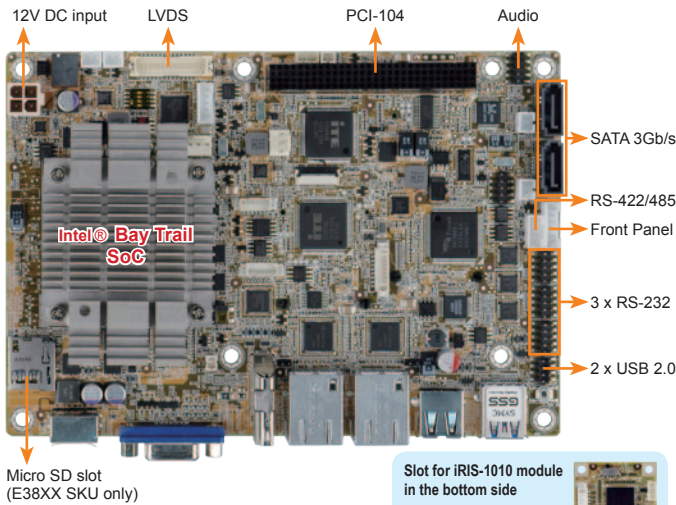


# NANO-BT-i1

EPIC SBC supports Intel® 22nm Atom™/Celeron® on-board SoC with VGA, HDMI, LVDS, Dual Intel® PCIe GbE, USB 3.0, Dual PCIe Mini, SATA 6Gb/s, mSATA, COM, Audio and RoHS



## Specifications

- ◆ SoC
  - Intel® Atom™ E3845 on-board SoC (1.91GHz, quad-core, 2MB cache, TDP=10W)
  - 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™ E3825 on-board SoC (1.33GHz, dual-core, 1MB cache, TDP=6W)
  - 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® N2930 on-board SoC (1.83GHz, quad-core, 2MB cache, TDP=7.5W)
  - Intel® Celeron® N2807 on-board SoC (1.58GHz, dual-core, 2MB cache, TDP=4.3W)
- ◆ BIOS
  - AMI UEFI BIOS
- ◆ Memory
  - One 204-pin 1066/1333MHz single-channel unbuffered DDR3L SDRAM SO-DIMM supports up to 8 GB (J1900, N2930, E3845, E3827, E3826) or 4 GB (N2807, E3825, E3815)
- ◆ Graphics Engine
  - Intel® HD Graphics Gen 7 Engines with 4 execution unit, supports DX11.1, OpenGL 4.2 and OpenCL1.2
- ◆ Display Output
  - VGA (up to 2560x1600@60Hz)
  - HDMI (up to 2560x1600@60Hz)
  - 18/24-bit dual-channel LVDS by CH7511B DP to LVDS converter (up to 1920x1200@60Hz)
- ◆ Ethernet
  - LAN1: Intel® I210-AT PCIe controller with NCSI support
  - LAN2: Intel® I211-AT PCIe controller
- ◆ Super I/O
  - Fintek F81866
- ◆ I/O Interface
  - 2 x SATA 3Gb/s with 5V SATA power connector (no RAID)
  - 1 x USB 3.0 (on rear I/O)
  - 1 x RS-422/485 (pin header)
  - 1 x PS/2 KB/MS
  - 3 x USB 2.0 (1 on rear I/O, 2 by pin header)
  - 3 x RS-232 (pin header)
  - 1 x Micro SD slot (E38XX SKU only)
- ◆ iRIS Remote Management Module
  - 1 x iRIS-1010 slot
- ◆ SMBus
  - 1 x 4-pin (1x4) wafer
- ◆ Audio
  - Realtek ALC662 HD Audio codec
  - 1 x Analog audio by 10-pin (2x5) header
- ◆ Front Panel
  - 1 x 6-pin (1x6) wafer for power LED & HDD LED
  - 1 x 2-pin (1x2) wafer for power button
  - 1 x 2-pin (1x2) wafer for power reset
- ◆ LAN LED
  - 2 x 2-pin headers for LAN1 Link LED, LAN2 Link LED
- ◆ Expansion
  - 1 x Full-size PCIe Mini card slot (support mSATA co-lay SATA port 2)
  - 1 x PCI/104 slot (PCI signal)
- ◆ Digital I/O
  - 8-bit digital I/O (4-bit input, 4-bit output)
- ◆ Fan Connector
  - 1 x 3-pin CPU fan connector
  - 1 x 3-pin system fan connector
- ◆ Power supply
  - 12V only DC input
  - 1 x Internal 4-pin (2x2) power connector
  - Support AT/ATX mode
- ◆ Power Consumption
  - +12V@1.52A (Intel® Atom™ Processor J1900 CPU, 1 x 8GB 1333 MHz DDR3 memory)
- ◆ Watchdog Timer
  - Software programmable, support 1~255 sec. system reset
- ◆ Operating Temperature: -20°C ~ 60°C
- ◆ Storage Temperature: -30°C ~ 70°C
- ◆ Operating Humidity: 5% ~ 95%, non-condensing
- ◆ Dimensions: 115mm x 165mm
- ◆ Weight: GW:850g / NW:350g

