NISE 106-N3710

Intel® Pentium® Processor N3710 Quad Core Fanless System

Main Features

- Onboard Intel® Pentium® processor N3710 Quad Core, 1.6GHz
- 3 x Display output: 1 x HDMI display + 1 x DVI-D + 1 x DP port
- 2 x Intel® I210AT GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 3.0

- 2 x DB9 for RS232/422/485, 2 x DB9 for RS232
- 1 x Optional interface for optional Wi-Fi/3.5G/LTE modules
- Support -5°C~55°C extended operating temperature
- Support 9~30V DC input

Product Overview

Powered by the latest generation of Intel® Pentium processor N3710 Quad Core, 1.6GHz (formerly codenamed "Braswell "), NISE 106 presents intelligent PC-based controller and IOT gateway for factory automation. Up to 8G DDR3L memory, The NISE 106 support operating temperature from -5 up to 55 °C with typical DC input 9~30V. The NISE 106 has high integration ability with optional mini-PCIe module and 4 x COM ports which makes it a reliable connection with devices in factory automation applications, IOT applications (with optional GbE LAN, Wi-Fi, 3.5G/4G LTE module) and communication applications (with optional GPIO, RS232/422/485). NISE 106 is definitely the top choice for M2M intelligent system as a factory automation controller and gateway.

Specifications

CPU Support

- Onboard Intel® Pentium® Quad Core processor N3710, 2M Cache, 1.6GHz

Main Memory

- 1 x DDR3L SO-DIMM socket, support DDR3L 1600 8GB RAM max., un-buffered and non-ECC

Display Option

- 1 x HDMI + 1 x DVI-D + 1 x DP display port

I/O Interface-Front

- ATX power on/off switch
- 1 x Power status/1 x HDD access/1 x battery low/1 x programing/ 4 x Tx/Rx LEDs
- 2 x Intel® I210AT GbE LAN ports; support WoL, teaming and PXE
- 1 x HDMI + 1x DVI-D display output
- 4 x USB 3.0 (900mA per each)
- 1 x 3-pin DC input, support +9 to 30VDC input

I/O Interface - Rear

- 1 x DisplayPort

- 1 x SIM card holder
- 1 x External CFast socket
- 2 x DB9 for RS232/422/485 with auto flow control (COM1 and COM2)
- 2 x DB9 for RS232 (COM3 and COM4)
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna
- 1 x Remote power on/off switch
- 1 x Optional I/F for optional mini-PCIe Wi-Fi/3.5G/LTE/NEXCOM's automation module output

I/O Interface - Internal

- 4 x GPI and 4 x GPO (5V, TTL type)

Storage Device

- 1 x 2.5" HDD (SATA 3.0)

Expansion Slot

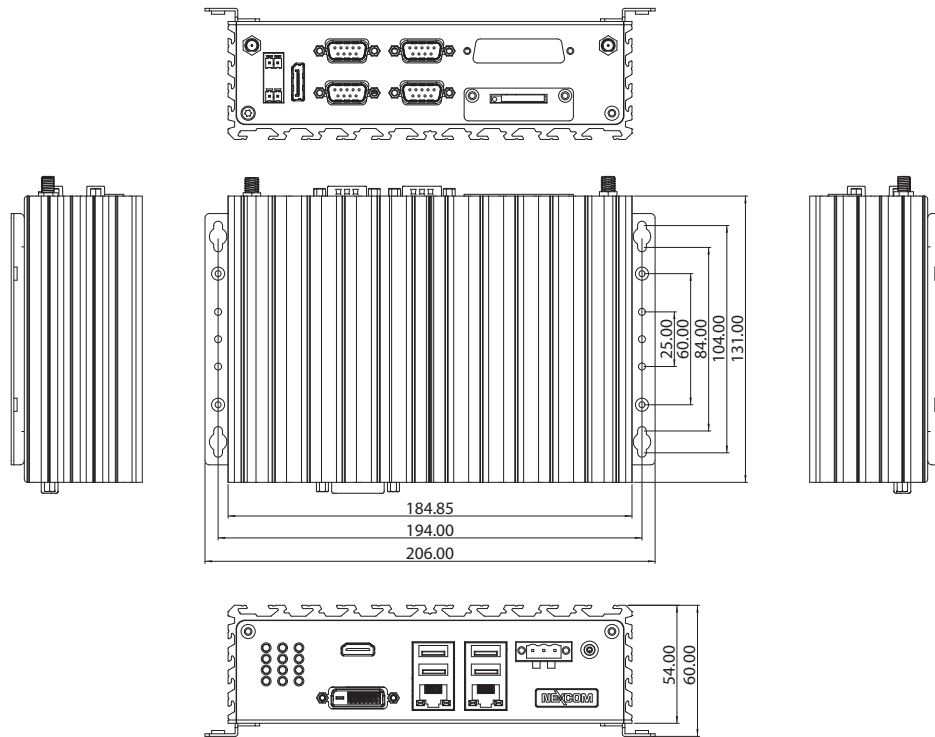- 1 x mini-PCIe socket for optional Wi-Fi/4G LTE/3.5G modules

Power Requirement

- Power input: +9 to 30 Vdc
- 1 x Optional 24V, 60W power adapter

Dimensions

- 185mm (W) x 131mm (D) x 54mm (H) without wall-mount bracket

Dimension Drawing

Construction
- Aluminum 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: -30°C to 85°C
- 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/ CFast & 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
- Windows 7, 64-bit only
- Windows 8.1 , 64-bit only
- Windows Embedded Standard 7, 64-bit only
- Windows 10 IoT Enterprise, 64-bit only
- Linux Kernel version 4.4

Ordering Information
- **NISE 106-N3710 (P/N: 10J00010602X0)**
  Intel® Pentium® Processor N3710 Quad Core, 1.6GHz fanless system

- **24V, 60W AC/DC power adapter w/o power cord**
  (P/N: 7400060033X00)