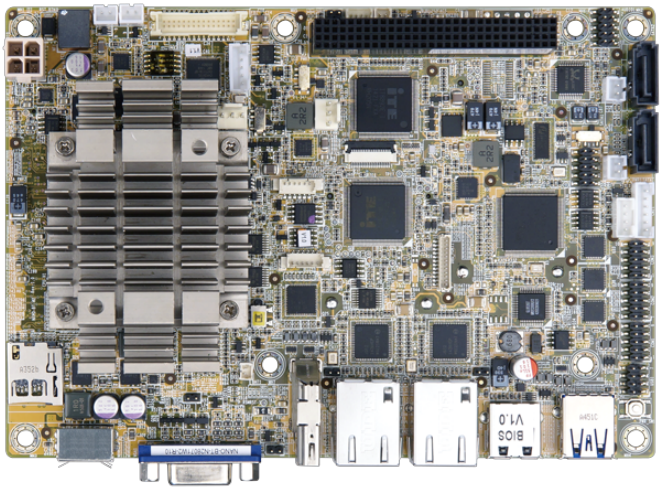
NANO-BT

EPIC SBC supports 22nm Intel® Atom™/Celeron® on-board SoC



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

» IEI One Key Recovery solution allows you to create rapid OS backup and recovery

Specifications

System	
CPU	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)
Memory	One 204-pin 1333/1066 MHz single-channel unbuffered DDR3L SDRAM SO-DIMM
Memory Max.	8 GB (J1900, N2930, E3827, E3826, E3815) or 4 GB (N2807)
Physical Characteristics	
Dimensions (LxWxH) (mm)	115 X 165
Net Weight	350g
Storage	
Storage	2 x SATA :3Gb/s with 5V SATA power connector(no RAID)
I/O Interface	
Display Output	1 x VGA :up to 2560x1600@60Hz
	1 x HDMI :up to 1920x1080@60Hz
	1 x LVDS :18/24-bit dual-channel (up to 1920x1200@60Hz)
Ethernet	2 x LAN :LAN1: Intel® I210-AT PCIe controller with NCSI support
	LAN2: Intel® I211-AT PCIe controller
Audio	Description: Realtek ALC662 HD Audio codec
	1 x Front Audio :2x5 pin
I/O Interface	3 x Internal RS-232 :2x5 pin, p=2.0
	1 x Internal RS-422/485 :1 x4 pin, p=2.0
	1 x External USB 2.0
	1 x External USB 3.2 Gen1x1
	3 x Internal USB 2.0 :2x4 pin, p=2.0
	1 x PS/2
Expansion	1 x PCIe mini Card Slot :Full-size PCIe Mini card slot (support mSATA co-lay SATA port 2)
	1 x PCI-104 :PCI signal
Other Features	
iRIS	1 X iRIS-1010 slot
Power	
Power Consumption	12V@1.52A (Intel® Atom™ processor J1900 with one 8 GB 1333 MHz DDR3 memory)
Power Supply	12V only DC input
	1 x Internal power connector (2x2 pin)
	Support AT/ATX mode

Environment	
Storage Temperature	-20°C ~ 60°C
Operating Temperature	-20°C ~ 60°C, -40°C ~ 85°C (NANO-BT-E38XX1W2)
Humidity	5% ~ 95%, non-condensing
Certifications	
Safety & EMC	CE/FCC compliant

