NISE 300

4th Generation Intel® Core™ i5 Fanless System with
6 Mini-PCIe Expansion and User-Friendly Front I/O Design

Main Features

- Onboard BGA type 4th Generation Intel® Core™ i5 Processor
- Mobile Intel® QM87 PCH
- 2 x USB3.0; 2 x USB2.0
- 6 x Mini-PCIe, 2 x RS232/422/485 with Auto Flow
- Support 1 x mSATA, 1 x CFast and 2 x 2.5" SATA
- User-friendly I/O Design; All I/O Interface at Front
- Support Wireless Communication; Optional for Wi-Fi or 3G Modules
- Support +9V and +30VDC Input; Support ATX Power Mode
- Easy Replacement for RTC Battery
- Dual Intel® GbE LAN Ports, Support WoL, Teaming & PXE

Product Overview

The high performance NISE 300, which is integrated with 4th generation Intel® Core™ i5 processor and QM87 PCH, can provide outstanding system performance and presents a brand new opportunity for both intelligent and industrial computing solutions. NISE 300 supports up to 8G un-buffered and non-ECC DDR3/DDR3L memory, CFast , SATA3.0, the latest USB3.0 technology. Support +9V ~ +30VDC input and the operating temperature range is from -5 Celsius degree to 55 Celsius degree. NISE 300 comes with user-friendly I/O design; all I/O interfaces are at front panel and it makes system much easier to use and to expand the functionalities. It's mechanical design also fits with 2U 19" rack-mount dimension. NISE 300 also integrates with 6 Mini-PCIe sockets and 2 COM Port interfaces, which makes it a real versatile box for various applications such as factory automation applications (PROFIBUS, DeviceNet, EtherCAT, PROFINET, Ethernet/IP), network applications (GbE LAN, Wi-Fi, GSM), and storage devices (mSATA). With the latest features and flexible module expansions, NISE 300 is definitely the top choice for M2M intelligence and factory automation platforms.

Specifications

CPU Support

- Onboard BGA type 4th generation Intel® Core™ i5 processor
- Core™ i5-4402E, Dual Core™, 1.6GHz

Main Memory

- 2 x DDR3/DDR3L SO-DIMM Socket, support up to 8GB DDR3/DDR3L 1333/1600 RAM, un-buffered and non-ECC

Display Option

- Three Independent Display
  - VGA+DVI-D (Through DVI-I Y Cable) + HDMI
- Dual Independent Display
  - DVI-D + VGA
  - HDMI + VGA

Front I/O Interface

- ATX power on/off switch
- 1 x Remote Power ON/OFF Switch
- 1 x Power Status/1 x HDD Access LEDs
- 2 x USB3.0 ports (Blue Color, 900mA per each)
- 2 x USB2.0 Ports (500mA per each)
- 1 x DVI-I, 1 x HDMI
- 2 x DB9 for COM1 & COM2
  - support RS232/422/485 with Auto Flow Control
  - support 5V/12V/Ring function by jumper setting
- 2 x Intel® 82574L GbE LAN Ports, Support PXE/Teaming/WoL
- 1 x External CFast socket
- 1 x SIM Card holder
- 1 x External RTC Li-ion Battery holder
- 1 x Line out and 1 x Mic-in

Internal I/O Interface

- 4 x GPI and 4 GPO (5V, TTL Type)
- 4 x COM Ports Box Header (RS232 only)
- 1 x USB2.0 Internal Connector, for USB dongle
- 2 x USB2.0 Internal Box Header

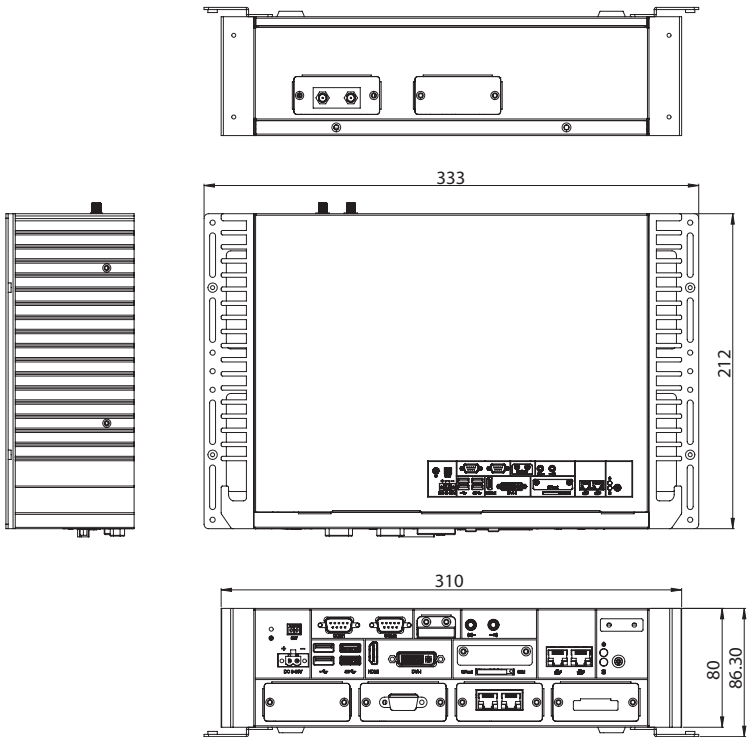
Storage Device

- 1 x CFast (SATA 3.0)
- 1 x mSATA (SATA 3.0)
- 2 x 2.5" HDD (SATA 3.0)

Expansion Slot

- 1 x Mini-PCIe socket for GSM/Wi-Fi
  1 x Mini-PCIe socket for mSATA
  4 x Mini-PCIe socket for expansion modules

Dimension Drawing



Power Requirement
- ATX Power Mode
- Typical +9V ~ +30VDC Input
- Power adapter: Optional AC to DC power adapter (+19VDC, 120W)

Dimensions
- 310mm (W) x 212mm (D) x 80mm (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 (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage Temperature: -40°C to 85°C
- Operating humidity: 10% ~ 90% relative humidity, non-condensing
  Limits to be at 90% RH at max 40C
- Shock Protection:
  HDD: 20G, half sine, 11ms, IEC60068-27
  CFast: 50G, half sine, 11ms, IEC60068-27
- Vibration Protection w/HDD Condition:
  Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6

Certifications
- CE/FCC Class A

OS Support Lists
- Windows 7 32bits and 64bits
- Windows 8.1 32 bits and 64 bits

Ordering Information

Barebone
- **NISE 300 System (P/N: 10J00030000X0)**
- **19V, 120W AC to DC power adapter w/o power core (P/N:7400120013X00)**