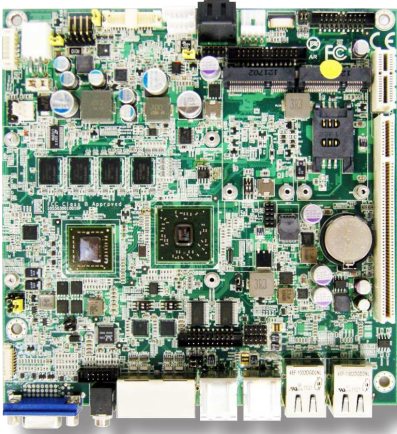


# ITX-a55E3

## AMD G-series APU G-T56N/G-T40N Embedded Mini-ITX Motherboard



### Features

- **Ultra Low Profile (16.8mm Height)**
- Dual Gigabit Ethernet Ports
- Soldered onboard PenMount Touch Controller
- Dual Independent Displays supported
- Additional PCIe x1 Slot for PCI Expansion (need riser card)
- Integrated SIM Socket for 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 G-series APU G-T56N dual-core 1.65GHz or G-T40N dual-core 1.0GHz
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
Serial Port	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

Expansion Bus	1 x PCI slot 1 x PCIe x1 slot (Non-standard offset, used with riser card) 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
Audio	Realtek ALC662 HD Audio Codec, Mic-in/Line-in/Line-out (Line-out w/ 1 x 3.5mm phone jack on rear I/O)

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

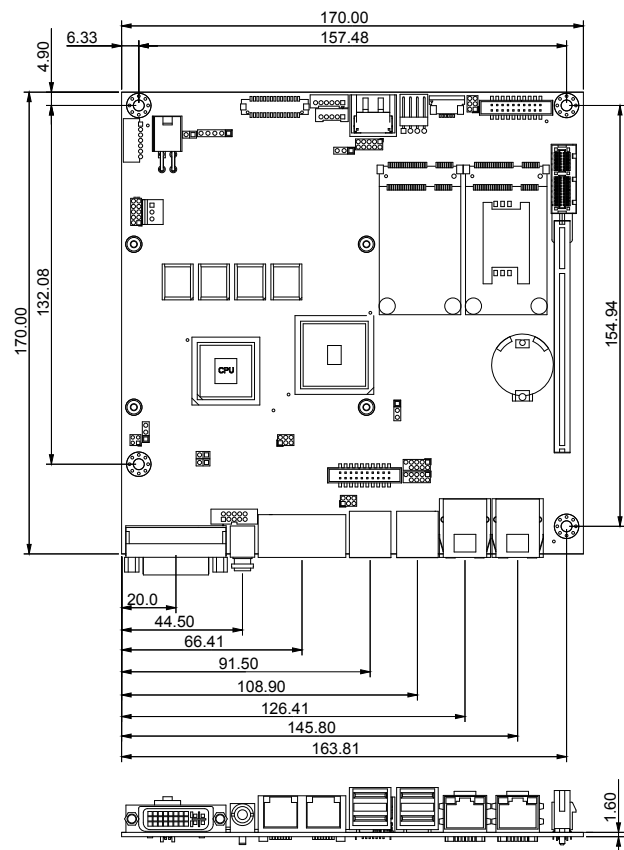
### Touch Screen Interface

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

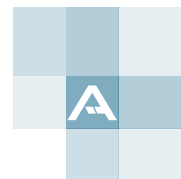
Power Requirement	Wide range DC power input 9~36V
Power Consumption	2.34A@+12V with G-T56N (Typical) 1.43A@+12V with G-T40N (Typical)
Operating Temp.	-20~70°C (-4~ 158°F)
Operating Humidity	10 ~ 95% @ 70°C (non-condensing)
Dimensions (L x W)	170 x 170 mm (6.7" x 6.7")