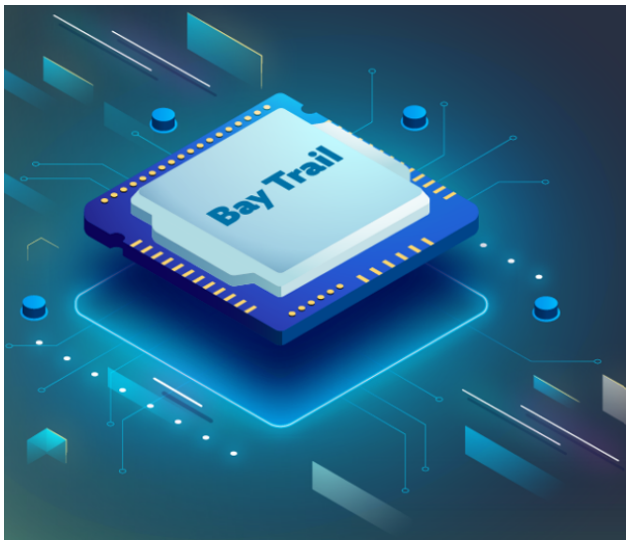
Ordering Information

NANO-BT-i1-N29301-R11	EPIC SBC supports Intel 22nm Quad-Core Celeron N2930 1.83GHz (7.5W) on-board SoC with VGA/HDMI/LVDS, Dual PCIe GbE, USB 3.0, Dual PCIe Mini, SATA, mSATA , COM, iRIS-1010, audio and RoHS
NANO-BT-i1-N28071-R11	EPIC SBC supports Intel 22nm Dual-Core Celeron N2807 1.58GHz (4.5W) on-board SoC with VGA/HDMI/LVDS, Dual PCIe GbE, USB 3.0, Dual PCIe Mini, SATA, mSATA , COM, iRIS-1010, audio and RoHS
NANO-BT-i1-J19001-R11	EPIC SBC supports Intel 22nm Quad-Core Celeron J1900 2.0GHz (10W) on-board SoC with VGA/HDMI/LVDS, Dual PCIe GbE, USB 3.0, Dual PCIe Mini, SATA, mSATA , COM, iRIS-1010, audio and RoHS

Packing List

1 x NANO-BT single board computer with heatsink	1 x Power cable
2 x RS-232 cable	1 x QIG (Quick Installation Guide)
2 x SATA with power cable kit	

