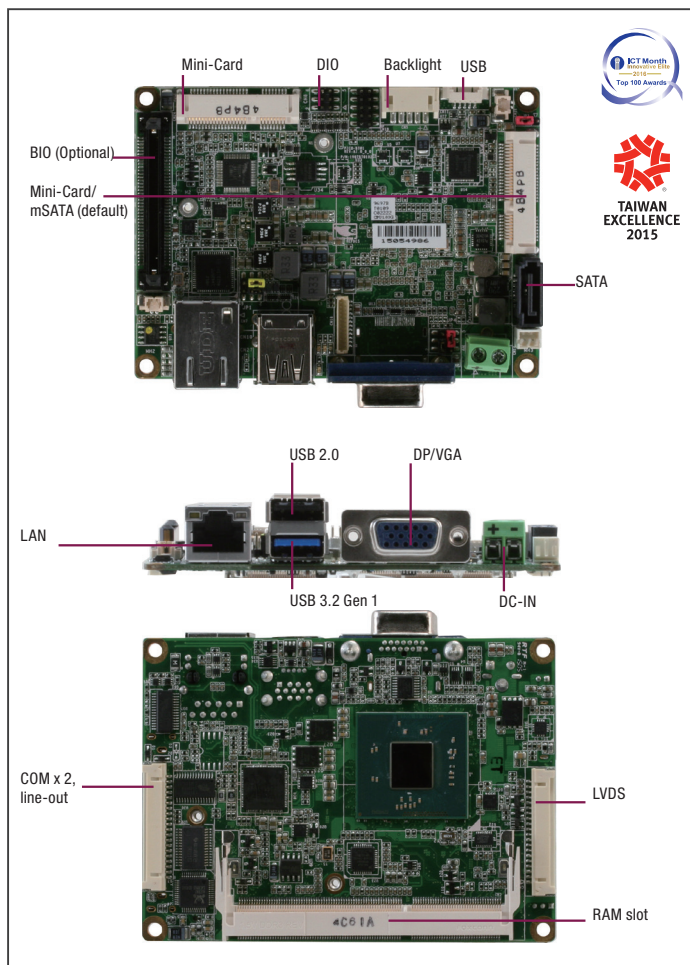


Pico-ITX Board with Intel® Atom™/ Celeron® Processor SoC



Specifications

System	
Form Factor	Pico-ITX
CPU	Intel® Celeron® Processor J1900 (4C, 2GHz, up to 2.42GHz, TDP 10W) Intel® Celeron® Processor N2807 (2C, 1.58GHz, up to 2.16GHz, TDP 4.3W) Intel Atom® Processor E3845 (4C, 1.91GHz, TDP 10W) Intel Atom® Processor E3825 (2C, 1.33GHz, TDP 6W)
CPU Frequency	Up to 2.42GHz
Chipset	Onboard Intel Atom® E3845/E3825, and Celeron® J1900/N2807 Processor SoC
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	255 levels
Power Requirement	+12VDC
Power Supply Type	AT/ATX (default) optional lockable connector
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" (100 mm x 72 mm)
Gross Weight	0.88lb (0.4 kg)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C) or WITAS 2 (-40°C ~ 85°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
OS support	Windows 10 (64 bit) Windows 7 (64 bit) Ubuntu 21.04.0/Kernel 5.10

Features

- Onboard Intel® Atom™ E3800/ Celeron® J1900/N2807 Processor SoC
- DDR3L 1066/1333 MHz SODIMM x 1, Up to 8 GB
- 18/24-bit LVDS LCD, CRT Co-lay Display Port
- SATA 3.0Gb/s x 1, Mini-Card(Full size)/mSATA(default) x 1
- USB 3.2 Gen 1 x 1, USB 2.0 x 2
- Gigabit Ethernet x 1, RJ-45 x 1
- RS-232 x 1, RS-232/422/485 x 1
- Mini-card x 1 (Half size)
- 4-Bit Digital I/O
- BIO Connector for Daughter Board Optional



Display	
Chipset	Onboard Intel Atom® E3845/E3825, and Celeron® J1900/N2807 Processor SoC
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
I/O	
Storage/SSD	SATA 3.0Gb/s x 1, Full size mPCIe/mSATA or USB2.0 x 1 (SATA as default, PCIe selected by HW BOM)
Ethernet	Intel Gigabit Ethernet, 10/100/1000Base-TX x 1 (Witas with i210IT, the others with i211AT)
USB Port	USB 3.2 Gen 1 x 1 Rear IO, USB 2.0 x 1 Rear IO 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	—

