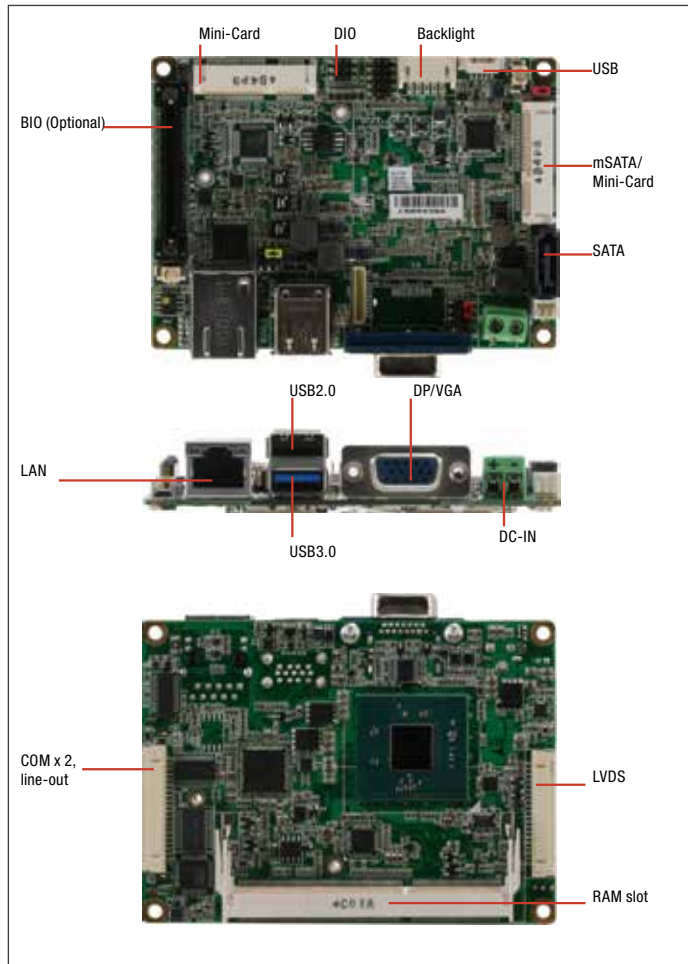


Pico-ITX Board with Intel® Atom™ or Celeron® Processor SoC



## Specifications

System	
Form Factor	Pico-ITX
CPU	Onboard Intel® Atom™ E3845 or Celeron® J1900/N2807 Processor SoC
CPU Frequency	Up to 2.0 GHz
Chipset	Intel® E3845/J1900/N2807
Memory Type	204-pin DDR3L SODIMM x 1, DDR3L 1066/1333, Max 8GB
Max. Memory Capacity	Up to 8GB
BIOS	AMI/SPI
Wake On LAN	Yes
Watchdog Timer	1-255 steps by software program
Power Requirement	+12VDC
Power Supply Type	AT/ATX (default), lockable connector optional
Power Consumption (Typical)	Intel® Celeron® J1900 2.0GHz, DDR3L 1333 MHz 8 GB 1.14A@+12V
System Cooling	Heat-spreader, heatsink or cooler optional
Dimension	3.94" x 2.84" (100mm x 72mm)
Gross Weight	0.88lb (0.4 kg)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C) or WITAS 1 (-20°C ~ 70°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	80,000
Certification	CE, FCC
Display	
Chipset	Intel® E3845/J1900/N2807
Resolution	VGA up to 2048 x 1152 @60Hz or DP up to 2560 x 1400 @60Hz LVDS (18/24-bit) up to 1400 x 900 @60Hz
LCD Interface	18/24-bit Single LVDS

## Features

- Onboard Intel® Atom™ E3800 or Celeron® J1900/N2807 Product Family Processor SoC
- DDR3L 1066/1333 MHz SODIMM x 1, Up to 8GB
- 18/24-bit LVDS LCD, CRT co-lay Display Port
- SATA 3.0 Gb/s x 1, mSATA/Mini-Card 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
- Mini-Card x 1
- 4-Bit Digital I/O
- BIO Connector for Daughter Board