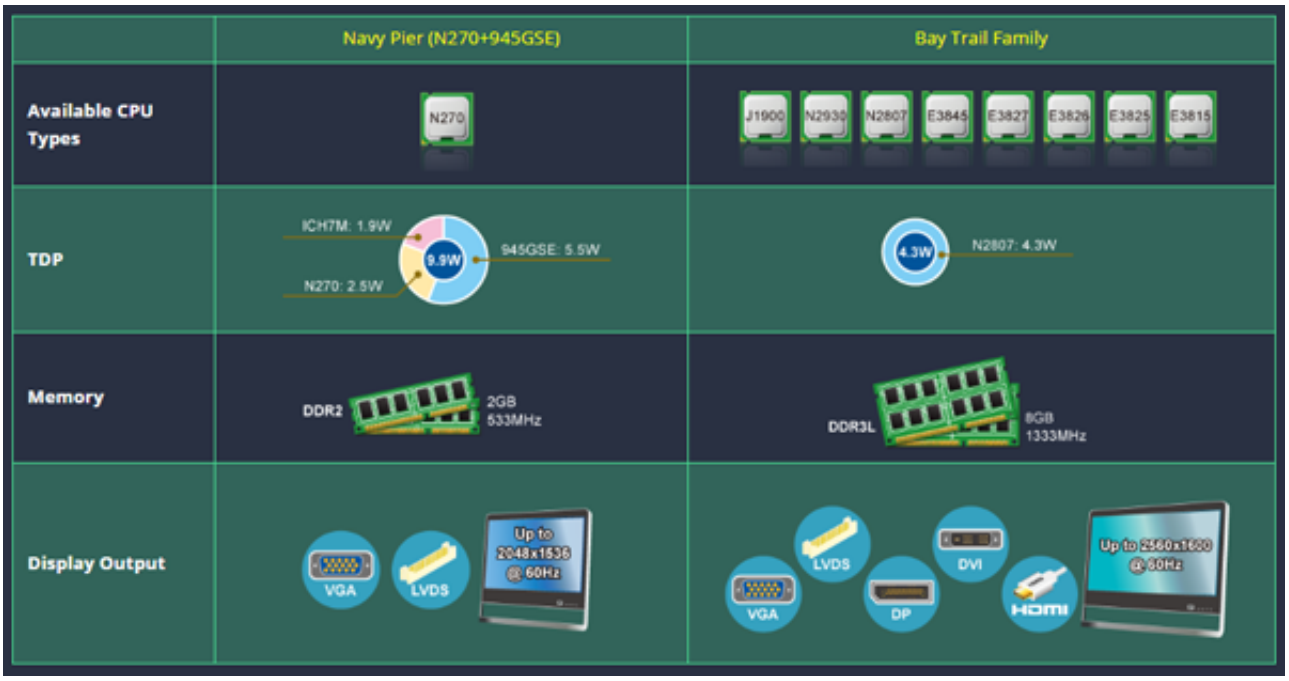
IEI Bay Trail Embedded Board



*Bay Trail embedded board series is powered by Intel® Bay Trail quad-core SoC which is three times faster than the single-core Intel® Atom™ N270 CPU. It upgrades the specifications to USB 3.0 and DDR3L to provide f aster data transmission and reduce power consumption which can greatly enhance work efficiency. This series also supports an extended operating temperature ranged from -40°C to +85°C for industrial applications in tough and rugged environments.

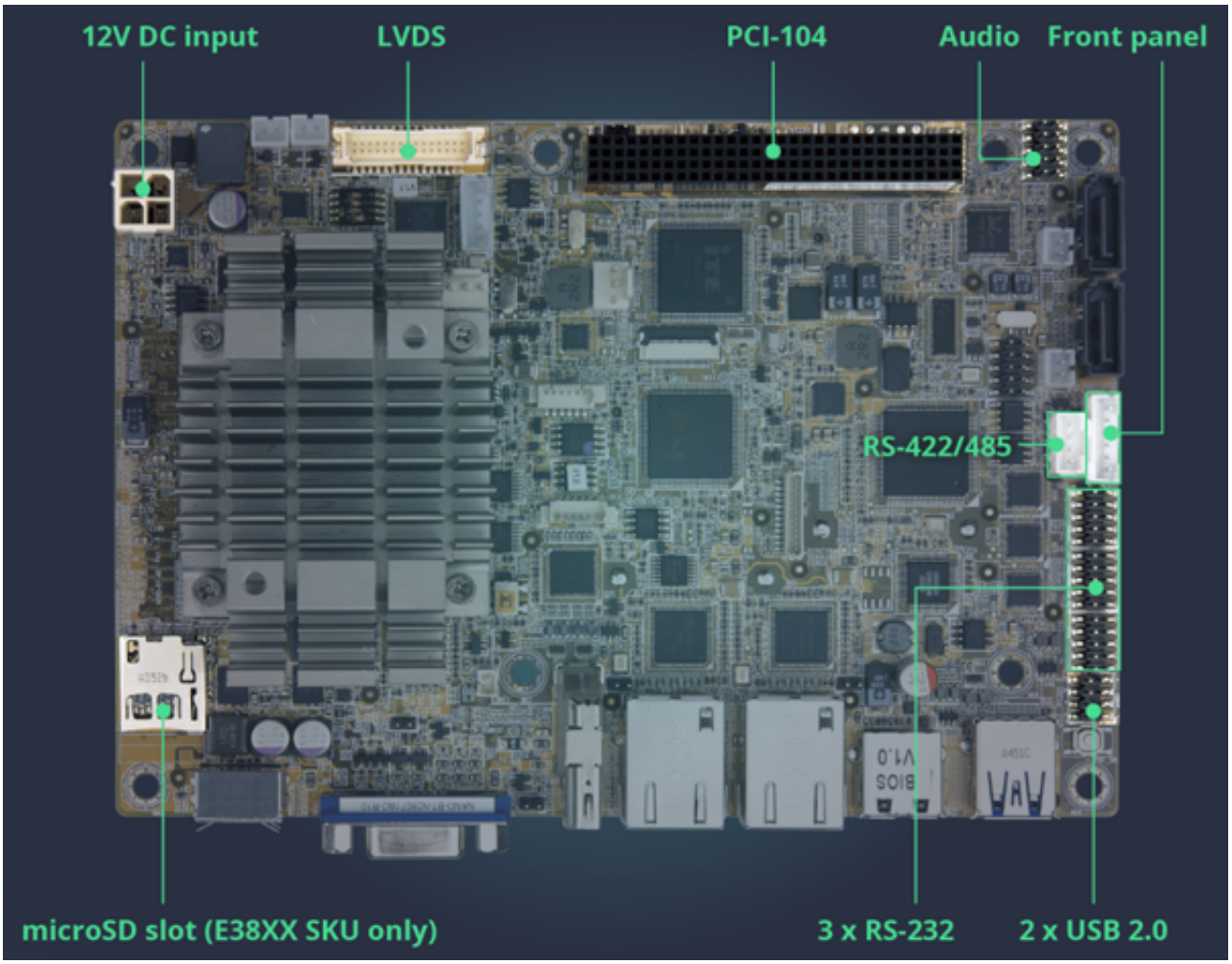
*Windows 7 (Pro/WES7/WEC7), Windows 8.1 (Pro/WE8), Windows 10 and Android operating systems are all supported by the low power consumption, fanless Bay Trail embedded board series to offer multiple option s for users. IEI Bay Trail industrial board series combines high resolution, great efficiency and low power consumption. Improving the overall function of the system allows users to replace Navy Pier series seamlessly and satisfie s their various requirements.

