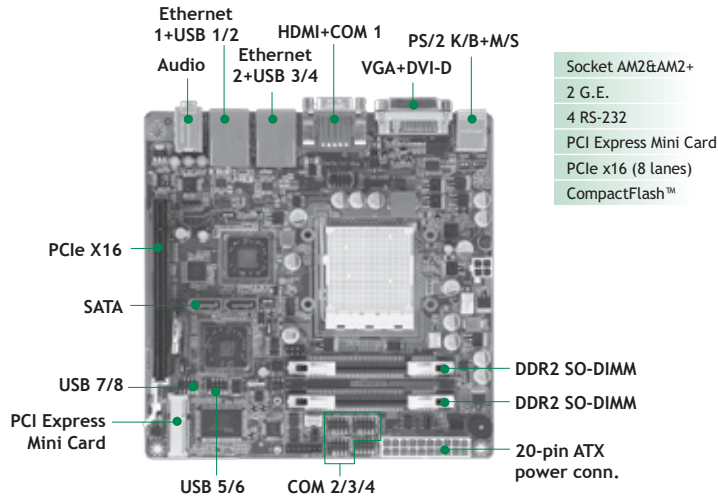


MANO110

AMD64 Athlon AM2&AM2+ Mini ITX SBC with HDMI, DVI-D, VGA, 4 COM and 8 USB



System

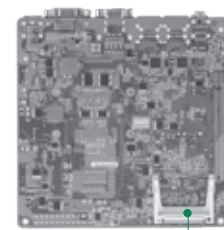
CPU	AM2/AM2+ socket for AMD Athlon™ X2/ Turion™ X2/ Athlon™ processors
System Memory	2 x 200-pin SO-DIMM supports DDR2-800 max. up to 4GB
Chipset	AMD R5780E + SB710
BIOS	AMI
SSD	1 x CompactFlash™ type-II (optional)
Watchdog Timer	255 levels, 1-255 sec.
Expansion Interface	1 x PCIe x16 (8 lanes) 1 x PCI Express Mini Card
Battery	Lithium 3V/220 mAH
Power Requirements	AMD Athlon™ 3100+ 2.0 GHz, 2GB DDR2 Max. RMS: +5V_SBY @ 0.375A, +3.3V @ 1.431A, +5V @ 1.539A, +12V @ 1.253A, -12V @ 0.054A
Size	170 x 170 mm
Board Thickness	1.6 mm
Temperature	0° C ~ +60° C (32° F ~ 140° F), operation
Relative Humidity	10% ~ 95% relative humidity, non-condensing

I/O

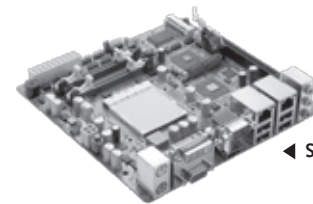
MIO	1 x PS/2 keyboard 1 x PS/2 mouse 4 x RS-232; with +5V/+12V powered
SATA	2 x SATA-300
Hardware Monitoring	Detect CPU/system temperature, voltage and support Smart Fan control
Ethernet	2 ports as 10/100/1000Mbps support Wake-on-LAN, RPL/PXE Boot ROM with Realtek RTL8111B
Audio	HD Codec audio as MIC-in/Line-in/Line-out/speaker-out with Realtek ALC888
USB	8 x USB 2.0
SMBus	System Management Bus for advanced monitoring/control interface
Digital I/O	8 channels IN/OUT programmable

Features

- AMD64 embedded Athlon AM2&AM2+ processor
- With high graphics performance via AMD RS780E chipset
- HDMI display output
- 4 COM ports for transaction terminal applications
- 8 USB 2.0 ports



CF (optional)



Display

Chipset	ATI Radeon™ HD 3200 Graphics
Memory Size	Max. up to 512 MB
Display Interface	1 x VGA 1 x HDMI 1 x DVI-D

Packing List

Standard			
Quick installation guide, user's manual/utility CD, cable, CPU cooler			
Cable			
Part Number	Description	E38M110100 Qty	E38M110101 Qty
SATA cable		1	1
COM port x 2 cable		1	

Ordering Information

Standard	
MANO110HDGGA w/ CPU cooler (P/N: E38M110101)	AMD64 Athlon AM2&AM2+ Mini ITX SBC with HDMI, DVI-D, VGA, 2 10/1000/1000Mbps Ethernet, HD audio, 4 COM and 8 USB ports
MANO110HDGGA w/o CPU cooler (P/N: E38M110100)	AMD64 Athlon AM2&AM2+ Mini ITX SBC with HDMI, DVI-D, VGA, 2 10/1000/1000Mbps Ethernet, HD audio, 4 COM and 8 USB ports (Please order with 5078M110000E)
MANO110 CPU cooler (P/N: 5078M110000E)	MANO110 CPU cooler