



Main Features

- Onboard Intel® Atom™ processor E3815 Single core, 1.46GHz
- Display from DVI-I
- 2x Intel I210IT LAN ports support WoL, Teaming and PXE
- 1x USB2.0 & 1x USB3.0
- 2x COM ports with RS232/422/485, jumper-free setting with 2.5kv isolation protect
- 1x optional interface for optional Wi-Fi/ 3.5G/ automation modules
- External RTC battery holder for easy replacement
- Support NVRAM 1Mb
- Support -20 ~ 70 °C extended operating temperature
- Support 24V +/-20% DC input

Product Overview

Powered by the latest generation of Intel® Atom™ processor E3815 (formerly codenamed “Bay Trail-I”), it presents a brand new opportunity for both intelligent and industrial computing solutions. NIFE100 supports up to 4G DDR3L memory and have several options on storage devices like CFast and SSD. The NIFE 100 support extended operating temperature from -20 upto 70 degree C with wide DC input 24V +/-20% range. The NIFE 100 has high integration ability with optional Mini-PCIe module and 2x COM ports with Isolation protect, 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). NIFE100 is definitely the top choice for M2M intelligent system and factory automation platforms.

Specifications

CPU Support

- Onboard Intel® Atom™ processor E3815 Single Core, 1.46GHz
- Support Intel® Atom™ E3800 processor family from single core E3815, dual core E3825/E3826/E3827 and Quad Core E3845 with difference SKUs.

Main Memory

- 1x DDR3L SO-DIMM socket, support DDR3L 1066/1333 4GB RAM max., un-buffered and non-ECC

Display Option

- DVI-I: Support DVI-D and VGA (via Y cable from DVI-I connector)

I/O Interface-Front

- ATX power on/off switch
- 1x power status/ 1x HDD access/ 1x battery Low/ 2x programing LEDs/ 4x COM port LED
- 1x External CFast socket
- 1x SIM card holder
- 2x Intel I210IT GbE LAN ports, support wake-on LAN, Teaming and PXE
- 1x DVI-I display output

- 1x USB 3.0 (900mA per each)
- 1x USB 2.0 (500mA per each)
- 2x phoenix contact for COM1 & COM2, both support RS232/422/485 with auto flow control and 2.5k isolation protect
 - jumper-free setting on RS232/422/485
 - Support ring function by jumper setting
- 1x remote power ON/OFF Switch
- 1x 2-pin DC input, support 24V +/- 20% DC input

I/O Interface - Internal

- 4x GPI and 4 GPO (5V, TTL Type)

Storage Device

- 1x CFast (SATA 2.0)
- 2x 2.5" SSD (SATA 2.0)

Expansion Slot

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

Power Requirement

- Power input: 24V +/-20% DC Input
- 1x optional 24V, 60W power adapter

Dimension Drawing

Coming soon

Support OS

- Windows 8
- Windows Embedded Standard 8
- Windows 7
- Windows Embedded Standard 7
- Windows Embedded Compact 7
- Linux Kernel version 3.8.0

Dimensions

- 192.5mm (H) x 135.5mm (D) x 88.4mm (W)

Construction

- Aluminum and metal chassis with fanless design

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, IEC60068-27
 - 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
- 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

Ordering Information

- **NIFE 100 (P/N: 10J70010000X0)**
Intel® Atom™ processor E3815 single core fanless system
- **24V, 60W AC/DC power adapter w/o power cord**
(P/N: TBC)