



## Main Features

- OnBoard Intel® Atom™ Dual Core D2550 processor 1.86 GHz
- Intel® 82801JIR ICH10 RAID
- 1x DVI-I & 1x DVI-D display output
- 4x Intel® 82574IT GbE LAN ports; Support WoL, teaming and PXE
- 4x RS232/422/485
- 4x GPI & 4x GPO
- 6x USB2.0; 1x external CFast socket; 1x SIM card socket
- 1x internal Mini-PCIe with two antenna holes
- Support +9V to 36VDC input; Support ATX power mode
- 1x PCI expansion
- Support optional Fieldbus module kit (PROFIBUS, ProfiNET, DeviceNET, EtherCAT, Ethernet IP master module)

## Product Overview

Powered by Intel® Atom™ Dual Core D2550 Processor, NIFE 2310 is designed for industrial fieldbus enable system which can be utilized in most factory automation applications. The fanless NIFE 2310 is also designed to be operated in harsh environment with extended operating temperature feature. Targeting as gateway and SCADA control system, NIFE 2310 is designed with 4x LAN ports, support WoL, LAN teaming and PXE functions. In addition, NIFE 2310 also provides 4x COM, 6x USB2.0, dual independent display and super graphic performance for variety needs and one PCI expansion available. The NIFE 2310 is designed with universal concept to support any one of major fieldbus protocols without extra effort. With this high integration ability, the NIFE 2310 is ease of use, replacement or installation with PROFIBUS, ProfiNET, DeviceNET, EtherCAT or Ethernet IP protocol, mainly for communication protocol in factory automation.

## Specifications

### CPU Support

- On-Board Intel® Atom™ Dual Core D2550 processor, 1.86GHz, 1M L2 cache
- Intel® 82801JIR ICH10 RAID

### Main Memory

- 2x DDR3 SO-DIMM sockets, support up to 4G DDR3-800/ 1066/ 1333 MHz SDRAM, un-buffered and non-ECC

### Dual Independent Display Option

- DVI-D + VGA (P/N: 60233VGA50X00, 1.8M cable, from DVI-I to VGA male type)
- DVI-D + DVI-D

### I/O Interface-Front

- ATX Power on/off switch
- HDD access/ power status LEDs
- 2x DB9, RS232/422/485 w/ 2.5KV isolation protection
- 2x USB2.0
- 4x GPO & 4x GPI
- 1x Mic-in and 1x Line-out
- SIM card socket
- CFast socket
- 2x antenna holes

- 1x FieldBUS Port (for optional PROFIBUS, ProfiNET, DeviceNET, EtherCAT, Ethernet IP master kit)

### I/O Interface-Rear

- 1x 2-pin DC input, Support +9 to 36VDC input
- 1x DVI-I
- 1x DVI-D
- 4x Intel® 82574IT GbE LAN ports; Support WoL, teaming and PXE
- 4x USB2.0
- 2x DB9, RS232/422/485

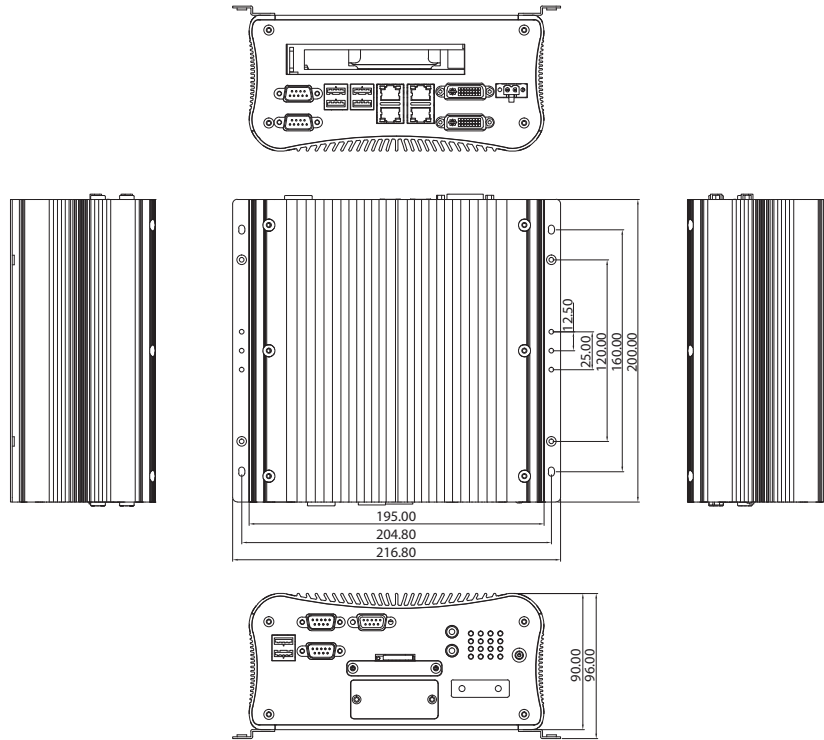
### Device

- 1x 2.5" SATA HDD driver bay
- 1x External CFast socket

### Optional Fieldbus Kit

- FBI90E-PBM: Profibus Master card with cable and universal bracket (P/N: 88J50090E03X0)
- FBI90E-PNM: ProfiNET Master card with cable and universal bracket (P/N: 88J50090E00X0)
- FBI90E-DNM: DeviceNET Master card with cable and universal bracket (P/N: 88J50090E04X0)

## Dimension Drawing



- FBI90E-EP: Ethernet IP Master card with cable and universal bracket (P/N: 88J50090E01X0)
- FBI90E-ECM: EtherCAT Master card with cable and universal bracket (P/N: 88J50090E02X0)

### Expansion

- NIFE 2310: One PCI Expansion  
Add-on card length: 130mm max.  
Power consumption: 10W/slot max.

### Power Requirements

- Support +9V to 36VDC input; Support ATX power mode

### Dimensions

- 195mm (W) x 200mm (D) x 90mm (H) (7.7" x 7.9" x 3,6")

### Construction

- Aluminum Chassis with fanless design

### Environment

- Operating temperature:  
Ambient with air flow: -20°C to 65°C
- Storage temperature: -30°C to 85°C
- Relative humidity: 10% to 93% (Non-condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - CFast: 40G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ HDD
  - 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 A

## Ordering Information

### Barebone

- **NIFE 2310 (P/N: A0J70231000X0)**  
Intel® Atom™ Dual Core D2550 Fanless System with DDR3 4 G memory and Universal Fieldbus bracket and one PCI expansion
- **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)**