

AM300-BF AMD® M690E microATX Board

PROCESSOR

- AMD S1 socket (638-pin) for:
 - AMD Turion™ 64 X2 Dual-Core
 - AMD Sempron™
- 1GHz HyperTransport (HT) interface speed

CHIPSET

- AMD® chipset
 - Northbridge: AMD® M690E
 - Southbridge: AMD® SB600

SYSTEM MEMORY

- Two 200-pin DDR2 SODIMM sockets
- Supports maximum of 4GB system memory
- Supports up to 800MHz DDR2 SDRAM with maximum memory clock speed of 400MHz
- Supports 16Mx16, 32Mx8, 32Mx16, 64Mx8 and 64Mx16 memory devices
- Supports DDR SDRAM self refresh mechanism
- Supports dynamic CKE and ODT for power conservation

BIOS

- Award BIOS
- 4Mbit LPC flash memory

ENERGY EFFICIENT DESIGN

- ACPI specification 2.0 compliant power management schemes
- Supports S3
- Wakeup event for S3 and S5
- Supports CPU SMM, generating SMI# signal upon power management events
- Supports CLRUN # on PCI power management
- Provides clock generator and CPU STPCLK# control

DAMAGE FREE INTELLIGENCE

- Monitors CPU/system temperature
- Monitors Vcore/VBAT/1.2V/1.8V voltages
- Monitors CPU/2nd/system fan speed
- Read back capability that displays temperature, voltage and fan speed
- Watchdog timer function

ONBOARD GRAPHICS FEATURES

- Integrated ATI Radeon™ X1200 series graphics engine
- Side-port memory interface
 - 64MB dedicated side-port frame buffer memory to be used exclusively for the integrated graphics core (video acceleration)
- Supports maximum resolution of 2560 x 1600 in DVI dual link mode
- Microsoft DirectX 9x
- Supports OpenGL format
- Dual independent displays
 - Completely independent resolution, refresh rates, and display data for the two display paths
- Graphics interfaces:
 - Analog CRT
 - LVDS: dual channel 24-bit
 - DVI: for external digital monitor (shared with PCIE x16 slot)

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

ONBOARD AUDIO FEATURES

- Realtek ALC262 HD audio codec
- 4-channel DAC and 6-channel ADC High Definition Audio Codec with UAA
- High quality differential CD input
- True stereo line level outputs
- S/PDIF-in/out interface
- 2-channel audio output

SERIAL ATA INTERFACE

- Supports four SATA (Serial ATA) interfaces which are compliant with SATA 1.0a specification
- SATA speed up to 3Gb/s
- RAID 0, RAID 1 and RAID 10

IDE INTERFACE

- One IDE connector supports up to two IDE devices (shared with CompactFlash device)
- Supports up to UltraDMA 133Mbps hard drives
- Supports PIO IDE transfers

REAR PANEL I/O PORTS

- 1 mini-DIN-6 PS/2 mouse port
- 1 mini-DIN-6 PS/2 keyboard port
- 2 DB-9 serial ports
- 1 DB-15 VGA port
- 1 DVI-I port (DVI-D signal only)
- 1 RJ45 LAN port
- 4 USB 2.0/1.1 ports
- Mic-in, line-in and line-out

I/O CONNECTORS

- 1 CompactFlash connector (shared with IDE)
- 3 connectors for 6 additional external USB 2.0/1.1 ports
- 1 25-pin parallel connector
- 1 Digital I/O connector
- 1 front audio connector for line-out and mic-in jacks
- 1 CD-in internal audio connector
- 1 S/PDIF-in/out connector
- 4 Serial ATA connectors
- 1 40-pin IDE connector
- 1 floppy connector
- 1 20-pin ATX power connector
- 1 4-pin 12V power connector
- 1 chassis open connector
- 1 front panel connector
- 3 fan connectors

EXPANSION SLOTS

- 1 PCI Express x16 slot - operates at PCIE x8 only (selectable with DVI dual-link)
- 3 PCI slots

TEMPERATURE

- 0°C to 60°C

HUMIDITY

- 10% to 90%

PCB

- 6 layers, microATX form factor
- 24.3cm (9.6") x 24.3cm (9.6")

REAR PANEL I/O PORTS

