



Main Features

- Onboard Intel® Atom™ processor E3826 dual core, 1.46GHz
- 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
- 1 x RS232, 1 x RS232 (only Tx/Rx/GND), 1 x RS422/485 with auto flow control
- Support -5 ~ 55 degree C operating temperature
- Support 24V DC input

Product Overview

Powered by the latest generation of Intel® Atom™ processor E3826 (formerly codenamed "Bay Trail-"), NISE 50 series positions at the intelligent IoT gateway for factory automation and for smart city applications. Up to 4G on-board DDR3L memory, the NISE 50 series support operating temperature from -5 up to 55 degree C with 24V 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® Atom™ processor E3826 Dual Core, 1.46GHz
- Option: Support Intel® Atom™ processor E3845 Quad Core, 1.91GHz (by request)

Main Memory

- On-board 2GB DDR3L 1066/1333 RAM
 - Un-buffered and non-ECC
 - Max 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: RS232, only support Tx/Rx/GND
- COM3: RS422/485 auto flow control
- 1 x Line-out
- Support 24V DC INPUT

I/O Interface - Internal

- 4 x GPI and 4 x GPO (Programmable to GPI or GPO)
- 1 x DB9, only support RS232, Tx/Rx/GND single

Storage Device

- On-board 16GB EMMC
- Optional mSATA module

Expansion Slot

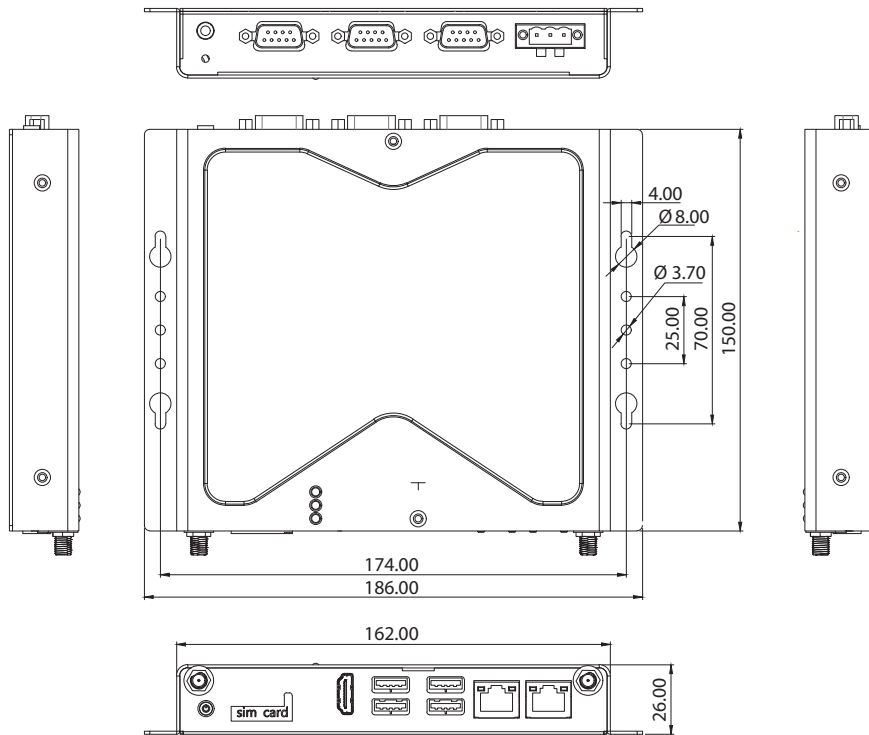
- 3 x Mini-PCIe socket for optional Wi-Fi/3.5G modules

Mini-PCIe	Size	USB	PCIe	mSATA	3.5G/4G
CN5	Full	v	N/A	Support	Support
CN6	Full	v	v	N/A	Support
CN7	Half	v	v	N/A	N/A

Power Requirements

- Power input: 24V DC +/-20%
- 1 x optional 24V, 60W power adapter

Dimension Drawing



Support OS

Model Name	NISE 50		NISE 50-4G-32G		NISE 50W	
	eMMC 16GB	mSATA	eMMC 32GB	mSATA	SSD	
Storage						
Memory	2GB		4GB		2GB	
OS	Android4.4	64bit	64bit			
	WIN10 IOT Ent.		64bit	64bit		
	WES8	32bit	32bit	64bit	32bit	
	WIN 7 PRO		32bit		64bit	32bit
	WES7E		32bit		64bit	32bit
WEC7		32bit		32bit	32bit	

* Note: Only one LAN can be active under Android 4.4

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 / EMMC: 50G, half sine, 11ms, IEC60068-27
- Vibration protection w/mSATA or EMMC condition:
 - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
 - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE
- FCC Class A
- UL/cUL

Ordering Information

♦ NISE 50 (P/N: 10J00005000X0)

Intel® Atom™ Processor E3826 Dual Core Fanless System, with on-board 16GB EMMC and 2G DDR3L RAM

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