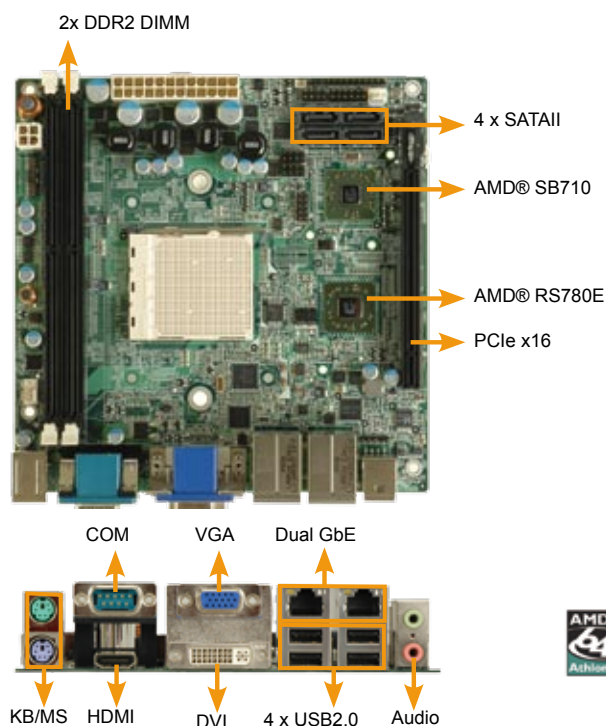


KINO-780AM2

Mini-ITX SBC with Socket AM2 for AMD® Althon™64, Althon™64 X2, Sempron CPU, VGA/DVI/HDMI, SPDIF-out, Dual PCIe GbE, USB2.0, SATAII



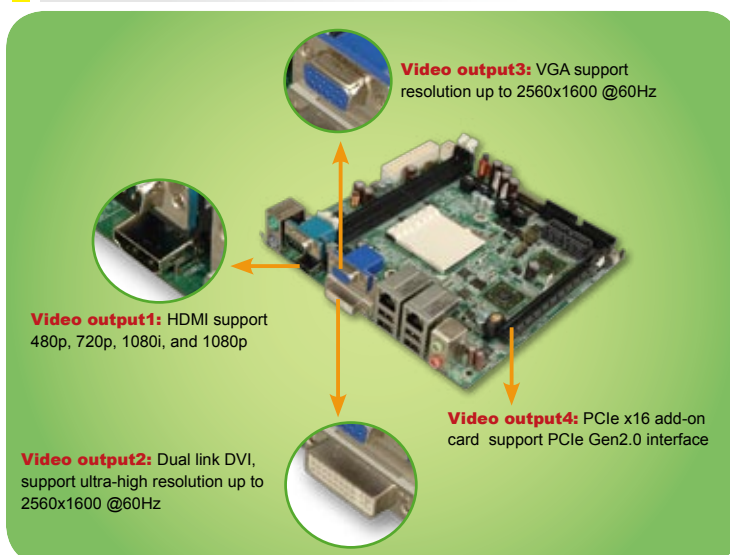
Specifications

- ◆ CPU
AMD® Socket AM2 Althon™64, Althon™64 X2, Sempron CPU with 2600MHz Hyper Transport 3.0 support
- ◆ System Chipset
AMD® RS780E + SB710
- ◆ BIOS
AMI BIOS
- ◆ Memory
Two 240-pin 667/800 DDR2 dual-channel SDRAM DIMMs supported (system max. 4GB)
- ◆ Ethernet
Dual Realtek PCIe RTL8111CP GbE Chipsets
- ◆ I/O Interface
8 x USB2.0 (4 on rear IO, 4 by pin header)
4 x SATAII
1 x RS-232
1 x PS2 for KB/MS
- ◆ Graphic
ATI Radeon HD3200 Graphic core for DX10 support
- ◆ Display Output
VGA integrated in the AMD® RS780E (Max. resolution 2560x1600@32bpp)
Support HDMI resolution up to 1080p integrated in the AMD® RS780E
Dual link DVI-D integrated in the AMD® RS780E (Resolution 2560x1600)
- ◆ Expansion
1x PCIe x16
- ◆ Digital I/O
8-bit digital I/O, 4-bit input/ 4-bit output
- ◆ Super IO
Fintek F71859
- ◆ Audio
Realtek ALC888 HD Codec
- ◆ Watchdog Timer
Software Programmable support 1~255 sec. System reset
- ◆ Power Supply
ATX power supply
- ◆ Power Consumption
5V@4.8A, 12V@0.22A, Vcore_12V@12.69A, 3.3V@0.54A (AMD® Phenom X4 9950 CPU)
- ◆ Temperature
Operation: 0°C ~ 60°C (32°F ~ 140°F)
- ◆ Humidity
Operation: 5% ~95% non-condensing
- ◆ Dimension
170mm x 170mm
- ◆ Weight
GW: 1000g / NW: 450 g

