



Main Features

- Onboard Intel® Atom™ processor E3845 quad core, 1.91GHz
- 2 x MiniPCle sockets, 2 x COM Ports expansions
- 2 x USB 2.0/1x CFast (SATA 2.0)/1x 2.5" HDD (SATA 2.0)
- Wi-Fi/GSM
- VGA/DVI-D
- External RTC Battery Holder
- DC Input 24V +/- 20%

Product Overview

Integrated with Intel® Atom™ Bay Trail-I E3845 quad core processor, NISE 301 is a reliable factory solution for the factory automation projects which require running in space-critical and low power consumption environments. E3845 quad core processor comes with four physical cores and it allows NISE 301 to be multi-core PC controller for real-time processing. NISE 301 supports up to 4G DDR3L memory and have several options on storage devices like C-Fast, HDD, or SSD. NISE301 supports 24V +/- 20% DC input, and can be operated in an extended operating temperature range between -5 to 55 Celsius degree. NISE 301 follows user-friendly front access design and also supports two optional mini-PCle modules and two RS232/422/485 com ports. With rich I/O availability, NISE301 is capable of transforming into factory intelligent system for factory automation applications (with optional PROFIBUS, ProfiNET, DeviceNET, EtherCAT, Ethernet IP master/slave module), network applications (with optional GbE LAN, Wi-Fi, 3.5G module) and communication applications (with optional GPIO, RS232/422/485).

Specifications

CPU Support

- Onboard Intel® Atom™ processor E3845 quad core, 1.91GHz

Main Memory

- 1 x DDR3L SO-DIMM Socket, support up to 4GB with un-buffered and non-ECC

Display Option

- Dual Independent Display
 - DVI-D + VGA

Front I/O Interface Status LEDs

- 1 x Power Status/ 1 x HDD Access LEDs
- 2 x LAN Status/ 1 x C-Fast LEDs
- 4 x GPO Status/ 1 x Battery Low LEDs

Front I/O Interface

- 1 x ATX power on/off switch
- 1 x VGA, 1 x DVI-D
- 3 x USB2.0 Ports (500mA per each)
- 2 x Intel® GbE LAN ports (I210AT); Support WoL, Teaming and PXE
- 2 x Serial Ports (2x RS232/422/485 with auto flow control)
- 2 x Antenna Holes for Wi-Fi/GSM
- 1 x External C-Fast socket

- 1 x SIM Card holder
- 1 x External RTC Li-ion Battery holder

Front Expansion Slot

- 2 x Mini-PCle expansion slots
 - optional PROFIBUS, ProfiNET, DeviceNET, EtherCAT, Ethernet IP master/slave module
 - optional GbE LAN, Wi-Fi, 3.5G module
 - optional RS232/422/485 module

Storage Device

- 1 x CFast (SATA 2.0)
- 1 x 2.5" HDD (SATA 2.0)

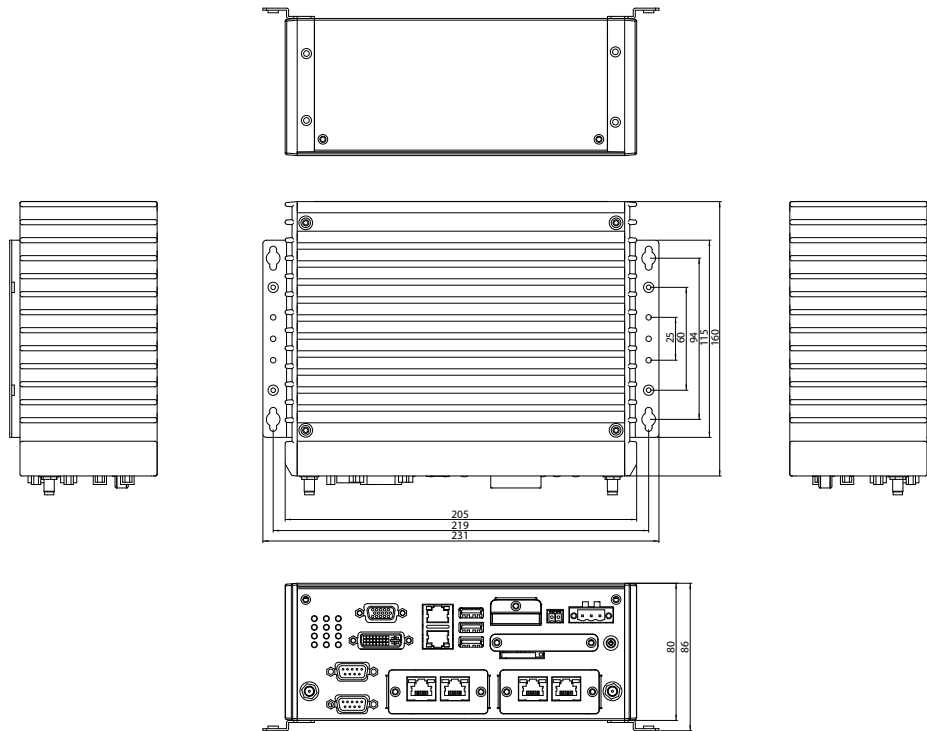
Expansion Slot

- 1 x Mini-PCle socket for GSM/Wi-Fi
- 1 x Mini-PCle socket for mSATA
- 4 x Mini-PCle socket for expansion modules

Power Requirement

- AT/ATX Power Mode (default with ATX power mode)
- Power input: Typical +24Vdc +/-20%
- Power adapter: Optional AC to DC power adapter (+24Vdc, 60W)

Dimension Drawing



Dimensions

- 205mm (W) x 160mm (D) x 80mm (H) without Wall-Mount bracket

Construction

- Aluminum and Metal 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 85°C
- Relative Humidity: 10% ~ 93% (Non-Condensing)
- Shock Protection:
HDD: 20G, half sine, 11ms, IEC60068-27
CFast: 50G, half sine, 11ms, IEC60068-27
- Vibration Protection w/HDD Condition:
Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE Class A
- FCC Class A
- LVD

OS Support Lists

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

Ordering Information

Barebone

- NISE 301 System (P/N: 10J00030100X0)
- 24V, 60W AC to DC power adapter w/o power core (P/N: TBD)