### Dimensions

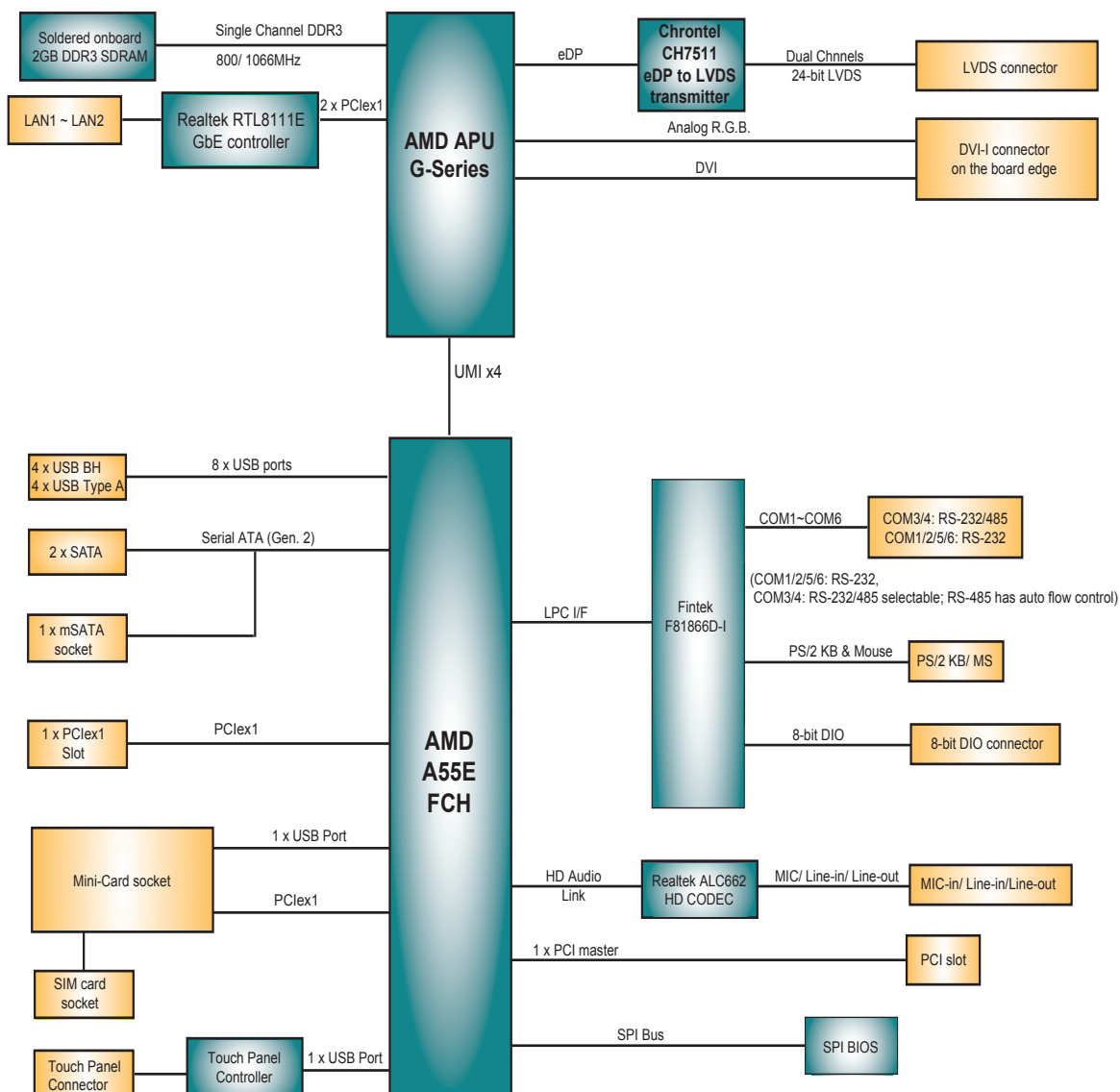


Unit: mm

All specifications are subject to change without notice.



## Block Diagram



## Ordering Information

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

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

## Optional Accessories

SCDB-5190 PCIe x1 Riser Card

CBK-11-55E3-00  
 Cable kit  
 2 x USB cables  
 2 x Two-port 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