Mainboard Diagram

M2A581-SGE

-AMD™ 570X CrossFire Chipset and AMD™ SB600 Chipset
-Support Socket AM2 64-bit dual core AMD Athlon™64 X2
 Processor
-Support HTT 1000MHz
-Dual Channel DDR2 800 Memory DIMMs Supported
-Support 4 Serial ATA Devices with RAID 0, 1, 10
-Ready for Windows® Vista™
-Gigabit LAN Supported
-HD 8-Channel Audio CODEC
-CPU Vcore 7-Shift
-ATX Form Factor

Features and Benefits

Socket AM2 64-bit AMD Athlon™ 64 Processor with HyperTransport™ Technology

AMD64, a revolutionary technology allowing the processor to run 32-bit applications at full speed while enabling a new generation of powerful 64-bit software applications. HyperTransport™ technology can increase overall system performance by removing I/O bottlenecks, increasing system bandwidth, and reducing system latency.

AMD™ 570X CrossFire Chipset: Backbone of the Performance Platform

delivers outstanding value and performance for gamers, with a true bandwidth design for Multi-GPU configurations. This high bandwidth architecture in the AMD 570X chipset enables the latest Radeon™HD X2000 series with the flexibility for single or dual card configurations. The AMD 570X chipset provide 1 x16, 1x8 PCI Express lanes to support simultaneous operation of graphics cards for astonishing performance with brilliant and intense 3D graphics.

AMD™ SB600 Southbridge Chipset

AMD SB600 Series offers advanced technologies and superior performance to any chipset platform solution for AMD desktop and mobile applications. With superior performance and broad-based connectivity, SB600 is rich in all the latest advanced features such as 10 USB 2.0 ports and audio. Designed for full data access for the fastest Windows Vista experience, it features new disk controller technologies that ensure fast file access while providing encryption for data security. AMD SB600 is designed with advanced power management for low power consumption and energy efficient platforms.

BIOS BACK Function: The BIOS Backup and Recovery Function

With the new support for the Serial Peripheral Interface, the whole motherboard series are embedded with the new storage of the extra bin file for BIOS recovery. When unexpected error occurs, even the BIOS crashes down, you can restore your BIOS with just simply clicking to restart your system. The backup bin file will recover automatically within a few minutes.

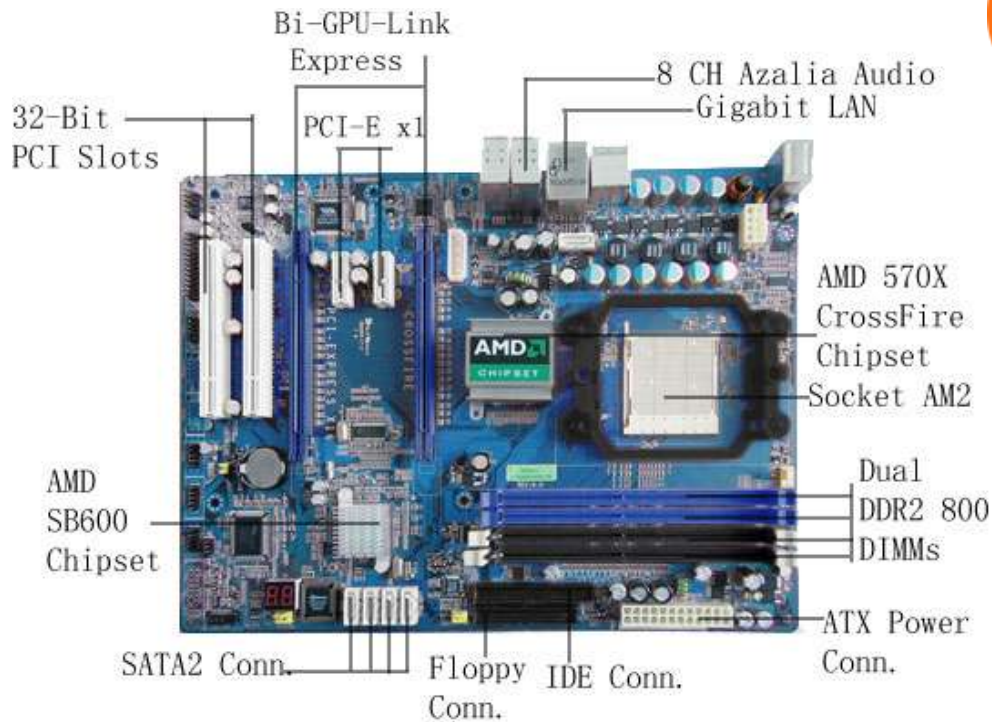### CPU Vcore 31-Shift / Shift_to the scalabilities and flexibilities

The adjustable voltage for CPU Vcore can be upgraded in 31 stages for the precisely hardware dynamic over-clocking of demanding computing performance.

Debug Port: The Professional Hardware Diagnosis System

Being bugged of abnormal system failure through the tossed and turned nights no more, the embedded Hardware Debug Port offers you the real-time visual system healthy for the demanding usage of computing. No more bugging by unknown system failure and no more time wasted in the first moment of 24-hour nonstop ping business computing, the embedded Debug Port will turn you into a well training hardware professional with the seeing system situation..

Rear I / O

Mainboard Specifications

■ CPU	■ Socket AM2 HTT 1000 MHz AMD® Athlon™64 With HyperTransport Technology ■ Compatible with 64-bit Dual Core AMD® Athlon™64 X2 Processor
■ Chipset	■ AMD™ 570X CrossFire Chipset + AMD™SB600 Chipset
■ Memory	■ 4 * 240-pin DIMM Sockets for unbuffered Dual DDR2 800 SDRAM up to 8 GB
■ Expansion Slots	■ 2 * 32-bit PCI Slots / 2 * PCI EXPRESS x1 ■ 2 * PCI EXPRESS x16 （1*PCI-EXPRESS @16 lane and 1 * PCI-E @8 lane for CrossFire Technology ）
■ Storage	■ 2 * Ultra DMA 133 / 100 / 66 IDE Devices Support ■ Embedded AMD™SB600 Southbridge Chipset Supports 4 Serial ATA2 HDDs with RAID 0, 1, 10 Functions.
■ Audio	■ Realtek ALC888 8-Channel High Definition Audio CODEC
■ Ethernet LAN	■ Realtek RT8111B PCI-E Gigabit LAN
■ USB	■ Embedded 10 * High Speed USB @ 480 Mbit / s
■ Special Features	■ Advanced Power Design that supports the latest Socket-AM2 K8 CPU ■ "IMAGE IT!" System Backup Software and "ProMagicPLUS!" System Recovery System ■ Bi-Turbo Technology , BIOS Back Function, DIY Switch
■ Rear Panel I / O	■ 6 * High Speed USB Connectors @ 480 Mbit / s ■ 1 * PS / 2 Mouse & 1 * PS/2 Keyboard ■ 1 * RJ45 Over USB2.0 Connector ■ 1 * Audio I / O ■ 1 * ESATA Connector
■ Internal I / O	■ 2 * High Speed USB Connectors @ 480 Mbit / s for 4 USB 2.0 Ports ■ CPU / Chassis Fan Connectors ■ 1 * 12V 8-pin ATX Power Connector and 1 * 24-pin ATX Power Connector ■ 1 * Serial header of 9-pin Block ■ 1 * Parallel header of 25-Pin Block ■ CD / AUX Audio in ■ 1 * Floppy Connector ■ 2 * IEEE1394 header
■ BIOS	■ Award 4 MB Flash ROM
■ Form Factor	■ ATX Form Factor