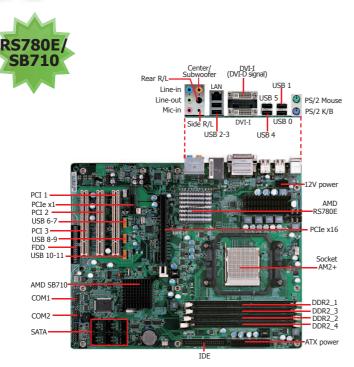
# **AM636-B** ATX



#### **Features**

CHIPSET AMD® RS780E/SB710

CPU AMD® AM2 Athlon™ series

AMD® AM2 Sempron™

AMD<sup>®</sup> AM2 Sempron<sup>™</sup> AMD<sup>®</sup> AM3 Phenom<sup>™</sup> series

MEMORY 4 DDR2 DIMM up to 16GB
EXPANSION 1 PCIe x16, 1 PCIe x1, 3 PCI

DISPLAY OUTPUTS 1 DVI-I, 1 DVI-I (DVI-D signal)

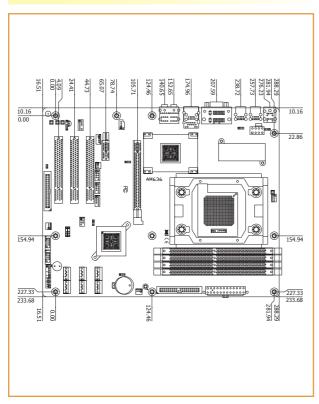
LAN 1 Gigabit LAN port

COM 2 COM
USB 12 USB 2.0
STORAGE 6 SATA 2.0

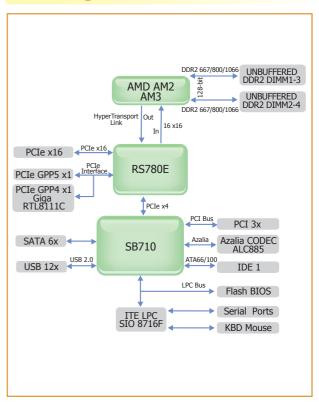
1 IDE 1 FDD

## FC CE ROHS

### **Mechanical Drawing**



#### **Block Diagram**



#### **Specifications**

#### **PROCESSOR**

- Socket 940 AM2+ 65nm for:
- AMD<sup>®</sup> AM2 processors: Athlon series / Sempron<sup>™</sup> AMD<sup>®</sup> AM3 Phenom<sup>™</sup> processors
- HyperTransport 3.0

#### **CHIPSET**

- AMD<sup>®</sup> chipset
  - Northbridge: AMD<sup>®</sup> RS780E
     Southbridge: AMD<sup>®</sup> SB710

#### **SYSTEM MEMORY**

- Four 240-pin DDR2 DIMM sockets
- Supports maximum of 16GB system memory
- Supports DDR2 667/800/1066MHz DIMMs
- Supports dual channel 128-bit wide memory interface
- Supports unbuffered x8 and x16 DIMMs

#### **EXPANSION SLOTS**

- 1 PCI Express x16 slot
- 1 PCI Express x1 slot
- 3 PCI slots

#### **ONBOARD GRAPHICS FEATURES**

- Integrated ATI Radeon HD3200 graphics engine
- Microsoft DirectX 10
- Dual independent displays
  - Completely independent resolution, refresh rates, and display data for the two display paths
- Graphics interface:
  - DVI interface

#### **ONBOARD AUDIO FEATURES**

- Realtek ALC885 HD audio codec
- 7.1-channel audio output
- DAC SNR/ADC SNR of 106dB/101dB
- · Full-rate lossless content protection technology

#### **ONBOARD LAN FEATURES**

- One Realtek RTL8111C PCI Express Gigabit controller
- Supports 10Mbps, 100Mbps and 1Gbps data transmission
- IEEE 802.3 (10/100Mbps) and IEEE 802.3ab (1Gbps) compliant

#### **SERIAL ATA INTERFACE**

- Supports 6 SATA (Serial ATA) interfaces which are compliant with SATA 1.0a specification
- SATA speed up to 3Gb/s
- RAID 0 and RAID 1

#### **REAR PANEL I/O PORTS**

- 1 mini-DIN-6 PS/2 mouse port
- 1 mini-DIN-6 PS/2 keyboard port
- 1 DVI-I port
- 1 DVI-D port
- 1 RJ45 LAN port
- 6 USB 2.0/1.1 ports
- Center/Subwoofer, Rear R/L and Side R/L jacks
- Mic-in, line-in and line-out jacks

#### I/O CONNECTORS

- 3 connectors for 6 additional external USB 2.0/1.1 ports
  1 front audio connector for line-out and mic-in jacks
- 2 connectors for 2 external RS232 serial ports
- 1 CD-in connector
- 1 40-pin IDE connector
- 1 FDD connector
- 6 Serial ATA connectors
- 1 IrDA connector
- 1 CIR connector1 24-pin ATX power connector
- 1 8-pin 12V power connector
- 1 front panel connector
- 4 fan connectors

- Award BIOS
- 8Mbit SPI flash memory

#### **ENERGY EFFICIENT DESIGN**

- ACPI specification 2.0 compliant power management schemes
- Supports S1 and S3
- Wake-On-Events include:
   Wake-On-PS/2 KB/Mouse
- Wake-On-USB KB/Mouse
- Wake-On-LAN
- Wake-On-Ring
- RTC timer to power-on the system
- AC power failure recovery

#### **DAMAGE FREE INTELLIGENCE**

- Monitors CPU/system temperature
   Monitors CPU/DIMM/3.3V/5V/12V/5VSB/1.2V/Vbat voltages
- Monitors CPU/system fan speed
- Read back capability that displays temperature, voltage and fan speed
- Watchdog timer function

#### POWER CONSUMPTION

150.16 W with Athlon series and 2x 1GB DDR2 DIMM

#### **OS SUPPORT**

- Windows XP Professional x86 & SP3 (32-bit)
   Windows XP Professional x64 & SP2 (64-bit)
   Windows 7 Ultimate x86 & SP1 (32-bit)
   Windows 7 Ultimate x64 & SP1 (64-bit)

#### **TEMPERATURE**

0°C to 60°C

#### **HUMIDITY**

• 10% to 90%

#### **DIMENSIONS**

- · ATX form factor
- 305mm (12") x 244mm (9.6")

#### **CERTIFICATION**

- FCC Class B
- RoHS

#### **Packing List**

- 1 AM636-B motherboard
- 1 Bracket mounted with a COM port
- 1 USB cable
- 1 Serial ATA data cable
- 1 Serial ATA power cable
- 1 I/O shield
- 1 QR (Quick Reference)
- 1 CD

#### **Optional Items**

- USB port cable
- COM port cable
- Serial ATA data cable Serial ATA power cable
- IDE cable
- I/O shield