

Hi-Fi Z87W Motherboard



- Support the Intel 4th generation Core i7 and Core i5 processors in the 1150 package
- Intel Z87 single chip architecture
- Support 4-DIMM DDR3-2800(OC)/2600(OC)/2400(OC)/2200 up to 32G maximum capacity
- On board HDMI supported 4K2K resolution enables high-definition image display
- 100% Solid Capacitors
- BIOSSTAR Hi-Fi Technology
- Built-in powerful headphone Amplifier
- Intel SRT (Smart Response Technology)
- Intel RST (Rapid Storage Technology)
- Intel Rapid Start Technology
- Intel Smart Connect Technology

Hi-Fi Z87W Specification

CPU SUPPORT	<p>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</p>
MEMORY	<p>Support Dual Channel DDR3 2800(OC)/ 2600(OC)/ 2400(OC)/ 2200(OC)/ 2133(OC)/ 1866(OC)/ 1800(OC)/ 1600/ 1333/ 1066 MHz 4 x DDR3 DIMM Memory Slot Max. Supports up to 32GB Memory</p>
INTEGRATED VIDEO	<p>By CPU model Supports DX11.1 Supports HDCP</p>

STORAGE	6 x SATA III Connector Support SATA RAID: 0,1,5,10 Support Intel Smart Response Technology
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 6 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 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 Z87W OVERVIEW

CPU-Chipset



Intel Z87 chipset

The Intel® Z87 Express Chipset is a single-chipset design to support socket 1150 Intel® 4th generation Intel® Core™ processor-based platform . Provides excellent performance and increased bandwidth and stability. Intel® Z87 Express Chipset can also enable iGPU function, letting users enjoy the latest Intel® integrated graphic performance. The PC platform features improved adaptive performance that adds speed when you need it. When combined with advanced system responsiveness, the platform delivers the ultimate PC 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+



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.



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 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.



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.

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.



ATI CrossFire X™ Technology

ATI CrossFireX™ 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™ 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.

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.



SRT(Intel Smart Response Technology)

Intel Smart Response Technology is an Intel Rapid Storage Technology(RST) enabling 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.



T-Overclocker

T-overclocker presents a simple Windows-based system performance enhancement and utility management. It features several powerful yet easy to use tools such as overclocking for system performance enhancement, CPU and memory special enhancement, a smart-fan control for managing fan speed control of both CPU cooling fan, north-bridge chipset cooling fan, PC health for monitoring system status, and pre-set OC modes for easy OC.



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 bandwidth and boost the overall system performance.

Durable+



**Moistureproof
PCB**

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 RdsOn P-Pak MOS

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



**10
10-Phase Power**

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
CAPACITOR
Stable, Lifespan++**

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
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

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
THE ALL-IN-ONE
MEDIA SOLUTION

**FREE
DOWNLOAD**

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.



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 auto-detects 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!**

BIOSTAR