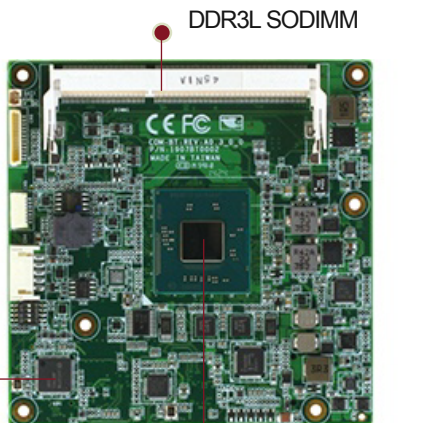


Onyx Single Board Computer Unit

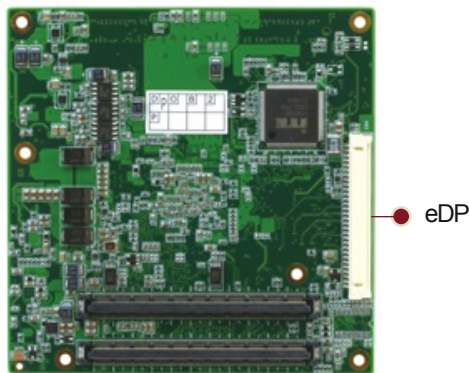
COM-BT

COM Express Type 6 CPU Module with Onboard Intel® Atom™ Soc Processor



Intel® I211AT
Gigabit Ethernet

Intel® Onboard SoC



Features

- Intel® Atom™ SoC series Processor
- DDR3L 1066/1333 MHz SODIMM x 1, Up to 8GB
- Intel Gigabit Ethernet
- CRT, Up to 24-bit Dual-channel LVDS, DP/HDMI, eDP (Optional)
- High Definition Audio Interface
- SATA 3.0Gb/s x 2
- USB3.0 x 1, USB2.0 x 7
- PCI-Express [x1] x 3
- COM Express Compact Module, Pin-out Type 6, COM.0 Rev. 2.1

Specifications

Main Specifications

Processor	Intel® SOC Processor N2930: 4C / 1.83GHz / 7.5W, N2807: 2C / 1.58GHz / 4.3W, E3845: 4C 1.91 GHz / 10W, E3827: 2C 1.75 GHz / 8W, E3826: 2C 1.46 GHz / 7W, E3825: 2C 1.33 GHz / 6W, E3815: 1C 1.46 GHz / 5W, J1900: 4C / 2.0GHz / 10W
Form Factor	COM Express Nano Module, Pin-out Type 6, COM.0 Rev. 2.1
System Memory	DR3L1066/1333 MHz SODIMM x 1, up to 8GB
Chipset	Intel® Atom™ SOC
H/W Status Monitoring	Supports CPU Temperature Monitoring.
Expansion Interface	PCI Express [x1] x 3, LPC Bus x 1, SMBus x 1
BIOS	AMI BIOS, Legacy free BIOS
Wake on LAN	Yes
Watchdog Timer	ITE IT8528E, 255 levels

I/O

USB	USB 2.0 x 7 (including USB3.0 x 1)
Serial Port	TX / RX x 2
Ethernet	Intel® I211AT for 10/1000/1000Base-TX
Storage	SATA 3.0Gb/s x 2
Audio	High definition audio
GPIO	Up to 4 in and 4 out share with SDIO
PS/2 Port	-

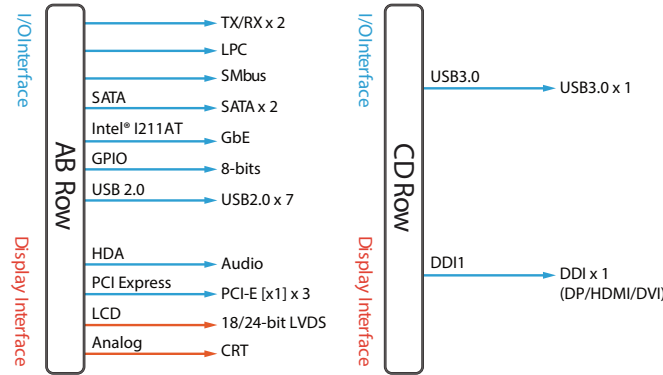
Mechanical and Environmental

Power Consumption	-
Power Requirement	Standard: +12V, AT/ATX
Operating Humidity	0% ~ 90% relative humidity, non-condensing
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Gross weight	0.55 lb (0.25Kg)
Dimensions(W x D x H)	3.74" x 3.74" (95mm x 95mm)
MTBF (Hours)	-

