

ITX-a55E3

AMD Fusion G-T56N/G-T40N Embedded Mini-ITX Motherboard



Features

- **Ultra Low Profile (16.8mm Height)**
- Dual Gigabit Ethernet Ports
- Soldered Onboard PenMount Touch Controller
- Support Dual Independent Displays
- Additional PCIe x1 Slot for PCI Expansion (need riser card)
- Integrate SIM Socket to Support Mobile Telecommunication
- Highly Integrated Communication Interfaces
- **Wide Range DC Power Input 9 ~36V**
- **Extended Operating Temp.: -20 ~ 70°C**
- **UPS Function Support**

System

CPU	Soldered onboard AMD Fusion G-T56N 1.65GHz or G-T40N 1.0GHz processor
Memory	Soldered onboard 2GB DDR3 SDRAM
Chipset	AMD FCH A55E
BIOS	AMI Flash BIOS
Watchdog Timer	1~255 levels reset

I/O

I/O Chip	Fintek F81866D-I
	4 x RS-232 ports
Serial Port	2 x RS-232/485 selectable ports w/ RS-485 auto-flow control
USB Port	8 x USB 2.0 ports
KB/MS	1 x 6-pin wafer connector for keyboard and mouse (PS/2 interface via Y-cable)
Digital I/O	8-bit programmable Digital Input/Output
	1 x PCI slot
	1 x PCIe x1 slot (Non-standard offset, used with riser card)
Expansion Bus	1 x Mini-card socket interconnected with SIM for WiFi or HSPA+ connectivity
	1 x SIM card socket

Storage	2 x Serial ATA ports with 600MB/s HDD transfer rate
	1 x mSATA socket (white Mini-card socket)

Ethernet Chipset	2 x Realtek RTL8111E PCIe GbE controllers
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Audio Interface	Realtek ALC662 HD Audio Codec, Mic-in/Line-in/Line-out (Line-out w/ 1 x 3.5mm phone jack on rear I/O)
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Display

Graphics Chipset	Integrated AMD Radeon™ HD6320 w/ G-T56N or HD6250 w/ G-T40N
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Graphics Interface	1 x DVI-I connector (default) or selectable Analog RGB, DVI-I connector supports either Analog RGB or DVI, resolution up to 2048 x 1536 for Analog RGB and 1920 x 1200 for TMDS
	Support Dual Channels 24-bit LVDS, resolution up to 1920 x 1080

Touch Screen Interface

Mode	PenMount C8051F321, supporting 5-wire Resistive Touch, USB interface
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Mechanical & Environmental

Power Requirement Wide range DC power input 9~36V

Power Consumption 2.34A@+12V with G-T56N (Typical)

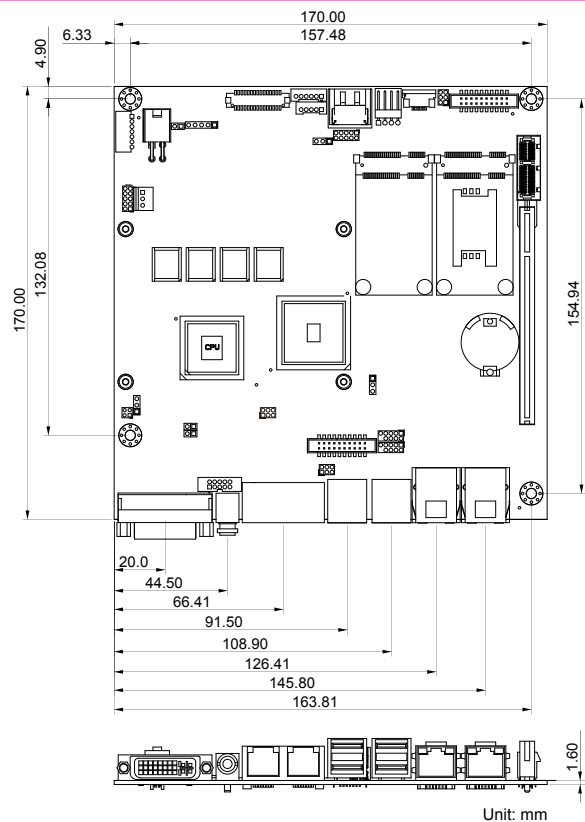
1.43A@+12V with G-T40N (Typical)

Operating Temp. -20~70°C (-4~ 158°F)

