NISE 105-E3845

Main Features

- Onboard Intel® Atom™ processor E3845 Quad Core, 1.91GHz
- Dual Independent Display from DVI-I and HDMI
- 2 x Intel® I120IT GbE LAN ports; Support WoL, Teaming and PXE
- 2 x USB 2.0 & 1 x USB 3.0
- 4 x COM ports (COM1&COM2 with RS232/422/485, jumper-free setting)

- 1 x Optional Interface for optional Wi-Fi/3.5G/Automation modules
- External RTC battery holder for easy replacement
- Support -5~55 degree C operating temperature
- Support 9-30VDC input

Product Overview

Powered by the latest generation of Intel® Atom™ processor E3845 (formerly codenamed "Bay Trail-I"), the NISE 105-E3845 provides outstanding performance not only on computing but also on graphics, and it presents a brand new opportunity for both intelligent and industrial computing solutions. NISE 105-E3845 support ACP ThinManager that offers management solutions for the modern factory by simplifying management and also support Indusoft for HMI and SCADA. Up to 4G DDR3L memory, NISE 105-E3845 have several up to 4G DDR3L memory and have several options on storage devices like CFast, HDD and SSD. The NISE 105-E3845 is also the 1st system in Compact NISE 100 series to support extended operating temperature from -5 up to 55 degree C with wide DC input range from 9-30VDC. In addition to no cable connection on the NISE 105-E3845, it brings NISE 105-E3845 the sustainability to work in harsh environment both with temperature and vibration concern. The NISE 105-E3845 has high integration ability with optional Mini-PCIe module and 4 x COM ports, which makes it a real intelligent system for various applications such as factory automation applications (with optional PROFIBUS, ProfiNET, DeviceNET, EtherCAT, Ethernet IP master module), network applications (with optional GbE LAN, Wi-Fi, 3.5G/4G LTE module) and communication applications (with optional GPIO, RS232/422/485). NISE 105-E3845 is definitely the top choice for M2M intelligent system and factory automation platforms.

Specifications

CPU Support
- Onboard Intel® Atom™ processor E3845 Quad Core, 1.91GHz

Main Memory
- 1 x DDR3L SO-DIMM Socket, Support DDR3L 1066/1333 4GB RAM max., un-buffered and non-ECC

Display Option
- Dual Independent Display
  - HDMI and DVI-D
  - HDMI and VGA (via DVI-I to VGA converter)

I/O Interface-Front
- ATX power on/off switch
- 1 x Power Status/1 x HDD Access/1 x Battery Low/1 x Programing LEDs
- 1 x External CFast socket
- 1 x SIM Card holder
- 2 x Intel® I210IT GbE LAN ports; Support WoL,Teaming and PXE
- 1 x DVI-I Display Output
- 1 x USB 3.0 (900mA per each)
- 1 x USB 2.0 (500mA per each)
- 2 x DB9 for COM1 & COM2, both support RS232/422/485 with auto

flow control
  - Jumper-free setting on RS232/422/485
  - Support 5V/12V/Ring function by jumper setting, Ring as the default (COM2 Only)
- 1 x Remote Power ON/OFF Switch
- 1 x 2-pin DC input, support +9 to 30VDC input

I/O Interface - Rear
- 1 x USB 2.0
- 1 x HDMI
- 1 x RTC Battery
- 2 x DB9 for COM3 & COM4, both support RS232 only
- 1 x Mic-in & 1 x Line-out
- 2 x Antenna Holes for optional Wi-Fi/3.5G antenna
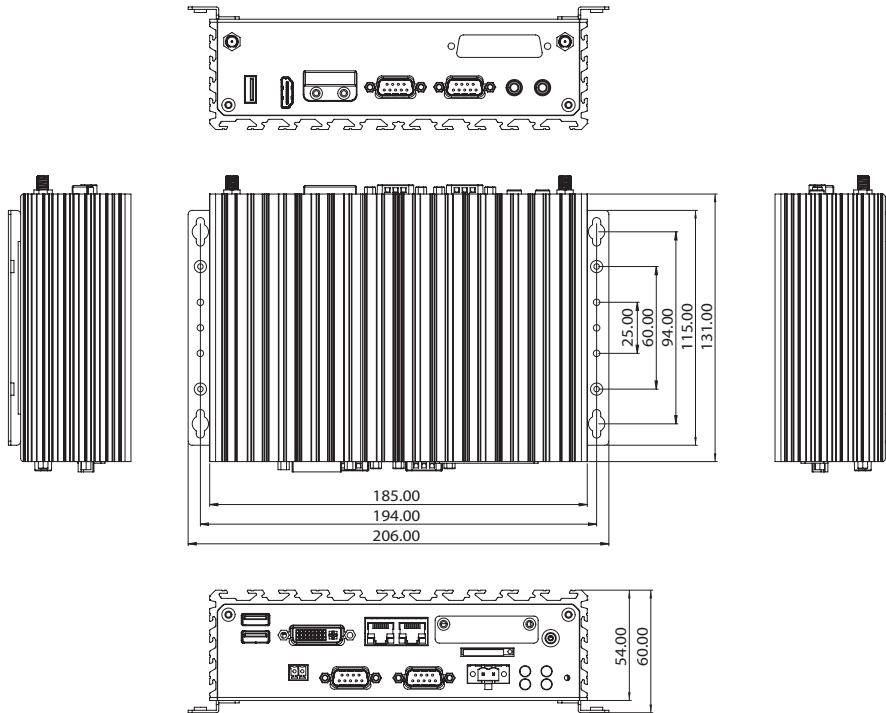- 1 x Optional I/F for optional Mini-PCIe Wi-Fi/3.5G/Hilscher Automation| module output

I/O Interface - Internal
- 4 x GPI and 4 GPO (5V, TTL Type)

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

Dimension Drawing

Expansion Slot
- 1 x Mini-PCIe socket for optional Wi-Fi/3.5G/Hilscher automation modules

Power Requirement
- Power input: +9VDC to +30VDC
- 1 x optional 24V, 60W power adapter

Support OS
- Windows 8, 32bit/64bit
- Windows Embedded Standard 8, 32bit/64bit
- Windows 7, 32bit/64bit
- Windows Embedded Standard 7, 32bit/64bit
- Windows Embedded Compact 7, 32bit
- Linux Kernel version 3.8.0
- Wind River® Intelligent Device Platfrom XT 2.0
- Android 4.4, 64bit

Dimensions
- 185mm (W) x 131mm (D) x 54mm (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 with industrial grade device
  (According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage Temperature: -30°C to 85°C
- Relative Humidity: 10% to 95% (non-Condensing)
- Shock Protection:
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - CFast: 50G, half sine, 11ms, IEC60068-2-27
- Vibration Protection w/HDD Condition:
  - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6
- Vibration Protection w/ CFast & SSD Condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications
- CE
- FCC Class A
- UL / cUL

Ordering Information

- **NISE 105-E3845 (P/N: 10J00010503X0)**
  Intel® Atom™ Processor E3845 Quad Core Fanless System

- **24V, 60W AC/DC power adapter w/o power cord**

  (P/N: 7400060023X00)