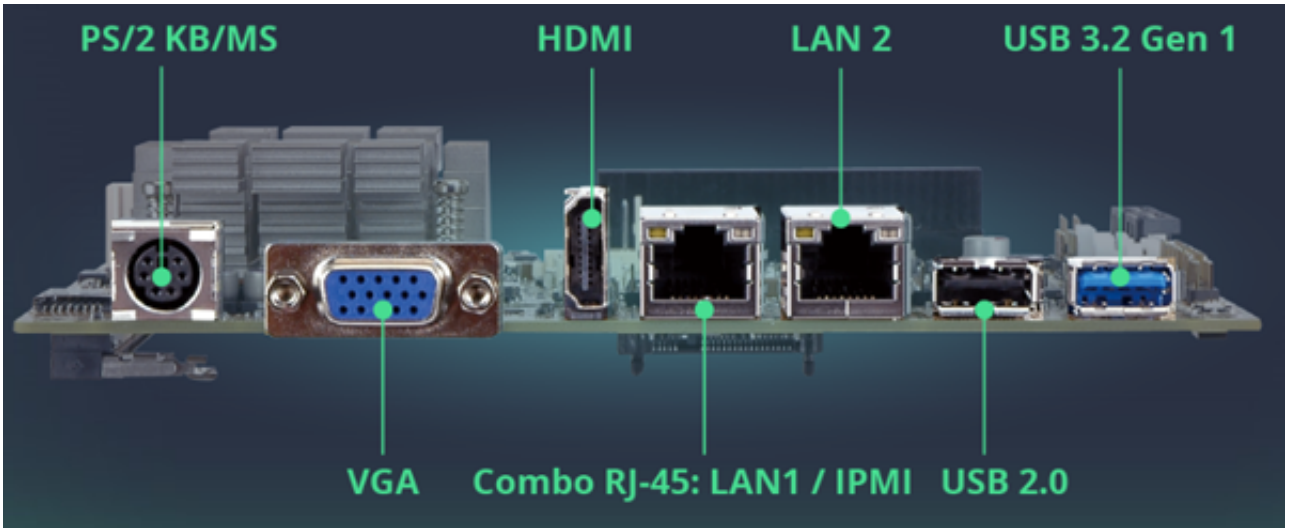
Specification Comparison Between N270+945GSE & Bay Trail



