

All systems are fully configured & integrated to our customer's specifications including:

- Memory
- HDD/SSD
- Operating System
- Application Software
- PCI/PCle card Installation



**Main Features**

- Onboard Intel® Atom™ Quad Core E3845 1.91GHz
- Dual Independent Display from DVI-I and HDMI
- 2 x Intel® I210IT LAN ports support WoL, Teaming and PXE
- 2 x USB2.0 & 1 x USB3.0
- 4 x COM ports (COM1&COM2 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

**Overview**

Powered by the latest generation of Intel® Atom™ processor E3845 the NES-105-E3845 provides outstanding performance not only in computing but also graphics. The NES-105-E3845 supports ACP Thin Manager, Indusoft for HMI and SCADA making it an ideal solution for the modern factory. Up to 4GB DDR3L memory and options for storage devices; CFast, HDD and SSD. The NES-105-E3845 supports an extended operating temperature range of -5 up to 55 degree C with wide DC input range from 9-30VDC. Ideal for harsh environments and no internal cabling ensure sustainability for temperature and vibration. The NES-105-E3845 has a Mini-PCle expansion slot and 4 x COM ports, and is designed for 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 Security/Communication Applications (with optional GPIO, RS232/422/485).

**Specification**

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CPU Support</b>         | Onboard Intel® Atom™ E3845 Quad Core 1.91GHz processor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Main Memory</b>         | 1 x DDR3L SO-DIMM Socket, Support DDR3L 1066/1333 4GB RAM max., un-buffered and non-ECC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>I/O Interface-Front</b> | ATX power on/off switch<br>1 x Power Status/1 x HDD Access/1 x Battery Low/1 x Programming LEDs<br>1 x External CFast socket<br>1 x SIM Card holder<br>2 x Intel® I210IT GbE LAN Ports, support Wake on LAN, Teaming and PXE<br>1 x DVI-I Display Output<br>1 x USB3.0 (900mA per each)<br>1 x USB2.0 (500mA per each)<br>2 x DB9 for COM1 & COM2, both support RS232/422/485 with auto flow control<br>- Jumper-free setting on RS232/422/485<br>- Support 5V/12V/Ring function by jumper setting (COM2 Only)<br>1 x Remote Power ON/OFF Switch<br>1 x 2-pin DC input, support +9 to 30VDC input |
| <b>I/O Interface-Rear</b>  | 1 x USB2.0<br>1 x HDMI<br>1 x RTC Battery<br>2 x DB9 for COM3 & COM4<br>1 x Mic-in & 1 x Line-out<br>2 x Antenna Holes for optional Wi-Fi/3.5G antenna<br>1 x Optional I/F for optional miniPCle Wi-Fi/3.5G/Hilscher Automation module output                                                                                                                                                                                                                                                                                                                                                     |
| <b>Storage Device</b>      | 1 x CFast (SATA3.0)<br>1 x 2.5" HDD (SATA2.0)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Power Requirements</b>  | Power input: +9VDC to +30VDC<br>1 x optional 24V, 60W power adapter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Dimensions</b>          | 185mm(W) x 131mm(D) x 54mm(H) (7.28"x 5.2"x 2.13")                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Construction</b>        | Aluminium chassis with fanless design                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

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-

**Certifications** UL / cUL, CE, FCC Class A

**OS Support List**  
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 Platform XT 2.0  
Android 4.4, 64bit

**Dimension Drawing**

