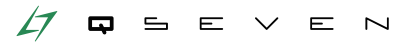
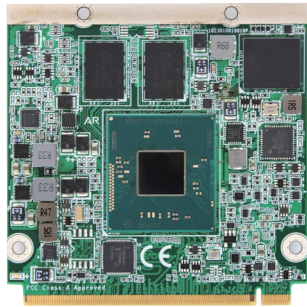


# EmQ-i2301



## Intel® Atom E3800 series processor Qseven™ CPU Module



### Features

- **Fanless Design**
- Soldered Onboard Intel® Atom E3800 series SoC Processor
- Intel i210IT PCIe GbE controller
- Soldered Onboard 16GB eMMC
- Dual Channels 24-bit LVDS, DDI Port
- **Extended Operating Temp.: -20 ~ 70°C**

### System

<b>CPU/ Chipset</b>	Soldered onboard Intel® Atom E3825 1.33GHz or E3845 1.91GHz SoC Processor
<b>Memory</b>	Soldered onboard 2GB / 4GB DDR3L SDRAM
<b>BIOS</b>	Insyde UEFI BIOS
<b>Watchdog Timer</b>	1~255 levels reset

### I/O

<b>USB Port</b>	8 x USB 2.0 ports
<b>Expansion Bus</b>	3 x PCIe x1 lanes
<b>Storage</b>	2 x Serial ATA ports Soldered onboard 16GB eMMC (Optional)
<b>Ethernet Chipset</b>	1 x Intel® i210IT PCIe GbE controller
<b>SDIO</b>	Supports SDIO
<b>Audio</b>	HD Audio Link

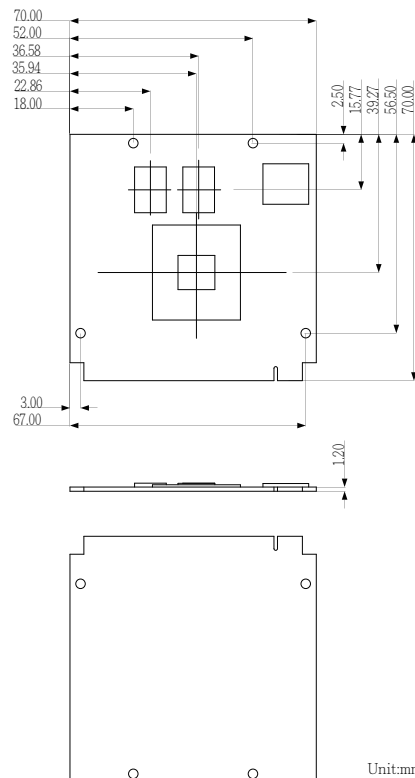
### Display

<b>Graphics Chipset</b>	SoC Integrated Intel® Gen7 graphic LCD: Dual Channel 24-bit LVDS, resolution up to 1920x1200
<b>Graphics Interface</b>	Support Analog RGB signals (via Qseven GF reserved pin) 1 x DDI port

