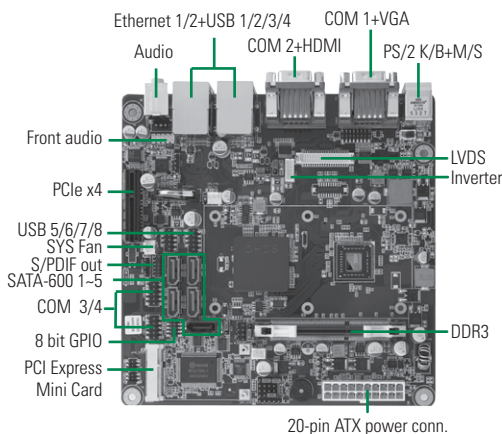


# MANO120

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

## Features

- AMD G-Series APU T56N 1.65 GHz
- AMD A55E FCH
- 1 DDR3-1066/1333 SO-DIMM, up to 4GB
- 18 bit single channel LVDS
- VGA/HDMI/LVDS with dual-view supported
- PCIe x4 slot and PCI Express Mini Card
- SATA-600
- AT/ATX mode supported

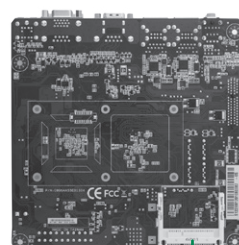


## Core System

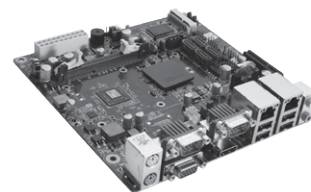
|                     |   |
|---------------------|---|
| CPU                 | AMD G-Series APU T56N 1.65 GHz dual core onboard                        |
| System Memory       | 1 x 204-pin DDR3-1066/1333 SO-DIMM, up to 4GB                           |
| Chipset             | AMD A55E  |
| BIOS                | AMI EFI 16Mb SPI  |
| SSD                 | 1 x CFast™  |
| Watchdog Timer      | 255 levels, 1~255 sec.  |
| Expansion Interface | 1 x PCIe x4 slot<br>1 x PCI Express Mini Card<br>1 x CFast™             |
| Battery             | Lithium 3 V/ 220 mAH  |
| Power Requirements  | +5V @ 1.65A, +12V @ 1.7A, -12V @ 0.06A,<br>+5VSB @ 0.09A, +3.3V @ 0.41A |
| 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 & mouse<br>4 x RS-232 (with 2 powered COM)   |
| SATA                | 5 x SATA-600   |
| 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<br>Speaker-out 3W x 2 with TPA3005D2 amplifier<br>Front Audio pin header |
| USB                 | 8 x USB 2.0  |
| SMBus               | System Management Bus for advanced monitoring/control interface  |
| Digital I/O         | 8 channels (4-IN & 4-OUT)  |



▲ Rear view CFast



▲ Side view

## Display

|                   |                                   |
|-------------------|-----------------------------------|
| Chipset           | AMD Radeon™ HD6320 graphic engine |
| Memory Size       | 2GB                               |
| Display Interface | 1 x HDMI<br>1 x VGA<br>1 x LVDS   |

## Packing List

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

## Ordering Information

|   |   |
|---|---|
| <b>Standard</b>                             |   |
| MANO120VGA-RC with cooler (P/N: E38M120100) | Mini-ITX SBC with AMD G-Series APU T56N, A55E FCH, LVDS/HDMI/VGA, 2 GbE LANs, HD audio, 4 COM, 8 USB ports and CFast™ |