

# EmCORE-a55E1

## AMD G-series G-T56N / G-T40N 3.5" Compact Board



### Features

- Soldered Onboard AMD Fusion G-Series Processor
- Dual Gigabit Ethernet Ports
- HDMI, Analog RGB and Dual Channels 24-bit LVDS
- Dual Independent Displays
- Integrate SIM Socket to Support Mobile Telecommunication

### System

<b>CPU</b>	Soldered onboard AMD G-series G-T56N 1.65GHz, or G-T40N 1.0GHz processor
<b>Memory</b>	1 x 204-pin DDR3 SO-DIMM socket, supporting 800/1066/1333MHz SDRAM up to 4GB
<b>Chipset</b>	AMD FCH A55E
<b>BIOS</b>	AMI UEFI BIOS
<b>Watchdog Timer</b>	1~255 levels reset

### I/O

<b>I/O Chip</b>	Fintek F81866
<b>Serial Port</b>	6 x COM ports (5 x RS-232, 1 x RS-232/422/485 selectable)
<b>USB Port</b>	6 x USB 2.0 ports
<b>KB/MS</b>	1 x 6-pin wafer connector for keyboard and mouse (PS/2 interface via Y-cable)
<b>Digital I/O</b>	8-bit programmable Digital Input/Output, shared with LPT port connector
<b>Expansion Bus</b>	1 x Mini-card socket 1 x SIM socket
<b>Storage</b>	2 x Serial ATA ports with 600MB/s HDD transfer rate 1 x CFast socket
<b>Ethernet Chipset</b>	2 x Intel® 82583V PCIe GbE controllers
<b>Audio Interface</b>	Realtek ALC662 5.1 Channel HD Audio Codec, Mic-in/ Line-in/ Line-out

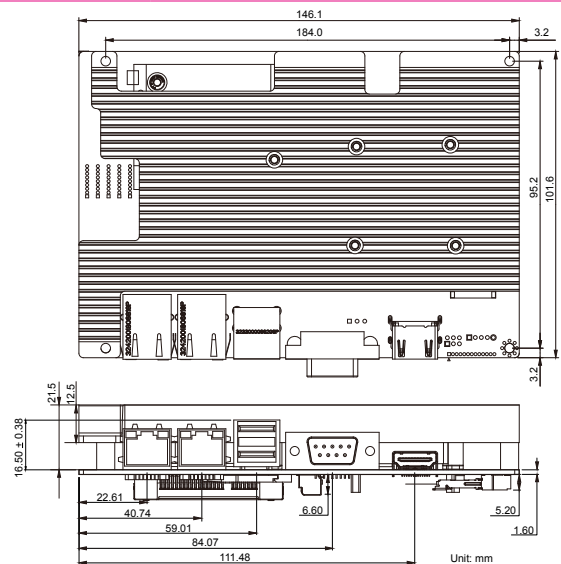
### Display

<b>Graphics Chipset</b>	Integrated AMD Radeon HD 6320 w/ G-T56N, HD 6250 w/ G-T40N
<b>Graphics Interface</b>	Analog RGB supports resolution up to 2560 x 1600 @60Hz LCD: Dual Channels support 18/24-bit LVDS, resolution up to 1920 x 1600 Support HDMI 1.3a

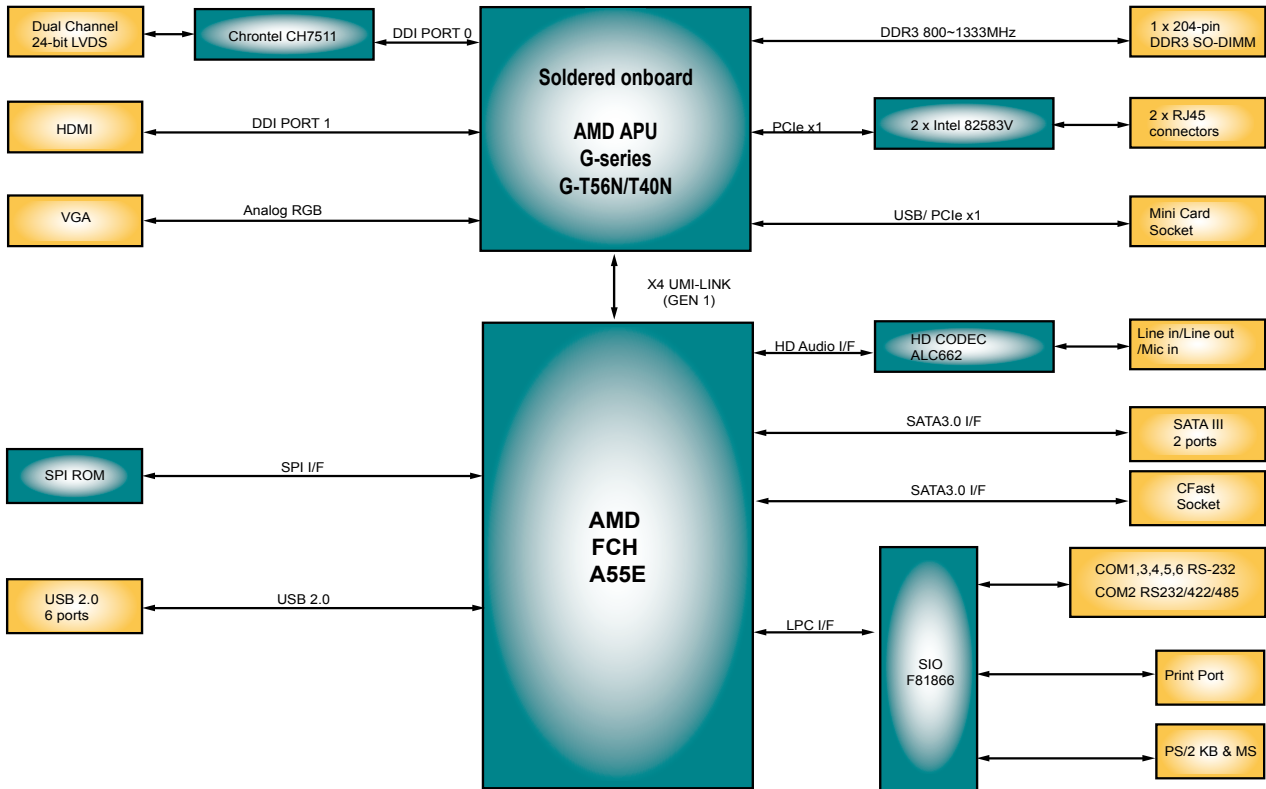
### Mechanical & Environmental

<b>Power Connector</b>	12V DC only with Aux. ATX power connector
<b>Power Consumption</b>	1.75A@+12V with G-T56N (Typical) 1.2A@+12V with G-T40N (Typical)
<b>Operating Temp.</b>	0 ~ 70°C (32 ~ 158°F)
<b>Operating Humidity</b>	10 ~ 95% @ 70°C (non-condensing)
<b>Dimensions (L x W)</b>	146 x 102 mm (5.75" x 4.00")

### Dimensions



## Block Diagram



## Ordering Information

**EmCORE-a55E1-T56N** AMD G-T56N 3.5" Compact Board

**EmCORE-a55E1-T40N** AMD G-T40N 3.5" Compact Board

## Optional Accessories

- CBK-14-55E1-00**
- Cable kit
- 5 x COM port cables
  - 2 x USB cables
  - 2 x SATA cables
  - 1 x SATA Power cable
  - 1 x LPT cable
  - 1 x audio cable
  - 1 x KB/MS cable
  - 1 x VGA cable