



## Features

- Onboard Intel® Atom™ x5-E3930, 1.8GHz or x7-E3950, 2.0GHz [i-Temp support]
- Onboard LPDDR4 memory
- 1x Intel I210IT PCI-E 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 (1.3 GHz~1.8GHz) Intel® Atom™ QC x7/ E3950 (1.6GHz~2.0GHz)
PCH	Integrated in Intel® SoC
Memory Types	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 (By option)
Ethernet	1x Intel® I210IT PCI-E Gigabit LAN
I/O Chip	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 3.0/ 3.1	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

IBQ800-X5	Qseven CPU module with Intel® Atom™ E3930 (1.8GHz), 4GB LPDDR4 memory on board, eDP support
IBQ800-X5LV	Qseven CPU module with Intel® Atom™ E3930 (1.8GHz), 4GB LPDDR4 memory on board, LVDS support
IBQ800-X5Q	Qseven CPU module with Intel® Atom™ E3940 (1.8GHz), 4GB LPDDR4 memory on board, eDP support
IBQ800-X5QLV	Qseven CPU module with Intel® Atom™ E3940 (1.8GHz), 4GB LPDDR4 memory on board, LVDS support
IBQ800-x7	Qseven CPU module with Intel® Atom™ E3950 (2.0GHz), 4GB LPDDR4 memory on board, eDP support
IBQ800-X7LV	Qseven CPU module with Intel® Atom™ E3950 (2.0GHz), 4GB LPDDR4 memory on board, LVDS support
IP416	Qseven (R2.1) Carrier Board

## Dimensions and Drawing

