



## Main Features

- Support Intel® Core™ i7/i5 socket processor
- Mobile Intel® QM57 PCH
- Dual Intel® GbE LAN ports; Support WoL and PXE
- Dual VGA or VGA/DVI or DVI/HDMI Independent Display
- 3 x RS232 and 1 x RS232/422/485 with Auto Flow Control
- 1 x Mini-PCIe socket with one external SIM card holder
- Support +9V to 30VDC power input; Support ATX power mode

## Product Overview

A wireless-ready system, Utilizing 32nm Intel® Core™ i7/i5 processor, NISE 3520 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 3520 provides a wide variety of display I/O configurations and rich I/O interfaces including two Intel® GbE Ethernet ports, 4 x COM ports, 6 x USB, 8 x GPIO, 1 x Mini-PCIe socket, 1 x SIM card holder, 1 x HDMI and mobile audio interfaces. NISE 3520 is designed for a broad range of applications which demand intense graphic performance, these include medical diagnostic equipment, medical imaging, data storage, industrial automation, public infotainment, surveillance security applications. With mobile communication ability, NISE 3520 can be applied to mobile application or those applications where cannot reach LAN cable, for example, mobile DVR, Kiosk and Data Acquisition in the field.

## Specifications

### Main Board

- NISB3520
- 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

- 2 x 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
- Wireless Active LEDs
- 2 x Antenna holes
- 2 x USB 2.0 ports
- 1 x Line-out and 1 x Mic-in
- 1 x HDMI
- 1 x External SIM card holder

### I/O Interface-Rear

- 2-pin Remote Power on/ff switch

- +9V to 30VDC input
- 1 x PS/2 for Keyboard/Mouse
- 1 x DB15 male connector for GPIO (4 x input and 4 x output)
- 1 x DB44 Serial Port for 4 x RS232 (COM2: RS232/422/485 with auto flow control)
- 2 x GbE LAN ports; Support WoL and PXE
- 4 x USB 2.0 ports
- 1 x DB15 VGA port
- 1 x DVI-I port
- 1 x Line-out and 1 x Mic-in

### Device

- 1 x 2.5" HDD driver bay

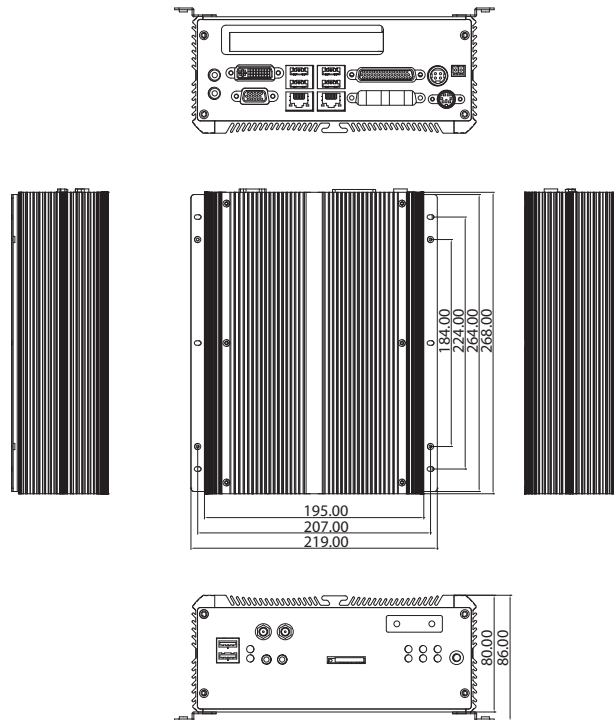
### Expansion

- 1 x PCI expansion (10W max./nper slot)  
Add-on card length: 169mm max
- 1 x Mini-PCIe socket  
Default: support optional 3.5G module  
Option: support optional Wi-Fi module

### Power Requirements

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

## Dimension Drawing



### Dimensions

- 195mm (W) x 268mm (D) x 80mm (H) (7.7" x 10.5" x 3.1")

### 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 ~ 500Hz according to IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5 ~ 500Hz according to IEC60068-2-6

### Certifications

- CE approval
- FCC Class B

### OS Support Lists

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

## Ordering Information

### Barebone

- **NISE 3520 (P/N: 10J00352000X0) RoHS Compliant**  
Intel® Core™ i7/i5 Fanless System with one PCI Expansion Slot
- **19V, 120W AC/DC Power Adapter w/ o power core**  
**(P/N: 7410120002X00)**