NISE 3700E

4th Generation Intel® Core™ i7/i5/i3
LGA Fanless System with Expansion





Main Features

- Support 4th generation Intel® Core™ i7/i5/i3 LGA socket type embedded processor
- Intel® Q87 PCH
- Support 1 x 2.5" SATA HDD
- 1 x DVI-I, 1 xDVI-D, and 1x HDMI with independent display support
- Three Intel® GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 3.0, 4 x USB 2.0, 1 x RS232 and 2 x RS232/422/485 with auto flow control
- 2 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/mSATA/ Fieldbus
- 1 x External CFast socket and 1x SIM card socket
- Support +9V to 30VDC input; ATX power mode
- 1 x PCIe x4 expansion

Product Overview

Integrated with 4th generation Intel® Core™ i7/i5/i3 processors, NISE 3700 series is the fanless PC designed for industrial applications which demand high CPU and graphics performance. NISE 3700 supports up to 8G DDR3 or DDR3L memory and have several options on storage devices like CFast, HDD, mSATA or SSD. NISE 3700 supports wide range of DC input from +9V to 30V DC input, and can be operated in an extended operating temperature range between -5 to 55 Celsius degree. For extended module availability, NISE 3700 also designed two internal Mini-PCIe sockets to support IoT applications (integrate with optional GbE LAN, Wi-Fi, 3.5G module) and common communication applications (integrate with optional GPIO, RS232/422/485 module).

Specifications

CPU Support

- Support 4th generation Intel® Core™ i7/i5/i3 LGA socket type embedded processor
  - Core™ i7-4770TE, Quad Core, 2.3GHz, 8M Cache
  - Core™ i5-4590T, Quad Core, 2.0GHz, 6M Cache
  - Core™ i3-4350T, Dual Core, 3.1GHz, 4M Cache
  - Pentium® G3320TE, Dual Core, 2.3GHz, 3M Cache
  - Celeron® G1820TE, Dual Core, 2.2GHz, 2M Cache

Main Memory

- 2 x DDR3/DDR3L SO-DIMM socket, support up to 8GB with un-buffered and non-ECC

Display Option

- Three independent display
  - HDMI + DVI-I + DVI-D
- Dual independent display
  - HDMI + DVI-I
  - HDMI + DVI-D
  - DVI-I + DVI-D

Front I/O Interface Status LEDs

- 3 x LAN active LEDs/1 x CFast access LEDs
- 3 x GPO status/COM1/2 TX/RX LEDs
- 1 x HDD access LEDs

Front I/O Interface

- 1 x ATX power on/off switch
- 1 x HDMI
- 2 x USB 3.0 ports (900mA per each)
- 1 x Line-out and 1 x Mic-in
- 2 x Antenna holes
- 1 x External CFast socket
- 1 x SIM card holder

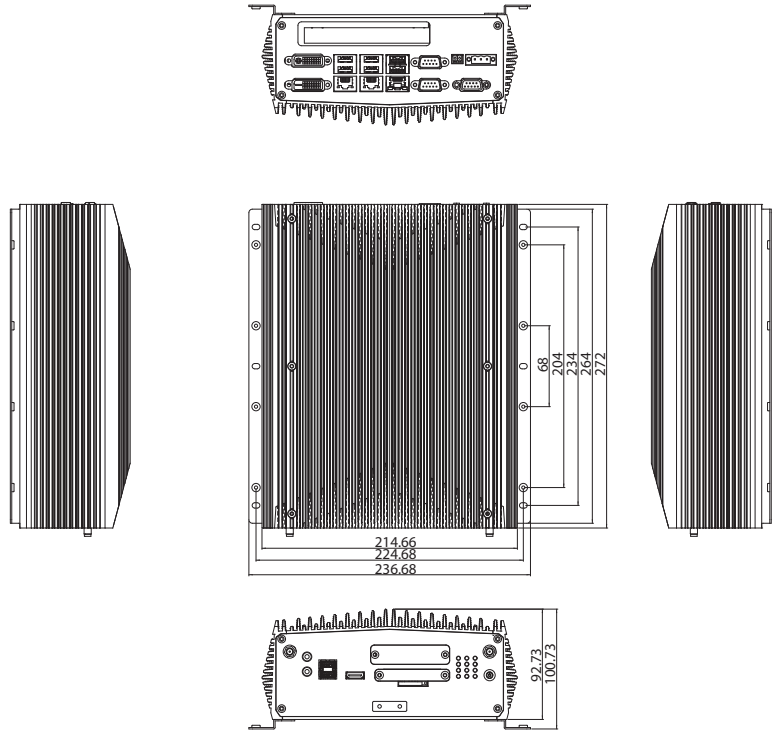
Rear I/O Interface

- 3 x DB9 for COM1 & COM2 & COM3
  - COM1: RS232/422/485 auto flow control
  - COM2: RS232/422/485 auto flow control
  - COM3: RS232
- 2 x USB 3.0 ports (900mA per each)
- 4 x USB 2.0 ports (500mA per each)
- 1 x DVI-D port
- 1 x DVI-I port
- 3 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 1 x 2-pin remote power on/off switch
- +9V to 30 V DC input

Storage Device

- 1 x CFast (SATA 3.0)
- 1 x 2.5" HDD (SATA 3.0)
- 1 x mSATA (internal mini-PCIe socket)

Dimension Drawing



Expansion Slot
- One PCIex4 expansion slot
  - Add-on card length: 169mm max.
  - Power consumption: 10W/slot max.
- 2 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/mSATA/ Fieldbus

Power Requirement
- AT/ATX power mode (default: ATX power mode)
- Power input: +9 to +30V DC
- Power adapter: optional AC to DC power adapter (24V DC, 120W)

Dimensions
- 215 mm(W) x 272mm (D) x 93mm (H) without wall mount bracket (8.5" x 10.7" x 3.7")

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: -20°C to 85°C
- Relative humidity: 10% to 93% (non-condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-27
  - CFast: 50G, half sine, 11ms, IEC60068-27
- Vibration protection with HDD condition:
  - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6

Certifications
- CE approval
- FCC Class B

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

Weight Information
- Gross weight: 5.9kg
- Net weight: 4.5kg

Ordering Information

- **NISE 3700E System (P/N: 10J00370000X0)**
  4th Generation Intel® Core™ i7/i5/i3 Fanless System with one PCIe x4 Expansion
- **NISE 3700E2 System (P/N: 10J00370001X0)**
  4th Generation Intel® Core™ i7/i5/i3 Fanless System with two PCIe x4 Expansions
- **NISE 3700P2 System (P/N: 10J00370002X0)**
  4th Generation Intel® Core™ i7/i5/i3 Fanless System with two PCI Expansions
- **NISE 3700P2E System (P/N: 10J00370003X0)**
  4th Generation Intel® Core™ i7/i5/i3 Fanless System with one PCI and one PCIe x4 Expansion
- **24V, 120W AC to DC power adapter w/o power cord (P/N: 7400120015X00)**

We reserve the right to change specifications and product descriptions at any time without prior notice.