



## 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

