



Main Features

- EtherCAT technology with NexECM, Class A EtherCAT Master
- EtherCAT communication cycle up to 250 μ s
- Support high-level API for CiA 402 profile
- Onboard Intel® Celeron® processor J1900 Quad Core 2.0GHz
- Dual independent display from DP and DVI-I
- 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
- Support -5 ~ 55 °C operating temperature

Product Overview

Powered by Intel® Celeron® processor J1900 (formerly codenamed "Bay Trail-D"), NET200-ECM presents intelligent PC-based EtherCAT controller for machine automation. It integrates NEXCOM's EtherCAT master, NexECM, to perform real-time communication with cycle time up to 250 μ s. NET200-ECM also provides API for CiA 402 profile and built-in EtherCAT configuration tool to speed up development time for automation users.

Beside EtherCAT communication, NET200-ECM has high integration ability with two optional Mini-PCIe modules and two COM ports, which makes it a flexible controller to connect with optional GbE LAN, Wi-Fi, 3.5G/4G LTE module or other fieldbus devices. With the provided features, NET200-ECM is an ideal controller for your EtherCAT control system.

Specifications

EtherCAT Master

- Slave module no.: up to 64
- Cycle time: up to 250 μ s
- Synchronization Error: +/-50ns
- Support CiA 402 standard protocol

CPU Support

- Onboard Intel® Celeron® processor J1900 Quad Core 2.0GHz

Main Memory

- 4GB RAM (2 x DDR3L)

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
- 1 x EtherCAT port, 1 x Intel® I210IT GbE LAN port
- 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-pic DC input, Typical 24V DC input with +/-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 +/-20% range
- 1 x optional 24V, 60W power adapter

Dimensions

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

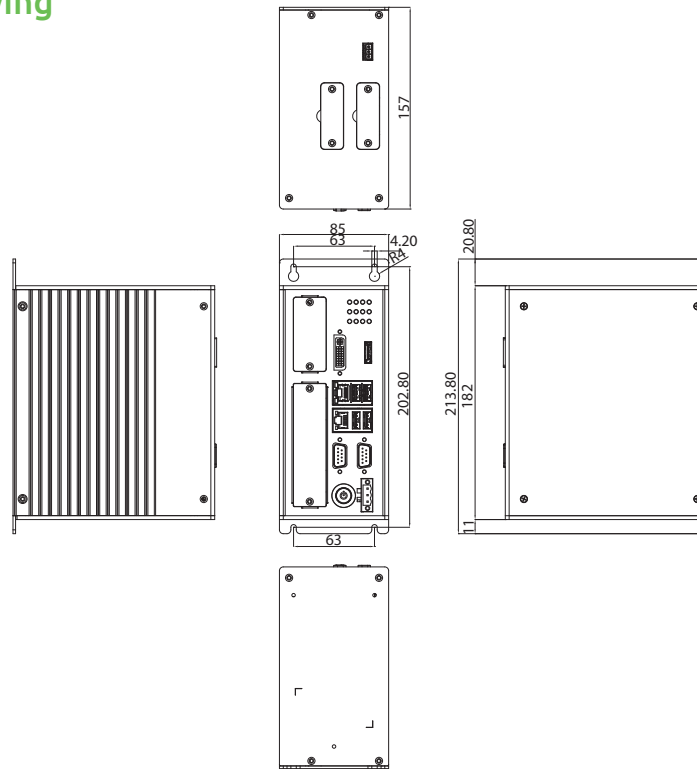
Construction

- Aluminum and metal chassis with fanless design

Environment

- Operating temperature:
Ambient with air flow: -5°C to 55°C

Dimension Drawing



(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:
 - SSD: 20G, half sine, 11ms, IEC60068-2-27
 - CFast: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ CFast & SSD condition:
 - Random: 2Grms @ 5 ~ 500Hz, IEC60068-2-64
 - Sinusoidal: 2Grms @ 5 ~ 500Hz, IEC60068-2-6

Certifications

- CE
- FCC Class A

Support OS

- Windows Embedded Standard 7, 32-bit, with RTX2012

Ordering Information

- ♦ **NET200-ECM (P/N: 10J10020000X0)**
Front-access EtherCAT Controller
- ♦ **24V, 60W AC/DC power adapter w/ o power cord**
(P/N: 7400060024X00)