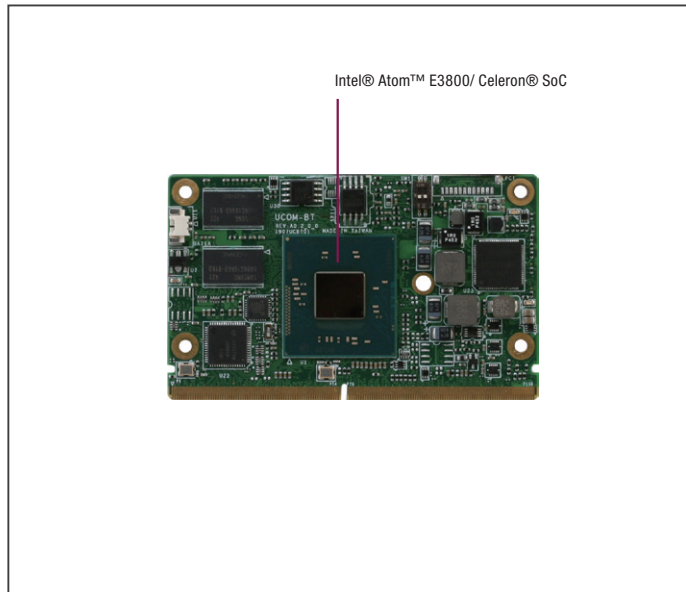


SMARC CPU Module with Onboard Intel® Atom™/Celeron® Processor SoC



Features

- Intel® Atom™ E3800 and N2807 Product Family Processor SoC
- Onboard DDR3L up to 4 GB Memory
- Gigabit Ethernet x 1
- 18/24-bit Single Channel LVDS, HDMI
- High Definition Audio Interface
- SATA x 2
- USB2.0 x 3, GPIO up to 12-bit, USB3.0 x 1
- PCI-Express [x1] x 3
- SMARC Spec v1.1, 82mm x 50mm

Specifications

| System | |
|-----------------------------|--|
| Form Factor | SMARC Version 1.1 |
| CPU | Intel® Atom™ Processor SoC |
| CPU Frequency | up to 1.91 GHz |
| Chipset | Intel® Atom™ E3800 series |
| Memory Type | Onboard DDR3L |
| Max. Memory Capacity | 2 GB (optional to 4 GB) |
| BIOS | AMI BIOS |
| Wake on LAN | No |
| Watchdog Timer | 255 Levels |
| Power Requirement | Normal: 3.3V - 5V |
| Power Supply Type | AT/ ATX |
| Power Consumption (Typical) | 0.7A@12V, full load, E3845 |
| Dimension | 3.23" x 1.96" (82 x 50 mm) |
| Operating Temperature | 32 °F ~ 140 °F (0 °C ~ 60 °C) -40 °F ~ 185 °F (-40 °C ~ 80 °C) WITAS 2 |
| Storage Temperature | -40°F ~ 185°F (-40°C ~ 85°C) |
| Operating Humidity | 0% ~ 90% relative humidity, non-condensing |
| MTBF (Hours) | 80,000 |
| Certification | CE/FCC |
| Display | |
| VGA/LCD Controller | Intel® Atom™ SoC |
| Video Output | 24-bit LVDS LCD, HDMI |
| Backlight Inverter Supply | — |
| I/O | |
| Ethernet | Intel® I211AT, 10/1000/1000Base-TX |
| Audio | HD Audio x 1 |
| USB Port | USB3.0 x 1, USB2.0 x 3 |
| Serial Port | UART x 2 (1 for TX/RX/RTS#/ CTS#; 1 for TX/RX) |
| Parallel Port | — |
| HDD Interface | SATA x 2 |
| FDD Interface | — |
| SSD | Optional for onboard eMMC up to 64GB |
| Expansion Slot | PCI Express [x1] x 3 I2C, SMBus x 1, SDIO SPI x 2, SPI 0 for boot only |
| DIO | GPIO, 11-bit |
| TPM | — |
| Touch | — |



