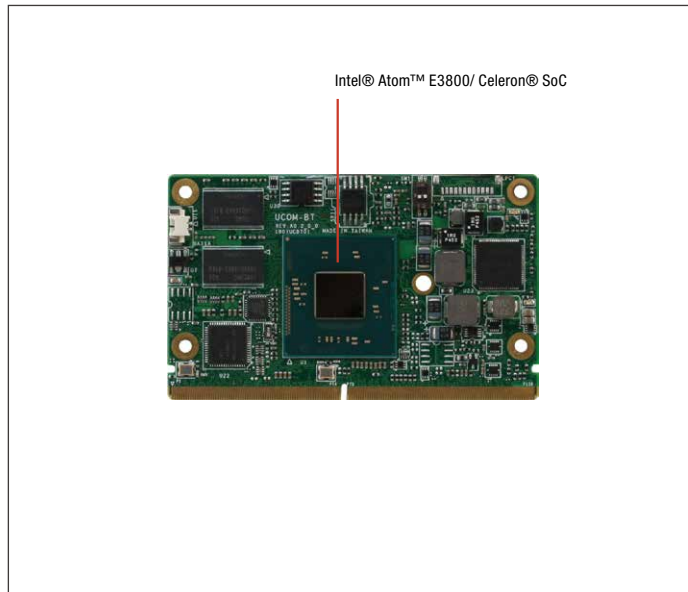


SMARC CPU Module with Onboard Intel® Atom™/Celeron® Processor SoC



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 2, 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™ SOC Processor
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/eDP, 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 2
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
Expansion Slot	PCI Express [x1] x 3 I2C, SMBus x 1, SDIO SPI x 2, SPI 0 for boot only
DIO	GPIO, 9 bit (up to 12 bit)
TPM	—
Touch	—



