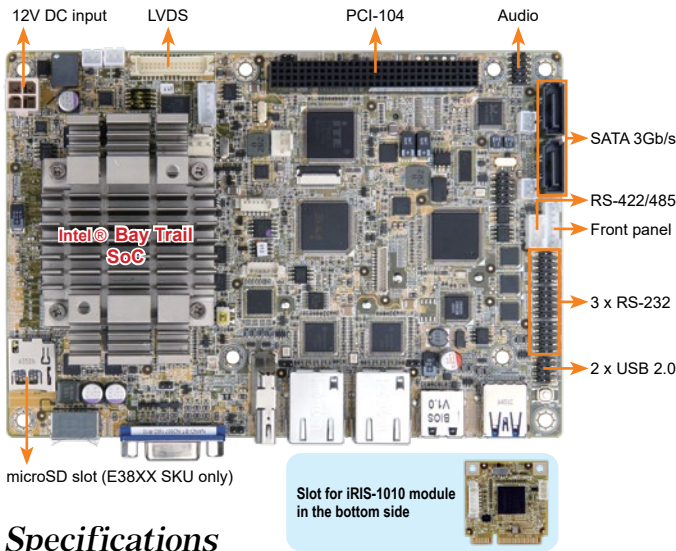


# NANO-BTW2 BT-i1

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

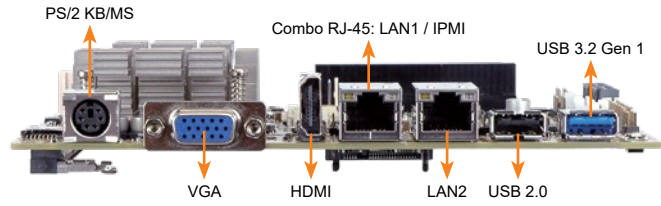


## Highly efficient and power optimized multi-format codec engine

- 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



## 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, OpenCL 4.2 and OpenCL 1.2
- ◆ 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 ALC662 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



## 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