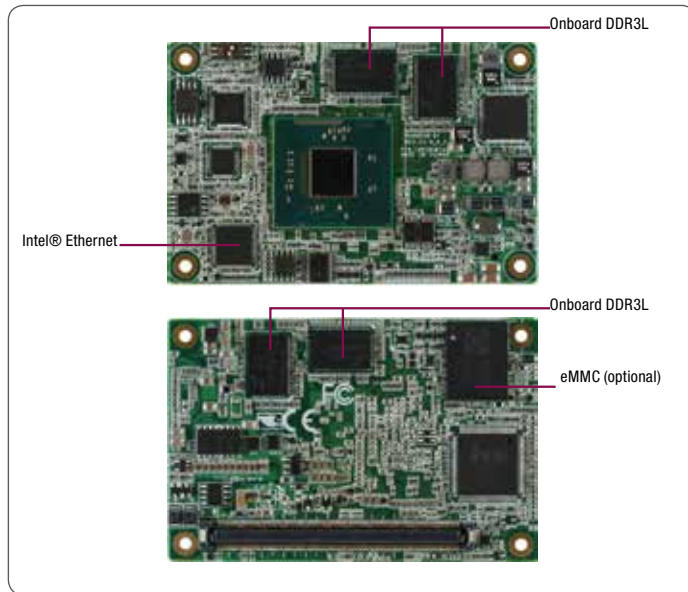


# NanoCOM-BT

COM Express Type 10 CPU Module with Onboard Intel® Atom™ SoC Processor



## Features

- Intel® Atom™ E3800 Product Family/Celeron® N2000 Series SoC Processor
- Onboard DDR3L 2 GB Memory
- Gigabit Ethernet x 1
- 18/24-bit Single Channel LVDS LCDs, DDI x 1
- High Definition Audio Interface
- SATA x 2, eMMC (Optional)
- USB2.0 x 6 + USB2.0/USB3.0 x 1, GPIO 8-bit, PCI-Express [x1] x 3
- COM Express Pin-out Type 10
- Nano Module Size, 84mm x 55mm , COM.0 Rev. 2.1

## Specifications

System	
Form Factor	COM Express Nano Module, Pin-out Type 10, COM.0 Rev. 2.1
Processor	Intel® Atom™ E3800 Product Family/Celeron® N2000 Series SoC Processor N2930: Quad Core 1.83 GHz/ 7.5W N2807: Dual Core 1.58 GHz/ 4.5W E3845: Quad Core 1.91 GHz/ 10W E3827: Dual Core 1.73 GHz/ 8W E3826: Dual Core 1.46 GHz/ 7W E3825: Dual Core 1.33 GHz/ 6W E3815: Single Core 1.46 GHz/ 5W
System Memory	Onboard DDR3L 2 GB
Chipset	Intel® Atom™ E3800 Product Family/Celeron® N2000 Series SoC Processor
I/O Chipset	Intel® Atom™ E3800 Product Family/Celeron® N2000 Series SoC Processor
Ethernet	Intel® I211/I210 for 10/1000/1000Base-TX
BIOS	AMI BIOS, Legacy free BIOS
Wake On LAN	Yes
Watchdog Timer	ITE IT8528
H/W Status Monitoring	Supports CPU Temperature Monitoring.
Expansion Interface	PCI-Express [x1] x 3, LPC Bus x 1, SMBus x 1
Power Requirement	Standard : +7V ~ 20V AT/ATX, Optional: +5V, AT/ATX
Power Consumption (Typical)	Intel® Atom™ E3845 1.91 GHz, DDR3 2 GB, full load 0.7A@12V, 8.4W
Board Size	3.31" x 2.17"(84mm x 55mm)
Gross Weight	0.44 lb (0.2 kg)
Operation Temperature	32 °F ~ 140 °F (0 °C ~ 60 °C) -40 °F ~ 185 °F (-40 °C ~ 85 °C) by E3800 family
Storage Temperature	-40 °F ~ 176 °F (-40 °C ~ 85 °C)
Operation Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	92,000
Display	
	Supports CRT/LCD Simultaneous/Dual view display
Chipset	Intel® Atom™ E3800 Product Family/Celeron® N2000 Series SoC Processor
Memory	Shared system memory up to 512 MB
Resolution	LCD: Up to 1920 x 1200@ single 24-bit LVD DDI: Up 2560 x 1600 (Display Port)
LCD Interface	18/24-bit single channel LVDS
I/O	
Storage	SATA x 2, eMMC up to 16 GB (optional)
Serial Port	TX/RX x 2
Parallel Port	—
USB	USB2.0 x 6 + USB2.0/USB3.0 x 1
PS/2 Port	—
IrDA	—
Audio	High definition audio
GPIO	Up to 4 in and 4 out share with SDIO



