

# NISE 3520P2/P2E

Intel® Core™ i7/i5 Fanless System  
w/ Mini-PCle and 2x Expansion Slots



## 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 1x RS232/422/485 with Auto Flow Control
- ♦ 1x Mini-PCle 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, 5x COM ports, 6x USB, 8x GPIO, 1x Mini-PCle socket, 1x SIM card holder, 1x HDMI, 2x GSM audio, 2x PCI slot,

NISE 3520 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

- ♦ NISB3500M
- ♦ 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
- ♦ Wireless Active LEDs
- ♦ 2x Antenna holes
- ♦ 2x USB2.0 ports
- ♦ 1x Line-out and 1x Mic-in
- ♦ 1x HDMI
- ♦ 1x External SIM card holder

### I/O Interface-Rear

- ♦ 2-pin Remote Power on/off switch
- ♦ +9V to 30VDC input
- ♦ 1x PS/2 for Keyboard / Mouse
- ♦ 1x DB15 male connector for GPIO (4x input and 4x output)
- ♦ 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

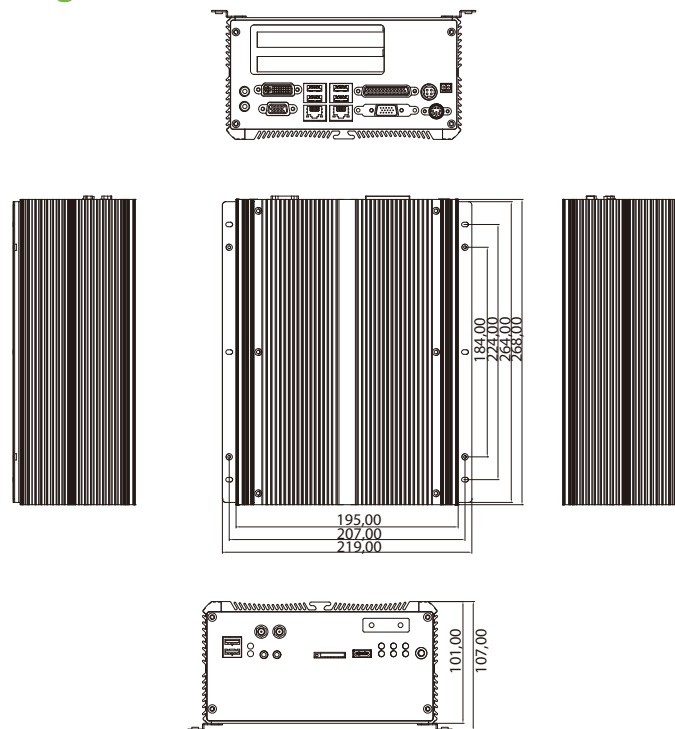
### Device

- ♦ 1x 2.5" HDD driver bay

### Expansion

- ♦ 2x PCI expansion (NISE 3520P2 only, 10W max./per slot)
- ♦ 1x PCI & 1x PCIe x1 expansion (NISE 3520P2E only, 10W max./per slot)
- ♦ Add-on card length: 169mm max
- ♦ 1x Mini-PCle socket
  - Default: support optional 3.5G module
  - Option: support optional Wi-Fi module

## Dimension Drawing



### Power Requirements

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

### Dimensions

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

### Construction

- Aluminum Chassis with fan-less 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

## Ordering Information

### Barebone

- **NISE 3520P2 (P/N: 10J00352002X0) RoHS Compliant**  
Intel® Core™ i7/i5 Fanless System with two PCI Expansion slot
- **NISE 3520P2E (P/N: 10J00352003X0) RoHS Compliant**  
Intel® Core™ i7/i5 Fanless System with one PCI and one PCIe x1 Expansion slots
- **19V, 120W AC/DC Power Adapter w/o power core (P/N: 7410120002X00)**