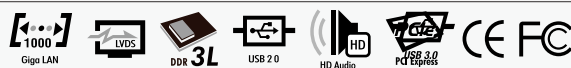




## Features

- Intel® Atom™ E3800 Product Family Processor SoC
- Onboard DDR3L 2 GB Memory
- Gigabit Ethernet x 1
- 18/24-bit Single Channel LVDS LCD/eDP, HDMI
- High Definition Audio Interface
- SATA x 2 (One for SSD)
- USB2.0 x 3, USB3.0 x 1, GPIO 8-bit, PCI-Express [x1] x 3
- Qseven Rev. 2.0, 70mm x 70mm



## Specifications

| System                      |                                                                                                                               |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Form Factor                 | Q7, 70mm x 70mm                                                                                                               |
| Processor                   | Intel® Atom™ Processor SoC<br>E3826: Dual Core 1.46 GHz/7W<br>E3815: Single Core 1.46 GHz/5W<br>E3845: Quad Core 1.91 GHz/10W |
| System Memory               | Onboard DDR3L 2 GB                                                                                                            |
| Chipset                     | Intel® Atom™ E3800 Product Family Processor SoC                                                                               |
| I/O Chipset                 | Intel® Atom™ E3800 Product Family Processor SoC                                                                               |
| Ethernet                    | Intel® I211AT for 10/1000/1000Base-TX                                                                                         |
| BIOS                        | AMI BIOS, Legacy free BIOS                                                                                                    |
| Wake On LAN                 | Yes                                                                                                                           |
| Watchdog Timer              | ITE IT8528VG                                                                                                                  |
| H/W Status Monitoring       | Supports CPU Temperature Monitoring.                                                                                          |
| Expansion Interface         | PCI Express [x1] x 3<br>SMBUS x 2<br>SPI x 1<br>SDIO x 1<br>DDI x 1                                                           |
| Power Requirement           | Normal : + 5V                                                                                                                 |
| Power Consumption (Typical) | E3845, Full load, 2A@5V                                                                                                       |
| Board Size                  | 2.75" x 2.75" (70mm x 70mm)                                                                                                   |
| Gross Weight                | 0.44 lb (0.2 kg)                                                                                                              |
| Operation Temperature       | 32 °F ~ 140 °F (0 °C ~ 60 °C)<br>-40 °F ~ 185 °F (-40 °C ~ 85 °C) by E3815                                                    |
| Storage Temperature         | -40 °F ~ 176 °F (-40 °C ~ 85 °C)                                                                                              |
| Operation Humidity          | 0% ~ 90% relative humidity, non-condensing                                                                                    |
| MTBF (Hours)                | —                                                                                                                             |
| Display                     | Supports CRT/LCD Simultaneous/Dual view displays                                                                              |
| Chipset                     | Intel® Atom™ E3800 Product Family Processor SoC                                                                               |
| Memory                      | —                                                                                                                             |
| Resolution                  | LCD: up to 1366 x 768@ single LVDS<br>HDMI: Up to 1920 x 1080                                                                 |
| LCD Interface               | 18/24-bit single channel LVDS                                                                                                 |
| I/O                         |                                                                                                                               |
| Storage                     | SATA x 1                                                                                                                      |
| Serial Port                 | 2-wire UART (Tx/Rx) x 1, 4-wire UART x 1                                                                                      |
| Parallel Port               | —                                                                                                                             |
| USB                         | USB2.0 x 3, USB3.0 x 1                                                                                                        |
| PS/2 Port                   | —                                                                                                                             |
| IrDA                        | —                                                                                                                             |
| Audio                       | High definition audio                                                                                                         |
| GPIO                        | 8-bit GPIO                                                                                                                    |

