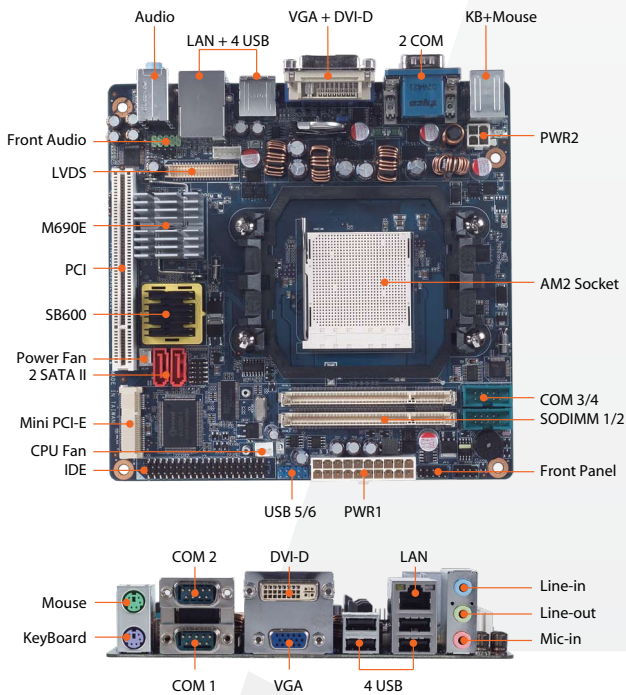


GM3320-690E

AMD M690E AM2/AM2+ Socket Mini-ITX Motherboard



Features

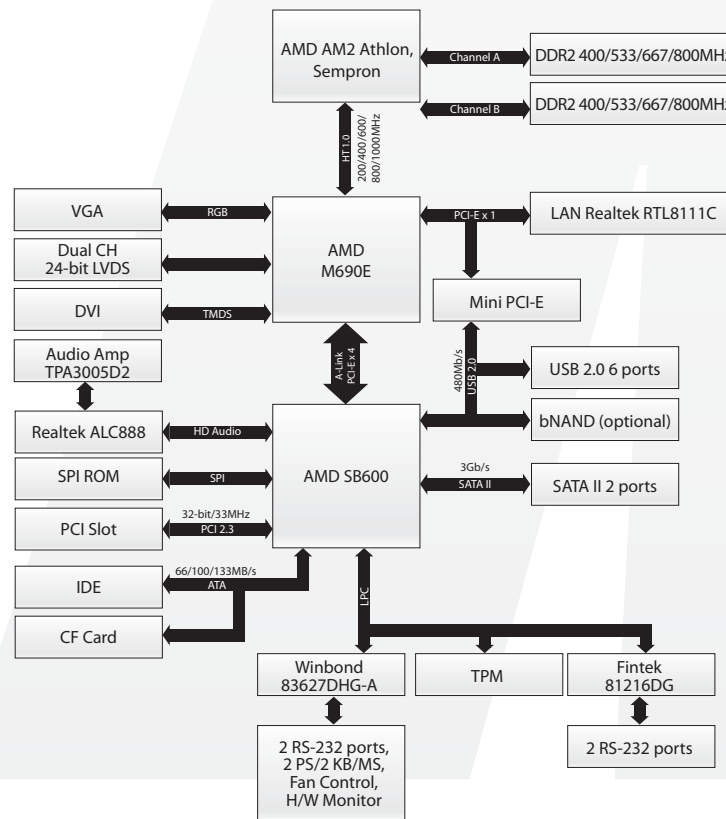
- Socket AM2/AM2+ supports Athlon 64, Athlon 64x2, Sempron Processor
- AMD M690E + SB600 Chipset
- Two 200-pin SODIMM, up to 4GB DDR2 400/ 533/ 667/ 800MHz
- VGA, DVI, dual channel 18/24-bit LVDS
- Realtek ALC888 supports 5.1 + 2 CH Multiple Streaming HD Audio
- Realtek RTL8111C Gigabit LAN
- 1 PCI, 1 Mini PCI-E, 1 bNAND (optional), 1CF
- 2 COM (5V/ 12V), 2 COM, 6 USB, 2 SATA II
- TPM 1.2, 8-bit GPIO, 6W AMP