Packing List

- 1 x KINO-780AM2 single board computer
- 4 x SATA cable (P/N: 32000-062800-RS)
- 1 x I/O shielding (P/N: 45014-0028C0-00-RS)
- 1 x Mini Jumper Pack
- 1 x Utility CD
- 1 x QIG(Quick Installation Guide)

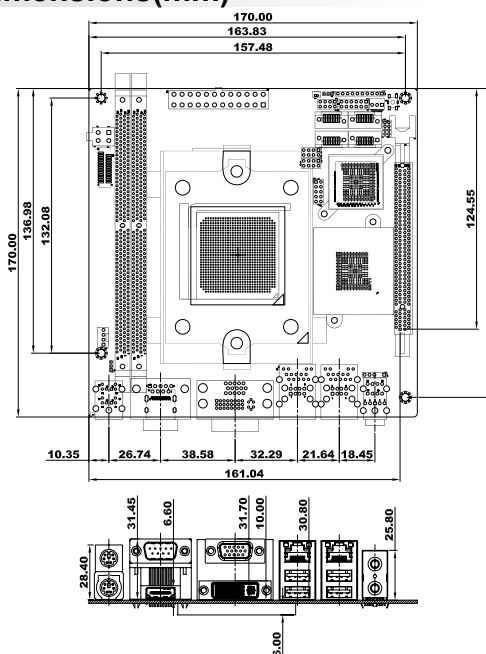
ON board Dual display independent by VGA+DVI-D, VGA+HDMI:



Features

1. AMD® RS780E integrated Radeon HD3200 graphic core for UVD, MPEG2, and H.264/AVC Full HD Decoder
2. DDR2 667/800MHz memory dual-channel DDR2 DIMMs support up to 4GB
3. Dual Display support by VGA + DVI-D/HDMI + VGA
4. AMD® Socket AM2 Althon™64, Althon™64 X2, Sempron CPU with 2600MHz Hyper Transport 3.0 support
5. ATI Radeon HD3200 Graphic core for DX10 support

Dimensions(mm)

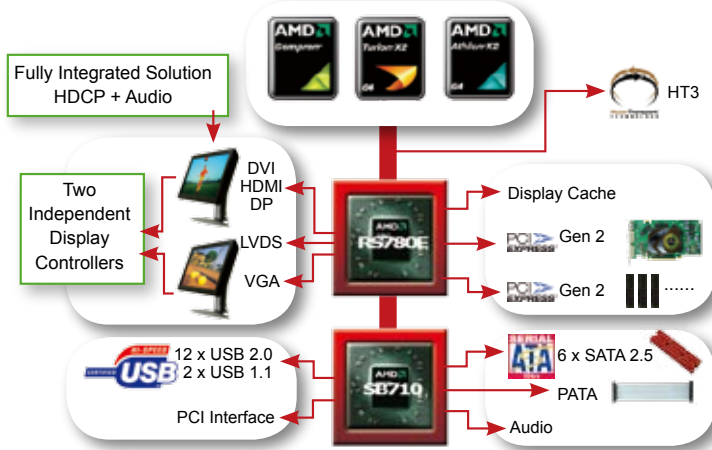


Ordering Information

| Part No. | Description |
|-----------------|--|
| KINO-780AM2-R10 | Mini-ITX SBC with Socket AM2 for AMD® Althon™64, Althon™64 X2, Sempron CPU, VGA/DVI/HDMI, SPDIF-out, Dual PCIe GbE, USB2.0, SATAII |
| CB-USB02-RS | Dual USB cable |
| 32100-088600-RS | SATA Power cable |
| CF-AM2-RS | Socket AM2 CPU cooler |

