



Main Features

- OnBoard 3rd generation Intel® Core™ i7 BGA processor
- Mobile Intel® QM77 PCH
- Support 1 x 2.5" SATA HDD or 2 x SATA DOM
- 2 x Display Port; 1 x VGA; 1 x DVI-D; 2 x USB 3.0; 2 x USB 2.0
- 4 x Intel® 82574IT GbE LAN ports; Support WoL, Teaming and PXE
- 2 x DB9 for RS232/422/485; 1 x DB44 Serial Port for 4 x RS232
- 1 x internal Mini-PCIe socket supports optional Wi-Fi or 3.5G module
- 1 x CFast socket; 1 x SIM card socket
- Support +24VDC input; Support ATX Power mode
- 1 x PCIe4 expansion

Product Overview

Integrated with 3rd generation Intel® Core™ i7 with QM77 PCH platform, NISE 3640E series designed with 4 x Intel® 82574IT GbE LAN controllers which can support up to 4 cameras and better throughput; besides, NISE 3640E series also supports WoL, LAN Teaming and PXE function. With computing and graphic performance enhancement, NISE 3640E series support 3 independent display and deliver a level of performance ideal for image and vision measurement on traffic control, overspeed monitoring, real time update and ePlice. More, NISE 3640E series support 2 x RS232/422/485, 4 x RS232, 2 x USB 3.0, 2 x USB 2.0, 1 x CFast socket, 1 x SIM card socket, and 1 x internal Mini-PCIe socket supports optional Wi-Fi or 3.5G module.

Leveraging a reliable fanless, durable cable-free design and wide operating temperature, NISE 3640E series can be exhibited in harsh environments, where severe temperature variation and vibration may exist.

Specifications

CPU Support

- Onboard BGA 3rd generation Intel® Core™ i7/i5/i3 processors
 - Core™ i7-3517UE, Dual Core, 1.7GHz, 4M Cache (Onboard Default)
 - Core™ i5-3437U, Dual Core, 2.9GHz, 3M Cache
 - Core™ i3-3217UE, Dual Core, 1.6GHz, 3M Cache
 - Celeron 1047UE, Dual Core, 1.4GHz, 2M Cache
- Mobile Intel® QM77 PCH

Main Memory

- On-board 2 x DDR3/DDR3L SO-DIMM, supports up to 8GB DDR3/DDR3L 1333/1600 SDRAM, with un-buffered and non-ECC
- Pre-install 4G Industrial Grade Memory as the manufacture configuration for shipment

Display Option

- Three Independent Display (only support on 3rd Generation Processor)
 - Two Display Port and 1 x VGA
 - Two Display Port and 1 x DVI-D
- Dual Independent Display
 - VGA and DVI-D
 - Display Port and VGA

I/O Interface-Front

- ATX power on/off switch

- HDD access/Power status/LAN status LEDs
- 2 x USB 3.0 (Blue color)
- 2 x USB 2.0
- 2 x Display Port (Can be converted to DVI-D or HDMI via active cables)
- 1 x CFast socket
- 1 x SIM card socket
- 2 x Antenna holes

I/O Interface-Rear

- 2 x DB9 for RS232/422/485
- 1 x DB44 for 4 x RS232
- 4 x Intel® 82574IT GbE LAN ports; Support WoL, Teaming and PXE
- 1 x DB15 VGA port
- 1 x DVI-D
- 1 x Line-out and 1 x Mic-in
- 2-pin Remote Power on/off switch
- +24VDC Input

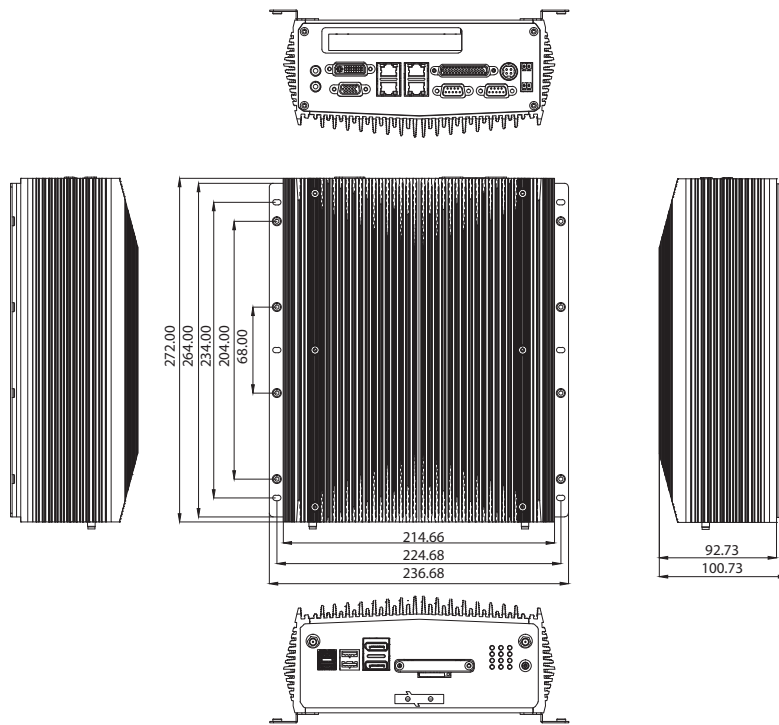
Storage Device

- 1 x 2.5" SATA HDD or 2 x SATA DOM (support 90°C horizontal type only)
- 1 x CFast socket

Expansion Slot

- One PCIe4 Expansion Slot

Dimension Drawing



- Add-on card length: 169mm max.
- Power consumption: 10W/ slot max.
- 1 x Mini-PCIe socket (support optional Wi-Fi or 3.5G module)

Power Requirements

- ATX Power mode
- Support +24VDC Input
- Optional power adapter

Dimensions

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

Construction

- Aluminum Chassis with fanless design

Environment

- Operating temperature:
 - Ambient with air flow: -20°C to 60°C with industrial grade device (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
 - Ambient with air flow: -20°C to 70°C with industrial grade SSD
- Storage temperature: -30°C to 85°C
- Relative humidity: 95% at 40°C
- 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 ~ 500Hz according to IEC60068-2-64
 - Sinusoidal: 0.5Grms @ 5 ~ 500Hz according to IEC60068-2-6

Certifications

- CE approval
- FCC Class A

OS Support Lists

- Windows XP 32bits and 64bits
- Windows 7 32bits and 64bits
- Windows 8.1 32bits and 64bits

Ordering Information

Barebone

- **NISE 3640E (P/N: 10J00364000X0)**
3rd Generation Intel® Core™ i7 Fanless System with One PCIe4 Expansion
- **NISE 3640E2 (P/N: 10J00364001X0)**
3rd Generation Intel® Core™ i7 Fanless System with Two PCIe4 Expansion
- **NISE 3640P2 (P/N: 10J00364002X0)**
3rd Generation Intel® Core™ i7 Fanless System with Two PCI Expansion
- **NISE 3640P2E (P/N: 10J00364003X0)**
3rd Generation Intel® Core™ i7 Fanless System with One PCI Expansion and One PCIe4 Expansion
- **24V, 120W AC/DC power adapter w/ o power cord (P/N: 7400120001X00)**