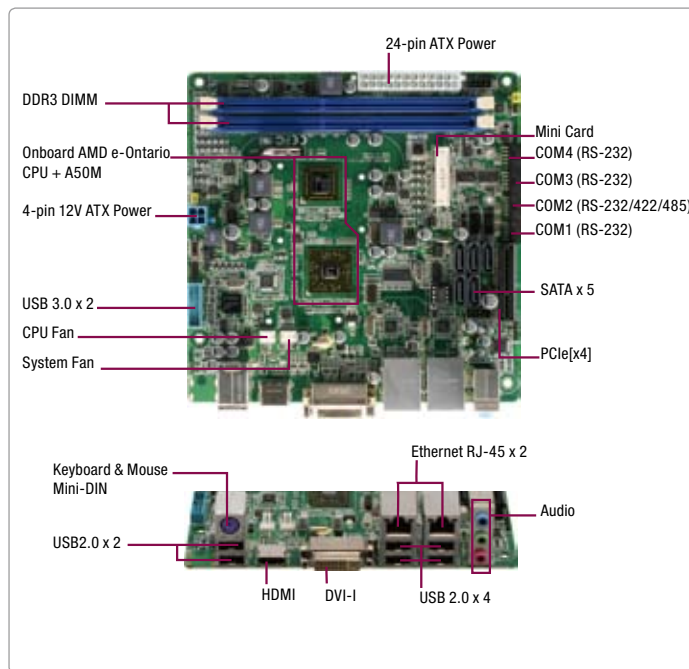


# EMB-A50M

Embedded Motherboard with Onboard AMD Fusion APU Processor

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Embedded & Industrial Motherboards



## Features

- Onboard AMD CPU, Fusion APU T56N/ T44R Dual-Core/ Single Core Processor
- AMD Hudson M1/ A50M
- 240-pin DDR3 800/1066 DIMM x 2, Unbuffered Memory, Max. 8 GB (Supports Up To DDR3 1333 For T56N APU)
- Gigabit Ethernet x 2
- Integrated AMD Radeon™ HD 6310 (6250 for T44R)
- DVI-I, HDMI
- HD 5.1CH Audio
- SATA 6.0Gb/s x 5
- USB3.0 x 2, USB2.0 x 10, COM x 4
- PCI-Express 2.0 [x4] x 1, Mini PCIe (Half size) x 1, 8-bit Digital I/O



## Specifications

System	
Form Factor	Mini-ITX
Processor	Onboard AMD T56N Dual Core 1.6GHz (Cooler) /T44R Single Core 1.2GHz (Fanless) Processor
System Memory	240-pin DIMM x 2, DDR3 800/1066 Non-ECC, Unbuffered Memory, Max. 8 GB (Supports Up To DDR3 1333 For T56N APU)
Chipset	AMD Hudson M1/ A50M
I/O Chipset	ITE IT8771E
Ethernet	Realtek 8111E for 10/1000/1000Base-TX, RJ-45 x 2
BIOS	AMI BIOS, 32 Mb Flash ROM, PnP, DMI 2.0, WfM 2.0, ACPI 2.0a, SM BIOS 2.6
Wake On LAN	Yes
Watchdog Timer	System reset : 1~255 steps programmable
H/W Status Monitoring	Supports system temperature, voltage, and cooling fan status monitoring
Expansion Interface	PCI-Express 2.0 [x4] x 1, Mini PCIe (Half size) x 1
Power Requirement	Standard 24pin ATX connector x 1, 4-pin 12V ATX connector x 1
Power Consumption (Typical)	AMD G-T56N 1.6GHz, DDR3 1333 4GB 0.65@+5V; 1A@+12V, 0.1A@+3.3V
Board Size	6.7"(L) x 6.7"(W)(170mm x 170mm)
Gross Weight	1.1 lb (0.5 Kg)
Operation Temperature	32 °F ~ 140 °F (0 °C ~ 60 °C)
Storage Temperature	-40 °F ~ 176 °F (-40 °C ~ 80 °C)
Operation Humidity	0% ~ 90% relative humidity, non-condensing
MTBF	70,000
Display	
Chipset	Integrated AMD Radeon™ HD 6310 (6250 for T44R) graphics engine
Memory	Shared system memory up to 512MB
Resolutions	Up to 1920 x 1200 for HDMI/DVI output resolution
Video Interface	HDMI, DVI-I
I/O	
Storage	SATA 6.0Gb/s x 5 support AHCI mode
Serial Port	RS-232 x 3 RS-232/422/485 x 1
USB	USB3.0 x 2, USB2.0 x 10
Digital I/O	Supports 8-bit (Programmable)
PS/2 Port	Keyboard/Mouse x 1
Audio	Line-in, Mic-in, Line-out