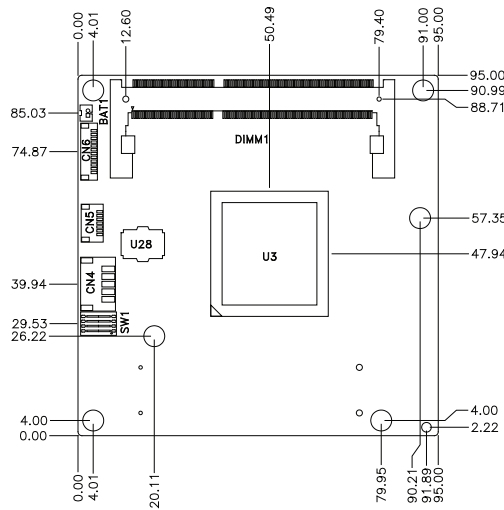
COM-BT

COM Express Type 6 CPU Module with Onboard Intel® Atom™ Soc Processor

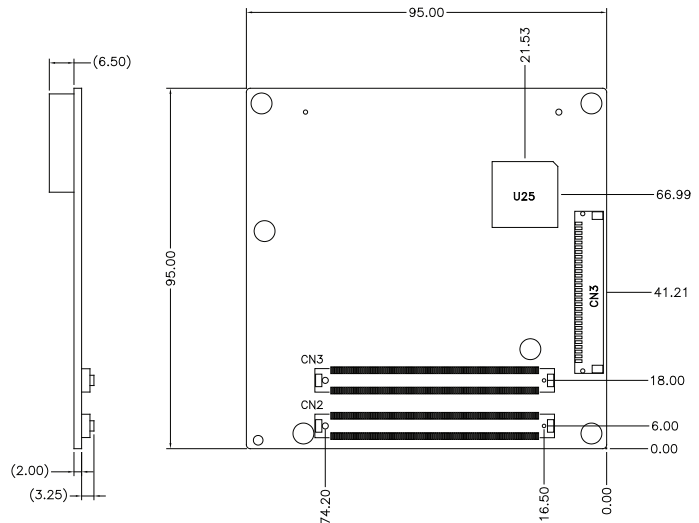
Block Diagram



Dimension



Component Side



Solder Side

NOTE:
The Height of Cooling System Depends on Customer Cooling Device.

Ordering Information

Part Number	COM Express Type	CPU	Memory	Display	LVDS	Storage	LAN	USB	UART	Expansion Slot	Power	Temp.
COM-BT-A10-0001	6 (COM.0 Rev. 2.1)	Quad core N2930 (1.83GHz)	DDR3L1066/1333, Max. 8GB	VGA, HDMI, LVDS, DP, eDP (Optional)	18/24-bit dual-channel LVDS	SATA x 2	GbE x 1	USB3.0 x 1 USB2.0 x 7	2 (TX/RX)	PCI-Express [x1] x 3, LPC bus x 1, SMBus x 1	12V	0°C - 60°C
COM-BT-A10-0002	6 (COM.0 Rev. 2.1)	Dual core N2807 (1.58GHz)	DDR3L1066/1333, Max. 8GB	VGA, HDMI, LVDS, DP, eDP (Optional)	18/24-bit dual-channel LVDS	SATA x 2	GbE x 1	USB3.0 x 1 USB2.0 x 7	2 (TX/RX)	PCI-Express [x1] x 3, LPC bus x 1, SMBus x 1	12V	0°C - 60°C
COM-BT-A10-0003	6 (COM.0 Rev. 2.1)	Quad core E3845 (1.75GHz)	DDR3L1066/1333, Max. 8GB	VGA, HDMI, LVDS, DP, eDP (Optional)	18/24-bit dual-channel LVDS	SATA x 2	GbE x 1	USB3.0 x 1 USB2.0 x 7	2 (TX/RX)	PCI-Express [x1] x 3, LPC bus x 1, SMBus x 1	12V	0°C - 60°C
COM-BT-A10-0004	6 (COM.0 Rev. 2.1)	Dual core E3827 (1.91 GHz)	DDR3L1066/1333, Max. 8GB	VGA, HDMI, LVDS, DP, eDP (Optional)	18/24-bit dual-channel LVDS	SATA x 2	GbE x 1	USB3.0 x 1 USB2.0 x 7	2 (TX/RX)	PCI-Express [x1] x 3, LPC bus x 1, SMBus x 1	12V	0°C - 60°C
COM-BT-A10-0005	6 (COM.0 Rev. 2.1)	Dual core E3826 (1.46GHz)	DDR3L1066, Max. 8GB	VGA, HDMI, LVDS, DP, eDP (Optional)	18/24-bit dual-channel LVDS	SATA x 2	GbE x 1	USB3.0 x 1 USB2.0 x 7	2 (TX/RX)	PCI-Express [x1] x 3, LPC bus x 1, SMBus x 1	12V	0°C - 60°C
COM-BT-A10-0006	6 (COM.0 Rev. 2.1)	Dual core E3825 (1.33GHz)	DDR3L1066, Max. 8GB	VGA, HDMI, LVDS, DP, eDP (Optional)	18/24-bit dual-channel LVDS	SATA x 2	GbE x 1	USB3.0 x 1 USB2.0 x 7	2 (TX/RX)	PCI-Express [x1] x 3, LPC bus x 1, SMBus x 1	12V	0°C - 60°C
COM-BT-A10-0007	6 (COM.0 Rev. 2.1)	Single core E3815 (1.46GHz)	DDR3L1066, Max. 8GB	VGA, HDMI, LVDS, DP, eDP (Optional)	18/24-bit dual-channel LVDS	SATA x 2	GbE x 1	USB3.0 x 1 USB2.0 x 7	2 (TX/RX)	PCI-Express [x1] x 3, LPC bus x 1, SMBus x 1	12V	0°C - 60°C
COM-BT-A10-0008	6 (COM.0 Rev. 2.1)	Quad core J1900 (2.0GHz)	DDR3L1066/1333, Max. 8GB	VGA, HDMI, LVDS, DP, eDP (Optional)	18/24-bit dual-channel LVDS	SATA x 2	GbE x 1	USB3.0 x 1 USB2.0 x 7	2 (TX/RX)	PCI-Express [x1] x 3, LPC bus x 1, SMBus x 1	12V	0°C - 60°C

