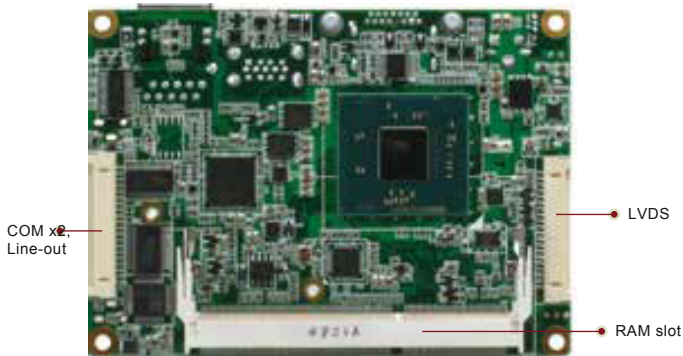
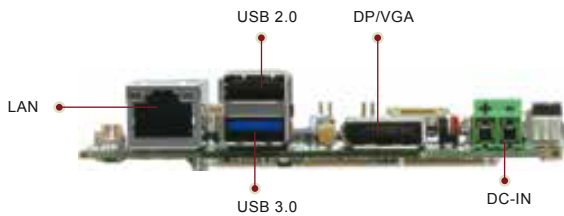
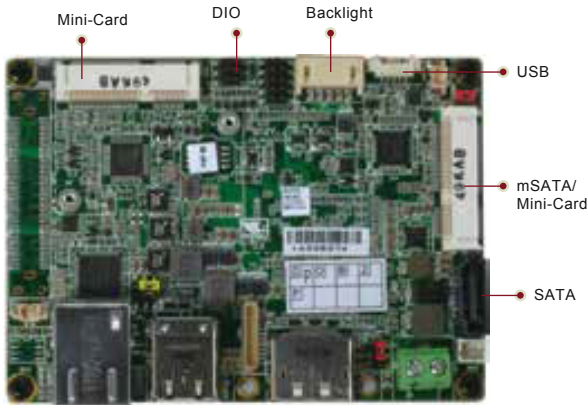


Onyx Single Board Computer Unit

PICO-BT01

Pico-ITX Board with Intel® Atom™ or Celeron® Processor SoC



Features

- Onboard Intel® Atom™ E3845/ Celeron® J1900/ N2807 Processor SoC
- DDR3L 1066/1333 MHz SODIMM x 1, Up to 8 GB
- 18/24-bit LVDS, CRT Co-lay Display Port
- SATA 3.0 Gb/s x 1
- USB3.0 x 1, USB2.0 x 2
- Gigabit Ethernet x 1, RJ-45 x 1
- RS-232 x 1, RS-232/422/485 x 1
- mSATA/Mini-Card x 1, Mini-Card x 1
- 4-bit Digital I/O
- BIO Connector for Daughter Board

Specifications

Main Specifications

Processor	Onboard Intel® Atom™ E3845/ Celeron® J1900/N2807 Processor
Form Factor	Pico-ITX
System Memory	204-pin SODIMM DDR3L 1066/1333 MHz up to 8 GB
Chipset	Intel® Atom™ E3845/ Celeron® J1900/N2807 Processor SoC
H/W Status Monitoring	Monitoring system temperature, voltage status
Expansion Interface	Mini-Card x 1 (Half-size), BIO [PCIe x 1, USB x 2, line-out, SMBus, GPIO, LPC] (Optional)
BIOS	AMI/SPI
Wake On LAN	Yes
Battery	Lithium battery