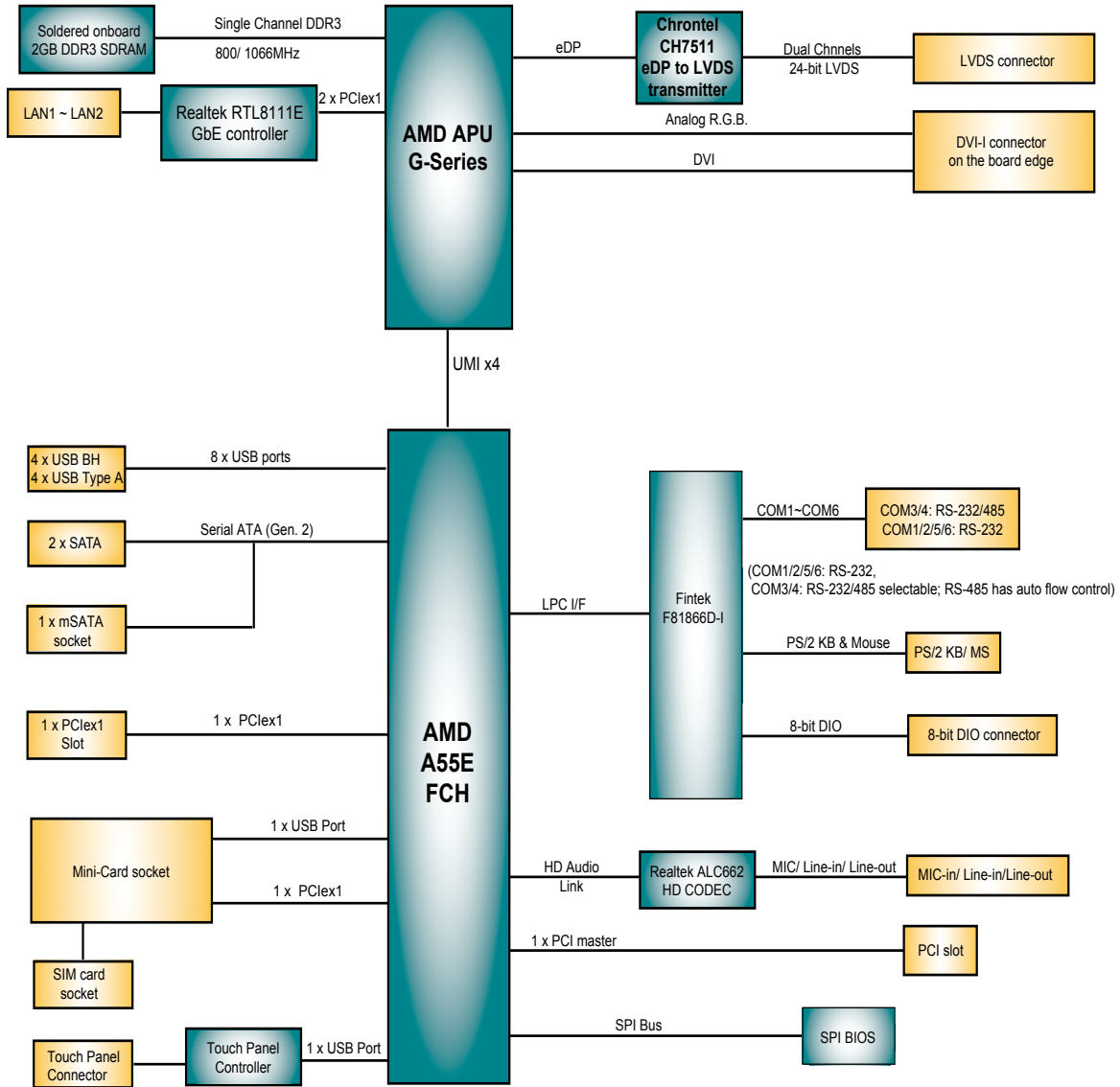
Operating Humidity 10 ~ 95% @ 70°C (non-condensing)

Dimensions (L x W) 170 x 170 mm (6.7" x 6.7")

Dimensions



Block Diagram



Ordering Information

ITX-a55E3-T56N AMD G-T56N Embedded Mini-ITX motherboard

ITX-a55E3-T40N AMD G-T40N Embedded Mini-ITX motherboard

Optional Accessories

SCDB-5190 PCIe x1 Riser Card

Cable kit

- 2 x USB cables
- 2 x Two ports COM cables
- 2 x COM port RJ-45 cables
- 1 x KB & MS cable
- 1 x audio cable
- 1 x SATA Power cable
- 2 x SATA cables

CBK-11-55E3-00