I/O	
Storage/SSD	SATA II 3.0Gb/s x 1, mSATA/Mini-Card (Full-size) x 1
Ethernet	Intel® Gigabit Ethernet i211AT 10/100/1000Base-TX x 1
USB Port	USB 3.0 x 1 Rear I/O, USB 2.0 x 1 Rear I/O and x 1 Pin header
Serial Port	RS-232 x 1, RS-232/422/485 x 1 (Ring /+5V/+12V)
Audio	Line-out x 1
DIO	4-bit (2-in, 2-out)
Expansion Slot	Mini-Card (Half-size) x 1, BIO x 1
SIM	Option by BIO Board
TPM	—
Touch	—

## Packing List

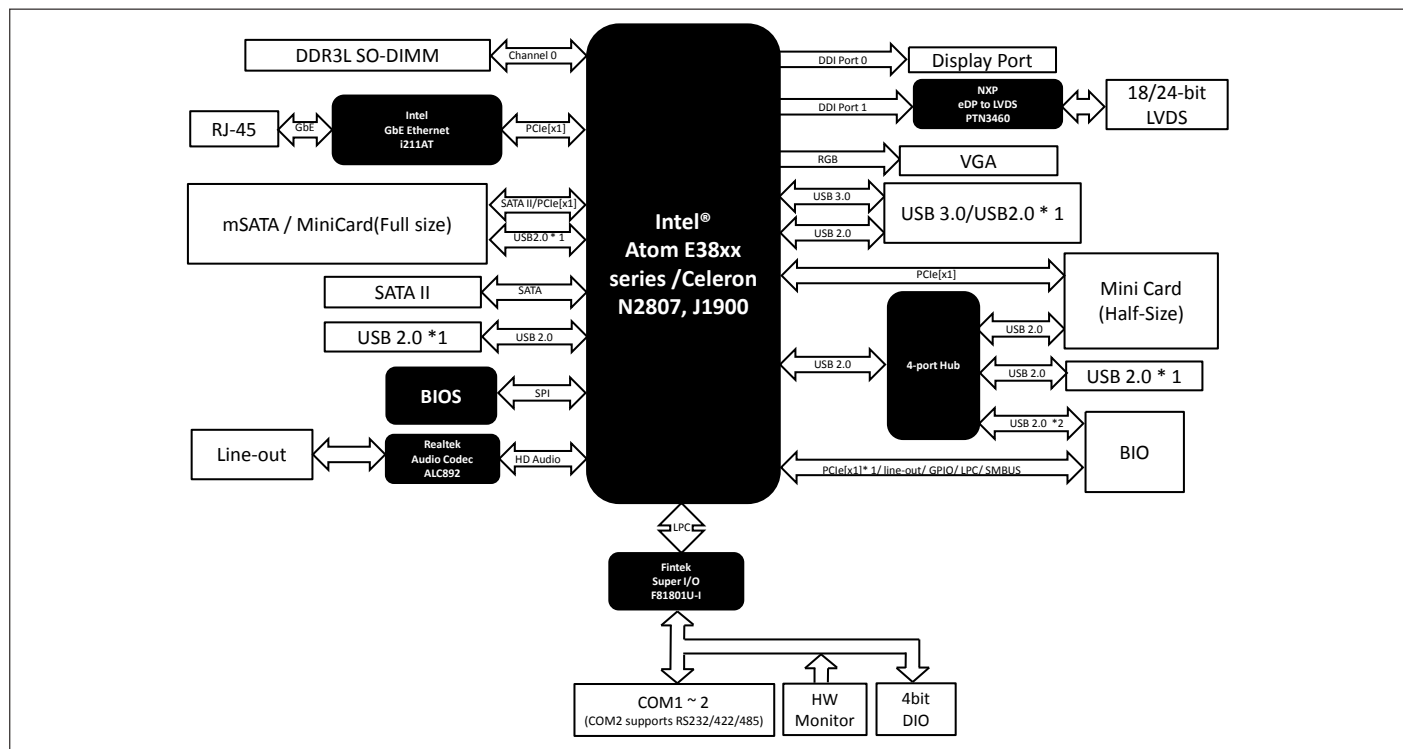
- M10BT0100  
Heat Spreader
- 1703200153  
COM x 2, Line-out Cable
- Product CD
- PICO-BT01

