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Main Features

- Onboard Intel® Celeron® processor J1900 Quad Core 2.0GHz
- Dual independent display from DP and DVI-I
- 2 x Intel® I210-AT GbE LAN ports support WoL, teaming and PXE
- 3 x USB 2.0 & 1 x USB 3.0
- 2 x RS232/422/485
- 2 x mini-PCIe socket for optional Wi-Fi/3.5G/4G LTE/fieldbus modules
- Top access SD card socket
- Support -5~55 degree C operating temperature
- Typical 24V DC input with $\pm 20\%$ range, with reverse polarity protection

Product Overview

Powered by the latest generation of Intel® Celeron® processor J1900 (formerly codenamed “Bay Trail-D”), NIFE 200 presents intelligent PC-based controller and IoT gateway for factory automation. NIFE 200 supports up to 8G DDR3L memory and have several options on storage devices like SD, mSATA, HDD and SSD. The NIFE 200 support operating temperature from -5 up to 55 degree C with typical DC input 24V $\pm 20\%$ range. The NIFE 200 has high integration ability with optional mini-PCIe module and 2 x COM ports, which makes it a reliable connection with devices in factory automation applications (with optional PROFIBUS, PROFINET, DeviceNET, EtherCAT, EtherNet/IP, CANopen, SERCOSIII master module), IoT applications (with optional GbE LAN, Wi-Fi, 3.5G/4G LTE module) and communication applications (with optional GPIO, RS232/422/485). NIFE 200 is definitely the top choice for M2M intelligent system as a factory automation controller and gateway.

Specifications

CPU Support

- Onboard Intel® Celeron® processor J1900 Quad Core 2.0GHz
- Support Intel® Atom™ E3800 processor family from Single Core E3815, Dual Core E3825/E3826/E3827 and Quad Core E3845 with difference SKUs

Main Memory

- 2 x DDR3L SO-DIMM socket, support DDR3L 1066/1333 8GB RAM max., un-buffered and non-ECC

Display Option

- Dual independent display
 - DVI-I and DP

I/O Interface-Front

- ATX power on/off switch
- LEDs for HDD LED, batty LEDs, power LED, COM port Tx/Rx, 5x programmable GPO LEDs
- 1 x External SD card
- 1 x SIM card holder
- 2 x Intel® I210-AT GbE LAN ports, support WoL, teaming and PXE
- 1 x DP display output
- 1 x DVI-I display output
- 1 x USB 3.0 (900mA per each)
- 3 x USB 2.0 (500mA per each)

- 2 x RS232/422/485 support auto flow control
 - Jumper-free setting on RS232/422/485
 - Support 2.5KV isolation protection on COM1
- 1 x 3-pin DC input, typical 24V DC input with $\pm 20\%$ range

Storage Device

- 1 x 2.5" SSD/HDD (SATA 2.0) - front accessible
- 1 x SD card (data storage only)
- 1 x mSATA

Expansion Slot

- 2 x mini-PCIe socket for optional Wi-Fi/3.5G/4G LTE/fieldbus modules

Power Requirement

- Typical 24V DC input with $\pm 20\%$ range, with reverse polarity protection
- 1 x Optional 24V, 60W power adapter

Dimensions

- 85mm (W) x 157mm (D) x 214mm (H)

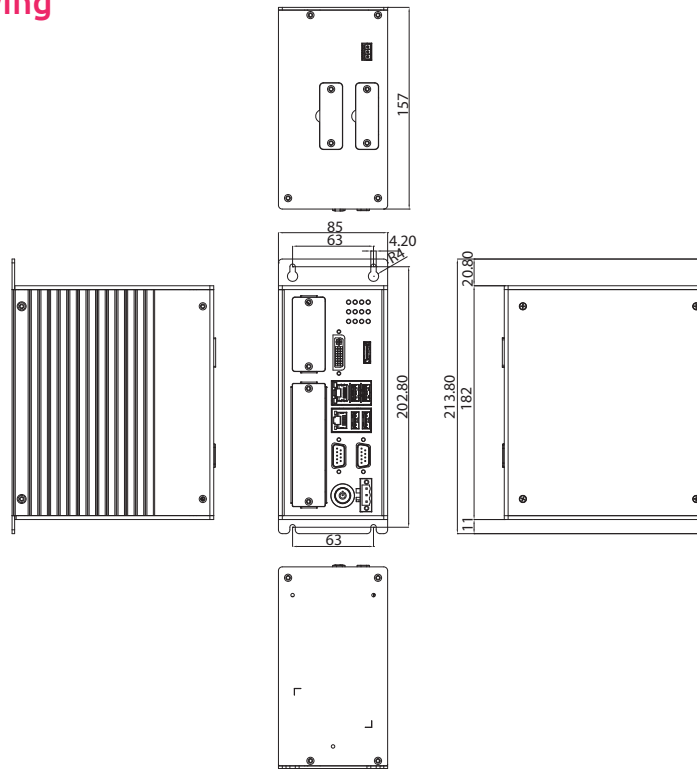
Construction

- 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)

Dimension Drawing



- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
 - HDD: 20G, half sine, 11ms, IEC60068-2-27
 - SSD: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ SSD condition:
 - Random: 2Grms @ 5~500Hz, IEC60068-2-64
 - Sinusoidal: 2Grms @ 5~500Hz, IEC60068-2-64

Certifications

- CE approval
 - EN61000-6-2
 - EN61000-6-4
- FCC Class A
- LVD
- UL60950

Support OS

- Windows 10 IoT Enterprise, 64-bit
- Windows 7, 32-bit/64-bit
- Windows Embedded Standard 7, 32-bit/64-bit
- Linux Kernel version 3.8.0

Ordering Information

- **NIFE 200 (P/N: 10J70020000X0)**
Intel® Atom™ processor J1900 Quad Core 2.0GHz fanless system
- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060033X00)**