



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® I210-AT 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 -10°C to 60°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 -10°C to 60°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 1066/1333 SO-DIMM socket, support up to 8GB

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 GPIO 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

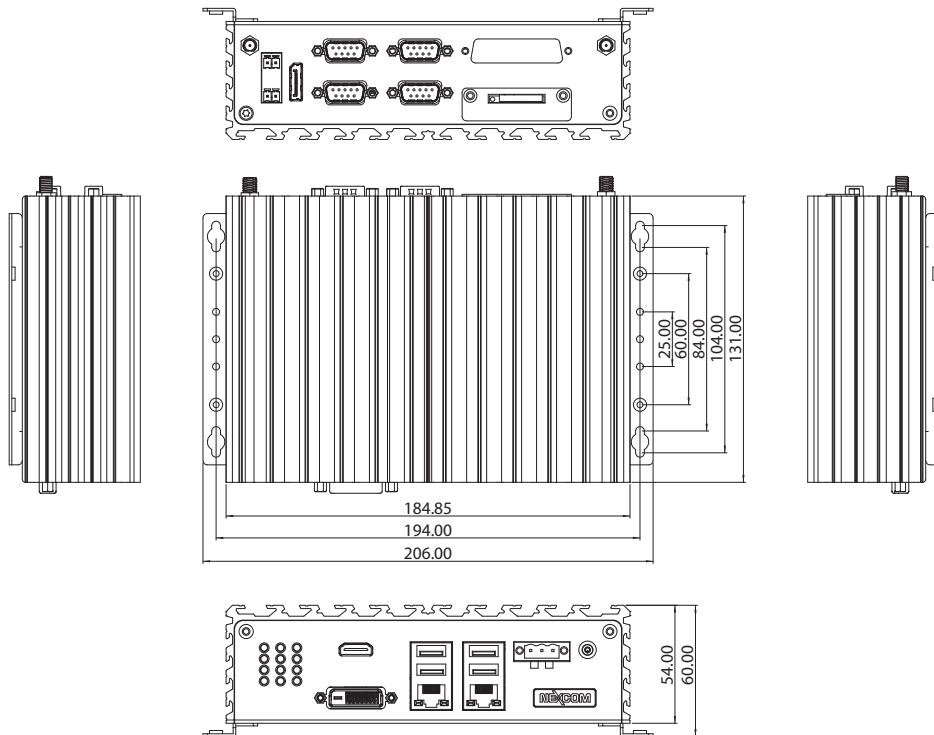
Power Requirement

- ♦ 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: -10°C to 60°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: 7400060054X00)