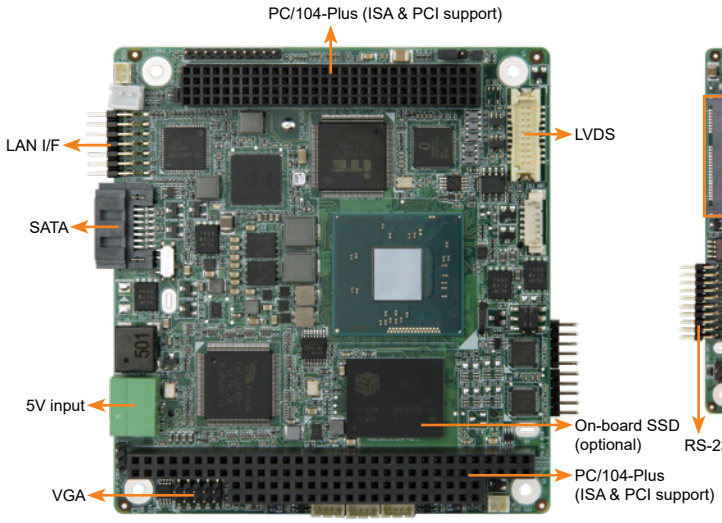
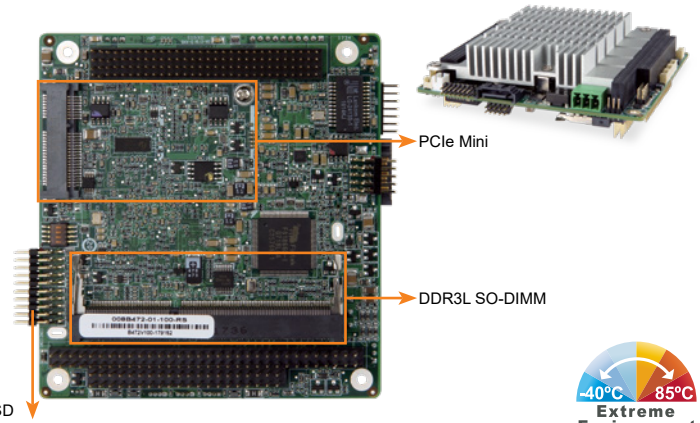
PM–BT

PC/104-Plus SBC with Intel® Atom™/Celeron® on-board SoC with DDR3L, VGA, LVDS, GbE, USB 2.0, SATA 3Gb/s, RS-232/422/485 and 5V DC input, RoHS





