



Features

- Onboard Intel® Atom® x5-E3930, 1.8GHz or x7-E3950, 2.0GHz [i-Temp support]
- Onboard LPDDR4 memory
- 1x Intel I210IT Gigabit LAN
- TPM (2.0), eMMC5.0 (optional)
- Wide-range operating temperature from -40°C to 85°C

Specifications

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|--------------------------|--|
| 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

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| 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