Specifications

System		I/O	
CPU	Socket AM2/AM2+ supports Athlon 64, Athlon 64x2, Sempron Processor	MIO	1 IDE, 4 COM RS-232 (COM with 5V/12V), 2 SATA II, 1 PS/2 Keyboard, 1 PS/2 Mouse
FSB	1000/800/600/400/200MHz Hyper Transport (HT)	USB	6 USB 2.0
BIOS	Award 8Mb SPI BIOS	GPIO	8-bit General Purpose I/O for 4-bit DI and 4-bit DO
System Chipset	AMD M690E + SB600 Chipset	Display	
I/O Chip	Winbond W83627DHG-A	Chipset	IGP ATI Radeon X1250-base
System Memory	Two 200-pin SODIMM, up to 4GB DDR2 400/533/667/800MHz	Display Memory	Share System Memory, up to 256MB
SSD	One CompactFlash Type I/II socket	Resolution	2048 x 1536 (@ 60Hz)
Watchdog Timer	Reset : 1 to 255 sec/min per step	Dual Display	VGA + DVI, VGA + LVDS or DVI + LVDS supports extend mode
H/W Status Monitor	Monitoring CPU temperature and cooling fan status. Auto throttling control when CPU overheats	LVDS	Dual channel 18/24-bit LVDS
Expansion	1 PCI (PCU Rev.2.3 compliant), 1 bNAND (optional), 1 Mini PCI-E, 1 CF Type I/II	DVI	AMD M690E supports DVI-D
TPM	Onboard TPM 1.2 by Infineon SLB9635	Audio	
Power State	S1, S3, S4	Chipset	AMD SB600
Wake up on LAN/Ring	Supports LAN and Ring modes (COM w/o power when WOR)	Audio Codec	Realtek ALC888 HD Audio Codec supports 5.1 + 2 CH multiple streaming HD Audio
SmartFan Control	Supports 3 modes (Silent/ Optimal/ Performance)	Audio Interface	Line-in, Line-out, Mic-in
		Audio Amplifier	3+3W, TPA3005D2 Stereo
		Ethernet	
		LAN	Realtek RTL8111C PCI-E Gigabit Ethernet Controller

Mini-ITX Motherboard

Block Diagram



Back Panel I/O Port

- 1 PS/2 Keyboard + Mouse
- 2 COM RS-232 with 5V/12V Power
- 1 VGA Port
- 1 DVI Port
- 4 USB 2.0/1.1
- 1 LAN RJ45 Port
- Audio I/O (3 jacks)

Internal I/O Connector

- 1 USB Connector supports 2 USB Ports
- 2 7-pin SATA II Connectors
- 1 40-pin IDE Connector
- 1 Front Panel Audio Header
- 1 System Panel Connector
- 1 CPU Fan Connector (supports DC Fan)
- 1 System Fan Connector
- 1 Digital I/O Header
- 1 LVDS Connector
- 2 Standard COM Headers (2 x 5)
- 1 LVDS Backlight Power Connector
- 1 S/PDIF Header
- 1 Amplifier

Mechanical & Environmental

Power Requirement	+12V	+5V	+3.3V	5VSB
	2.6A	1.28A	2.89A	0.66A

(AMD Athlon 64 2000+)

Power Type ATX

Power Connector 1 20-pin ATX Power Connector
1 4-pin ATX 12V Power Connector

Operating Temperature 0 to 60°C (32 to 140°F)

Operating Humidity 0% to 90% relative humidity, non-condensing

Size (L x W) 6.69" x 6.69" (170 mm x 170 mm)

Weight 0.88lbs (0.4Kg)