## Optional Accessories

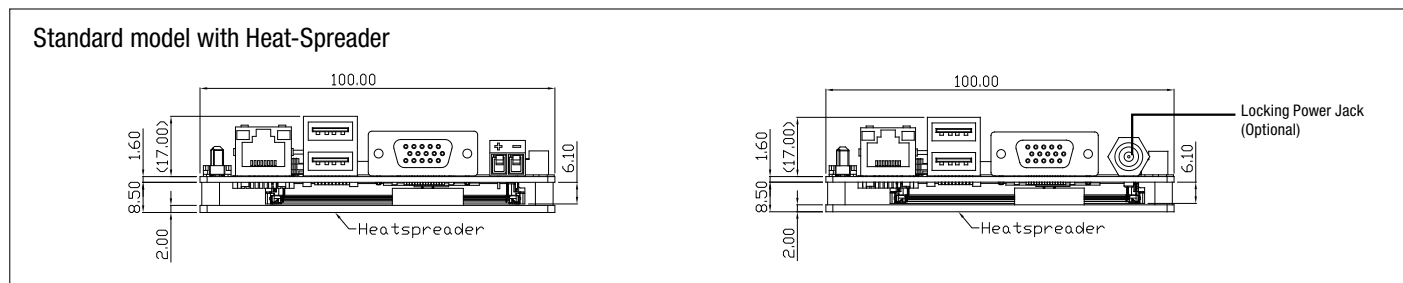
Part Number	Description	Qty.
1709070500	SATA Cable	1
1702150155	SATA Power Cable	1
17592NABT0	CPU Cooler for 6-10W. To be used with heat Spreader.	1
M16BT01000	Heatsink for N2807. To be used with heat Spreader.	1
1700050207	USB Cable 20cm	1
BIO-ST01-L1U2-A10-01	BIO Board, LAN, 2W Audio AMP, 2 USB, SMBus	1
BIO-ST01-M1U1-A10-01	BIO Board, MiniCard, 2W Audio AMP, USB, SMBus	1
BIO-ST02-C4M1-A10-01	BIO Board, 4 COM, USB, MiniCard, SIM	1
PICO-BT01W1-HSK01	Heatsink for E3845 WITAS1. To be used with heat Spreader.	1

# PICO-BT01

## Block Diagram



## Dimension Unit: mm



## Ordering Information

Part Number	SoC	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	24bit 1CH	SATA 2 x 1, mSATA/Mini-Card x 1	GbE x 1	USB3.0 x 1, UBS2.0 x 2	1	1	Mini-Card x 1, DIO 4-bit	+12V (ATX)	32°F ~ 131°F (0°C ~ 60°C)	Line-out
PICO-BT01-A10-0003	Atom™ E3845 (Quad Core)	DDR3L, Max. 8 GB	Heat-spreader	CRT+LVDS	24bit 1CH	SATA 2 x 1, mSATA/Mini-Card x 1	GbE x 1	USB3.0 x 1, UBS2.0 x 2	1	1	Mini-Card x 1, DIO 4-bit	+12V (ATX)	32°F ~ 131°F (0°C ~ 60°C)	Line-out, BIO x 1
PICO-BT01-A10-0004	Atom™ E3825 (Dual Core)	DDR3L, Max. 4GB	Heat-spreader	DP+LVDS	24bit 1CH	SATA 2 x 1, mSATA/Mini-Card x 1	GbE x 1	USB3.0 x 1, UBS2.0 x 2	1	1	Mini-Card x 1, DIO 4-bit	+12V (ATX)	32°F ~ 131°F (0°C ~ 60°C)	Line-out
PICO-BT01-A10-0005	Celeron® J1900 (Quad Core)	DDR3L, Max. 8 GB	Heat-spreader	CRT+LVDS	24bit 1CH	SATA 2 x 1, mSATA/Mini-Card x 1	GbE x 1	USB3.0 x 1, UBS2.0 x 2	1	1	Mini-Card x 1, DIO 4-bit	+12V (ATX)	32°F ~ 131°F (0°C ~ 60°C)	Line-out
PICO-BT01W1-A10-0003	Atom™ E3845 (Quad Core)	DDR3L, Max. 8 GB	Heat-spreader	CRT+LVDS	24bit 1CH	SATA 2 x 1, mSATA/Mini-Card x 1	GbE x 1	USB3.0 x 1, UBS2.0 x 2	1	1	Mini-Card x 1, DIO 4-bit	+12V (ATX)	WITAS 1 (-20°C ~ 70°C)	Line-out, BIO x 1