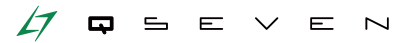
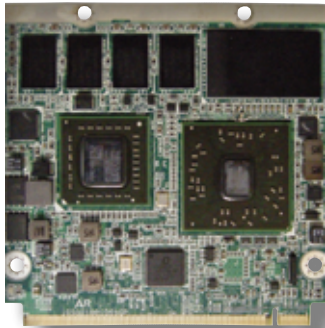


# EmQ-a50M1



## AMD Fusion G-T40E Qseven™ CPU Module



### Features

- **Fanless Design**
- Soldered Onboard AMD G-T40E Dual Core Processor
- Integrated Gigabit Ethernet
- Dual Channels 18/24-bit LVDS, Analog RGB, and DDI Port
- **Extended Operating Temp.: -20 ~ Max. 70°C**

### System

<b>CPU</b>	Soldered onboard AMD G-T40E 1.0GHz processor
<b>Memory</b>	Soldered onboard 2GB DDR3L SDRAM
<b>Chipset</b>	AMD FCH A50M
<b>BIOS</b>	AMI UEFI BIOS
<b>Watchdog Timer</b>	1~255 levels reset
<b>I/O</b>	
<b>USB Port</b>	8 x USB 2.0 ports
<b>Expansion Bus</b>	4 x PCIe x1 lanes SPI and LPC (Low Pin Count) interfaces
<b>Storage</b>	2 x Serial ATA ports 600MB/s HDD transfer rate 8GB NANDrive (optional)
<b>Ethernet Chipset</b>	1 x Realtek RTL8111E PCIe GbE controller
<b>Audio</b>	HD Audio Link

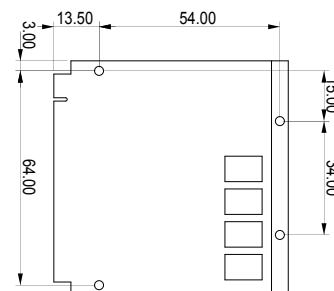
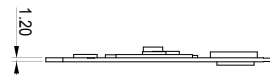
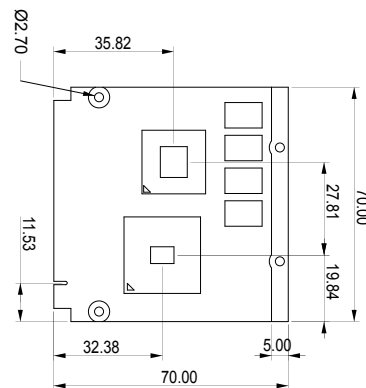
### Display

<b>Graphics Chipset</b>	Integrated AMD Radeon HD 6250
<b>Graphics Interface</b>	LCD: Dual Channels 18/24-bit LVDS Support Analog RGB signals (via Qseven GF reserved pin) 1 x DDI port

### Mechanical & Environmental

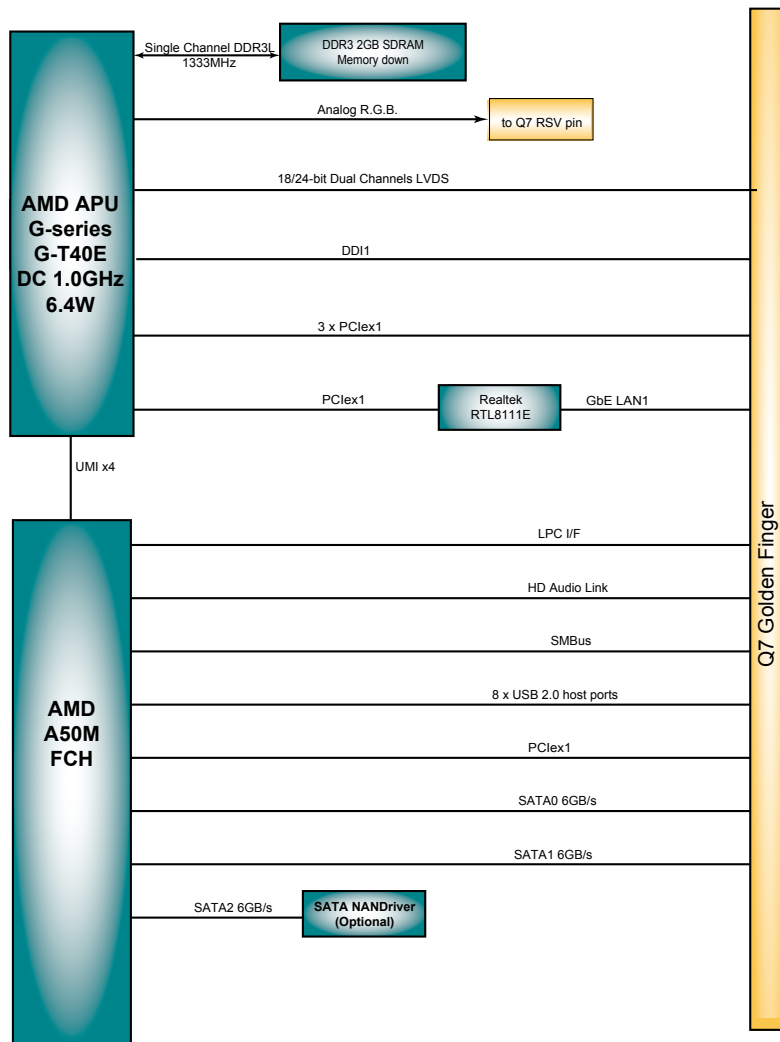
<b>Power Requirement</b>	5V, 5VSB
<b>Power Consumption</b>	1.55A@+12V (Typical)
<b>Operating Temp.</b>	-20 ~ 70°C (-4 ~ 158°F) with EmQ-a50M1 -20 ~ 60°C (-4 ~ 149°F) with EmQ-a50M1D
<b>Operating Humidity</b>	10 ~ 95% @ 70°C with EmQ-a50M1 (non-condensing) 10 ~ 95% @ 60°C with EmQ-a50M1D (non-condensing)
<b>Dimension (L x W)</b>	70 x 70 mm (2.76" x 2.76")

### Dimensions



Unit: mm

## Block Diagram



## Ordering Information

<b>EmQ-a50M1</b>	AMD G-T40E Dual Core Q7 CPU module w/ 2GB memory soldered on module
<b>EmQ-a50M1D (BTO)</b>	AMD G-T40E Dual Core Q7 CPU module w/ 2GB memory and 8GB NANDrive soldered on module
<b>StarterKit-003-50M1</b>	Qseven™ Starter Kit for EmQ-a50M1

## Optional Accessories

<b>HS-0520-F1</b>	Heat spreader (70.0 x 65.0 x 8.0mm)
<b>HS-0000-W3</b>	Universal evaluation heatsink kit for Qseven CPU module (70x70x30mm)
<b>PBQ-3000</b>	Qseven™ EPIC evaluation board

Page 60

<b>CBK-06-3000-00</b>	Cable kit
	• 1 x USB cable
	• 1 x USB2 cable
	• 2 x Serial port cables
	• 1 x SATA cable
	• 1 x SATA power cable