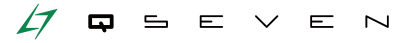
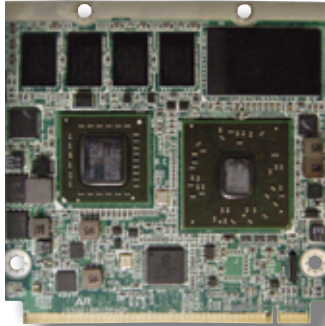


EmQ-a50M1



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

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

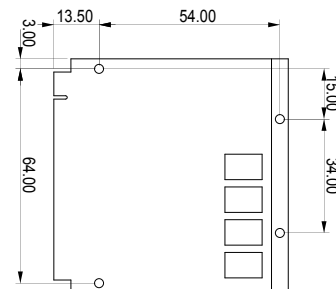
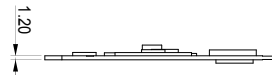
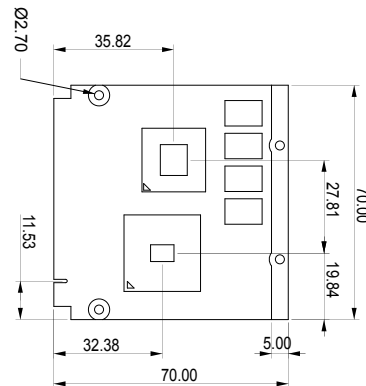
Display

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

Mechanical & Environmental

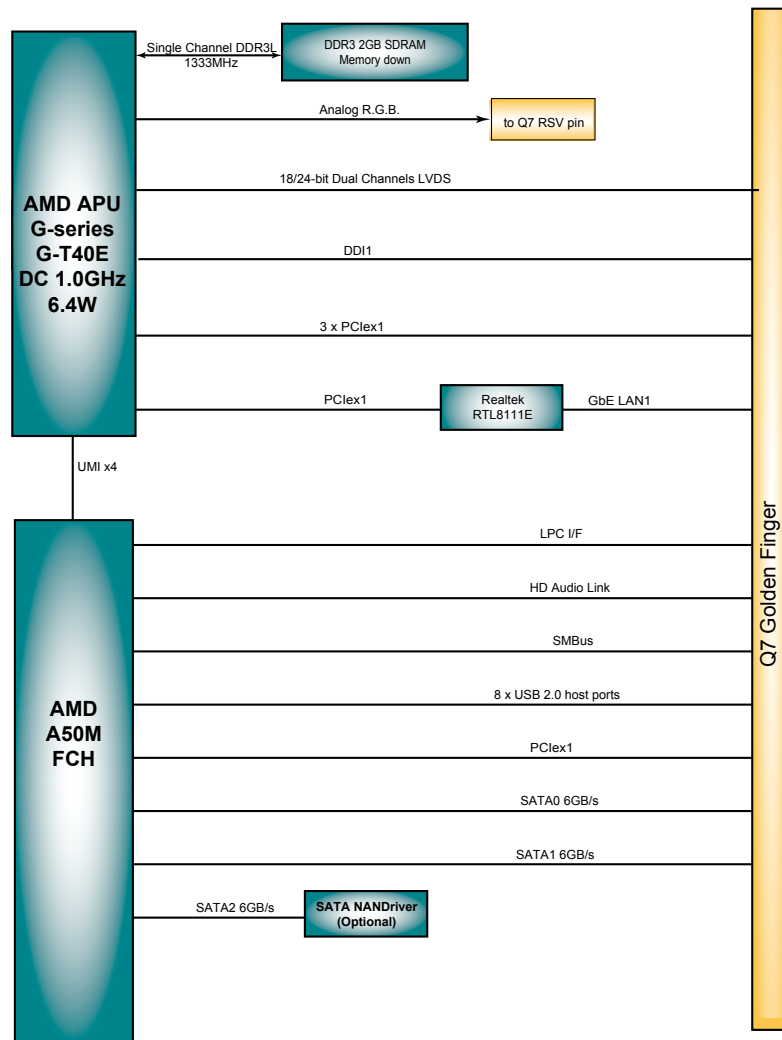
Power Requirement	5V, 5VSB
Power Consumption	1.55A@+12V (Typical)
Operating Temp.	-20 ~ 70°C (-4 ~ 158°F) with EmQ-a50M1 -20 ~ 60°C (-4 ~ 149°F) with EmQ-a50M1D
Operating Humidity	10 ~ 95% @ 70°C with EmQ-a50M1 (non-condensing) 10 ~ 95% @ 60°C with EmQ-a50M1D (non-condensing)
Dimension (L x W)	70 x 70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

Dimensions



Unit: mm

Block Diagram



Ordering Information

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

Optional Accessories

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

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

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