



## Main Features

- ◆ Support 3rd generation Intel® Core™ i3/i5 rPGA socket type processor
- ◆ Intel® QM77 PCH
- ◆ 2 x USB3.0 & 2 x USB2.0
- ◆ 4 x Intel® GbE LAN Ports
- ◆ 1 x DVI-I & 1 x VGA
- ◆ 2 x 2.5KV isolated RS232/422/485
- ◆ 1 x CFast socket
- ◆ Two Mini-PCIe sockets
- ◆ Support built-in +24VDC isolation power module
- ◆ Support ATX power mode, WoL and PXE function
- ◆ Support NVRAM 1Mb

## Product Overview

Integrated with Intel® 3rd generation Core™ i7 process, NIFE 4000 offers excellent computing performance. The QM77 PCH provides original USB3.0, which ensures the high throughput and is suitable for the high bandwidth devices, such as industrial cameras. The four Intel® GbE LAN ports provide high communication bandwidth and can be used to access GbE camera for surveillance and industrial automation projects. NIFE 4000 provides built-in optical isolated digital input and digital output, 16 channels respectively. The LED indicators can be configured to show the status of the first four digital outputs. All built-in I/O connectors of NIFE 4000 locate at the front panel. It makes the wiring and maintenance easier for typical installation style for factory automation devices. Along with well-proven fanless design experience of NEXCOM which ensures the stability, these make NIFE 4000 well fitting with the factory automation applications.

## Specifications

### CPU Support

- ◆ Support 3rd generation Intel® Core™ i5/i3 rPGA socket type processor
  - Core™ i5-3610ME, Dual Core, 2.7GHz, 3M Cache
  - Core™ i3-3120ME, Dual Core, 2.4GHz, 3M Cache
- Support Three Independent Display with above processor
- ◆ Intel® QM77 PCH chipset

### Main Memory

- ◆ 2 x DDR3/DDR3L SO-DIMM sockets, support dual channel up to 8 GB, DDR3 1333 SDRAM, un-buffered and non-ECC

### Display Option

- ◆ Dual independent display
  - VGA
  - DVI-D
- ◆ Three independent display
  - VGA
  - VGA output via optional Y-cable
  - DVI-D

### I/O Interface

- ◆ ATX power on/off switch
- ◆ Power status LED
- ◆ HDD/CFast access LEDs
- ◆ RF access LED

- ◆ COM ports access LEDs
- ◆ 2 x USB2.0 ports & 2 x USB3.0 ports
- ◆ 2 x 2.5KV isolated RS232/422/485 terminal connector
- ◆ 1 x DB44 for 16CH isolated DI and 16CH isolated DO
- ◆ 1 x VGA output & 1 x DVI-I output
- ◆ 4 x Intel® GbE LAN ports (with Intel® WG82574L & WG82579LM LAN chip)
- ◆ 1 x PS/2 connector for keyboard and mouse
- ◆ 1 x Mic-in and 1 x Line-out
- ◆ 2-pin remote power on/off switch
- ◆ 2 x Optional I/O knockout for additional functions

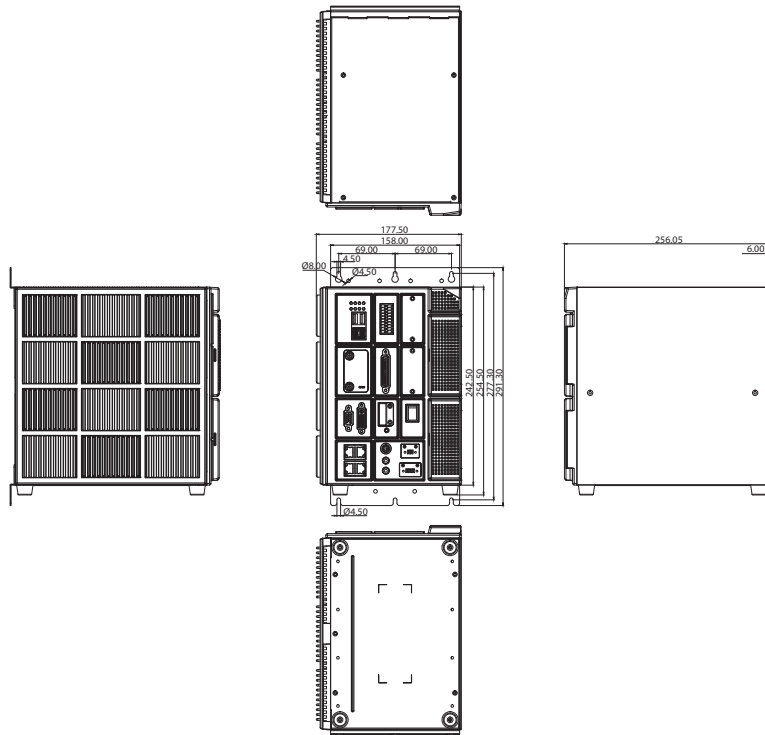
### Isolated Digital Input

- ◆ 16CH 2.5KV optical isolated Digital Input
  - Digital logic levels
  - 0-24V, non-polarity type
  - Input low voltage (L): 0 ~ 1.5V
  - Input high voltage (H): 5 ~ 24V
  - Input resistance: 1.2kΩ @ 0.5W
  - Max. response frequency: 10KHz @ 50% duty

### Isolated Digital Output

- ◆ 16CH 2.5KV optical isolated Digital Output
- ◆ Output type: Open-collector NPN Darlington transistor
- ◆ Supply voltage: 5-35V

## Dimension Drawing



- Sink current: 200mA max. for all channel @ 100% duty

### Storage Device

- 2 x External 2.5" HDD bay, cold swappable
- 1 x External CFAST socket

### Expansion Slot

- 2 x Mini-PCIe socket for optional fieldbus modules

### Power Requirements

- Built-in +24VDC isolation power module

### Dimensions

- 178mm (W) x 250mm (D) x 255mm (H) without wall mount bracket

### Environment

- Operating temperature: Ambient with air flow: 0°C to 55°C (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 80°C
- Operating humidity: 10% ~ 90% relative humidity, non-condensing  
Limits to be at 90% RH at max 40C
- Shock protection: 20G, half sine, 11ms, IEC60068-2-27 with HDD
- Vibration protection  
Random: 0.5Grms @ 5 ~ 500 Hz according to IEC68-2-64  
Sinusoidal: 0.5 Grms @ 5~500 Hz according to IEC68-2-6

### Certifications

- CE/FCC Class A

### OS Support Lists

- Windows XP 32bits and 64bits
- Windows 7 32bits and 64bits
- Windows 8.1 32 bits and 64 bits

## Ordering Information

### ♦ NIFE 4000 (P/N: 10J70400000X0)

3rd Generation Intel® Core™ i3/i5 rPGA Fanless System with Isolation Power Module and Optional Fieldbus Modules

### Optional Fieldbus kit

88J50090E00X0	FBI 90E-PNM KIT	ProfiNET Master Module Kit
88J50090E01X0	FBI 90E-EP KIT	Ethernet IP Master Module Kit
88J50090E02X0	FBI 90E-ECM KIT	EtherCAT Master Module Kit
88J50090E03X0	FBI 90E-PBM KIT	Profibus Master Module Kit
88J50090E04X0	FBI 90E-DNM KIT	DeviceNet Master Module Kit

### ♦ 19V 65W AC/DC power adapter w/o power cord (P/N: 7400065009X00)