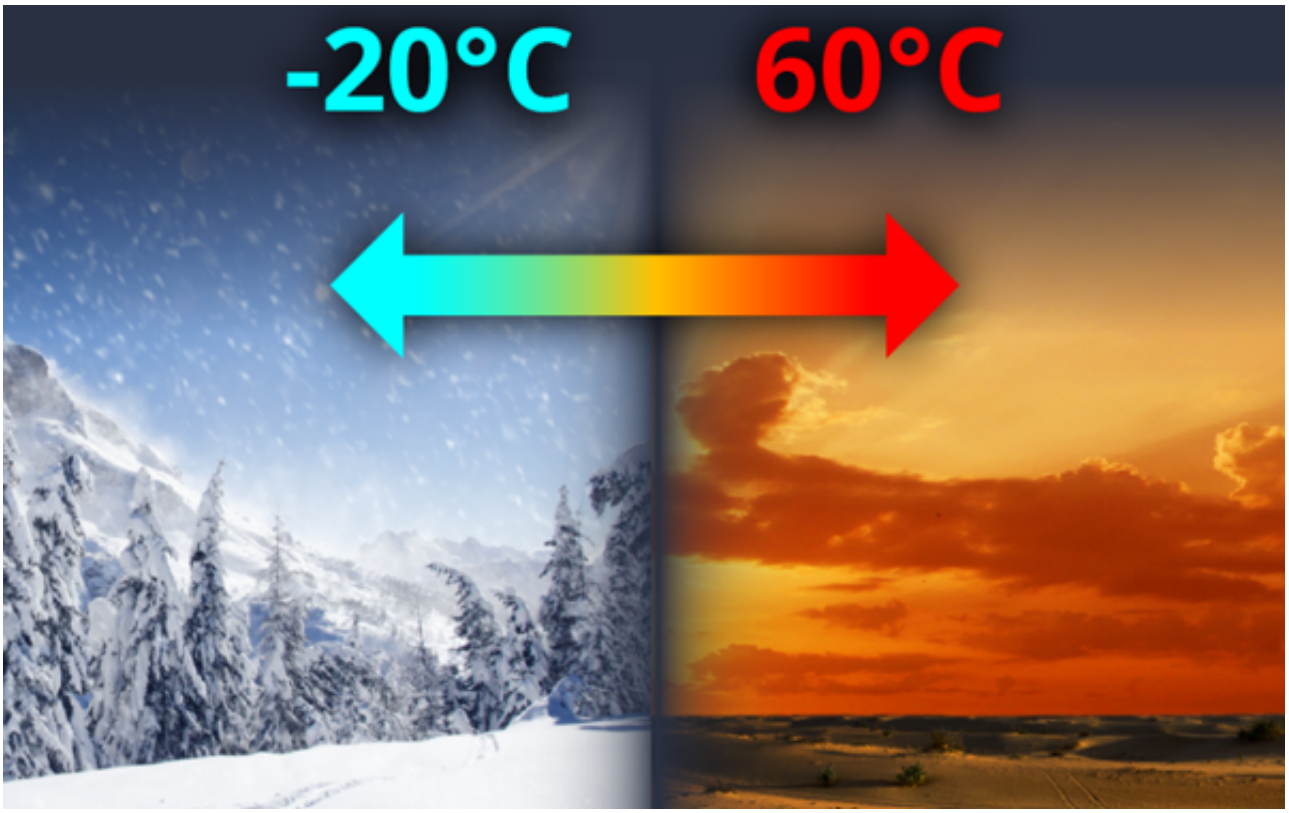
	Navy Pier (N270+945GSE)	Bay Trail Family	
Launch	Q2'08	Q4'13	
Process	45nm	22nm	
Processor Frequency &TDP	N270: 1.6GHz/2.5W	Celeron®: J1900: 2 GHz /10W N2930: 1.83 GHz /7.5W N2807: 1.58 GHz /4.3W	Atom™: E3845: 1.91 GHz /10W E3827: 1.75 GHz /8W E3826: 1.46 GHz /7W E3825: 1.33 GHz /6W E3815: 1.46 GHz /5W
Chipset TDP	Intel® 945GSE: 5.5W Intel® ICH7M: 1.9W	N/A	
Memory	DDR2 533MHz (Max. 2G)	DDR3L 1333MHz for J1900/N2930/E3845/E3827 (Max. 8GB) DDR3L 1333MHz for N2807 (Max. 4GB) DDR3L 1066MHz for E3826/E3825/E3815 (Max. 8GB)	
Graphics	2 Independent Displays DirectX9, OpenGL1.4 Gfx @ up to 133MHz	2 Independent Displays Gen 7 4 EUs DirectX11.1 , OpenGL 4.0 Gfx @ up to 854MHz (J1900/N2930)	
Video Decode	MPEG2	MPEG4, h.264, VC-1/WMV9 VP8 up to 1080p	
Stroage & IO	IDE, SATA, 6 USB 2.0	SATA 3Gb/s, 1 USB 3.0, 3 USB 2.0, eMMC 4.51, SD card	

Product Overview





Suitable for Semi-outdoor Environment, Wide Temperature -20°C~60°C


-20°C
60°C