoy real Blu-ray grade high-definition sound that you've never experienced before.

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.



HDMI® 3D Visual

The HDMI® 3D Visual provides a level of interoperability for devices designed to deliver 3D content over the HDMI® connection. The latest HDMI® Specification adds key enhancements to support the market requirements for bringing broadcast 3D content into the home featuring key enhancements for 3D applications including the addition of mandatory 3D formats for broadcast content.



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.



Integrated HDMI® with HDCP

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

Speed+



Dual GbE LAN

The primary advantage is the doubling of bandwidth which allows the network bandwidth of 1G to become that of 2G, and with two high-speed gigabit networks plus zero packet delay that provides super high data transmission efficiency. Another major advantage is "Load Balancing", it allows users to attach both network adapters to a single network. It will therefore support the aggregation "teaming" function by merging the two connections to support multiple aggregation modes. In addition, two Gigabit Ethernet lightning protection circuits reducing the probability of damage from lightning or other power surge. So if one connection is disabled the other connection will automatically kick in.



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.



mini-PCIe+mSATA

Combo connector which allows both mini-PCIe and mSATA SSD and others upgrades



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.



SRT(Intel Smart Response Technology)

Intel Smart Response Technology is an Intel Rapid Storage Technology(RST) eaching feature that improves computer system performance. It allows a user to configure computer systems with an SSD used as cache memory between the hard disk drive and system memory. This provides the advantage of having a hard disk drive(or a RAID volume) for maximum storage capacity while delivering an SSD-like overall system performance experience.



intel Smart Connect

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 Channel DDR3

It supports 2 or 4 DIMM Slots DDR3 memory that features data transfer rates of DDR3 2000(O.C.)/1800(O.C.)/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.



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. X

Energy Saver With 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. X

New Enhancements Import/Export, Enhancements with Windows 8, Easier Customizations X

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



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.



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.



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.



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!