

Hi-Fi Z97Z7 Motherboard



- Support for 4th Gen Intel® Core™ Processors, enables overclocking on Unlocked Intel® Core™ Processors
- Intel Z97 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
- BIOSTAR Hi-Fi Technology inside
- Hi-Fi Cap for premium sound quality with lower distortion
- Support PCIe M.2(10Gb/s)
- Support SATA Express(10Gb/s)
- Intel SRT (Smart Response Technology)
- Intel RST (Rapid Storage Technology)
- Intel Rapid Start Technology
- Intel Smart Connect Technology

Hi-Fi Z97Z7 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
 Ready for Intel 4th Gen. unlocked CPU (codename Devil's Canyon)
 Ready for Intel next enthusiast-class CPU(codename Broadwell)
 Support CPU Bclk overclock

MEMORY	Support Dual Channel DDR3 2800(OC)/ 2600(OC)/ 2400(OC)/ 2200(OC)/ 2133(OC)/ 1866(OC)/ 1800(OC)/ 1600/ 1333/ 1066 MHz Support non-ECC memory modules Support Extreme Memory Profile(XMP) memory modules 4 x DDR3 DIMM Memory Slot Max. Supports up to 32GB Memory
INTEGRATED VIDEO	By CPU model Supports DX11.1/ 11/ 10.1/ 10/ 9 Supports HDCP Support DirectX Video Acceleration(DXVA) for accelerating video processing Full AVC/VC1/MPEG2 HW Decode Support Advanced Scheduler 2.0, 1.0, XPDM Support OpenGL 4.0 Support HDMI, 1.4a specification compliant with 3D Support 3 Displays(HDMI + DVI + VGA)
STORAGE	4 x SATA III Connector 1 x SATA Express Connector(Support 1 x SATA Express 10Gb/s Devices or 2 x SATA3 6Gb/s Devices) Support SATA RAID: 0,1,5,10 Support both Legacy and AHCI Mode Support Hot-Plug in AHCI mode Support Intel Smart Response Technology 1 x M.2 (M Key) Connector Support both PCIE NAND for PCIE SSD and SATA NAND for SATA SSD
LAN	Realtek RTL8111GR - 10/100/1000Mb/s Controller Support Wake-On-LAN Support PXE
AUDIO CODEC	Realtek ALC892 8-Channel Blu-ray Audio Support Blu-ray Audio Support HD Audio Support 2/4/6/8-channel Support Biostar Hi-Fi
USB	4 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(support CrossfireX) 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 4 x USB 3.0 Port 2 x USB 2.0 Port 1 x HDMI Connector, resolution up to 4096x2160@24Hz, 24bpp / 2560x1600@60Hz, 24bpp / 1920x1080@60Hz, 36bpp 1 x DVI Connector, resolution up to 1920x2000@60Hz @24bpp 1 x VGA Port, resolution up to 1920x2000@60Hz @24bpp 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) 1 x SATA Express Connector(Support 1 x SATA Express 10Gb/s Devices or 2 x SATA3 6Gb/s Devices) 1 x M.2 Key M Connector 1 x Front Audio Header 1 x Front Panel Header 1 x S/PDIF-Out Header 2 x CPU Fan Connector 3 x System Fan Connector 1 x CIR Header 1 x TPM Header(TPM V1.2) 1 x COM Port Header
H/W MONITORING	CPU / System Temperature Monitoring CPU / System Fan Monitoring Smart / Manual CPU / System Fan Control System Voltage Monitoring
DIMENSION	ATX Form Factor Dimension: 30.5cm x 24.4cm (W x L)
OS SUPPORT	Supports Windows 7 / 8 / 8.1 / 10(x64)
BUNDLE SOFTWARE	BullGuard Smart Ear headphone Utility BIO-Remote2 BIO-Remote Smart Speed LAN Intel Rapid Start Technology Intel Smart Connect Technology Intel Rapid Storage Technology(include Intel Smart Response Technology)
ACCESSORIES	4 x SATA Cable 1 x I/O Shield 1 x DVD Driver 1 x User Manual

FEATURES	Supports PURO Hi-Fi Supports 100% Solid capacitor Supports Rapid Switch2 Rapid Debug3 Supports Charger Booster Supports BIOS Online Update
Hi-Fi Z97Z7 OVERVIEW	
CPU-Chipset	
	Intel Z97 chipset The Intel® Z97 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® Z97 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.



Super Hi-Fi Audio Connectors

30uF "Golden" plated audio connectors provide superb signal conductivity, less oxidation, and best possible studio-grade headgears.



HD Audio

Provides high quality sound with minimal loss of audio fidelity.



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.



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 lossless audio from 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.



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™ 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.



PCIe M.2

The extremely data transfer rate can be up to 1000MB/s (PCIe x2) and also compatible with SATA interface M.2, up to 6Gb/s. It is specifically designed for higher performance SSD.



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.



SATA Express

The SATA Express supports both SATA and PCIe storage solutions and maximum data transfer speed up to 10Gb/s.



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.



T-Overclocker

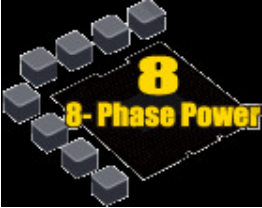
T-overclocker presents a simple Windows-based system performance enhancement and utility management. It features several powerful yet easy to use tools such as overclocking for system performance enhancement, CPU and memory special enhancement, a smart-fan control for managing fan speed control of both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



Dual DDR3-2800+

It supports 2 or 4 DIMM Slots DDR3 memory that features data transfer rates of DDR3 2800(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.

Durable+

	Super Durable Ferrite Choke Super Durable Ferrite Choke brings the benefits of higher current capacity, lower energy loss and better power stability.
	Super Durable Solid Caps The best quality solid state capacitors with ultra low ESR design, the Super Durable Solid Caps doubles the lifespan.
	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.
	8 Phase Power Design 8-phase power design gives unparalleled overclocking ability and the lowest temperature to reach maximum performance level.
	Super Conductive Heatsink Design Massive heatsink design provides super fast heat dissipation, high stability and reliability for extreme performance.



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 (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.



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.



Rapid Switch 2

Engineered by BIOSTAR, the exquisite onboard switches allow you to easily shut down and restart your system.



Super Rapid Debug 3

Super Rapid Debug 3 posts critical POST code information on a vivid digital LED display.



Super Durable Box Header

Super Durable Box Header provides solid, secure and durable connections between motherboard and peripheral cables.



LN2 Switch

With LN2 mode activated the BIOSSTAR motherboard is optimization to remedy the cold boot bug during POST at an extremely low temperature and help the system boot successfully.

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