

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

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



**Main Feature**

- Onboard Intel® Atom™ processor E3826 dual core, 1.46GHz
- Dual Independent Display from DVI-I and HDMI
- 2 x Intel® I120IT LAN ports support WoL, Teaming and PXE
- 2 x USB2.0 & 1 x USB3.0
- 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 -20 ~ 70 degree C extended operating temperature
- Support 9-30VDC input

**Overview**

Powered by the latest generation of Intel® Atom™ processor E3826 (formerly codenamed "Bay Trail-I"), the NES-105 provides outstanding computing performance and graphics in a compact fanless design; ideal for both intelligent and industrial computing solutions. The NES-105 supports ACP ThinManager, Indusoft for HMI and SCADA for the modern factory. Up to 4G DDR3L memory and support for various storage devices such as CFast, HDD and SSD.

Designed to support extended operating temperature ranges from -20 to 70 degrees Celsius and a wide DC input range from 9-30VDC the NES-105 is also cable-less, making it ideal for harsh temperature and vibration environments. The NES-105 is the perfect solution for numerous applications including: Factory automation (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).

**Specification**

**CPU Support**

Onboard Intel® Atom™ processor E3826 Dual Core, 1.46GHz  
Support Intel® Atom™ E3800 processor family from Single Core E3815, Dual Core E3825/E3826/E3827 and Quad Core E3845

**Main Memory**

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

**I/O Interface-Front**

ATX power on/off switch  
1 x Power Status, 1 x HDD Access, 1 x Battery Low, 1 x Programming LEDs, 1 x External CFast socket, 1 x SIM Card holder, 2 x Intel® I210IT GbE LAN Ports, support Wake on LAN, 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-PCle 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)

**Expansion Slot**

1 x Mini-PCle socket for optional Wi-Fi/3.5G/Hilscher automation modules

**Power Requirement**

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

**Construction**

Aluminium and Metal Chassis with fanless design

**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 Platform XT 2.0  
Android 4.4, 64bit

**Dimensions**

185mm (W) x 131mm (D) x 54mm (H) without wall-mount bracket

**Environment**

Operating Temperature:  
Ambient with air flow: -20°C to 70°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, IEC60068-2-64  
Vibration Protection w/CFast & SSD Condition:  
- Random: 2Grms @ 5~500 Hz, IEC60068-2-64  
- Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

**Dimension Drawing**

