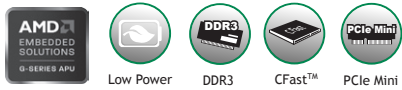
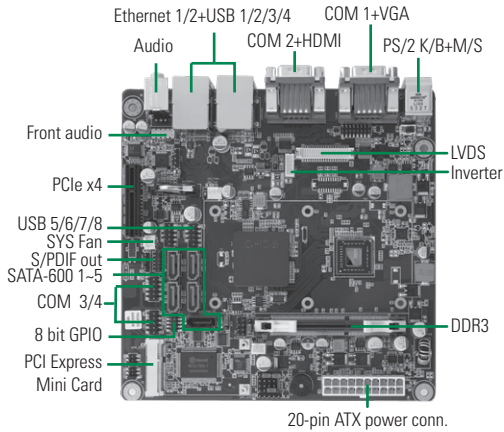


# MANO120

AMD G-Series APU Mini ITX SBC with AMD A55E FCH, HDMI/VGA/LVDS, Dual LANs and SATA-600



## System

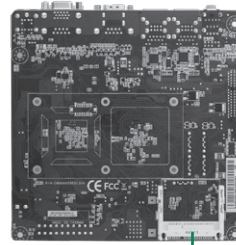
CPU	AMD G-Series APU T56N 1.65 GHz dual core onboard
System Memory	1 x 204-pin SO-DIMM supports DDR3-1066/1333 max. up to 4 GB
Chipset	AMD A55E FCH
BIOS	AMI EFI 16Mb SPI
SSD	1 x CFast™
Watchdog Timer	255 levels, 1~255 sec.
Expansion Interface	1 x PCIe x4 slot 1 x PCIe Mini Card 1 x CFast™
Battery	Lithium 3 V/ 220 mA
Power Requirements	+5V @ 1.65A, +12V @ 1.7A, -12V @ 0.06A, +5VSB @ 0.09A, +3.3V @ 0.41A
Size	170 x 170 mm
Board Thickness	1.6 mm
Temperature	0° ~ +60°C (32°F ~ 140°F), operation
Relative Humidity	10% ~ 95% relative humidity, non-condensing

## I/O

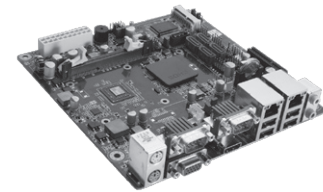
MIO	1 x PS/2 keyboard 1 x PS/2 mouse 4 x RS-232 (with 2 powered COM)
SATA	5 x SATA-600 (Port 5 supports SATA DOM)
Hardware Monitoring	Detect CPU/system temperature, voltage and support Smart fan control
Ethernet	2 ports as 10/100/1000 Mbps support Wake-on-LAN, PXE Boot ROM with Realtek RTL8111DL
Audio	HD Codec audio as MIC-in/Line-out 2 CH support multiple streaming with Realtek ALC892 Speaker-out 3W x 2 with TPA3005D2 amplifier Front Audio pin header
USB	8 x USB 2.0
SMBus	System Management Bus for advanced monitoring/control interface
Digital I/O	4 channels IN & 4 channels OUT

## Features

- AMD G-Series APU T56N 1.65 GHz
- 1 DDR3-1066/1333 MHz max. up to 4 GB
- 18 bit single channel LVDS
- Dual display combination with VGA, HDMI and LVDS
- PCIe x4 slot and PCI Express Mini Card
- SATA-600 supported
- CFast™ supported
- AT/ATX mode supported



▲ Rear view CFast



▲ Side view

## Display

Chipset	AMD Radeon™ HD6320 Graphic engine
Memory Size	2 GB
Display Interface	1 x HDMI 1 x VGA 1 x LVDS

## Packing List

User's manual/utility CD, SATA cable and I/O bracket

## Ordering Information

Standard	
MANO120VGA-T56N	AMD G-Series APU T56N Mini ITX SBC with A55E FCH, LVDS/HDMI/VGA, 2 10/100/1000Mbps Ethernet, HD audio, 4 COM, 8 USB ports and CFast