



## Main Features

- Support Intel® Core™ i7/i5 socket processor
- Mobile Intel® QM57 PCH
- Dual Intel® Gigabit Ethernet ports; Support WoL and PXE
- Dual VGA or VGA/DVI or DVI/HDMI Independent Display
- 3x RS232 and 1 x RS232/422/485 with Auto Flow Control
- 5<sup>th</sup> RS232 (option: 4x digital input, 4x digital output)
- 3x IEEE1394b ports, 2x eSATA
- Support +9V to 30VDC power input; Support ATX power mode
- 1x PCI expansion slots and 1x PCIe expansion slots

## Product Overview

Utilizing 32nm Intel® Core™ i7/i5 processor, NISE 3500 series feature Intel® Turbo Boost and Intel® Hyper-Threading technologies (2 cores, 4 threads), as well as on-processor graphics and two DDRIII 800/1066 memory modules up to 4GB. In addition, NISE 3500 provides a wide variety of display I/O configurations and rich I/O interfaces including two Intel® GbE Ethernet ports, 5x COM ports, 6x USB, 8x GPIO, 2x SATAII, 2x eSATA, audio interfaces. NISE 3500M has more features than NISE 3500, for example, it is equipped with 3x IEEE1394b ports and 1x HDMI port. NISE 3500 is designed for a broad range of applications which demand intense graphics performance, these include medical diagnostic equipment, medical imaging, data storage, industrial automation, public infotainment, surveillance security applications.

## Specifications

### Main Board

- NISB 3500
- OnBoard Mobile Intel® QM57 Platform Controller Hub
- Support Intel® Core™ i7-620M PGA Processor (2.66GHz, 4M Cache)
- Support Intel® Core™ i5-520M PGA Processor (2.4GHz, 3M Cache)
- Support Intel® P4500 PGA Processor (1.86GHz, 2M Cache)

### Main Memory

- 2x 240-pin memory DIMM, up to 4GB DDR3 800/1066MHz SDRAM, unbuffered and non-ECC
- \* Note: Actual memory size is dynamic based on the OS I/O resource allocation

### I/O Interface-Front

- ATX power on/off switch
- HDD Access/Power status LEDs
- 2x USB2.0 ports
- 2x eSATA ports
- 3x IEEE1394b ports
- 1x HDMI

### I/O Interface-Rear

- 2-pin Remote Power on/off switch
- +9V to 30VDC input

- 1x PS/2 for Keyboard / Mouse
- 1x DB9 for COM5, RS232 (option: 4x GPI and 4x GPO)
- 1x DB44 Serial Port for 4x RS232 (COM2: RS232/422/485 with auto flow control)
- 2x GbE LAN ports; Support WoL and PXE
- 4x USB2.0 ports
- 1x DB15 VGA port
- 1x DVI-I port
- 1x Line-out and 1x Mic-in

### Device

- 2x 2.5" HDD driver bay

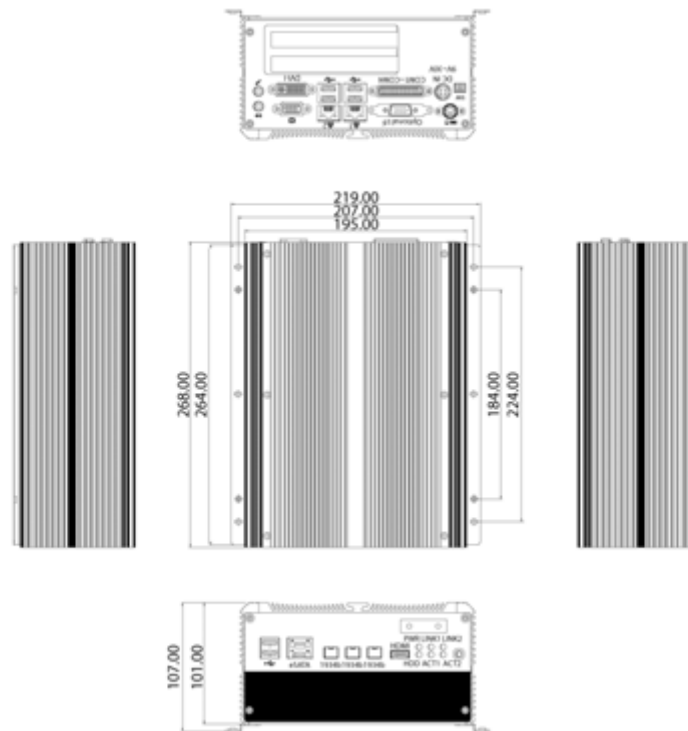
### Expansion

- 1x PCI expansion (10W max./ per slot)
- 1x PCIe expansion (10W max./ per slot)
- Add-on card length: 169mm max.

### Power Requirements

- ATX power mode
- OnBoard DC to DC power support from +9 to 30VDC
- Optional power adapter

## Dimension Drawing



### Dimensions

- 195mm (W) x 268 mm (D) x 101mm (H) (7.7" x 10.5" x 3.98")

### Construction

- Aluminum 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 80°C
- Relative humidity: 10% to 93% (Non-Condensing)
- Shock protection:  
HDD: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ HDD Condition
  - Random: 0.5Grms @ 5~500 Hz according to IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz according to IEC60068-2-6

### Certifications

- EN60601
- CE approval
- FCC Class B
- UL/ cUL
- e13

## Ordering Information

### Barebone

- **NISE 3500M2E (P/N: 10J00350003X0) RoHS Compliant**  
Intel® Core™ i7/i5 fanless system with one PCI expansion and one PCIe x1 expansion slot
- **NISE 3500M2 (P/N: 10J00350006X0) RoHS Compliant**  
Intel® Core™ i7/i5 fanless system with two PCI expansion (MoQ is required)
- **19V, 120W non-medical grade AC/DC power adapter w/o power core (P/N: 7410120002X00)**