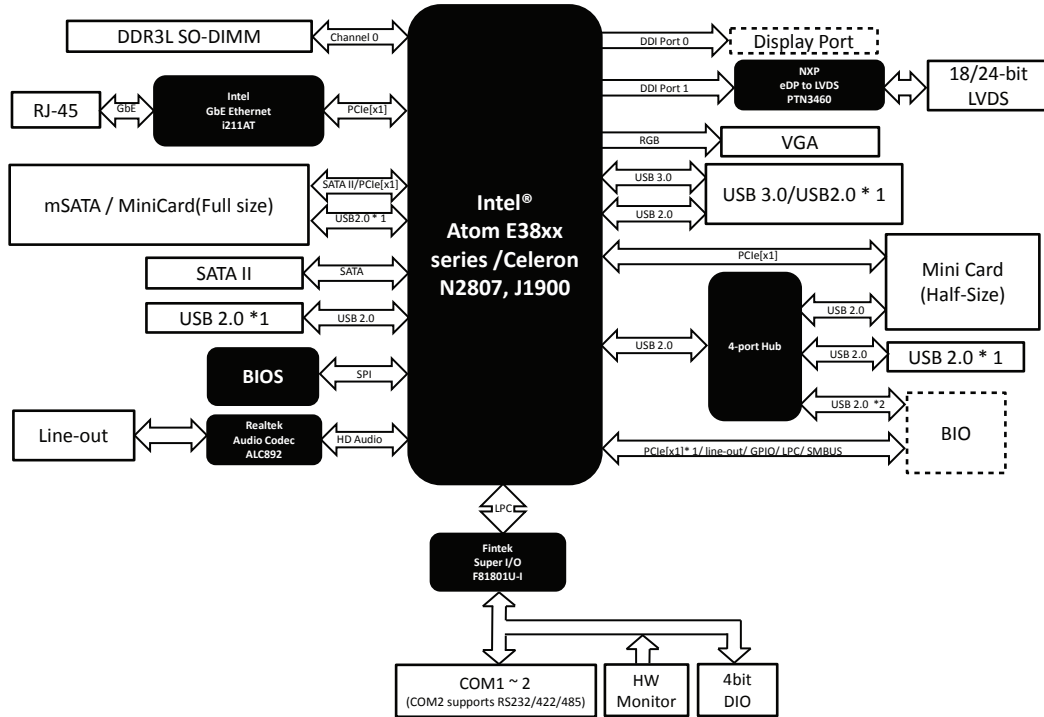
I/O

USB	USB3.0 x 1, USB 2.0 x 2, USB 1/2 total support 1.5A on rear I/O
Serial Port	COM1: RS-232, COM2: RS-232/422/485(Ring/ +5V/ +12V)
Ethernet	Gigabit Ethernet, RJ-45 x 1
Storage	Storage SATA 3.0 Gb/s x 1, mSATA/Mini-Card x 1 (Full size)
Audio	Line-out
Digital I/O	Support 4-bit(Programmable, 2-in/2-out)
BIO Interface (optional)	BIO daughter board w/ LAN x 1 or Mini-Card x 1,USB x 2, Line-out, SMBus, GPIO
Display Chipset	Intel® Atom™E3845/ Celeron® J1900/ Celeron® N2807 Processor SoC
Resolution	VGA up to 2048 x 1152 @ 60 Hz or DP up to 2560 x 1400 @ 60 Hz LVDS (18/24-bit) up to 1400 x 900@ 60 Hz
LCD Interface	18/24-bit Single LVDS

Mechanical and Environmental

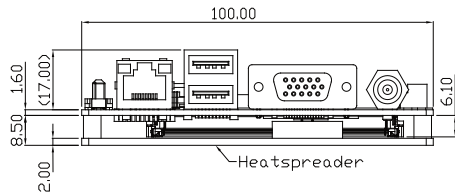
Power Consumption	Intel® Celeron® J1900,DDR3L 8 GB, 1.14A@+12V
Power Requirement	+12V AT/ATX(default), lockable connector optional
Operating Temperature	32°F ~ 140°F(0°C ~ 60°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Gross weight	0.44 lb (0.2kg)
Dimensions(W x D x H)	3.94" x 2.83" (100mm x 72mm)

Block Diagram

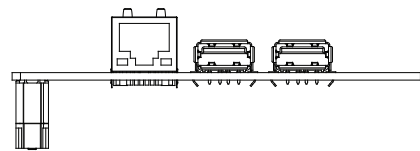


Dimension / Unit: mm

Standard model with heat-sink



BIO daughter board for reference



Ordering Information

Part Number	CPU	RAM	Fan/Fanless	Display	LVDS	Storage	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	Power Temp	Others
PICO-BT01-A10-0002	Celeron® N2807 (Dual Core)	DDR3L, Max. 4GB	Heat-spreader	DP + LVDS	24b 1CH	SATA 2 x 1, mSATA/Mini-Card x 1	GbE x 1	USB 3.0 x 1 UBS 2.0 x 2	1	1	Mini-Card x 1, DIO 4-bit	+12V (ATX)	0°C ~ 60°C	Line-out
PICO-BT01-A10-0003	Atom™ E3845 (Quad Core)	DDR3L, Max. 8 GB	Heat-spreader	CRT+ LVDS	24b 1CH	SATA 2 x 1, mSATA/Mini-Card x 1	GbE x 1	USB 3.0 x 1 UBS 2.0 x 2	1	1	Mini-Card x 1, DIO 4-bit	+12V (ATX)	0°C ~ 60°C	Line-out, BIO x 1
PICO-BT01-A10-0004	Atom™ E3825 (Dual Core)	DDR3L, Max. 4 GB	Heat-spreader	DP + LVDS	24b 1CH	SATA 2 x 1, mSATA/Mini-Card x 1	GbE x 1	USB 3.0 x 1 UBS 2.0 x 2	1	1	Mini-Card x 1, DIO 4-bit	+12V (ATX)	0°C ~ 60°C	Line-out
PICO-BT01-A10-0005	Celeron® J1900 (Quad Core)	DDR3L, Max. 8 GB	Heat-spreader	CRT+ LVDS	24b 1CH	SATA 2 x 1, mSATA/Mini-Card x 1	GbE x 1	USB 3.0 x 1 UBS 2.0 x 2	1	1	Mini-Card x 1, DIO 4-bit	+12V (ATX)	0°C ~ 60°C	Line-out