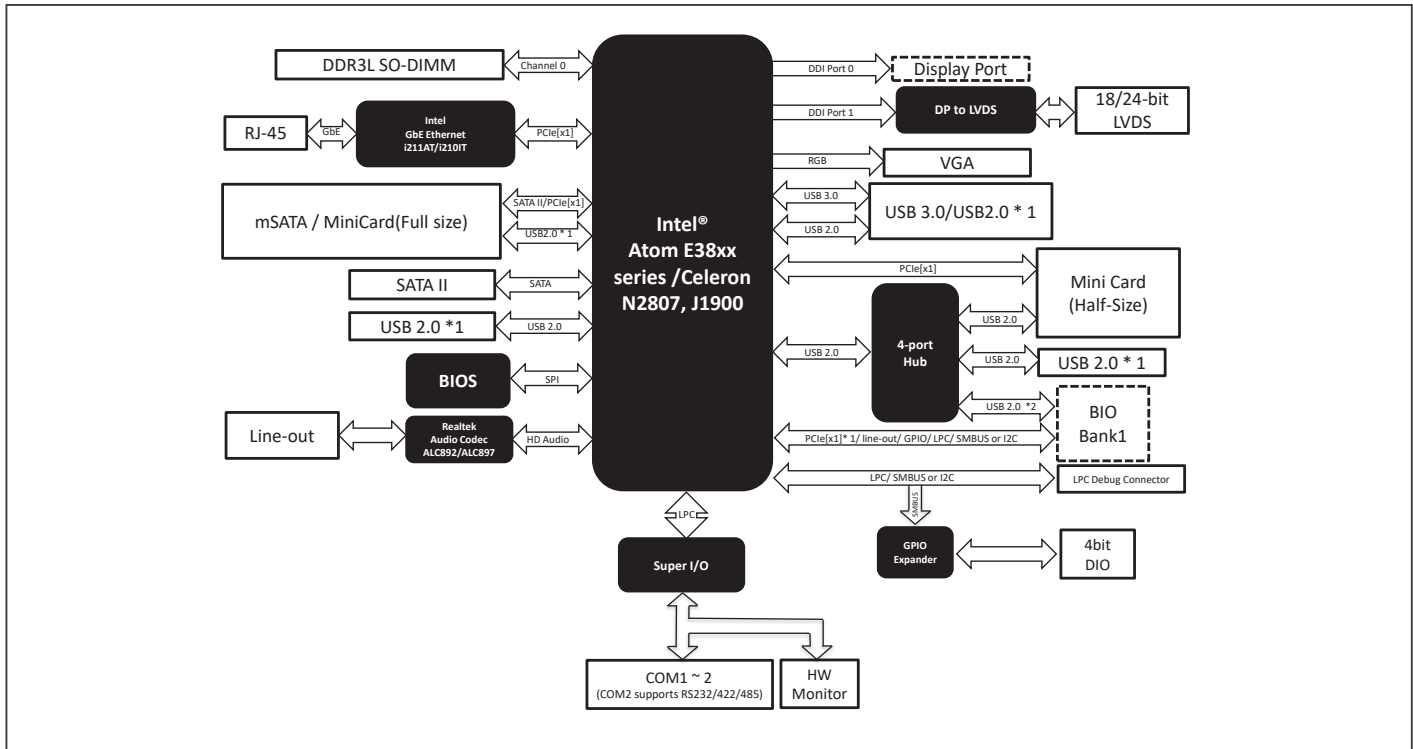
Packing List

- PICO-BT01-HSP01
Heat Spreader
- 1703200153
COM x 2, Line-out Cable
- PICO-BT01

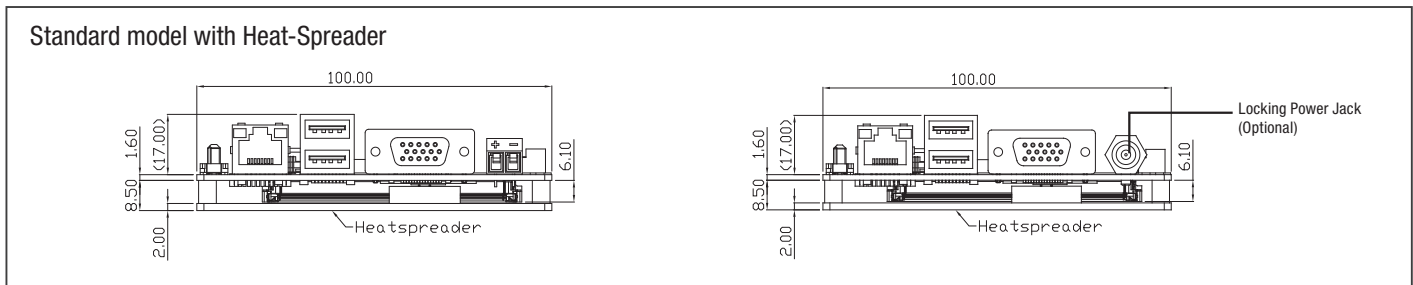
Optional Accessories

Part Number	Description	Qty.
1709070500	SATA Cable	1
1702150155	SATA Power Cable	1
1702040167	Power/FAN Cable 16cm	1
1700050207	USB Cable 20cm	1
PICO-BT01-FAN01	CPU Cooler.84 x 53 x 22.2mm.Silver.used with HSP	1
PICO-BT01W1-HSK01	Heatsink for E3845 WITAS. To be used with heat Spreader	1
PICO-BT01-HSK01	Heatsink. 84 x 53 x 12mm. To be used with heat spreader	1
PICO-BT01-HSK02	Heatsink. 100 x 72 x 15.5mm. To be used with heat spreader	1

Block Diagram



Dimension Unit: mm



Ordering Information

Part Number	CPU	RAM	Fan/Fanless	Display	LVDS	Storage	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	Temp.	Others
PICO-BT01-A12-0002	Celeron® N2807 (Dual Core)	DDR3L, Max. 4GB	Heat-spreader	DP+LVDS	24bit 1CH	SATAII x 1, Mini-Card (Full size)/mSATA (default) x 1	i211AT x 1	USB 3.2 Gen 1 x 1, UBS2.0 x 2	1	1	Mini-card x 1 (Half size), DIO 4-bit	+12V (Terminal block)	32°F ~ 131°F (0°C ~ 60°C)	Line-out
PICO-BT01-A12-0003	Atom™ E3845 (Quad Core)	DDR3L, Max. 8 GB	Heat-spreader	CRT+LVDS	24bit 1CH	SATAII x 1, Mini-Card (Full size)/mSATA (default) x 1	i211AT x 1	USB 3.2 Gen 1 x 1, UBS2.0 x 2	1	1	Mini-card x 1 (Half size), DIO 4-bit	+12V (Terminal block)	32°F ~ 131°F (0°C ~ 60°C)	Line-out, BIO x 1