RS780E/SB710 Introduce

2009 New Platform

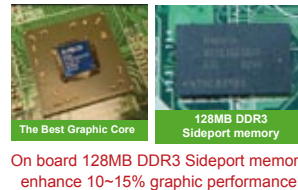
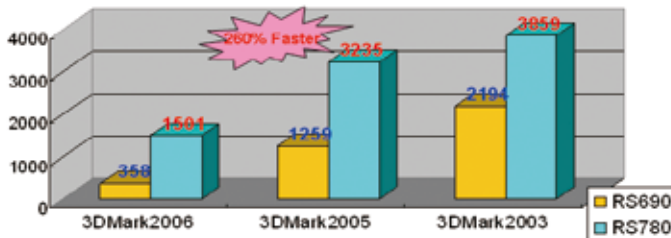


RS780E key advantage over M690E/T

| Feature | RS780E/T+ SB710 | M690E/T+ SB600 |
|----------------------------|---|-------------------|
| HyperTransport™ Interface | HT3 | HT1 |
| Graphic Core | Radeon 3200 | Radeon 1250 |
| DirectX® Support | DX10 | DX9 |
| Video Decode | UVD – VC-1, MPEG2, and H.264/AVC Full HD Decode | MPEG2 Decode Only |
| Side-port Memory Interface | DDR2-800, DDR3-1066 | DDR2-667 |
| HDMI/DVI | 1080p | 1080i |
| PCIe® Graphics | 1 x16 or 2 x8 Gen 2 | 1 x8 Gen 1 |
| Display Port | up to 2 | NA |
| Max Resolution VGA | 2560x1600@32bpp | 2048x1536@32bpp |
| USB Ports/Controller | 12x USB 2.0 + 2x USB 1.0 | 8x USB 2.0 |
| SATA | 6x SATA 2.5 | 4x SATA 2.0 |
| eSATA | Supported | NA |

The Best Graphic Core

AMD RS780E integrated Radeon HD3200 graphic core supports UVD – VC-1, MPEG2, and H.264/AVC Full HD decoder is 260% faster than AMD RS690 series in Benchmark performance testing



Test configuration:
AMD Phenom 9500 2.2GHz CPU,
2GB DDR2-800, WD 320GB HDD

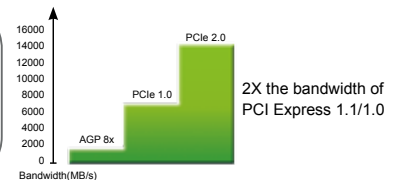
| Resolution | Benchmark | RS690 | RS780 |
|--------------|------------|-------|-------|
| 1280x1024x32 | 3DMark2006 | 358 | 1501 |
| 1024x768x32 | 3DMark2005 | 1259 | 3235 |
| 1024x768x32 | 3DMark2003 | 2194 | 3859 |

Next Generation PCIe Gen2.0 Support



PCI Express Gen. 2.0 Benefits

| | |
|---|--|
| 2X the bandwidth of PCI Express 1.1/1.0 | Maximum bandwidth of 5.0GT/s vs. 2.5GT/s of PCI Express |
| Greater flexibility & reliability in design | Backwards Compatible with 1.0 & 1.1 Power and performance dynamically manage |
| Headroom | Large bandwidth accessible for game developers |
| Transition | Graphics vendors transitioning in 2007 Expect across all segments in 2008 |



Value-added Display output

Dual link DVI interface

KINO-780AM2 high performance SBC equipped with the Dual link DVI interface which support resolution up to 2560x1600 @60Hz, video performance is equal to high-end video cards.



The 30-inch widescreen monitor offers a massive viewing area that supports multi-window



Dual link DVI benefit

- Support WQXGA display
- Support ultra-high resolution up to 2560x1600 @60Hz
- Single-link DVI: 1600x1200 @60Hz with standard timings, and 1920x1200 @60Hz with reduced blanking timings.
- Dual-link DVI: 2560x1600 @60Hz

New Multimedia Interface

KINO-780AM2 high performance SBC equipped with the High-Definition Multimedia Interface (HDMI) which is a compact audio/video interface for transmitting uncompressed digital data delivering high-definition video support 1080p resolution which equates to 1,920x1,080 pixels, it also supports industry standard EIA-861B video modes including 480p, 720p, 1080i, and 1080p



| Resolution | Resolution | Resolution |
|-----------------------------------|------------------------------------|--|
| 480i 640x480 307,200 pixels | 720p 1280x720 921,600 pixels | 1080p 1920x1080 2,073,600 pixels |



720p
1,280x720 pixels



1080p
1,920x1,080 pixels