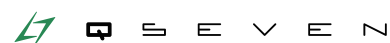
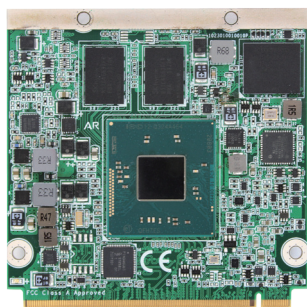


# EmQ-i2301



## 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 Onbaod 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<br>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                                                 |

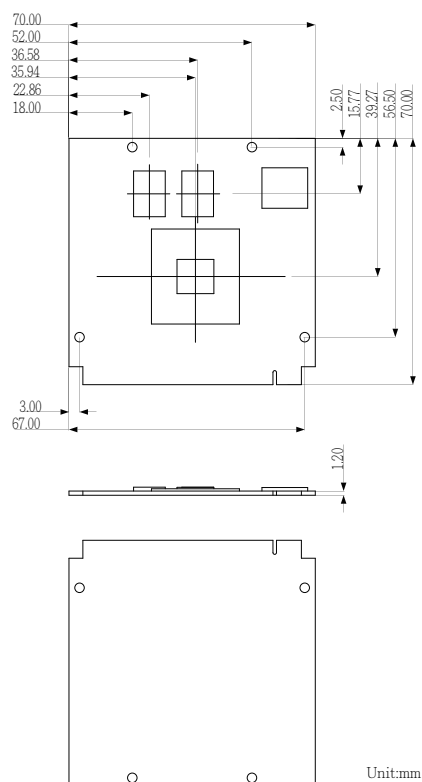
### Display

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

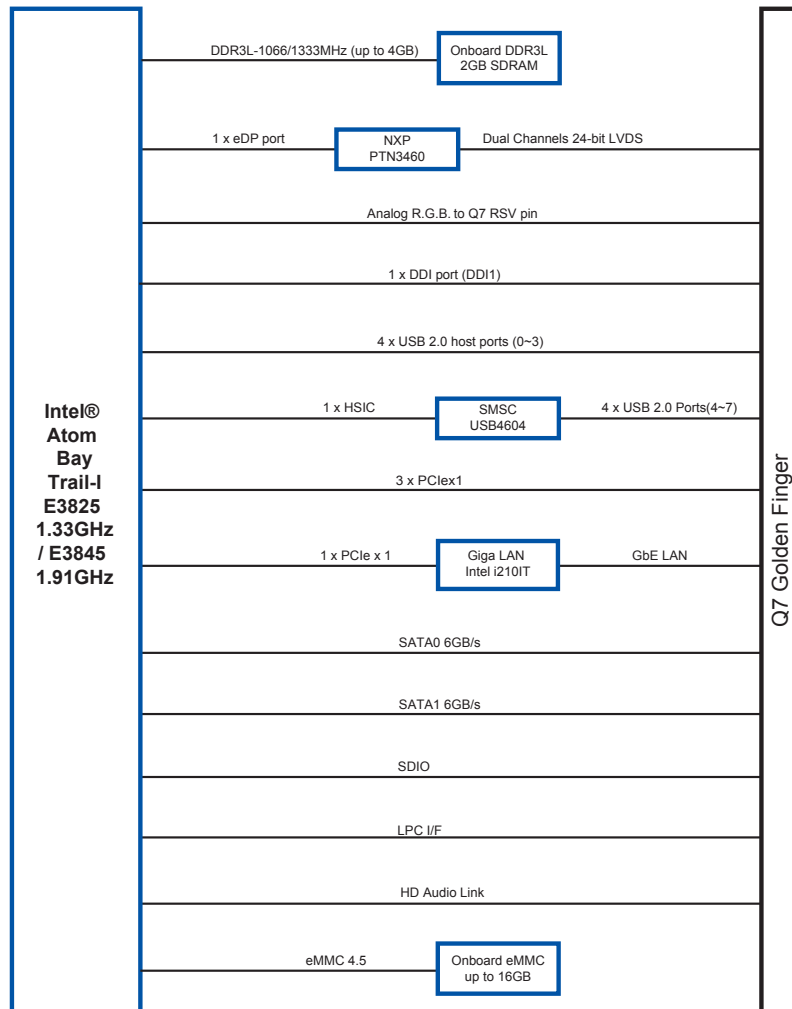
### Mechanical & Environmental

|                           |                                  |
|---------------------------|----------------------------------|
| <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> |