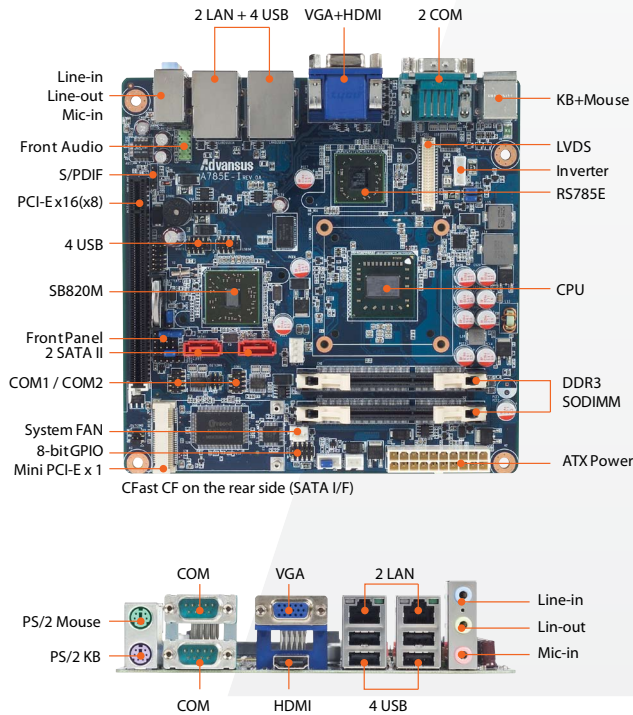


# A785E-I

## AMD Turion/Athlon II Neo Processors ASB2 Mini-ITX Motherboard



### Features

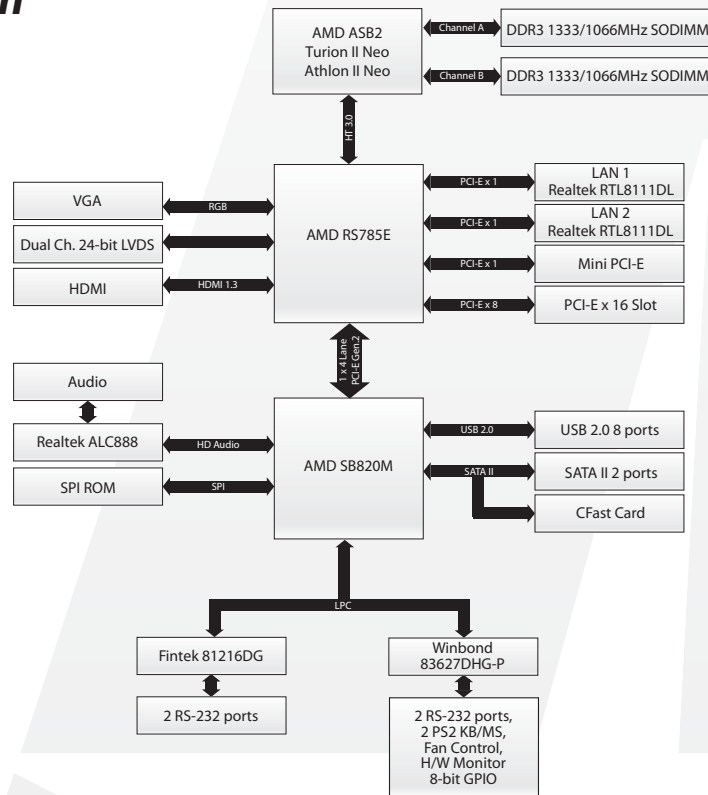
- ASB2 BGA Low Power Turion/Athlon II Neo Processors up to 2.2GHz
- AMD RS785E + SB820M Chipset
- ATI Radeon HD4200 graphics engine supports HDMI 1.3, DirectX 10.1, OpenGL 2.0, H.264
- Two 204-pin DDR3 800 SODIMM, up to 4GB
- Realtek ALC888 5.1 Ch. HD Audio
- Dual Realtek RTL8111DL GbE LAN
- Multiple display I/O supports versatile dual display functions : HDMI, VGA, 24-bit dual Ch. LVDS
- 1 Mini PCI-E, 1 PCI-E x16 Gen. 2 (x8), 1 CFast connector
- 2 SATA 3.0 support RAID 0, 1
- 4 COM (2 Powered COM), 8 USB 2.0
- 8-bit GPIO

