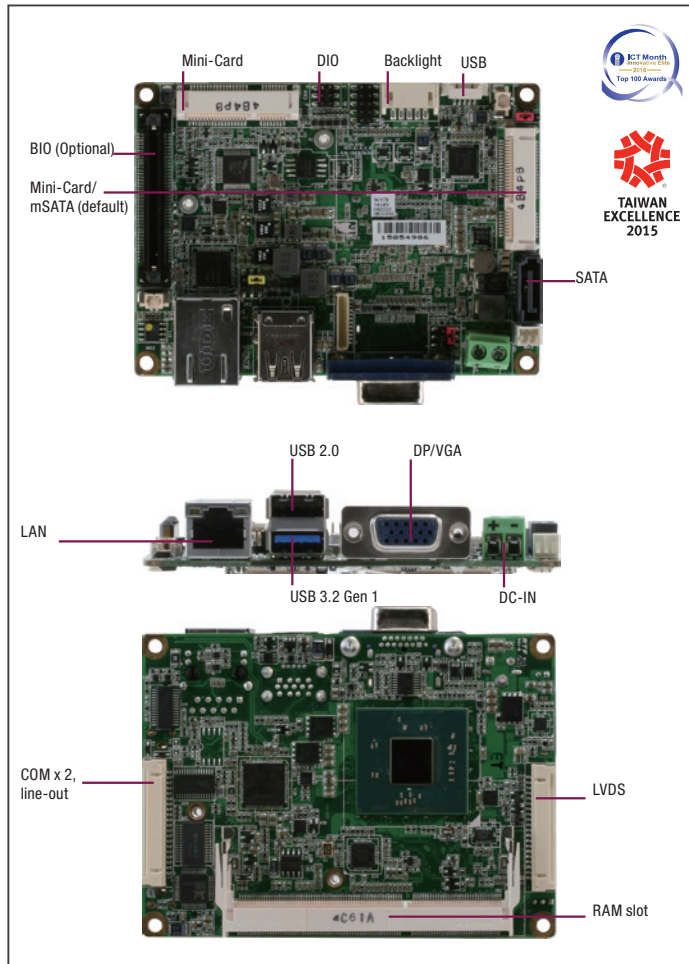


Pico-ITX Board with Intel® Atom™/ Celeron® Processor SoC



## Specifications

| System                      |  |
|-----------------------------|--|
| Form Factor                 | Pico-ITX   |
| CPU                         | Onboard Intel® Atom™ E3845/ 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              | 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  |
| Display                     |  |
| Chipset                     | Intel® E3845/J1900/N2807   |
| Resolution                  | VGA up to 2048 x 1152 @60Hz or DP up to 2560 x 1400 @60Hz<br>LVDS (18/24-bit) up to 1400 x 900 @60Hz |
| LCD Interface               | 18/24-bit Single LVDS  |

## 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



| I/O            |  |
|----------------|--|
| Storage/SSD    | SATA 3.0Gb/s x 1, Mini-Card(Full size)/mSATA(default) x 1  |
| Ethernet       | Intel Gigabit Ethernet, 10/100/1000Base-TX x 1 (Atom E series with I210IT, Celeron J/N series 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            | —  |
| Touch          | —  |

