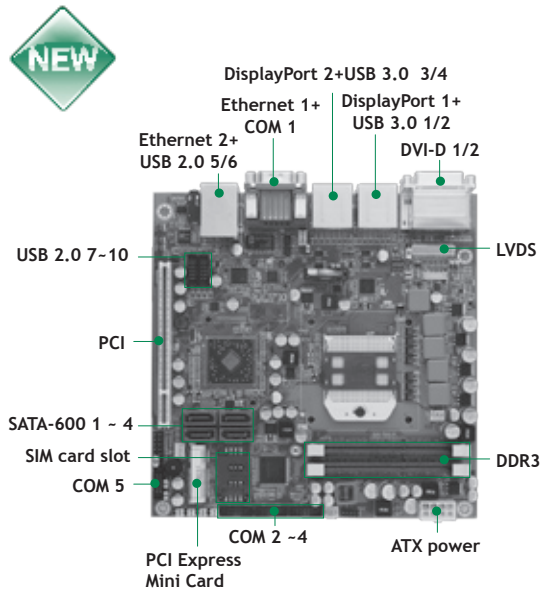


# MANO111

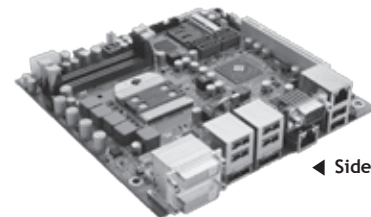
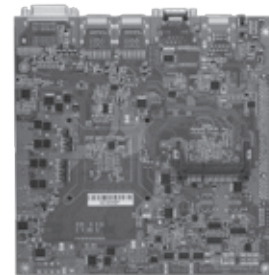
AMD Embedded R-Series APU Mini ITX SBC with AMD A75 PCH, DDR3, USB 3.0, LVDS/DisplayPort/DVI-D and Dual LAN



AMD R-Series APU  
LVDS/DP/DVI-D  
4 USB 3.0  
4 SATA-600  
CFast™  
2 G.E.  
TPM

## Features

- FS1r2 socket AMD Embedded R-Series APU
- AMD A75 PCH
- Integrated graphics AMD Radeon HD 7 series
- DDR3 Dual channel SO-DIMM 1333/1600 max. up to 16 GB
- 4 SATA-600 support RAID 0, 1, 5, 10
- 4 USB 3.0 supported
- 3 independent displays
- DisplayPort 2 supports multi-stream
- TPM 1.2 supported



## System

CPU	FS1r2 socket AMD Embedded R-Series APU
System Memory	2 x 204-pin SO-DIMM DDR3-1333/1600 max. up to 16 GB
Chipset	AMD A75 PCH
BIOS	AMI
SSD	CFast™
Watchdog Timer	255 level, 1 ~ 255 sec
Expansion Interface	PCI, PCIe Mini Card, SIM card
Battery	Lithium 3V/220 mAh
Power Requirements	TBD
Size	170 x 170 mm
Board Thickness	1.6 mm
Temperature	0°C ~ +60°C (32°F ~ 140°F), operation
Operation Humidity	10% ~ 95% relative humidity, non-condensing

## I/O

MIO	1 x RS-232/422/485 (COM 1); with +5V/+12V. 4 x RS-232 (COM 2-5); with +5V/+12V.
SATA	4 SATA-600 with RAID 0, 1, 5 and 10
Hardware Monitoring	Detect CPU/system temperature, voltage and support Smart fan contro
Ethernet	1st port as 10/100/1000Mbps supports wake-on-LAN, PXE with Realtek RTL8111E. 2nd port as 10/100/1000Mbps supports wake-on-LAN, PXE and DUSH with Realtek RTL8111DP.
Audio	Supports 2.1channel audio lineout via HD Codec ALC662
USB	4 x USB 3.0 7 x USB 2.0 (USB 11 on the PCI Express Mini Card)
TPM	1.2
SMBus	N/A
Digital IO	4 Channels IN & 4 Channels OUT

## Display

Chipset	Integrated Gfx (AMD Radeon HD7000 series)
Memory Size	Shared memory
LCD Interface	18/24 bit Dual channel LVDS
Display Interface	1 x LVDS 2 x DisplayPort 2 x DVI-D

## Packing List

Standard
Quick installation guide, user's manual/utility CD, cable

## Ordering Information

Standard
MANO111 Mini ITX SBC with AMD R-Series APU, DDR3, USB 3.0, LVDS/DisplayPort/DVI-D and 2 10/100/1000Mbps

SBC Services and Solutions

System on Modules

Embedded SBCs > EPIC

Embedded SBCs > 3.5" Capa

Embedded SBCs > Nano-ITX

Embedded SBCs > Pico-ITX

Embedded SBCs > PC/104

Industrial Motherboards

Slot CPU Cards

Accessories

Appendix