NISE 50-J1900

Intel® Celeron® Processor J1900 Quad Core Fanless System

Main Features

- Onboard Intel® Celeron® processor J1900 quad core, 2.42GHz
- 1 x HDMI display
- 2 x Intel® I210AT GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 2.0
- 3 x mini-PCIe sockets for optional Wi-Fi/3.5G/LTE modules
- 2 X RS232, 1 x RS422/485 with auto flow control
- Support -5~55 degree C operating temperature
- Support 12V DC input

Product Overview

Powered by the latest generation of Intel® Celeron® processor J1900 (formerly codenamed "Bay Trail"), NISE 50 series positions at the intelligent IoT gateway for factory automation and for smart city applications. DDR3L SODIMM memory socket, the NISE 50 series support operating temperature from -5 up to 55 degree C with 12V DC input with +/-20% range. The NISE 50 series have strong connectivity - Ethernet-based LAN port and traditional RS485, mainly for Modbus TCP or Modbus RTU communication. For wireless connectivity, there are 3x mini-PCIe sockets which can support optional wireless modules for IoT applications, for example, Wi-Fi, Bluetooth, 3.5G and 4G LTE module. NISE 50 is definitely the best choice for M2M intelligent system as an intelligent IoT gateway.

Specifications

CPU Support
- Default: onboard Intel® Celeron® processor J1900 quad Core, 2.42GHz

Main Memory
- DDR3L SODIMM Slot *1
  - Support 1066/1333 RAM
  - Un buffered and non ECC
  - Support maximum up to 4GB for option

Display Option
- 1 x HDMI display

I/O Interface-Front
- ATX power on/off switch
- 1 x Storage/2 x GPO programmable LED
- 1 x SIM card holder
- 2 x Intel® I210AT GbE LAN ports; support WoL, teaming and PXE
- 1 x HDMI display output
- 4 x USB 2.0 (500mA per each)
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna

I/O Interface-Rear
- 3 x DB9 for COM1 & COM2 & COM3

  - COM1: full RS232 signal
  - COM2: full RS232 signal
  - COM3: RS422/485 auto flow control
- Support 12V DC input

I/O Interface - Internal
- 4 x GPI and 4 x GPO (programmable to GPI or GPO)
- 1 x RS232, pin header, support RS232 Tx/Rx/GND signal only

Storage Device
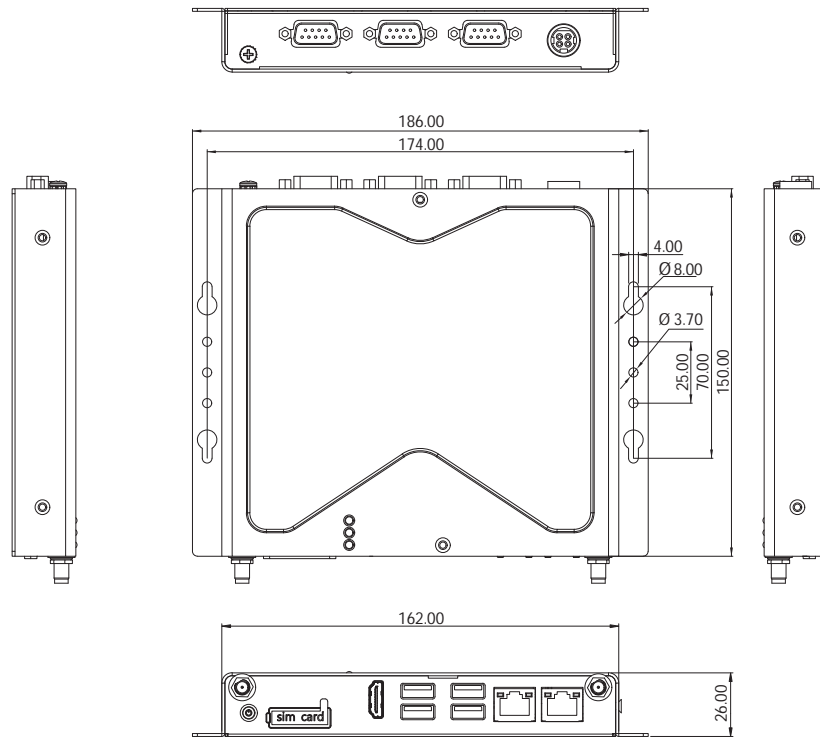- Optional mSATA module

Expansion Slot
- 3 x mini-PCIe socket for optional Wi-Fi/3.5G modules

mini-PCIe	Size	USB	PCIe	SATA	Msata	3.5G/4G	Wi-Fi
CN5	Full	v	N/A	v	Support	Support	N/A
CN6	Full	v	v	x	N/A	Support	Support
CN7	Half	x	v	x	N/A	N/A	Support

Power Requirements
- Power input: 12V DC +/-20%
- 1 x Optional 12V, 60W power adapter

NEXCOM

Dimension Drawing

Support OS
- Win7 64-bit
- Win10 64-bit

Dimensions
- 162mm (W) x 26mm (H) x 150mm (D) without wall-mount bracket

Construction
- Metal chassis with fanless design

Environment
- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 75°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  - mSATA: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ mSATA condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications
- CE
- FCC Class A

Ordering Information

- **NISE 50-J1900 (P/N: 10J00005029X0)**
  Intel® Celeron® processor J1900 quad Core fanless system,
  with DDR3L RAM SODIMM slot

- **60W 12V/5A AC/DC power adapter w/o power cord
  (P/N: 7400060042X00)**