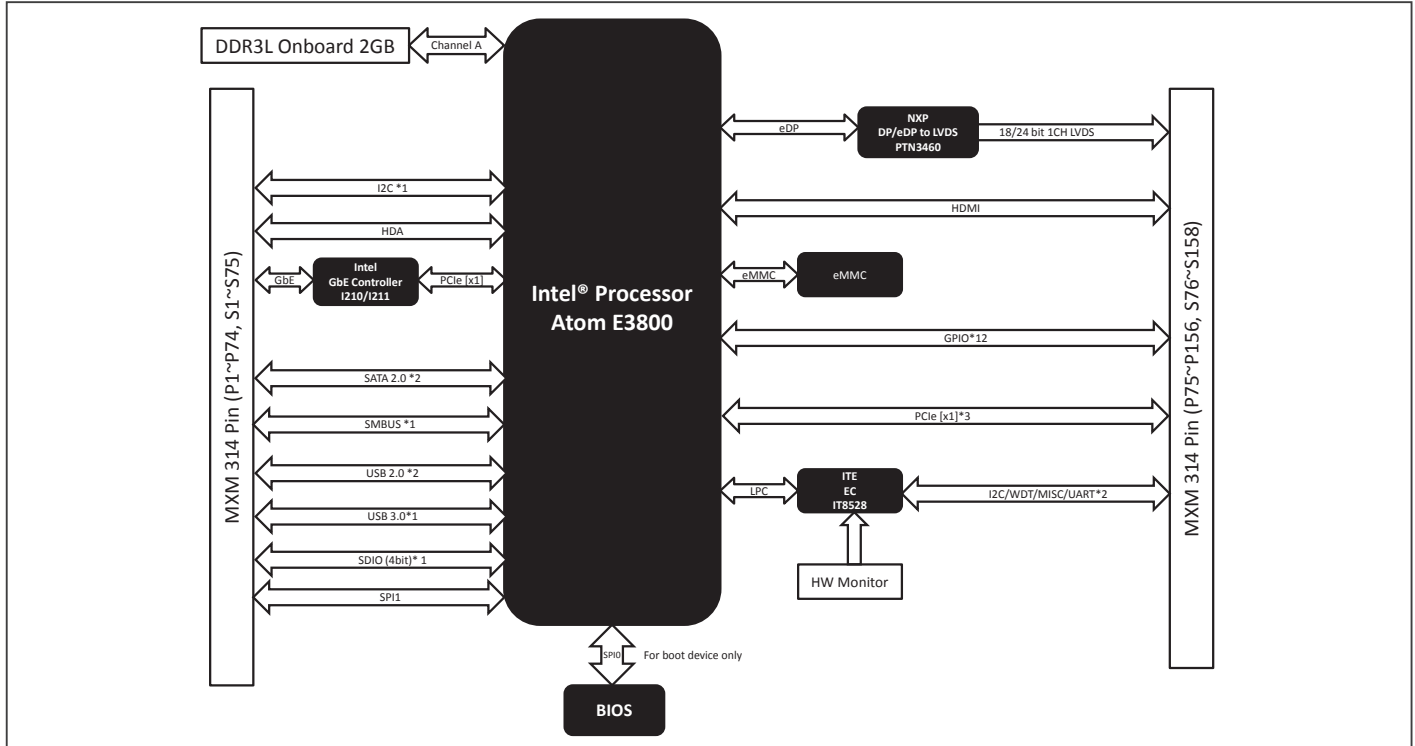
Packing List

- M2.5 Screw x 4
- Product CD
- μCOM-BT

Optional Accessories

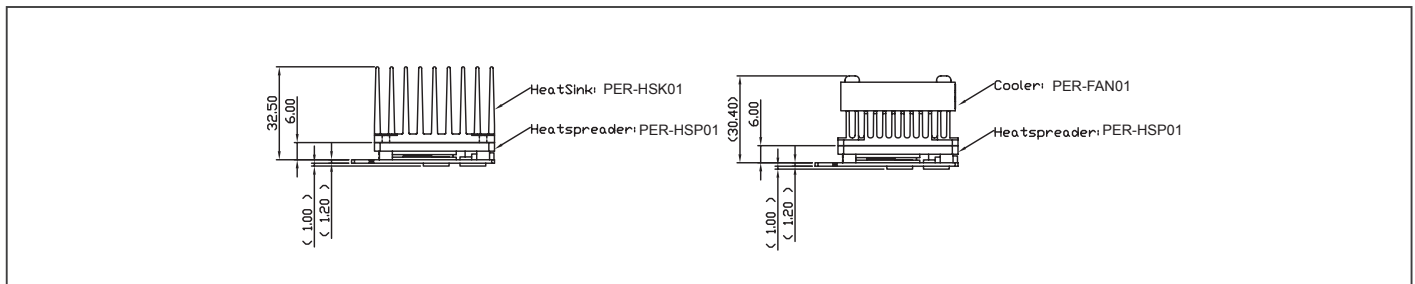
- ECB-960T-A10-0001
SMARC Carrier Board for x86
- μCOM-BT-HSP01
Heat Spreader for μCOM-BT
- μCOM-HSK01
Heatsink for μCOM Series, to be used with Heatspreader
- μCOM-FAN01
Cooler for μCOM Module, to be used with Heatspreader

Block Diagram



Dimension

Unit: mm



Ordering Information

| Part Number | Form Factor | CPU | Memory | Display | LVDS | Storage | LAN | USB | UART | Expansion | Others | Power | Temperature |
|------------------|-------------|----------------------|----------------------|---------|------------|---------------------|--------|------------------------|------------------------|-------------|-----------------------------|---------|-------------|
| uCOM-BT-A20-0004 | SMARC1.1 | N2807, 2c/1.58GHz | Onboard 2GB DDR3L | DDI x 1 | 18/24b 1CH | SATA x 2 | GbE x1 | USB2.0 x3 USB3.0 x1 | 2-wire x1 4-wire x1 | PCIe[x1] x3 | GPIO x11, SMBus, SDIO, I2C, | 3.3V/5V | 0°C~60°C |
| uCOM-BT-A20-0005 | SMARC1.1 | E3825, 2c/1.33GHz | Onboard 2GB DDR3L | DDI x 1 | 18/24b 1CH | SATA x 2, 8GB eMMC | GbE x1 | USB2.0 x3 USB3.0 x1 | 2-wire x1 4-wire x1 | PCIe[x1] x3 | GPIO x11, SMBus, SDIO, I2C, | 3.3V/5V | 0°C~60°C |
| uCOM-BT-A20-0006 | SMARC1.1 | E3845, 4c/1.91GHz | onboard 4GB DDR3L | DDIx1 | 18/24b 1CH | SATA x 2, 16GB eMMC | GbE x1 | USB2.0 x3 USB3.0 x1 | 2-wire x1 4-wire x1 | PCIe[x1] x3 | GPIO x11, SMBus, SDIO, I2C, | 3.3V/5V | 0°C~60°C |