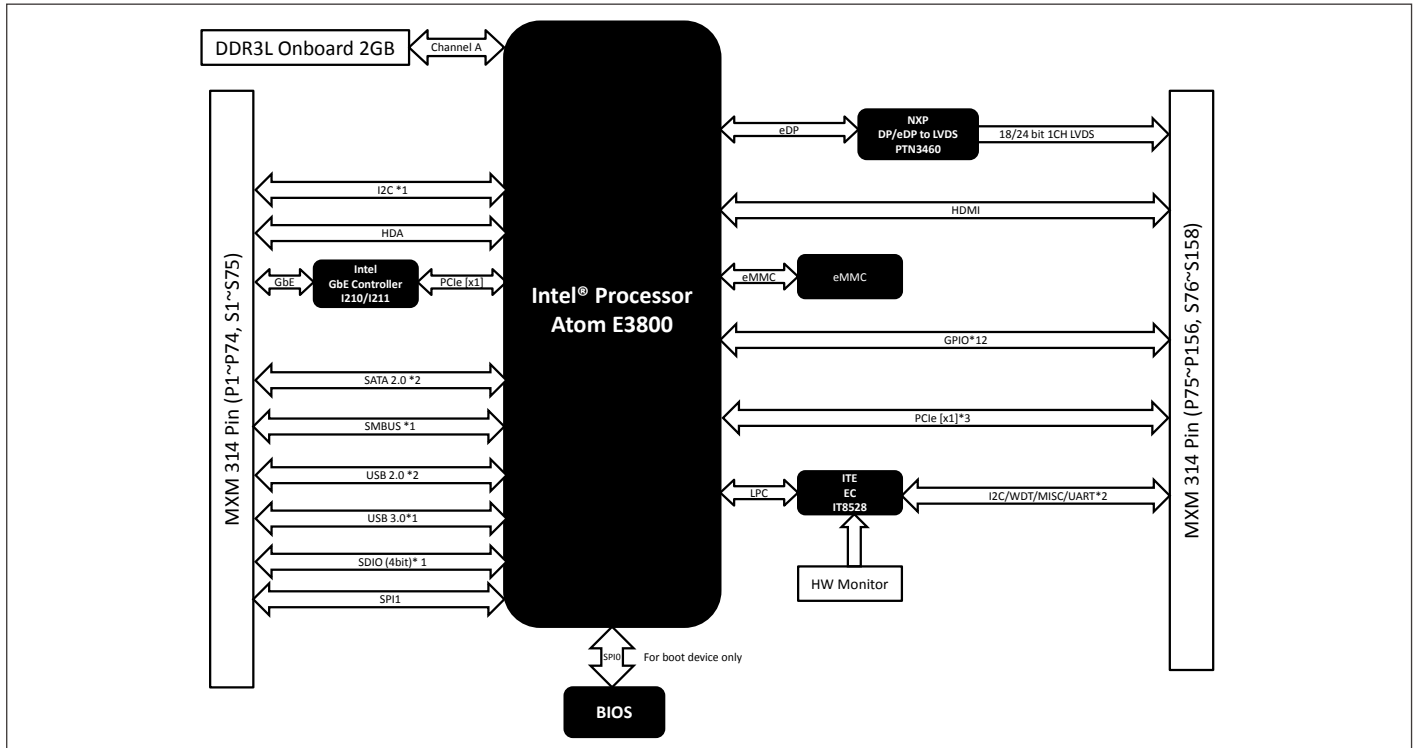
Packing List

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

Optional Accessories

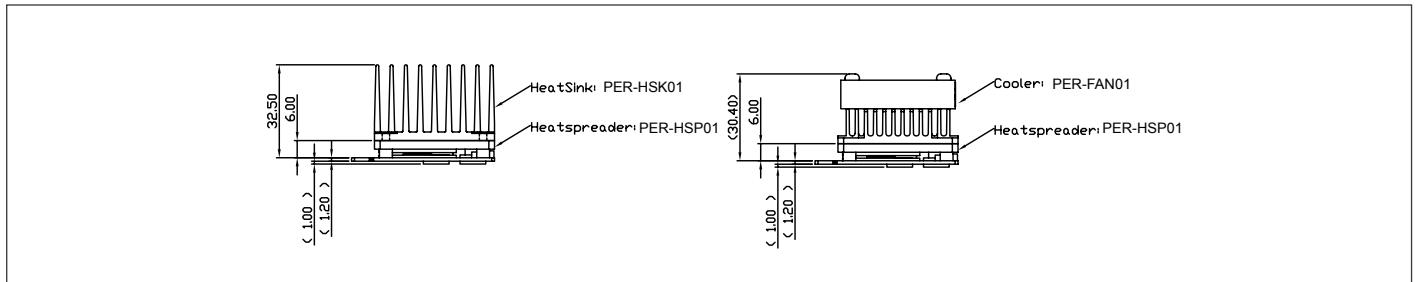
- **ECB-960T-A10-0001**
SMARC Carrier Board for x86
- **μCOM-BT-HSP01**
Heat Spreader for μCOM-BT
- **μCOM-BT-HSK01**
Heatsink for μCOM Series, to be used with Heatspreader
- **μCOM-BT-FAN01**
Cooler for μCOM Module, to be used with Heatspreader

Block Diagram



Dimension

Unit: mm



Ordering Information

Part Number	Form Factor	CPU	Memory	Display	LVDS	Storage	LAN	USB	Expansion	Power	Temperature	Other	Others
uCOM-BT-A20-0001	SMARC 1.1	N2807, 1.58 GHz	2GB DDR3L	LVDS, HDMI	24bit,1CH	SATA x 2	GbE x 1	USB3.0 x 1, USB2.0 x 2	PCIe[x1] x3	+5V	0°C ~ 60°C	GPIO, SPI0 for Boot, SPI1, I2C	—
uCOM-BT-A20-0002	SMARC 1.1	E3825, 1.33 Hz	2GB DDR3L	LVDS, HDMI	24bit,1CH	SATA x 2, 8GB eMMC	GbE x 1	USB3.0 x 1, USB2.0 x 2	PCIe[x1] x3	+5V	0°C ~ 60°C	GPIO, SPI0 for Boot, SPI1, I2C	—
uCOM-BT-A20-0003	SMARC 1.1	E3845, 1.91 GHz	4GB DDR3L	LVDS, HDMI	24bit,1CH	SATA x 2, 16GB eMMC	GbE x 1	USB3.0 x 1, USB2.0 x 2	PCIe[x1] x3	+5V	0°C ~ 60°C	GPIO, SPI0 for Boot, SPI1, I2C	—