

# NISE 3520

Intel® Core™ i7/i5 Fanless System with Mini-PCIe socket,  
Wireless Interface, HDMI and one Expansion Slot



## Main Features

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

## 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, 4x COM ports, 6x USB, 8x GPIO, 1x Mini-PCIe socket, 1x SIM card holder, 1x 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
- On board 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
- Wireless Active LEDs
- 2 x Antenna holes
- 2 x USB2.0 ports
- 1 x Line-out and 1x Mic-in
- 1 x HDMI
- 1 x External SIM card holder

### I/O Interface-Rear

- 2-pin Remote Power on/off switch
- 9~30V DC input
- 1 x PS/2 for Keyboard / Mouse
- 1 x DB15 male connector for GPIO (4x input and 4x output)
- 1 x DB44 Serial Port for 4x RS232 (COM2: RS232/422/485 with auto flow control)
- 2x GbE LAN ports
- 4 x USB2.0 ports
- 1 x DB15 VGA port
- 1 x DVI-I port
- 1 x Speaker-out and 1x Mic-in

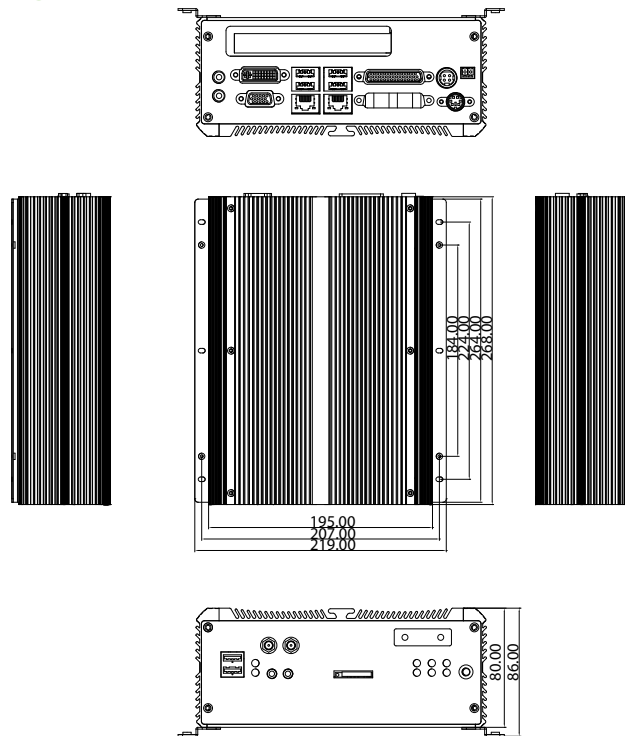
### Device

- 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

## Dimension Drawing



### Power Requirements

- ATX power mode
- On-board DC to DC power support from 9V to 30V DC
- Optional power adapter

### Dimensions

- 195mm (W) x 268 mm (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 ~ 55°C  
(According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (Non-Condensing)
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27
- Vibration protection  
Random: 0.5Grms @5~500 Hz according to IEC68-2-64  
Sinusoidal: 0.5Grms @5~500 Hz according to IEC68-2-6

### Certifications

- EN60601
- CE approval
- FCC Class B

## 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)**