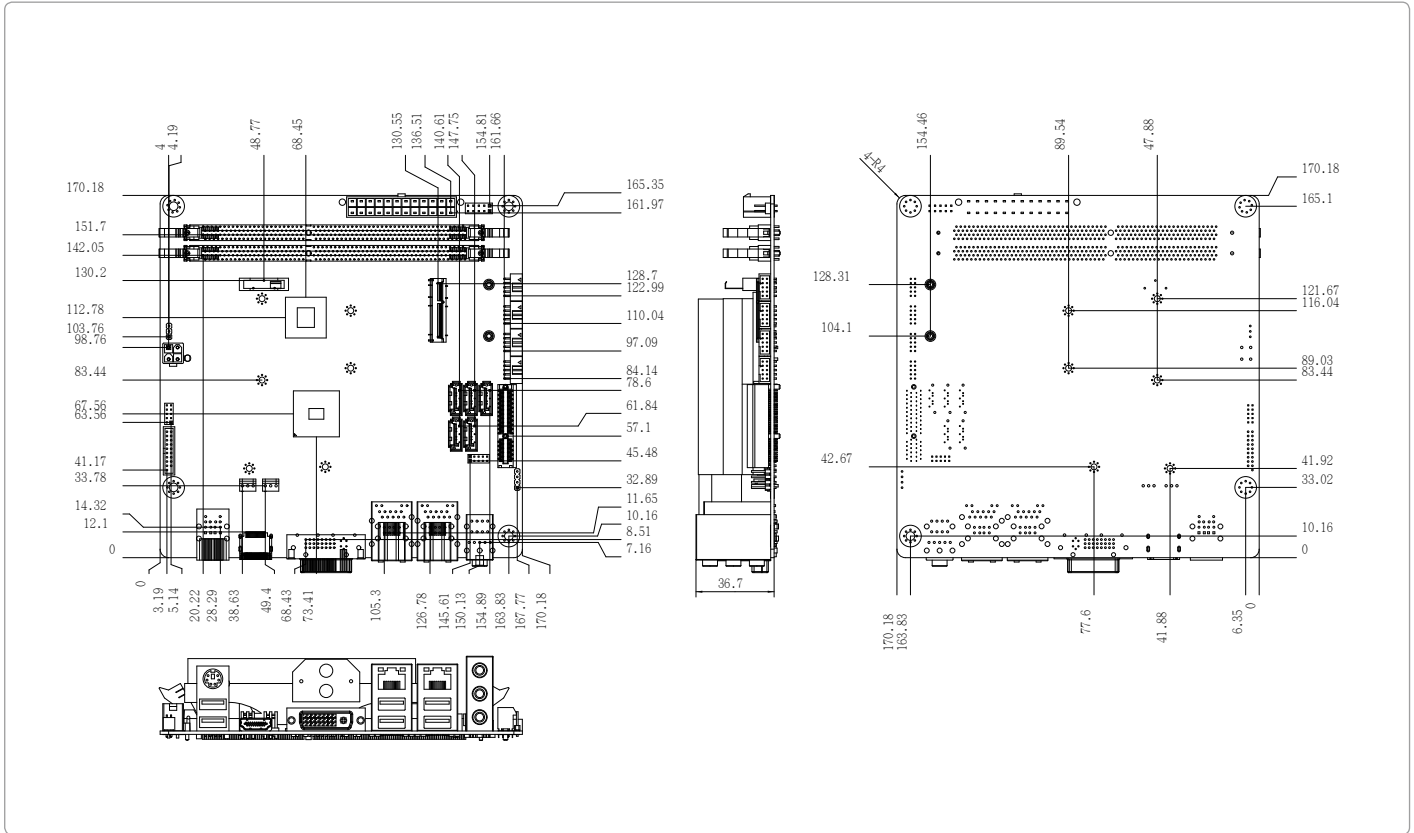
## Packing List

- 1709070800  
SATA Cable
- M20A50M000  
I/O Shield
- Product CD
- EMB-A50M

# EMB-A50M

## Dimension

Unit: mm



## Ordering Information

Part Number	CPU	RAM	Fan/Fanless	Display	Storage	LVDS	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	Temp.
TF-EMB-A50M-A10	AMD T56N	DIMM	Fan	DVI-D/HDMI	SATA3 x 5	—	GbE x 2	10	3	1	Mini PCIe x 1, PCI-E[x4] x 1	ATX	0°C ~ 60°C
TF-EMB-A50M-A10-01	AMD T44R	DIMM	Fanless	DVI-D/HDMI	SATA3 x 5	—	GbE x 2	10	3	1	Mini PCIe x 1, PCI-E[x4] x 1	ATX	0°C ~ 60°C