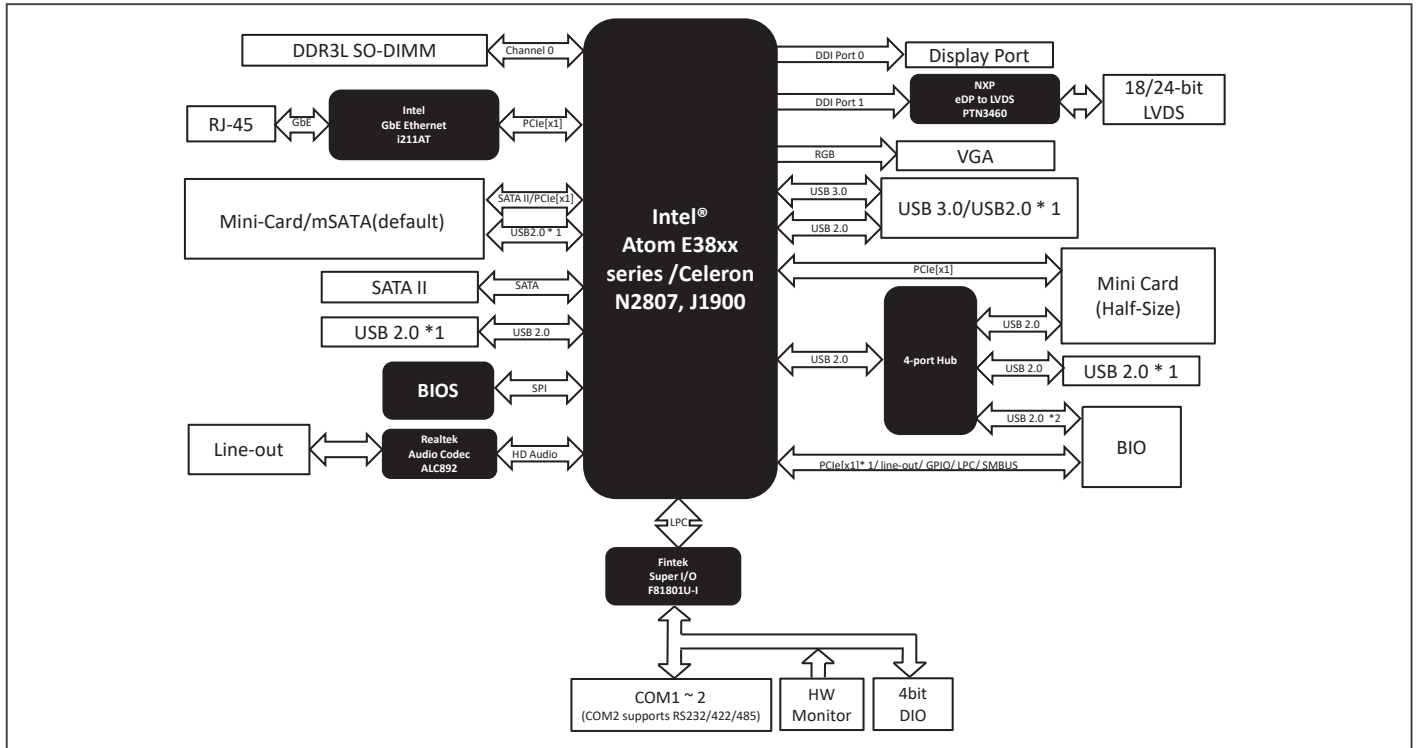
## Packing List

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

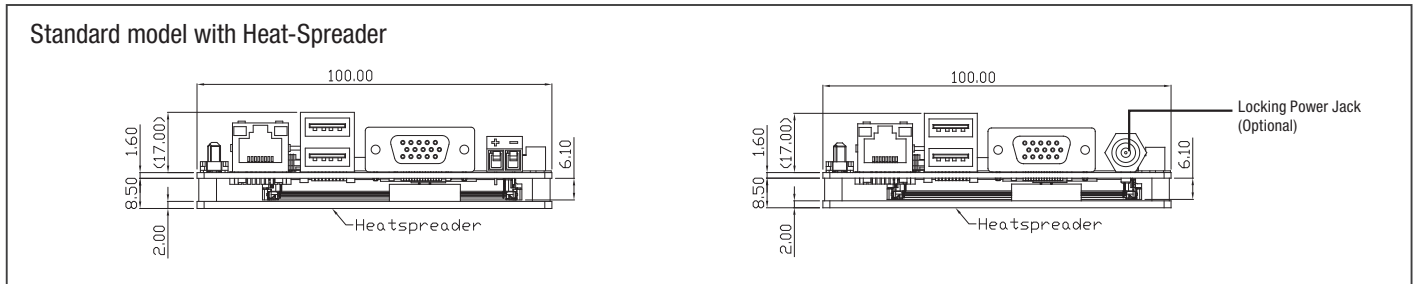
## Optional Accessories

| Part Number       | Description  | Qty. |
|-------------------|--|------|
| 1709070500        | SATA Cable   | 1    |
| 1702150155        | SATA Power Cable   | 1    |
| 1702040167        | Power/FAN Cable 16cm   | 1    |
| PICO-BT01-FAN01   | CPU Cooler.84*53*22.2mm.Silver.used with HSP                 | 1    |
| PICO-BT01W1-HSK01 | Heatsink for E3845 WiTAS1. To be used with heat Spreader.    | 1    |
| PICO-BT01-HSK01   | Heatsink for standard product.To be used with heat Spreader. | 1    |
| 1700050207        | USB Cable 20cm   | —    |

### 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-A11-0002   | Celeron® N2807 (Dual Core) | DDR3L, Max. 4GB  | Heat-spreader | DP+LVDS  | 24bit 1CH | SATAII x 1, Mini-Card (Full size)/mSATA (default) x 1 | GbE x 1 | USB 3.2 Gen 1 x 1, USB2.0 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-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 | GbE x 1 | USB 3.2 Gen 1 x 1, USB2.0 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-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 | GbE x 1 | USB 3.2 Gen 1 x 1, USB2.0 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-A11-0005   | 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 | GbE x 1 | USB 3.2 Gen 1 x 1, USB2.0 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 | GbE x 1 | USB 3.2 Gen 1 x 1, USB2.0 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 (Quad Core)    | DDR3L, Max. 8 GB | Heat-spreader | DP+LVDS  | 24bit 1CH | SATAII x 1, Mini-Card (Full size)/mSATA (default) x 1 | GbE x 1 | USB 3.2 Gen 1 x 1, USB2.0 x 2 | 1      | 1              | Mini-card x 1 (Half size), DIO 4-bit | +12V (Terminal block) | WITAS 2 (-40°C ~ 85°C)    | Line-out          |