

## TPower X58 Motherboard



- Design for Intel socket 1366 Nehalem Core i7 Extreme/ Core i7 45nm processors
- Intel X58 / ICH10R Chipset
- 12 Phases Power Design
- Support 6-DIMM DDR3-1866(OC)/1600(OC)/1333(OC) up to 24G maximum capacity
- Support ATI CrossfireX and nVidia SLI Technology
- 100% X.D.C Japanese solid capacitor
- BIOSTAR Space-Pipe with high efficiency copper heat-pipe
- BIOSTAR G.P.U (Green Power Utility) Technology for Energy Saving
- BIOSTAR TPower Utility
- On board Dual GbE
- 1394a, eSATA, S/PDIF Out (Optical/Coaxial)

## TPower X58 Specifcation

CPU SUPPORT	Intel® Core™ i7 Extreme Processor Intel® Core™ i7 Processor
QPI	Support QPI 6.4GT/s
MEMORY	Support Triple Channel DDR3 800/1066/1333(OC)/1600(OC)/1866(OC) MHz 6 x DDR3 DIMM Memory Slot Max. Supports up to 24GB Memory
STORAGE	6 x SATA II Connector (Support RAID: 0,1,5,10) 2 x eSATA II Connector (Support RAID: 0,1) 1 x IDE Connector
LAN	Realtek RTL8111C - 10/100/1000 Controller *Dual GbE
AUDIO CODEC	Realtek ALC888S 8+2 Channel HD Audio

USB	8 x USB 2.0 Port 2 x USB 2.0 Header
EXPANSION SLOT	3 x PCI-E 2.0 x16 Slot(x16,x16,x4) 1 x PCI-E 2.0 x1 Slot 2 x PCI Slot
REAR I/O	1 x PS/2 Keyboard 2 x eSATA2 Connector 1 x FireWire IEEE 1394a Port 8 x USB 2.0 Port 2 x LAN Port 6 x Audio Jacks 1 x S/PDIF Out Port
INTERNAL I/O	2 x USB 2.0 Header 6 x SATA II Connector (3Gb/s) 1 x IDE Connector 1 x Floppy Connector 1 x Front Audio Header 1 x Front Panel Header 1 x CD-IN Header 1 x S/PDIF-Out Header 1 x CPU Fan Connector 2 x System Fan Connector 1 x FireWire IEEE 1394 Header
DIMENSION	ATX Form Factor Dimension: 30.5 cm X 24.4 cm ( W x L )
OS SUPPORT	Supports Windows 2000 / XP / Vista
ACCESSORIES	1 x IDE Cable 6 x SATA Cable 6 x SATA Power Cable 1 x SLI Setter 1 x I/O Shield 1 x Fully Setup Driver CD 1 x User Manual
FEATURES	Windows 7 Compatible Supports Space-Pipe Thermal solution Supports 100% Solid capacitor Tweak Tech Supports 12-Phase Power Supports Clean-Tone Supports O.N.E Supports C.R.P Supports S.R.S Supports M.I.T Supports T-Power Supports Rapid Switch2 Rapid Debug3 BIO-FLASHER

## TPower X58 OVERVIEW

## **CPU-Chipset**





#### Intel X58 chipset

The Intel® X58 Express Chipset supports the latest Intel® Core™ i7 Processors using QuickPath Interconnect (QPI) with amazing and impressive point-to-point links. It provides more stability and bandwidth enhancement up to 36 PCI-Express 2.0 lanes. It also enables the nVidia® SLI technology and ATI CrossFireX™ technology to function on the same motherboard.

# Intel Core™ i7 Processor support

Core i7 is the first family of Intel 45nm CPU processors that uses the Intel Nehalem micro architecture in LGA1366 package. It integrates with the Triple-channel memory controller with 6 DIMM slots DDR3 memory.

It includes 8MB L3 cache and supports Intel® QuickPath Interconnect (QPI) with system bus of up to 6.4GT/s and reaches the maximum bandwidth of up to 25.6GB/s.

### Audio+



## 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+



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

ATI CrossFireX<sup>™</sup> is the ultimate multi-GPU performance gaming platform. With gamedominating 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!

## Speed+



## 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.



# NVIDIA SLI Technology {INS\_STR}

The advanced NVIDIA® SLI® technology delivers the best gaming performance. Experience the fastest performance imaginable on new killer gaming machines. Surround yourself with amazing 3D performance, remarkable physical effects, and accelerate your most performance-driven applications.



#### eSATA

One or Two external SATA 3Gb/s ports connectivity with minimal host overhead and host to device latency.



#### IEEE1394 on board

IEEE 1394a is a serial bus interface for high-speed communication and data transfer. Major applications are in desktop, digital video/audio and other portable devices.





#### Tweak Tech



#### **OC-Tweaker**

It has a Dynamic OC and 1-click feature for BIOSTAR MB and BIOSTAR V-Ranger graphics card functions.

#### Tweak Tech

Biostar has a unique engineering PWM layout with low ESR and high ripple conductive solid state caps that provide sufficient, stable power supply to the CPU. The same philosophy applies to our DDR design to enhance the memory's voltage stability.

#### 3-Channel DDR3

Tpower X58 supports 6 DIMM Slots DDR3 memory that features data transfer rates of DDR3 1866(O.C.)/1600/1333/1066. Core i7 supports 3 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+



12- Phase Power



2-Phase Power

### 12 Phase Power Design

8+4 phase VRM design with high quality power components such as low IR Direct FET MOSFETs for lower temperatures, Ferrite core chokes with lower hysteresis loss, and high quality Japanese-made solid capacitors all add up to ensure longer system life and lower power loss.

# 2 Phase Memory Power Design

2-phase independent power design increases memory voltage stability and durability.



# High efficiency thermal solution Space-Pipe

The new Space-pipe design effectively directs the heat generated by the chipsets to the heat sink near the back I/O ports - where it can be carried away by existing airflow from the CPU fan. This innovative fanless heat pipe design effectively lowers temperatures by up to 10°C without having lifetime problems that a normal chipset fan has.



#### 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.



#### G.P.U (Green Power Utility)

BIOSTAR G.P.U (Green Power Utility) is a new function that enhances energy efficiency by disabling extra phases while CPU is under light loading. It integrates a friendly GUI to monitor the resourcing and response of your CPU thus optimizing the power saving function in your system. G.P.U. constantly sets up the best power efficiency in your system, be it for heavy 3D gaming, Internet or MSN charting.





#### **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. "Simplitec" 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 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.



#### BIO-Rel ife

BIO-ReLife Technology lets you recover crashed BIOS data from a USB flash pen driver that stores new BIOS file. This practical BIOS utility can restore your system and recover from a BIOS crash situation.



## **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.



#### eHot-Line

Integrated e-service automatically sends your technical support request to Biostar Globe tech support without any delay.



#### **BIO-WATCH**

It monitors the MB and VGA status as well as the Fuzzy CPU fan control.



#### Biostar Flash

It features a 1-click BIOS update under Windows interface.



## Rapid Switch 2

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



## 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!