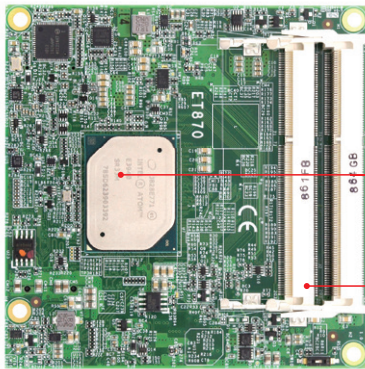
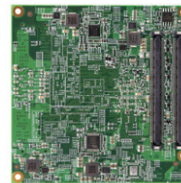


Intel® Atom®  
x7x5 CPUDDR3L SO-DIMM  
Sockets

## Features

- Onboard Intel® Atom® x7-E3950/ x5-E3940/ x5-E3930 Processor [i-Temp support]
- 2x DDR3L-1866 SO-DIMM sockets, Max. 16GB
- 2x independent displays, DisplayPort/ DVI-D/ LVDS or eDP via carrier board (IP419)
- HD audio via carrier board (IP419)
- Wide-range operating temperature from -40°C to 85°C



## Specifications

|                          |                                                                                                                                                    |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| CPU                      | Intel Atom® x7-E3950 Processor (1.6GHz~2.0GHz)<br>Intel Atom® x5-E3940 Processor (1.6GHz~1.8GHz)<br>Intel Atom® x5-E3930 Processor (1.3GHz~1.8GHz) |
| PCH                      | Integrated in Intel® SoC                                                                                                                           |
| Memory                   | 2x DDR3L-1866 SO-DIMM sockets, Max. 16GB                                                                                                           |
| BIOS                     | AMI                                                                                                                                                |
| Watchdog Timer           | 256 levels                                                                                                                                         |
| H/W Monitor              | Yes                                                                                                                                                |
| Storage Device Interface | N/A                                                                                                                                                |
| Expansion Slots          | 4x PCIe(x1)                                                                                                                                        |
| Graphics Controller      | Intel® SoC integrated Gen9 18EUs graphics                                                                                                          |
| Video Output             | Supports 2x DDI (DisplayPort / DVI-D)<br>1x 24-bit dual-channel or eDP                                                                             |
| Ethernet                 | Intel® I210IT Gigabit LAN                                                                                                                          |
| I/O Chipset              | Fintek F81804U-I                                                                                                                                   |
| Serial Port              | 2x COM ports (Tx/Rx only)                                                                                                                          |
| USB 2.0                  | 4x USB 2.0 via carrier board                                                                                                                       |
| USB 3.X                  | 3x USB 3.0 via carrier board                                                                                                                       |
| Serial ATA               | 2x SATA III via carrier board                                                                                                                      |
| Audio                    | Intel® Atom® SoC built-in HD Audio                                                                                                                 |
| TPM                      | TPM (2.0)                                                                                                                                          |
| Others                   | Digital I/O (4-in / 4-out)                                                                                                                         |
| Dimensions (L X W)       | 95mm x 95mm                                                                                                                                        |
| Power Consumption        | Intel® Atom® E3950 1.6GHz w/ 2x 8GB DDR3L-1600<br>+12V: 2.18A                                                                                      |
| Operating Temperature    | -40°C ~85°C (-40°F ~ 185°F)                                                                                                                        |
| Storage Temperature      | -40°C ~ 90°C (-40°F ~ 194°F)                                                                                                                       |
| Relative Humidity        | 10~90% (non-condensing)                                                                                                                            |

## Ordering Information

|             |                                                                                                              |
|-------------|--------------------------------------------------------------------------------------------------------------|
| ET870-I50   | COM Express (Type-6) CPU Module with Intel® Atom® x7-E3950 (2.0GHz), DDR3L dual-channel memory, eDP support  |
| ET870-I50LV | COM Express (Type-6) CPU Module with Intel® Atom® x7-E3950 (2.0GHz), DDR3L dual-channel memory, LVDS support |
| ET870-I40   | COM Express (Type-6) CPU Module with Intel® Atom® x5-E3940 (1.8GHz), DDR3L dual-channel memory, eDP support  |
| ET870-I40LV | COM Express (Type-6) CPU Module with Intel® Atom® x5-E3940 (1.8GHz), DDR3L dual-channel memory, LVDS support |
| ET870-I30   | COM Express (Type-6) CPU Module with Intel® Atom® x5-E3930 (1.8GHz), DDR3L dual-channel memory, eDP support  |
| ET870-I30LV | COM Express (Type-6) CPU Module with Intel® Atom® x5-E3930 (1.8GHz), DDR3L dual-channel memory, LVDS support |
| IP419       | Mini-ITX COM Express Type-6 (R3.0) carrier board                                                             |
| HSET870-A   | Heatsink with fan for ET870                                                                                  |
| HSET870-1   | Heat Spreader for ET870                                                                                      |

## Dimensions and Drawing