## Packing List

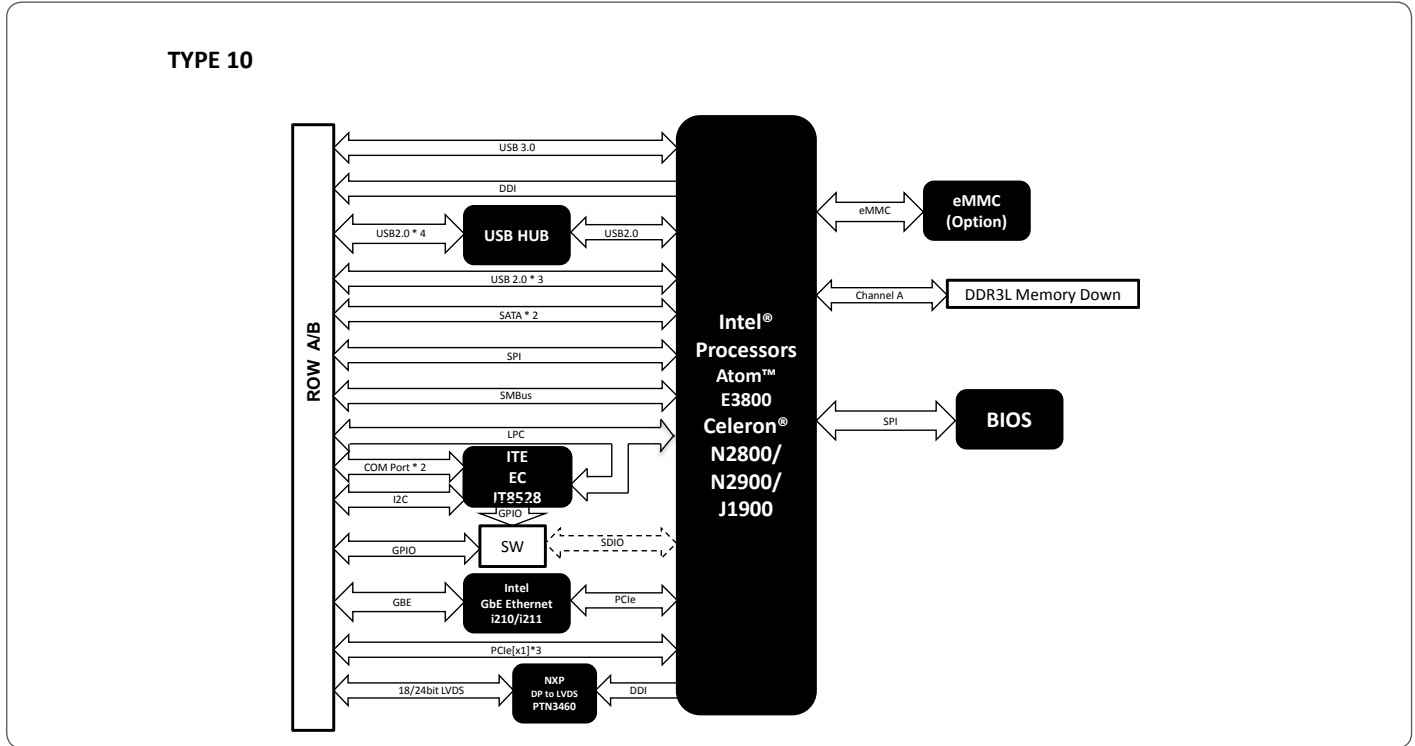
- M2.5 Screw x 4
- Product CD
- NanoCOM-BT