## Packing List

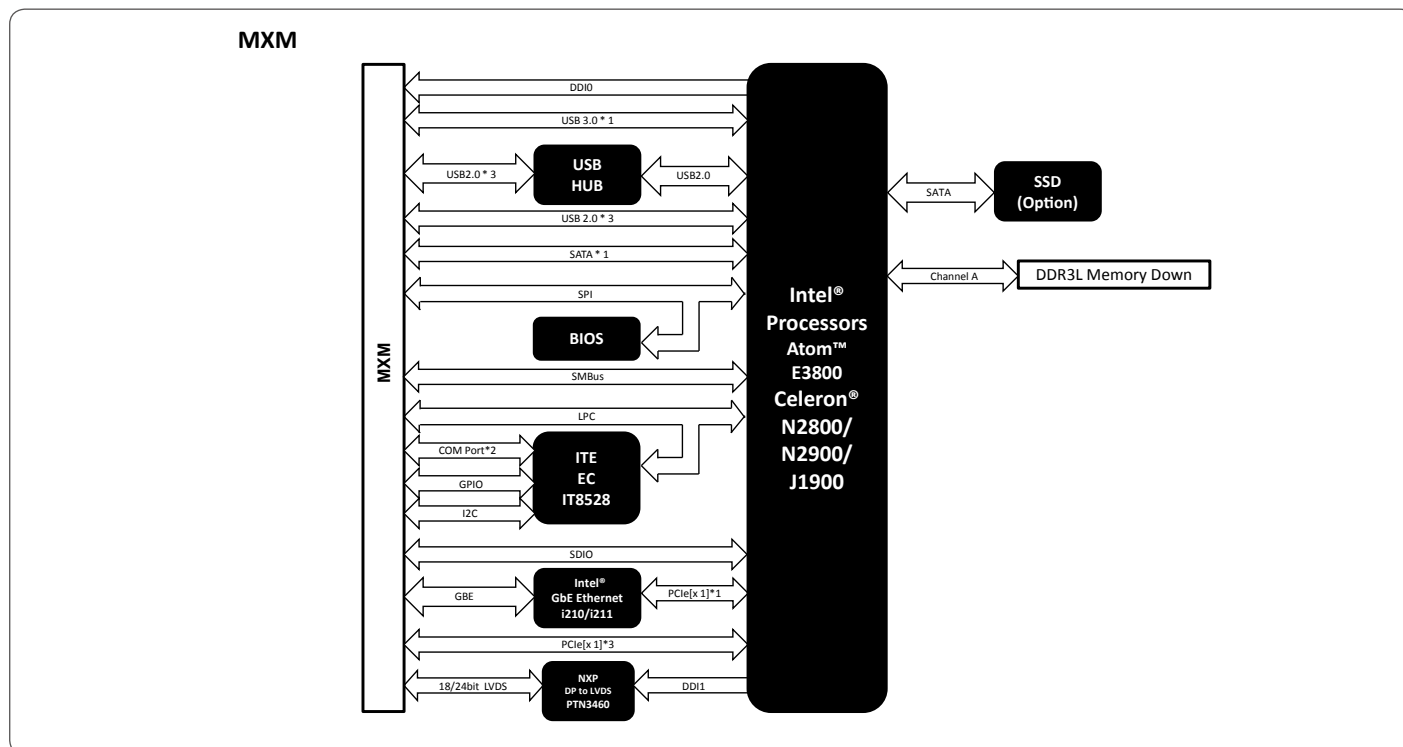
- M2.5 Screws x 4
- Product CD
- AQ7-BT

## Optional Accessories

- ECB-970-A10  
Q7 Carrier Board for x86
- PER-TBD  
Heat Spreader, For AQ7-BT, Onboard CPU
- PER-TBD  
Heatsink, for AQ7-BT, To be used with Heat Spreader

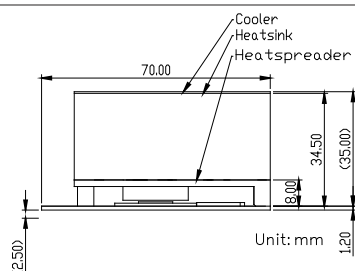
# AQ7-BT

## Block Diagram



## Dimension

Unit: mm



## Ordering Information

- **AQ7-BT-A10**  
Q7, Intel® Atom™ E3826 Processor SoC
- **AQ7-BT-A10-01**  
Q7, Intel® Atom™ E3815 Processor SoC