PICO-BT01-A12-0004	Atom™ E3825 (Dual Core)	DDR3L, Max. 8 GB	Heat-spreader	DP+LVDS	24bit 1CH	SATAII x 1, Mini-Card (Full size)/mSATA (default) x 1	i211AT x 1	USB 3.2 Gen 1 x 1, UBS2.0 x 2	1	1	Mini-card x 1 (Half size), DIO 4-bit	+12V (Terminal block)	32°F ~ 131°F (0°C ~ 60°C)	Line-out
PICO-BT01-A12-0005	Celeron® J1900 (Quad Core)	DDR3L, Max. 8 GB	Heat-spreader	CRT+LVDS	24bit 1CH	SATAII x 1, Mini-Card (Full size)/mSATA (default) x 1	i211AT x 1	USB 3.2 Gen 1 x 1, UBS2.0 x 2	1	1	Mini-card x 1 (Half size), DIO 4-bit	+12V (Terminal block)	32°F ~ 131°F (0°C ~ 60°C)	Line-out
PICO-BT01W2-A11-0003	Atom™ E3845 (Quad Core)	DDR3L, Max. 8 GB	Heat-spreader	CRT+LVDS	24bit 1CH	SATAII x 1, Mini-Card (Full size)/mSATA (default) x 1	i210IT x 1	USB 3.2 Gen 1 x 1, UBS2.0 x 2	1	1	Mini-card x 1 (Half size), DIO 4-bit	+12V (Terminal block)	WITAS 2 (-40°C ~ 85°C)	Line-out, BIO x 1
PICO-BT01W2-A11-0004	Atom™ E3825 (Dual Core)	DDR3L, Max. 8 GB	Heat-spreader	DP+LVDS	24bit 1CH	SATAII x 1, Mini-Card (Full size)/mSATA (default) x 1	i210IT x 1	USB 3.2 Gen 1 x 1, UBS2.0 x 2	1	1	Mini-card x 1 (Half size), DIO 4-bit	+12V (Terminal block)	WITAS 2 (-40°C ~ 85°C)	Line-out