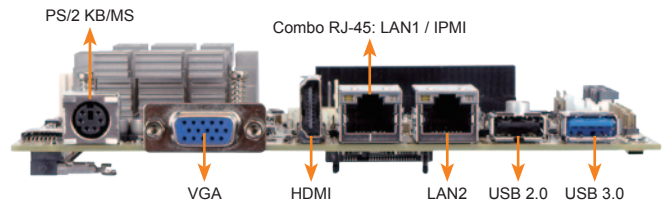
## Highly efficient and power optimized multi-format codec engine



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



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



## Features

1. EPIC SBC supports Intel® 22nm Atom™ or Celeron® on-board SoC
2. Supports dual independent display with LVDS, VGA and HDMI
3. 1.35V DDR3L 1333/1066 MHz SDRAM support up to 8GB
4. Support IPMI 2.0 with iRIS-1010 module
5. IEI One Key Recovery solution allows you to create rapid OS backup and recovery

## Packing List

|  |                                    |
|--|------------------------------------|
| 1 x NANO-BT single board computer with heatsink          |                                    |
| 2 x SATA with power cable kit (P/N: 32801-000201-300-RS) |                                    |
| 2 x RS-232 cable (P/N: 19800-000300-200-RS)              |                                    |
| 1 x Power cable (P/N: 32100-087100-RS)                   | 1 x QIG (Quick Installation Guide) |
| 1 x One Key Recovery CD                                  | 1 x Utility CD                     |

## Ordering Information

| Part No.                | Description   |
|-------------------------|---|
| NANO-BT-i1-J19001-R10   | EPIC SBC supports Intel® 22nm quad-core J1900 2.0GHz (10W) on-board SoC with VGA/HDMI/LVDS, Dual PCIe GbE, USB 3.0, PCIe Mini, SATA 3Gb/s, mSATA, COM, iRIS-1010, Audio and RoHS                |
| NANO-BT-i1-N29301-R10   | EPIC SBC supports Intel® 22nm quad-core N2930 1.83GHz (7.5W) on-board SoC with VGA/HDMI/LVDS, Dual PCIe GbE, USB 3.0, PCIe Mini, SATA 3Gb/s, mSATA, COM, iRIS-1010, Audio and RoHS              |
| NANO-BT-i1-N28071-R10   | EPIC SBC supports Intel® 22nm dual-core N2807 1.58GHz (4.3W) on-board SoC with VGA/HDMI/LVDS, Dual PCIe GbE, USB 3.0, PCIe Mini, SATA 3Gb/s, mSATA, COM, iRIS-1010, Audio and RoHS              |
| NANO-BT-i1-E38XX1-R10** | EPIC SBC supports Intel® Atom™ E38XX on-board SoC with VGA/HDMI/LVDS, Dual PCIe GbE, USB 3.0, PCIe Mini, SATA 3Gb/s, mSATA, COM, iRIS-1010, Audio and RoHS (by project support, MOQ 100pcs/lot) |
| iRIS-1010-R10           | IPMI 2.0 adapter card with AST1010 BMC chip (W/O KVM over IP function) for PCIe Mini socket interface   |
| 32006-000300-100-RS     | PS/2 KB/MS Y-cable without bracket  |
| 32000-070301-RS         | Dual-port USB 2.0 cable   |
| 32205-003800-300-RS     | RS-422/485 cable, 200mm   |

\*\* : Those item are by order production, MOQ: 100