NISE 108

Main Features

- Onboard Intel® Celeron® processor J3455 Quad Core, 1.50GHz
- Dual independent display from DP1 & DP2
- 2 x Intel® I210-IT GbE LAN ports; support WoL, teaming and PXE
- 2 x USB 2.0 & 2 x USB 3.0

- 3 x COM ports (COM3 with RS232/422/485, jumper-free setting)
- Support both 2.5" HDD and M.2
- Support -5~55 degree C operating temperature
- Support 24 VDC input

Product Overview

Powered by the latest generation of Intel® Celeron® J3455 processor Quad Core, 1.50GHz (formerly codenamed "Apollo Lake"), NISE 108 provides outstanding performance not only on computing but also on graphics, and it presents a brand new opportunity for both intelligent and industrial computing solutions. Up to 8G DDR3L memory, NISE 108 have several options on storage devices like M.2, HDD and SSD. In addition to no cable connection on the storage of NISE 108, it brings NISE 108 the sustainability to work in harsh nvironment both with temperature and vibration concern. The NISE 108 has high integration ability with optional mini-PCIe module and 3 x COM ports, which makes it a real intelligent system for various applications such as factory automation applications, network applications (with optional Wi-Fi module) and communication applications (with optional GPIO, RS232/422/485). NISE 108 is definitely the top choice for M2M intelligent system and factory automation platforms.

Specifications

CPU Support
- Onboard Intel® Celeron® processor J3455 Quad Core, 1.50GHz

Main Memory
- 1 x DDR3L SO-DIMM socket, support DDR3L1866 8GB RAM max., un-buffered and non-ECC

Display Option
- Dual independent display: DP1 & DP2

I/O Interface-Front
- ATX power on/off switch
- 1 x Power status/1 x HDD access/1x programing LEDs
- 2 x USB 3.0 (900mA per each)
- 2x USB 2.0 (500mA per each)
- 2 x Intel® I210-IT GbE LAN ports; support WoL,teaming and PXE
- 1 x DB9 for COM3, it supports RS232/422/485 with auto flow control
  - Jumper-free setting on RS232/422/485 by BIOS
- 2 x DB9 for COM1 & COM2, support RS232 only
  - COM1 support ring function
  - COM2 support 5V/12V/ring function by jumper setting, ring as the default
- 1 x 3-pin DC input, support 24 VDC input
- 1 x Antenna hole for optional WI-FI/3.5G antenna
- 1 x 3-pin remote power on/off switch

I/O interface-Rear
- 1 x Antenna hole for optional WI-FI/3.5G antenna

Storage Device
- 1 x M.2 (SATA 2.0, 2242)
- 1 x 2.5" HDD (SATA 2.0)

Expansion Slot
- 1 x mini-PCIe socket for optional WI-FI/3.5G/4G module
  (For 3.5G/4G function, mini-PCIe module must have SIM card holder)

Power Requirements
- Power input: DC input: 24V
- 1 x Optional 24V, 60W power adapter

Dimensions
- 185 mm (W) x 131mm (D) x 54 mm (H) without wall-mount bracket
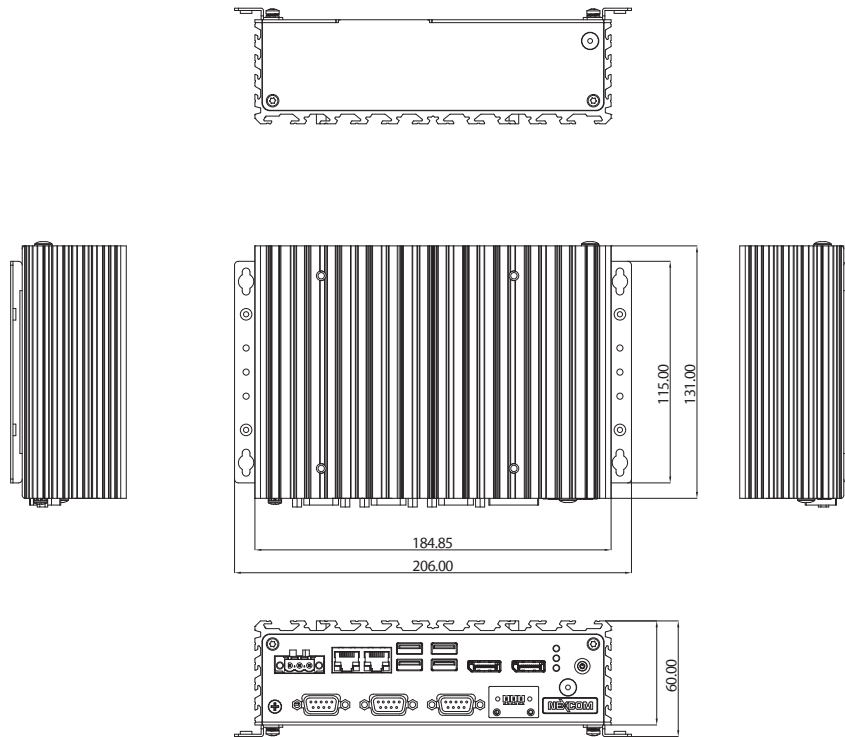
Construction
- Aluminum and metal chassis with fanless design

Environment
- Operating temperature:
  Ambient with air flow: -5°C to 55°C with industrial grade device
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 80°C

Dimension Drawing

- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - CFast: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ HDD condition:
  - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6
- Vibration protection w/ SSD condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications
- CE
- FCC Class A

Support OS
- Linux Kernel version 4.1
- Windows 10 IoT Enterprise, 64-bit

Ordering Information

- **NISE 108 (P/N: 10J00010800X0)**
  Intel® Celeron® processor J3455 Quad Core, 1.50GHz Fanless system
- **24V, 60W AC/DC power adapter w/o power cord
  (P/N: 7400060047X00)**