



## Features

- Onboard Intel® Atom® x5-E3930, 1.8GHz or x7-E3950, 2.0GHz [i-Temp support]
- Onboard LPDDR4 memory
- 1x Intel I210IT Gigabit LAN
- Supports TPM (2.0), eMMC5.0 (optional)
- Wide-range operating temperature

## Specifications

CPU	Intel® Atom® QC x5/ E3930 (1.3 GHz~1.8GHz) Intel® Atom® QC x5/ E3940 (1.6 GHz~1.8GHz) Intel® Atom® QC x7/ E3950 (1.6 GHz~2.0GHz)
PCH	Integrated in Intel® SoC
Memory	Onboard memory, LPDDR4, Max 8GB
BIOS	AMI
Watchdog Timer	256 levels
H/W Monitor	Yes
Storage Device Interface	eMMC 5.0 up to 32GB (optional)
Expansion Slots	4x PCI-E(x1)
Graphics Controller	Intel® SoC integrated Gen9-LP graphics
Video Output	Supports 1x DDI port, 1x eDP or 1x dual-channel LVDS (option)
Ethernet	1x Intel® I210IT Gigabit LAN
I/O Chipset	Fintek F81804U-I
Serial Port	1x COM port (RX/TX/RTS/CTS only)
USB 2.0	4x USB 2.0, derived from Qseven CPU module
USB 3.X	3x USB 3.0, derived from Qseven CPU module
Serial ATA	2x SATA III via carrier board
Audio	Intel® Atom® SoC built-in HD audio controller
TPM	TPM (2.0)
Others	SD, from SoC CPU
Dimensions (L X W)	70mm x 70mm (2.75" x 2.75")
Power Consumption	Intel® Atom® E3950 1.6GHz w/ 8GB memory, DDR4 1600 +12V: 1.7121A
Operating Temperature	-40°C ~ 85°C (-40°F~185°F)
Storage Temperature	-40°C ~ 90°C (-40°F ~ 194°F)
Relative Humidity	90% (non-condensing @60°C)

## Ordering Information

IBQ800F1-X7LV	Qseven CPU module with Intel® Atom® E3950 (2.0GHz), 4GB LPDDR4 memory on board, LVDS support
IBQ800F1-X7	Qseven CPU module with Intel® Atom® E3950 (2.0GHz), 4GB LPDDR4 memory on board, eDP support
IBQ800F1-X5QLV	Qseven CPU module with Intel® Atom® E3940 (1.8GHz), 4GB LPDDR4 memory on board, LVDS support
IBQ800F1-X5Q	Qseven CPU module with Intel® Atom® E3940 (1.8GHz), 4GB LPDDR4 memory on board, eDP support
IBQ800F1-X5LV	Qseven CPU module with Intel® Atom® E3930 (1.8GHz), 4GB LPDDR4 memory on board, LVDS support
IBQ800F1-X5	Qseven CPU module with Intel® Atom® E3930 (1.8GHz), 4GB LPDDR4 memory on board, eDP support
IP416	Qseven (R2.1) carrier board
HSIBQ800-1	Heat Spreader for IBQ800
HSIBQ800-A	Heatsink for IBQ800

## Dimensions and Drawing