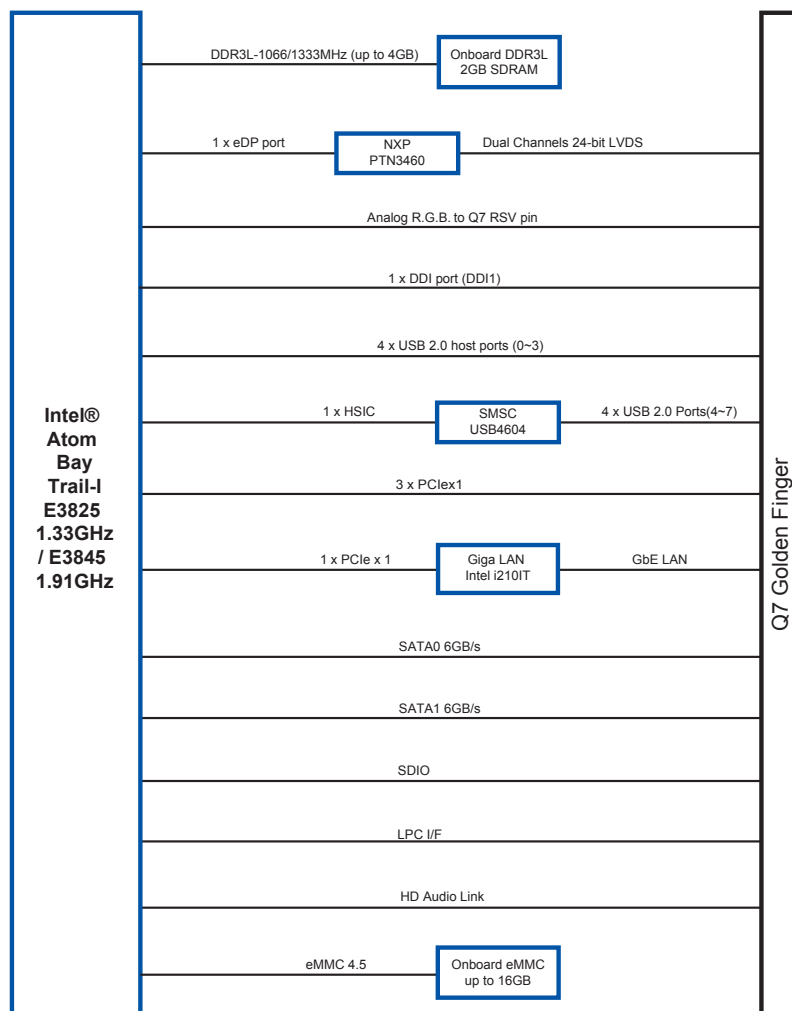
### Mechanical & Environmental

<b>Power Requirement</b>	5V
<b>Power Consumption</b>	0.93A@+12V with E3825 (Typical)
<b>Operating Temp.</b>	-20 ~ 70°C (-4 ~ 158°F)
<b>Operating Humidity</b>	10 ~ 95% @ 70°C (non-condensing)
<b>Dimension (L x W)</b>	70 x 70 mm (2.76" x 2.76")

### Dimensions



## Block Diagram



## Ordering Information

<b>EmQ-i2301-E3825-2G</b>	Intel® Atom™ Bay Trail-I E3825 Qseven™ CPU module w / 2GB memory soldered on module
<b>EmQ-i2301-E3845-2G</b>	Intel® Atom™ Bay Trail-I E3845 Qseven™ CPU module w / 2GB memory soldered on module
<b>EmQ-i2301-E3825-4G(BTO)</b>	Intel® Atom™ Bay Trail-I E3825 Qseven™ CPU module w / 4GB memory soldered on module
<b>EmQ-i2301-E3845-4G(BTO)</b>	Intel® Atom™ Bay Trail-I E3845 Qseven™ CPU module w / 4GB memory soldered on module
<b>EmQ-i2301D-E3825-2G(BTO)</b>	Intel® Atom™ Bay Trail-I E3825 Qseven™ CPU module w / eMMC16GB and 2GB memory soldered on module
<b>EmQ-i2301D-E3845-2G(BTO)</b>	Intel® Atom™ Bay Trail-I E3845 Qseven™ CPU module w / eMMC16GB and 2GB memory soldered on module
<b>EmQ-i2301D-E3825-4G(BTO)</b>	Intel® Atom™ Bay Trail-I E3825 Qseven™ CPU module w / eMMC16GB and 4GB memory soldered on module
<b>EmQ-i2301D-E3845-4G(BTO)</b>	Intel® Atom™ Bay Trail-I E3845 Qseven™ CPU module w / eMMC16GB and 4GB memory soldered on module

## Optional Accessories

<b>HS-0662-F1</b>	Heat spreader
<b>HS-0000-W3</b>	Universal evaluation heatsink kit for Qseven CPU module (70x70x30mm)
<b>PBQ-3000 R1.2</b>	Qseven™ EPIC evaluation board
<b>SCDB-5291</b>	Battery Charger DB
<b>CBK-06-3000-00</b>	Cable kit <ul style="list-style-type: none"> <li>• 1 x USB cable</li> <li>• 1 x USB2 cable</li> <li>• 2 x Serial port cables</li> <li>• 1 x SATA cable</li> <li>• 1 x SATA power cable</li> </ul>