## Optional Accessories

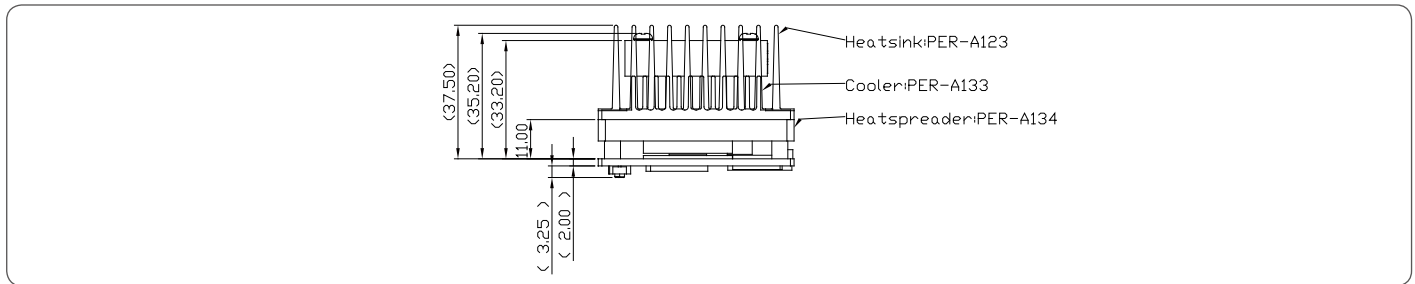
- **ECB-920A-A10**  
COMe Type 1/6/10 Carrier Board, ATX, GBE, 8 USB, 2 COM, 4 SATA, PCIe, AT/ATX, Legacy Free, Rev. A1.0
- **PER-A134**  
Heat Spreader, For NanoCOM-BT, Onboard CPU
- **PER-A133**  
CPU Cooler, 10W, for NanoCOM, To be used with Heat Spreader
- **PER-A123**  
Passive Heatsink, For NanoCOM-CV Rev. A .B, Onboard CPU, to be used with Heat Spreader

# NanoCOM-BT

## Block Diagram Unit: mm



## Dimension Unit: mm



## Ordering Information

Part Number	COM Express Type	CPU	Memory	Display	LVDS	Storage	LAN	USB	UART	Expansion Slot	Power	Power Temp	Others
NANOCOM-BT-A10-0001	10 (COM.0 Rev. 2.1)	Intel® Celeron® N2930	Onboard DDR3L 2 GB	eDP/ LVDS, DDI	24b, 1CH	SATA x 2	GbE x 1	USB2.0 x 6, USB2.0/USB3.0 x 1	2	PCI-Express [x1] x 3	+12V, AT/ ATX	0°C ~ 60°C	—
NANOCOM-BT-A10-0002	10 (COM.0 Rev. 2.1)	Intel® Celeron® N2807	Onboard DDR3L 2 GB	eDP/ LVDS, DDI	24b, 1CH	SATA x 2	GbE x 1	USB2.0 x 6, USB2.0/USB3.0 x 1	2	PCI-Express [x1] x 3	+12V, AT/ ATX	0°C ~ 60°C	—
NANOCOM-BT-A10-0003	10 (COM.0 Rev. 2.1)	Intel® Atom™ E3845	Onboard DDR3L 2 GB	eDP/ LVDS, DDI	24b, 1CH	SATA x 2	GbE x 1	USB2.0 x 6, USB2.0/USB3.0 x 1	2	PCI-Express [x1] x 3	+12V, AT/ ATX	0°C ~ 60°C	eMMC 16 GB
NANOCOM-BT-A10-0004	10 (COM.0 Rev. 2.1)	Intel® Atom™ E3827	Onboard DDR3L 2 GB	eDP/ LVDS, DDI	24b, 1CH	SATA x 2	GbE x 1	USB2.0 x 6, USB2.0/USB3.0 x 1	2	PCI-Express [x1] x 3	+12V, AT/ ATX	0°C ~ 60°C	—
NANOCOM-BT-A10-0005	10 (COM.0 Rev. 2.1)	Intel® Atom™ E3826	Onboard DDR3L 2 GB	eDP/ LVDS, DDI	24b, 1CH	SATA x 2	GbE x 1	USB2.0 x 6, USB2.0/USB3.0 x 1	2	PCI-Express [x1] x 3	+12V, AT/ ATX	0°C ~ 60°C	—
NANOCOM-BT-A10-0006	10 (COM.0 Rev. 2.1)	Intel® Atom™ E3825	Onboard DDR3L 2 GB	eDP/ LVDS, DDI	24b, 1CH	SATA x 2	GbE x 1	USB2.0 x 6, USB2.0/USB3.0 x 1	2	PCI-Express [x1] x 3	+12V, AT/ ATX	0°C ~ 60°C	eMMC 8 GB
NANOCOM-BT-A10-0007	10 (COM.0 Rev. 2.1)	Intel® Atom™ E3815	Onboard DDR3L 2 GB	eDP/ LVDS, DDI	24b, 1CH	SATA x 2	GbE x 1	USB2.0 x 6, USB2.0/USB3.0 x 1	2	PCI-Express [x1] x 3	+12V, AT/ ATX	0°C ~ 60°C	—