

### Hi-Fi A88S3E Motherboard



- Supported Socket FM2+/FM2 processors AMD Aseries/ E2-series processor
- Supported AMD Mutil Core(x4,x2)
- AMD 100W processor support
- AMD A88X Chipset
- 2 DIMM supported DDR3-2600(OC)/ 2400(OC)/ 2133/ 1866/ 1600/ 1333/ 1066/ 800
- AMD Dual Graphics Technology
- 100% X.D.C solid capacitor
- BIOSTAR Puro Hi-Fi

# Hi-Fi A88S3E Specification

CPU SUPPORT	AMD A10 Processor AMD A8 Processor AMD A6 Processor AMD A4 Processor AMD E2 Processor AMD Athlon™ II X4 Processor Maximum CPU TDP (Thermal Design Power): 100Watt
MEMORY	Support Dual Channel DDR3 2600(OC)/2400(OC)/2133/1866/1600/1333/1066/800 MHz 2 x DDR3 DIMM Memory Slot Max. Supports up to 32GB Memory
INTEGRATED VIDEO	By CPU model AMD Dual Graphics Technology Supports DX11.1 Supports HDCP
STORAGE	8 x SATA III Connector Support SATA RAID: 0,1,5,10
LAN	Realtek RTL8111G - 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 2 x USB 2.0 Port 2 x USB 2.0 Header
EXPANSION SLOT	1 x PCI-E 3.0 x16 Slot(supported by FM2+ CPU) 1 x PCI-E 2.0 x1 Slot 2 x PCI 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 HDMI Connector 1 x DVI (Dual Link) Connector 1 x VGA Port 1 x LAN Port 3 x Audio Jacks
INTERNAL I/O	1 x USB 3.0 Header 2 x USB 2.0 Header 8 x SATA III Connector (6Gb/s) 1 x Front Audio Header 1 x Front Panel Header 1 x S/PDIF-Out Header 1 x CPU Fan Connector 2 x System Fan Connector 1 x CIR Header 1 x COM Port Header 1 x Printer 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: 24.4cm x 20cm ( W x L )
OS SUPPORT	Supports Windows XP / 7 / 8 / 8.1 / 10(x64)
BUNDLE SOFTWARE	BIO-Remote2 BIO-Remote 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 Supports 100% Solid capacitor BIO-FLASHER Supports Charger Booster Supports BIOS Online Update

#### Hi-Fi A88S3E OVERVIEW

#### **CPU-Chipset**





#### AMD A88X chipset

AMD® A88X chipset is designed to support up to 5GT/s interface speed and PCI Express™ 3.0/2.0 graphics. It natively supports SATA 6Gb/s ports and USB 3.0 Ports.

#### FM2+ APU Support

Socket FM2+ is a new AMD CPU socket design that will support the yet to be released Steamroller core Kaveri APUs. The FM2+ has a slightly different pin configuration with two additional pin sockets, however FM2+ motherboards will retain backwards compatibility with previous generation Socket FM2 APUs. Socket FM2+ APUs possibly will not be compatible with Socket FM2 motherboards due to the aforementioned additional pins.

#### 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 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.





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 noiseblocking 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 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 Ear**

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.



#### S/P DIF Output on board

Onboard Optical & Coaxial connector supports your desktop in transferring the non-distortion digital audio output to the AV amplifier and professional speaker system.

#### Video+



#### **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.



#### **Dual-Link DVI**

A dual link doubles the number of TMDS pairs, effectively doubling video bandwidth at a given pixel clock frequency.



#### 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.



#### HDMI with HDCP {INS\_STR}

HDMI allows full video & audio support via standard DVI output. It has industry-leading high definition video quality.

#### 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.



#### PCI Express 2.0 Support

PCI Express 2.0 bus architecture offers a futureproofing bridge to tomorrow's most bandwidthdriven games and 3D applications by maximizing 5 GT/s of bandwidth. PCI Express 2.0 motherboards are fully backwards compatible with existing PCI Express products for broad support of PC peripherals.







## Durable+







#### 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 SATAII.

#### Dual DDR3-2600+

It supports 2 or 4 DIMM Slots DDR3 memory that features data transfer rates of DDR3 2600(O.C). 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.

# Dual Channel DDR3 {INS\_STR}

Delivering native support for DDR3 memory of up to 1600MHz, motherboards allow users to easily reach higher memory frequencies at lower voltages thus, achieving higher memory performance.

#### 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+







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

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.





#### 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**

"Simplitec" offers premium solutions to ensure your PC is faster, more reliable and free of security gaps automatically or with customized setups. "Simplifiec" 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!