-40°C 85°C Extreme Environment

PC/104-Plus | Fanless | 5V DC Input | PCIe Mini Expansion | Dual Display

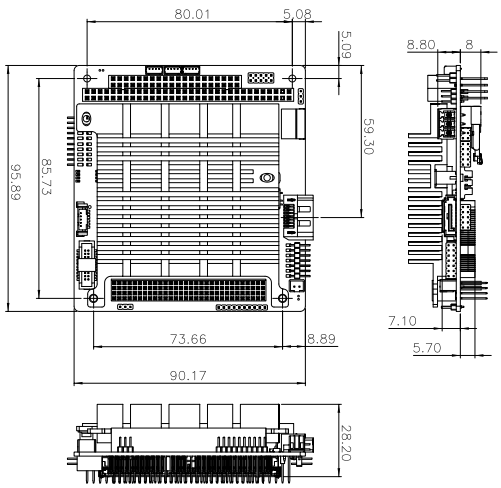
Specifications

- SoC
  Intel® Atom™ E3845 on-board SoC (1.91GHz, quad-core, 2MB cache, TDP=10W)
  Intel® Atom™ E3825 on-board SoC (1.33GHz, dual-core, 1MB cache, TDP=6W)
  Intel® Celeron® J1900 on-board SoC (2GHz, quad-core, 2MB cache, TDP=10W)
  Intel® Celeron® N2807 on-board SoC (1.58GHz, dual-core, 2MB cache, TDP=4.3W)
- BIOS
  AMI UEFI BIOS
- Memory
  One 204-pin 1333/1066 MHz single-channel DDR3L SO-DIMM supports up to 8 GB (J1900, N2930, E3845, E3827, E3826, E3825, E3815) or 4 GB (N2807)
- Graphics Engine
  Intel® HD Graphics Gen 7 Engine with four execution units, supporting DX11.1, OpenGL 4.2 and OpenCL1.2
- Display Output
  Dual independent display
  1 x VGA (up to 2560x1600@60 Hz)
  1 x 18/24-bit single-channel LVDS (2x10 pin)
- Ethernet
  1 x Intel® I210
- Super I/O
  Fintek F81866
- Internal I/O Interface
  1 x SATA 3Gb/s with 5V SATA power connector
  3 x USB 2.0 (1x4 pin, P=1.25)
  2 x RS-232/422/485 (2x5, P=2.0)
- Storage
  On-board SSD (optional, support by request)
- Front Panel
  1 x 10-pin header, P=2.0 (power LED, HDD LED, power button and reset button)
- Expansion
  1 x Full-size PCIe Mini slot (supports mSATA)
  1 x PC/104-Plus (ISA+PCI)*
- Digital I/O
  1 x 8-bit digital I/O (2x5 pin, P=2.0)
- Power Supply
  5V DC input
  12V for fan, LVDS and PCI-104 plus
  » 5V for PCI-104 plus (1x3 pin, P=2.0)
  » 12V for PCI-104 plus (1x3 pin, P=2.0)
  3/5V jumper for PCI-104 plus
  Support AT/ATX mode
  ErP/EuP Compliant
- Power Consumption
  5V@1.70A (Intel® Celeron® J1900 CPU with 8GB memory)
- Watchdog Timer
  Software programmable, supports 1~255 sec. system reset
- Operating Temperature
  -20°C ~ 60°C (for J1900/N2930/N2807)
  -40°C ~ 85°C (for E38xx)
- Storage Temperature
  -40°C ~ 85°C
- Thermal
  Heatsink
- Operating Humidity
  5% ~ 95%, non-condensing
- Dimensions
  96 mm x 90 mm
- Weight
  GW: 500g / NW 120g
- CE/FCC compliant

Features

- PC/104 form factor SBC supports 22nm Intel® Atom™ on-board SoC
- PC/104-Plus (ISA and PCI signal) function support
- 5V DC input solution
- Support 2 COM, PCIe Mini, USB and optional on-board SSD
- Dual display from VGA and LVDS
- Wide range temperature support froom -40°C ~ 85°C (for E38xx series CPU)

Dimensions *(Unit: mm)*



Packing List

1 x PM-BT single board computer	
1 x COM port cable	1 x SATA cable kit
1 x Heatsink	1 x Single-port USB cable
1 x LAN cable	1 x VGA cable

Ordering Information

Part No.	Description
PM-BT-J19001-R10	PC/104-Plus single board computer with Intel® Celeron® J1900 SoC with DDR3L, VGA, LVDS, USB 2.0, SATA 3Gb/s, GbE, RS-232/422/485 and 5V DC input, RoHS
PM-BT-N28071-R10	PC/104-Plus single board computer with Intel® Celeron® N2807 SoC with DDR3L, VGA, LVDS, USB 2.0, SATA 3Gb/s, GbE, RS-232/422/485 and 5V DC input, RoHS
PM-BT-E38xx1W2-R10**	PC/104-Plus single board computer with Intel® Atom™ E38xx SoC with DDR3L, VGA, LVDS, USB 2.0, SATA 3Gb/s, GbE, RS-232/422/485 and 5V DC input, RoHS,-40°C ~ 85°C
33403-000015-RS	PC104 plus spacer (for PCI) 120 pin socket connector
33403-000016-RS	PC104 plus spacer (for ISA) 64+40 pin socket connector

** Note: Models with other CPUs not listed in the table are requested by MOQ - 100 pcs/lot.
* ISA limitation, Please refer to the user manual for more information.