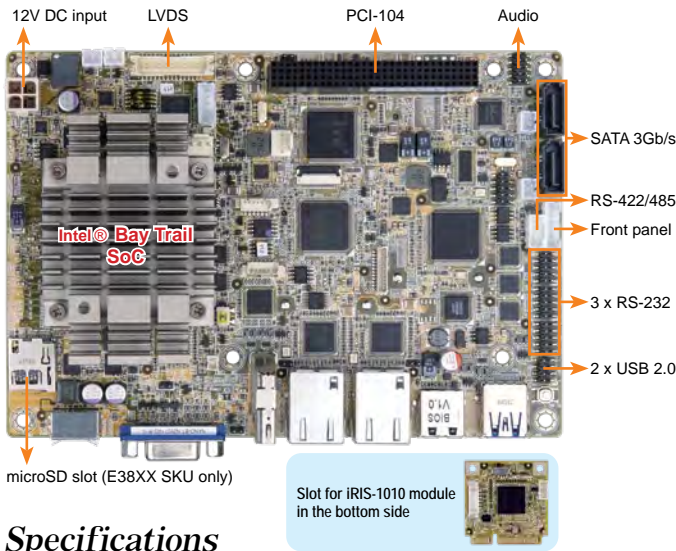


# NANO-BTW2 BT-i1

EPIC SBC supports 22nm Intel® Atom™/Celeron® on-board SoC with VGA, HDMI, LVDS, Dual Intel® PCIe GbE, USB 3.2 Gen 1 (5Gb/s), Dual PCIe Mini, SATA 3Gb/s, mSATA, COM, Audio and RoHS



## Specifications

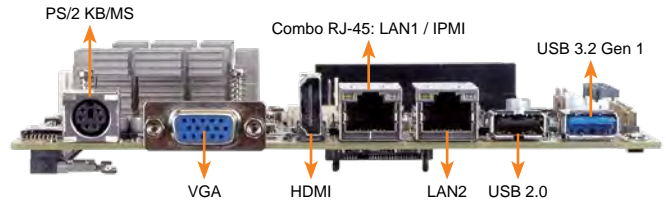
- ◆ SoC
  - Intel® Atom™ E3827 on-board SoC (1.75GHz, dual-core, 1MB cache, TDP=8W)
  - Intel® Atom™ E3826 on-board SoC (1.46GHz, dual-core, 1MB cache, TDP=7W)
  - Intel® Atom™ E3815 on-board SoC (1.46GHz, single-core, 512KB cache, TDP=5W)
  - Intel® Celeron® J1900 on-board SoC (2GHz, quad-core, 2MB 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 unbuffered DDR3L SDRAM SO-DIMM supports up to 8 GB (J1900, N2930, E3827, E3826, 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 HDMI (up to 1920x1080@60 Hz)
  - 1 x 18/24-bit dual-channel LVDS (up to 1920x1200@60Hz)
- ◆ Ethernet
  - » NANO-BT-i1
    - LAN1: Intel® I210-AT PCIe controller with NCSI support
    - LAN2: Intel® I211-AT PCIe controller
  - » NANO-BT-E38XX1W2
    - LAN1: Intel® I210-IT PCIe controller with NCSI support
    - LAN2: Intel® I210-IT PCIe controller
- ◆ External I/O Interface
  - 1 x PS/2 KB/MS
  - 1 x USB 2.0
  - 1 x USB 3.2 Gen 1 (5Gb/s)
- ◆ Internal I/O Interface
  - 1 x RS-422/485 (1x4 pin, P=2.0)
  - 2 x SATA 3Gb/s with 5V SATA power connector (no RAID)
  - 2 x USB 2.0 (2x4 pin, P=2.0)
  - 3 x RS-232 (2x5 pin, P=2.0)
- ◆ iRIS Remote Management Module: 1 x iRIS-1010 slot
- ◆ SMBus: 1 x SMBus (1x4 pin)
- ◆ Audio
  - Realtek ALC888S HD Audio codec
  - 1 x Front audio (2x5 pin)
- ◆ Front Panel
  - 1 x Power LED & HDD LED (1x6 pin)
  - 1 x Power button (1x2 pin)
  - 1 x Reset button (1x2 pin)
- ◆ LAN LED: 2 x LAN LED (1x2 pin)
- ◆ Expansion
  - 1 x Full-size PCIe Mini card slot (support mSATA co-lay SATA port 2)
  - 1 x PCI-104 slot (PCI signal)
  - 1 x microSD slot (E38XX SKU only)
- ◆ Digital I/O: 8-bit digital I/O (2x5 pin)
- ◆ Fan Connector
  - 1 x CPU smart fan (1x3 pin)
  - 1 x System smart fan (1x3 pin)
- ◆ Power Supply
  - 12V only DC input
  - 1 x Internal power connector (2x2 pin)
  - Support AT/ATX mode
- ◆ Power Consumption
  - 12V@1.52A (Intel® Atom™ processor J1900 with one 8 GB 1333 MHz DDR3 memory)
- ◆ Watchdog Timer: Software programmable, support 1~255 sec. system reset
- ◆ Operating Temperature: -20°C ~ 60°C, -40°C ~ 85°C (NANO-BT-E38XX1W2)
- ◆ Storage Temperature: -30°C ~ 70°C, -40°C ~ 85°C (NANO-BT-E38XX1W2)
- ◆ Operating Humidity: 5% ~ 95%, non-condensing
- ◆ Dimensions: 115mm x 165mm
- ◆ Weight: GW: 850g / NW: 350g
- ◆ CE/FCC compliant