## Specifications

System	
<b>CPU</b>	AMD Turion/Athlon II Neo ASB2 BGA Processors
<b>BIOS</b>	AMI 8Mb SPI
<b>System Chipset</b>	AMD RS785E + SB820M
<b>I/O Chip</b>	Winbond W83627DHG-P
<b>Memory Type</b>	Two 204-pin SODIMM sockets support up to 4GB DDR3 1066/1333 MHz SDRAM
<b>Watchdog Timer</b>	Reset: 1 to 255 sec/min per step
<b>H/W Status Monitor</b>	Monitoring temperature, voltage and cooling fan status. Auto throttling control when CPU overheats.
<b>Expansion</b>	1 PCI-E x16 Gen.2 (x8), 1 Mini PCI-E, 1 CFast CF
<b>Power State</b>	S1, S3, S4, S5
<b>Wake up on LAN or Ring</b>	WOL & WO
<b>SmartFan Control</b>	Yes
I/O	
<b>MIO</b>	4 COM RS-232, 2 SATA, 1 HDMI, 1 VGA, 2 LAN, 1 LVDS, 1 Backlight
<b>USB</b>	8 USB 2.0 (4 Rear, 4 Internal)
<b>GPIO</b>	8-bit General Purpose I/O for 4-bit DI and 4-bit DO

Display	
<b>Chipset</b>	AMD 785E/820M
<b>Display Memory</b>	UMA 512 + Sideport 128MB
<b>Dual Display</b>	VGA+LVDS, VGA+HDMI, HDMI+LVDS
<b>VGA</b>	Onboard, max 2560 x 1600@75Hz
<b>HDMI</b>	Onboard, max 1920 x 1080@60Hz
<b>LVDS</b>	Onboard, dual channel 24-bit LVDS, max 1920 x 1200@60Hz
<b>LVDS Backlight</b>	Yes, PWM Control
Audio	
<b>Audio Codec</b>	Realtek ALC888, 5.1 Ch. HD Audio
<b>Audio Interface</b>	Line-in, Line-out, Mic-in, S/PDIF, Front Audio Header
Ethernet	
<b>LAN</b>	Dual Realtek RTL8111DL GbE LAN

## Block Diagram



### Back Panel I/O Port

- 1 VGA Port
- 1 HDMI Port
- 2 COM RS-232 Ports
- 4 USB 2.0/1.1 Ports
- 2 LAN RJ45 Ports
- 1 Audio I/O (3 Jacks)

### Internal I/O Connector

- 2 USB Connectors support 4 USB Ports
- 2 COM RS-232 Connectors
- 2 SATA Connectors
- 1 Front Audio
- 1 CPU Fan Connector (3-pin)
- 1 System Fan Connector (3-pin)
- 1 GPIO
- 1 LVDS Connector
- 1 LVDS Inverter Power Connector

### Mechanical & Environmental

<b>Power Requirement</b>	+12V	+5V	+3.3V	5VSB
	1.43A	2.87A	1.84A	236mA
<b>Power Type</b>	ATX (Supports AT mode)			
<b>Power Connector</b>	1 20-pin ATX Power Connector			
<b>Operating Temperature</b>	0 to 60°C (32 to 140°F)			
<b>Operating Humidity</b>	0% to 90% relative humidity, non-condensing			
<b>Size (L x W)</b>	6.69" x 6.69" (170mm x 170mm)			
<b>Weight</b>	1.03lbs (0.47Kg)			