

# EmQ-i2301

## Intel® Atom™ Processor E3800 family Qseven® CPU Module



### Features

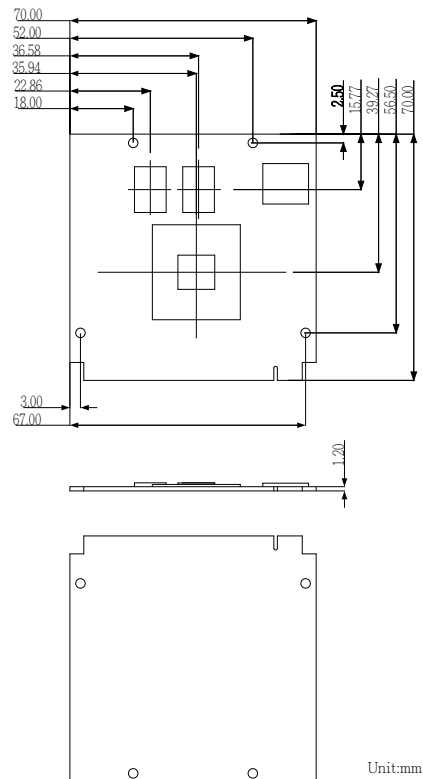
- **Fanless Design**
- Soldered Onboard Intel® Atom™ Processor E3800 family
- Intel® i210IT PCIe GbE controller
- Dual Channels 24-bit LVDS, DDI Port
- **Extended Operating Temp.: -20 ~ 70°C**

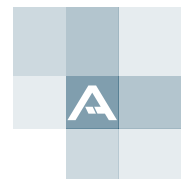
### System

CPU/ Chipset	Soldered onboard Intel® Atom™ Processor E3825 dual-core 1.33GHz or E3845 quad-core 1.91GHz
Memory	Soldered onboard 2GB / 4GB DDR3L SDRAM
BIOS	Insyde UEFI BIOS
Watchdog Timer	1~255 levels reset
I/O	
USB Port	8 x USB 2.0 ports
Expansion Bus	3 x PCIe x1 lanes, SDIO, I2C
Storage	2 x Serial ATA ports with 300MB/s HDD transfer rate Soldered onboard 16GB eMMC (Optional)
Ethernet Chipset	1 x Intel® i210IT PCIe GbE controller
Audio	HD Audio Link
<b>Display</b>	
Graphics Chipset	SoC Integrated Intel® Gen7 graphic LCD: Dual Channel 24-bit LVDS, resolution up to 1920x1200
Graphics Interface	Support Analog RGB signals (via Qseven GF reserved pin) 1 x DDI port

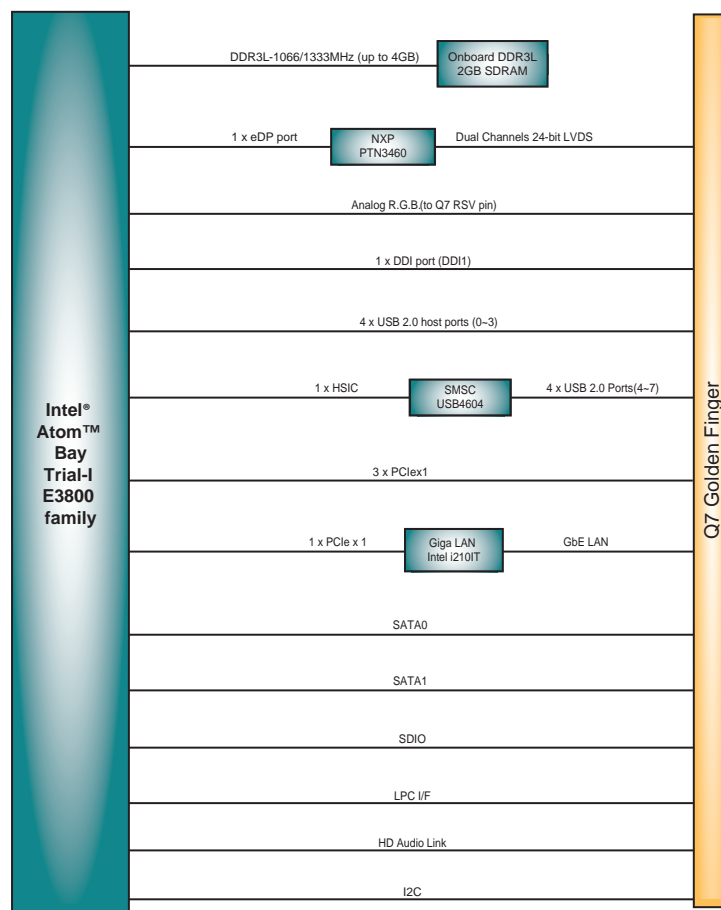
### Mechanical & Environmental

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





## Block Diagram



### Ordering Information

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

### Optional Accessories

HS-0662-F1	Heat spreader
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 Serial port cables 1 x SATA cable 1 x SATA power cable