



## Specifications

|                          |   |
|--------------------------|---|
| CPU                      | Intel Atom® x7-E3950 Processor (1.6GHz~2.0GHz)<br>Intel Atom® x5-E3940 Processor (1.6 GHz~1.8GHz)<br>Intel Atom® x5-E3930 Processor (1.3 GHz~1.8GHz)<br>Intel® Pentium® Processor N4200 (1.1GHz~ 2.5GHz)<br>Intel® Celeron® Processor N3350 (1.1GHz~ 2.4GHz)<br>Intel® Celeron® Processor J3455(1.5GHz~ 2.3GHz) |
| PCH                      | Integrated in Intel® SoC  |
| Memory                   | 1x DDR3L SO-DIMM, Max 8GB (Non-ECC)   |
| BIOS                     | AMI   |
| Watchdog Timer           | 256 levels  |
| H/W Monitor              | Yes   |
| Storage Device Interface | 1x mSATA (Via full-size Mini PCI-E)   |
| Mini Type Slots          | 2x Mini PCI-E (1x full-size, 1x half-size)  |
| Graphics Controller      | Intel® SoC integrated Gen9 18EUs graphics   |
| Video Output             | Supports HDMI(1.4b), Dual LVDS (18/24bit)   |
| Ethernet                 | IB818F-I50 2x Intel® I210IT Gigabit LAN<br>IB818F-420/335: 2x Intel® I211AT or I210AT Gigabit LAN   |
| I/O Chipset              | Fintek F81964D-I  |
| Serial Port              | 1x RS232/422/485 (jumper-less selection)<br>3x RS232  |
| USB 2.0                  | 2x USB 2.0 via pin-header   |
| USB 3.X                  | 4x USB 3.0 on board   |
| Serial ATA               | 2x SATA III   |
| Audio                    | Intel® Atom® SoC built-in HD audio controller + Realtek ALC888S Codec w/ class-D speaker amplifier  |
| TPM                      | TPM2.0  |
| Others                   | Digital I/O, +12V~+24V DC-in, EuP/ErP   |
| Dimensions (L x W)       | 102 x 147 mm (4" x 5.8")  |
| Power Consumption        | Intel® Atom® E3950, 1.6GHz w/ 8GB DDR3L +12V: 1.09A<br>Intel Pentium N4200, 1.1GHz w/ 8GB DDR3L +12V: 1.09A   |
| Operating Temperature    | E3950/E3940/E3930: -40°C~85°C (-40°F~185°F)<br>N4200/N3350: 0°C~+60°C (32°F~140°F)  |
| Storage Temperature      | -40°C~90°C (-40°F~194°F)  |
| Relative Humidity        | 90% (non-condensing @60°C)  |

## Features

- Onboard Intel® Atom® x7-E3950/ x5-E3940/ x5-E3930 Processor [i-Temp support]
- Onboard Intel® Pentium® N4200/ Celeron® N3350/ J3455
- 1x DDR3L-1866 SO-DIMM, Max. 8GB
- Supports HDMI 1.4b, **Dual LVDS(18/24bit)**
- Dual Intel® Gigabit LAN
- Watchdog timer, Digital I/O, mSATA, EuP/ErP
- 4x USB 3.0, 2x USB 2.0, 4x COM, 2x SATA III
- 1x Mini PCI-E slot (full-size), 1x Mini PCI-E slot (half-size)
- Wide-range operating temperature in certain models

## Ordering Information

|              |  |
|--------------|--|
| IB818F-I50   | Intel® Atom®x7-E3950 (1.6GHz~2.0 GHz) 3.5" SBC w/ dual GbE LAN, HDMI, 2x LVDS (18/24-bit dual-channel LVDS), EuP/ErP, 12V~24V DC-in, wide temp support |
| IB818F-I40   | Intel® Atom®x5-E3940 (1.6GHz~1.8 GHz) 3.5" SBC w/ dual GbE LAN, HDMI, 2x LVDS (18/24-bit dual-channel LVDS), EuP/ErP, 12V~24V DC-in, wide temp support |
| IB818F-I30   | Intel® Atom®x5-E3930 (1.3GHz~1.8 GHz) 3.5" SBC w/ dual GbE LAN, HDMI, 2x LVDS (18/24-bit dual-channel LVDS), EuP/ErP, 12V~24V DC-in, wide temp support |
| IB818F-420   | Intel® Pentium® N4200 (1.1GHz~2.5GHz) 3.5" SBC w/ dual GbE LAN, HDMI, 2x LVDS (18/24-bit dual-channel LVDS), EuP/ErP, 12V~24V DC-in                    |
| IB818F-335   | Intel® Celeron® N3350 (1.1GHz~2.4GHz) 3.5" SBC w/ dual GbE LAN, HDMI, 2x LVDS (18/24-bit dual-channel LVDS), EuP/ErP, 12V~24V DC-in                    |
| IB818F-J3455 | Intel® Celeron® J3455 (1.5GHz/2.3GHz) 3.5" SBC w/ dual GbE LAN, HDMI, 2x LVDS (18/24-bit LVDS Dual channel), EuP/ErP, 12V~24V DC-in                    |
| HSIB818-I    | Heatsink for IB818-I50/I40/I30   |
| HSIB818      | Heatsink for IB818-420/335/J3455   |
| HSIB818-I-1  | Heat Spreader for IB818-I50/I40/I30  |
| HSIB818-1    | Heat Spreader for IB818-420/335/J3455  |
| IB76A-1      | Cable kit w/ USB, COM, Power, SATA+Power   |

## Dimensions and Drawing

