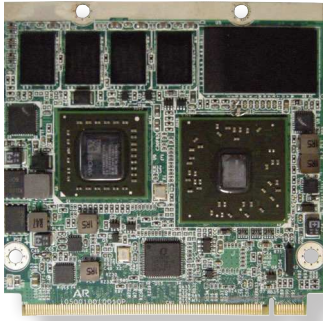


EmQ-a50M1



AMD G-Series APU G-T40E Qseven® CPU Module



Features

- **Fanless Design**
- Soldered onboard AMD G-Series APU G-T40E dual-core
- Integrated Gigabit Ethernet
- Dual Channels 18/24-bit LVDS, Analog RGB, and DDI Port
- **Extended Operating Temp.: -20 ~ 70°C**

System

| | |
|----------------|---|
| CPU | Soldered onboard AMD G-Series APU G-T40E dual-core 1.0GHz |
| 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

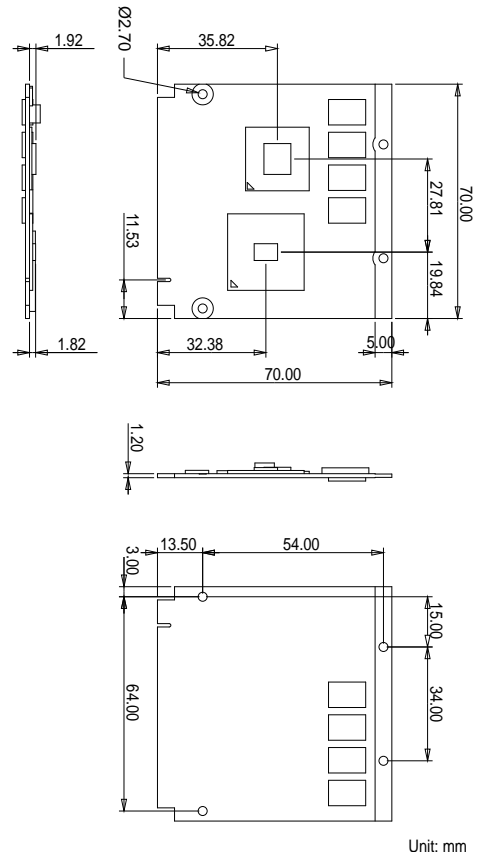
Display

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

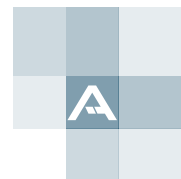
Mechanical & Environmental

| | |
|--------------------|---|
| 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) |
| Dimensions (L x W) | 70 x 70 mm (2.76" x 2.76") |

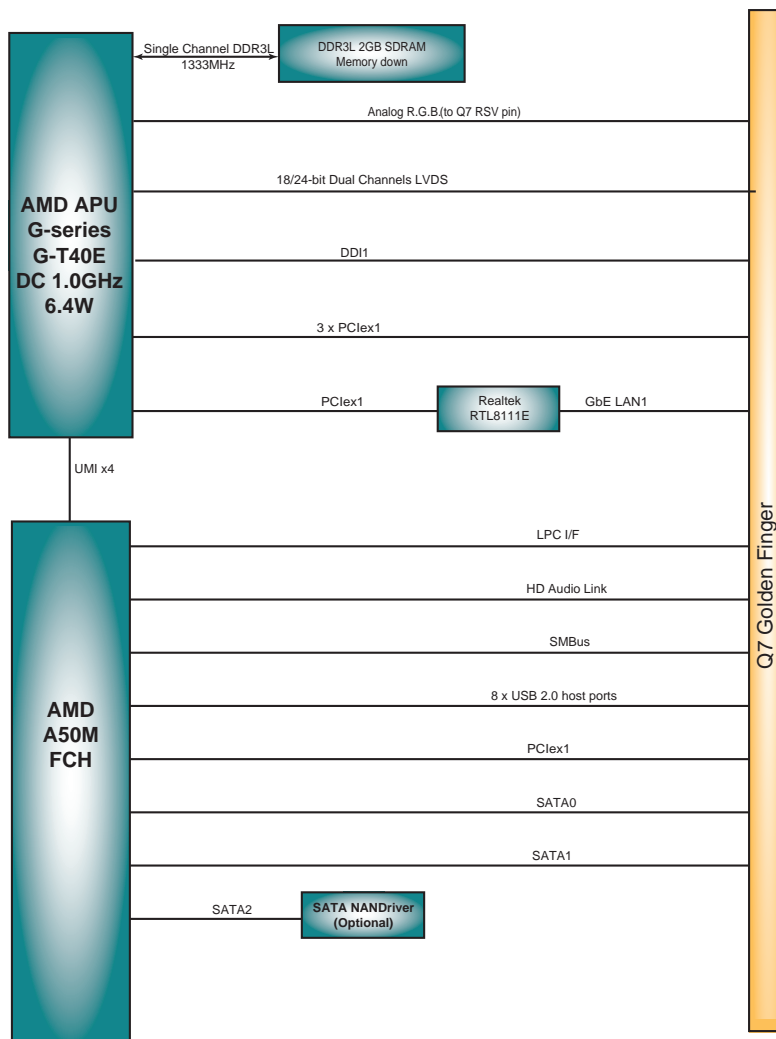
Dimensions



Unit: mm



Block Diagram



Ordering Information

| | |
|------------------|--|
| EmQ-a50M1 | AMD G-T40E Dual Core Q7 CPU module with 2GB memory soldered on module |
| EmQ-a50M1D (BTO) | AMD G-T40E Dual Core Q7 CPU module with 2GB memory and 8GB NANDrive soldered on module |

Optional Accessories

| | |
|---------------------|---|
| StarterKit-003-50M1 | Qseven® Starter Kit for EmQ-a50M1 |
| 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 |
| CBK-06-3000-00 | Cable kit 1 x USB cable 1 x USB2 cable 2 x COM-port cables 1 x SATA cable 1 x SATA power cable |