



## Main Features

- Support 3<sup>rd</sup> generation Intel® Core™ i7/i5/i3 rPGA socket type processor
- Mobile Intel® QM77 PCH
- Support 1 x 2.5" SATA HDD or 2 x SATA DOM
- 1 x VGA, 1 x DVI-D and 2 x display port with independent display support
- Dual Intel® GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 3.0, 2 x USB 2.0, 5 x RS232 and 1 x RS232/422/485
- 1 x Internal mini-PCIe socket support optional Wi-Fi or 3.5G module
- 1 x External CFast socket & 1 x SIM card socket
- Support +9V to 30VDC input; support ATX power mode
- Two PCI or PCIe x4 expansion

## Product Overview

Integrated with 3<sup>rd</sup> generation Intel® Core™ i7/i5/i3 with QM77 PCH platform, NISE series evolve to a new generation called NISE 3600E series. It is not only sustained its good reputation on quality and user friendly features but also innovated its mechanical design.

With computing and graphic performance enhancement, NISE 3600E series supports 2 x display port, 1 x VGA port and 1 x DVI-D port to fulfill the graphic intensive or computing oriented applications, including Auto Optical Inspection, Machinery Automation, ePolice infotainment, Surveillance or Image Processing equipment and Healthcare industry. In addition, NISE 3600E series offers 4 x USB 3.0 and 2 x USB 2.0, greater expansion capability with 2 x Intel® GbE LAN ports, 6 x COM ports, and 1 x external CFast socket for front accessible availability. NISE 3600E series is sufficient to support wide range of DC input from +9 to 30V and ATX power; it is a new generation to meet most application requirements.

## Specifications

### CPU Support

- Support 3<sup>rd</sup> generation Intel® Core™ i7/i5/i3 rPGA socket type processor
  - Core™ i7-3632QM, Quad Core, 2.2GHz, 6M Cache, Max Turbo Frequency 3.2 GHz
  - Core™ i7-3612QM, Quad Core, 2.1GHz, 6M Cache, Max Turbo Frequency 3.1 GHz
  - Core™ i5-3610ME, Dual Core, 2.7GHz, 3M Cache, Max Turbo Frequency 3.3 GHz
  - Core™ i3-3120ME, Dual Core, 2.4GHz, 3M Cache
- Support three independent display with above processors
- Turbo-boost disabled by default

### Main Memory

- 2 x DDR3 SO-DIMM socket, supports up to 8GB DDR3/DDR3L 1333/1600 SDRAM, with un-buffered and non-ECC

### Display Option

- Three independent display (only support on 3<sup>rd</sup> 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
  - Display port and DVI-D

- Display port and display port

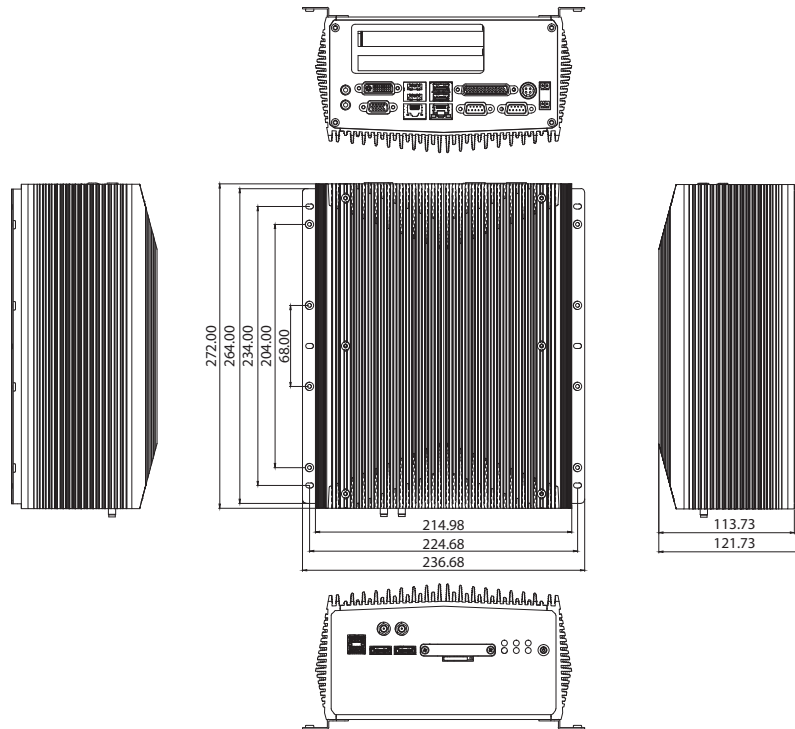
### I/O Interface-Front

- ATX power on/off switch
- HDD access/power status LEDs
- 2 x USB 3.0 ports (blue color)
- 2 x Display port (can be converted to DVI-D or HDMI via active cables)
- 2 x Antenna holes
- 1 x External CFast
- 1 x SIM card socket

### I/O Interface-Rear

- 2 x DB9 for COM5 & COM6 (RS232)
- 1 x DB44 serial port for 4 x COM port
  - COM1/COM3/COM4: RS232
  - COM2: RS232/422/485
- 2 x Intel® GbE LAN ports (Intel® 82574L and 82579LM); support WoL, teaming and PXE
- 2 x USB 2.0 ports
- 2 x USB 3.0 ports (blue color)
- 1 x DB15 VGA port
- 1 x DVI-D port
- 1 x Line-out and 1 x Mic-in
- 2-pin remote power on/off switch
- +9V to 30VDC input

## Dimension Drawing



### Storage Device

- 1 x CFAST socket
- 1 x 2.5" SATA HDD or 2 x SATA DOM
- SATA DOM: support 90°C horizontal type only

### Expansion Slot

- NISE 3600E2: two PCIe x4 expansion slot
  - Add-on card length: one 169mm max. and one 240mm max.
  - Power consumption: 10W/slot max.
- NISE 3600P2: two PCI expansion slot
  - Add-on card length: one 169mm max. and one 240mm max.
  - Power consumption: 10W/slot max.
- NISE 3600P2E: one PCIe x4 and one PCI expansion slot
  - Add-on card length: 169mm max. for PCIe x4 and 240mm max. for PCI expansion
  - Power consumption: 10W/slot max.
- 1 x mini-PCIe socket (support optional Wi-Fi or 3.5G module)

### Power Requirements

- ATX power mode
- Onboard DC to DC power support from 9V to 30VDC
- Optional power adapter

### Dimensions

- 215mm (W) x 272mm (D) x 114mm (H) without wall mount bracket (8.5" x 10.7" x 4.5")

### Construction

- Aluminum Chassis with fanless design

### Environment

- Operating temperature:
  - Ambient with air flow: -5°C to 50°C if using Core™ i7-3612QM
  - 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 80°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
- UL

### OS Support Lists

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

## Ordering Information

### Barebone

- **NISE 3600E (P/N: 10J00360000X0)**  
3rd generation Intel® Core™ i3/i5 rPGA fanless system with one PCIe x4 expansion
- **NISE 3600E2 (P/N: 10J00360001X2) RoHS Compliant**  
3rd generation Intel® Core™ i3/i5 rPGA fanless system with two PCIe x4 expansion
- **NISE 3600P2 (P/N: 10J003600002X0)**  
3rd generation Intel® Core™ i3/i5 rPGA fanless system with two PCI expansion
- **NISE 3600P2E (P/N: 10J003600003X0)**  
3rd generation Intel® Core™ i3/i5 rPGA fanless system with one PCI expansion and one PCIe x4 expansion
- **19V, 120W AC/DC power adapter w/o power core (P/N: 7410120002X00)**