

## Main Features

- Support Intel ${ }^{\circledR}$ Core ${ }^{\text {TM }}$ i7/i5 socket processor
- $3 x$ RS232 and 1x RS232/422/485 with Auto Flow Control
- Mobile Intel ${ }^{\circledR}$ QM57 PCH
- Dual Intel ${ }^{\circledR}$ Gigabit Ethernet ports; Support WoL and PXE
- $5^{\text {th }}$ RS232 (option: $4 x$ digital input, $4 x$ digital output)
- Support +9 to 30VDC power input; Support ATX power mode
- Dual VGA or VGA/ DVI Independent Display


## Product Overview

Utilizing 32 nm Inte ${ }^{\circledR}$ Core ${ }^{T M} \mathrm{i} 7 / i 5$ processor, NISE 3500 series feature Inte ${ }^{\circledR}$ Turbo Boost and Intel ${ }^{\circledR}$ 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 ${ }^{\oplus}$ GbE Ethernet ports, $5 x$ COM ports, $6 x$ USB, $8 x$ GPIO, $2 x$ SATAll, $2 x$ eSATA, audio interfaces. NISE 3500M has more features than NISE 3500, for example, it is equipped with $3 \times$ IEEE1394b ports and $1 \times$ 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 ${ }^{\circledR}$ QM57 Platform Controller Hub
- Support Intel ${ }^{\circledR}$ Core ${ }^{\text {TM }}$ i7-620M PGA Processor ( $2.66 \mathrm{GHz}, 4 \mathrm{M}$ Cache)
- Support Inte ${ }^{\circledR}$ Core ${ }^{\text {TM }}$ i5-520M PGA Processor ( $2.4 \mathrm{GHz}, 3 \mathrm{M}$ Cache)
- Support Inte ${ }^{\oplus}$ P4500 PGA Processor ( $1.86 \mathrm{GHz}, 2 \mathrm{M}$ Cache)


## Main Memory

- $2 \times 240$-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
- $2 x$ USB2. 0 ports
- $2 x$ eSATA ports


## I/O Interface-Rear

- 2-pin Remote Power on/ off switch
- +9 to 30VDC input
- 1x PS/ 2 for Keyboard / Mouse
- 1x DB9 for COM5, RS232 (option: $4 x$ GPI and $4 x$ GPO)
- 1x DB44 Serial Port for 4x RS232
(COM2: RS232/422/485 with auto flow control)
- $2 x$ GbE LAN ports; Support WoL and PXE
- $4 x$ USB2.0 ports
- 1x DB15 VGA port
- 1x DVI-I port
- 1x Line-out and $1 \times$ Mic-in


## Device

- $1 \times 2.5^{\prime \prime}$ HDD driver bay


## Expansion

- $2 x \mathrm{PCl}$ expansion (10W max./ per slot)
- Add-on card length: 169 mm max.


## Power Requirements

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


## Dimensions

- $195 \mathrm{~mm}(\mathrm{~W}) \times 268 \mathrm{~mm}(\mathrm{D}) \times 101 \mathrm{~mm}(\mathrm{H})\left(7.7^{\prime \prime} \times 10.5^{\prime \prime} \times 3.98^{\prime \prime}\right)$


## Construction

- Aluminum Chassis with fanless design


## Dimension Drawing



## Environment

- Operating temperature:

Ambient with air flow: $-5^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}$
(According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)

- Storage temperature: $-20^{\circ} \mathrm{C}$ to $80^{\circ} \mathrm{C}$
- Relative humidity: $10 \%$ to $93 \%$ (Non-Condensing)
- Shock protection:

HDD: 20G, half sine, 11 ms , 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

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


## Ordering Information

## Barebone

- NISE 3500P2 (P/N: 10J00350002X0) RoHS Compliant Intel ${ }^{\circledR}$ Core ${ }^{\text {TM }} \mathrm{i} 7 / 15$ fanless system with two PCl expansion slots
- NISE 3500P2E (P/N: 10J00350004X0) RoHS Compliant

Intel ${ }^{\oplus}$ Core $^{\text {TM }} \mathrm{i} 7 / 15$ fanless system with one PCl and one PCle $\times 1$ expansion sots (MoQ is required)

- NISE 3500E2 (P/N: 10J00350005X0) RoHS Compliant Inte ${ }^{\oplus}$ Core ${ }^{\text {TM }}$ i7/i5 fanless system with two PCle $\times 1$ expansion slots (MoQ is required, not in UL model list)
- NISE 3500P2E4 (P/N: 10J00350017X0) RoHS Compliant Intel ${ }^{\oplus}$ Core ${ }^{\text {TM }}$ i7/i5 fanless system with one PCI and one PCle $\times 4$ expansion slots (MoQ is required, not in UL model list)
- 19V, 120W AC/DC power adapter w/o power core (P/N: 7410120002X00)

