

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 200P2 presents intelligent PC-based controller and IoT gateway for factory automation. NIFE 200P2/P2E supports up to 8G DDR3L memory and have several options on storage devices like SD, mSATA, HDD and SSD. The NIFE 200P2/P2E support operating temperature from -5 up to 55 degree C with typical DC input 24V $\pm 20\%$ range. The NIFE 200P2/P2E 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 200P2 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

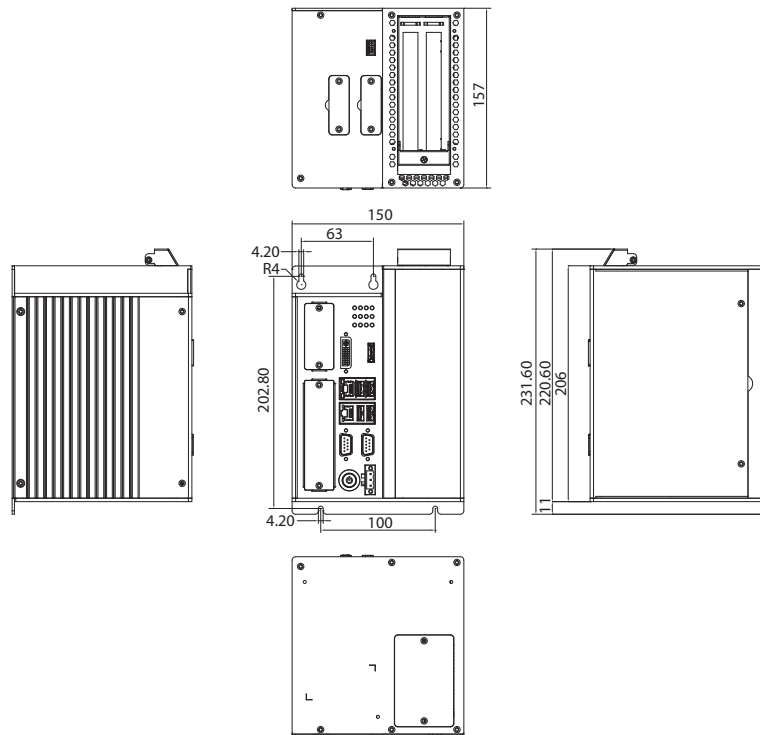
Expansion Slot

- NIFE 200P2: two PCI expansion
 - Add-on card length: 176mm max.
 - Power consumption: 10W/slot max.
- NIFE 200P2E: one PCI and one PCIe x4 expansion
 - Add-on card length: 176mm max.
 - Power consumption: 10W/slot max.
- NIFE 200E2: two PCIe x1 expansion
 - Add-on card length: 176mm max.
 - Power consumption: 10W/slot max.
- 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

Dimension Drawing



Dimensions

- ♦ 151mm (W) x 157mm (D) x 230mm (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)
- ♦ 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 200P2 (P/N: 10J70020001X0)**
Intel® Atom™ processor J1900 Quad Core 2.0GHz fanless system
- ♦ **NIFE 200P2E (P/N: 10J70020002X0)**
Intel® Atom™ processor J1900 Quad Core 2.0GHz fanless system
- ♦ **NIFE 200E2 (P/N: 10J70020019X0)**
Intel® Atom™ processor J1900 Quad Core 2.0GHz fanless system
- ♦ **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060033X00)**

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