## Highly efficient and power optimized multi-format codec engine

- ◆ Full HW Acceleration for Video Decoding
  - H.264, VC1 MPEG2, MVC, VP8, MPEG-4/H.263 MJPEG formats



- ◆ Video Encoding
  - » Full HW acceleration for H.264
  - » Hybrid HW acceleration of MPEG2



## Features

- ◆ EPIC SBC supports 22nm Intel® Atom™ or Celeron® on-board SoC
- ◆ Supports dual independent display with LVDS, VGA and HDMI
- ◆ 1.35V DDR3L 1333/1066 MHz SDRAM support up to 8 GB
- ◆ Support IPMI 2.0 with iRIS-1010 module

## Packing List

1 x NANO-BT single board computer with heatsink	
1 x Power cable	2 x SATA with power cable kit
2 x RS-232 cable	1 x QIG

## Ordering Information

Part No.	Description
NANO-BT-E38XX1W2-R11**	EPIC SBC supports Intel® 22nm single-Core Atom™ E381XX on-board SoC with VGA/HDMI/LVDS, Dual PCIe GbE, Dual PCIe Mini, USB 3.2 Gen 1 (5Gb/s), SATA 3Gb/s, mSATA, COM, audio and RoHS, -40~85°C
NANO-BT-i1-J19001-R11	EPIC SBC supports Intel® 22nm quad-core J1900 2.0GHz (10W) on-board SoC with VGA/HDMI/LVDS, Dual PCIe GbE, PCIe Mini, USB 3.2 Gen 1 (5Gb/s), SATA 3Gb/s, mSATA, COM, iRIS-1010, Audio and RoHS
NANO-BT-i1-N28071-R11	EPIC SBC supports Intel® 22nm dual-core N2807 1.58GHz (4.3W) on-board SoC with VGA/HDMI/LVDS, Dual PCIe GbE, PCIe Mini, USB 3.2 Gen 1 (5Gb/s), SATA 3Gb/s, mSATA, COM, iRIS-1010, Audio and RoHS
NANO-BT-i1-E38XX1-R11**	EPIC SBC supports Intel® Atom™ E38XX on-board SoC with VGA/HDMI/LVDS, Dual PCIe GbE, USB 3.2 Gen 1 (5Gb/s), PCIe Mini, SATA 3Gb/s, mSATA, COM, iRIS-1010, Audio and RoHS
NANO-BT-J19001-ECO-R10	Intel® 22nm Quad-Core J1900 2.0GHz (10W) on-board SoC with VGA/HDMI/LVDS, Dual PCIe GbE, PCIe Mini, USB 3.2 Gen 1 (5Gb/s), SATA, mSATA, COM, Audio, ECO packing and RoHS (10 pcs/pack)
iRIS-1010-R10	IPMI 2.0 adapter card with AST1010 BMC chip (w/o KVM over IP function) for PCIe Mini socket interface
32001-008600-200-RS	Dual-port USB 2.0 cable, 210mm, P=2.0
32006-000300-100-RS	PS/2 KB/MS Y-cable without bracket, 140mm/120mm
32205-003800-300-RS	RS-422/485 cable, 200mm, P=2.0

\*\*By order production, MOQ: 100