



## I-87120

Programmable CAN Interface Module

### Features

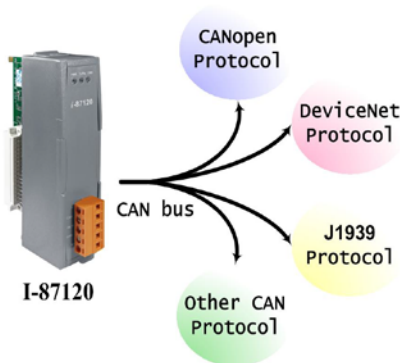
- Microprocessor inside with 80186, 80 MHz
- 82C250 CAN transceiver
- SJA1000 CAN controller
- Support both CAN 2.0A and CAN 2.0B
- Built-in jumper to select 120 Ω terminal resistor
- Max transmission speed up to 1 Mbps for CAN
- Max transmission distance over 1000m



### Introduction

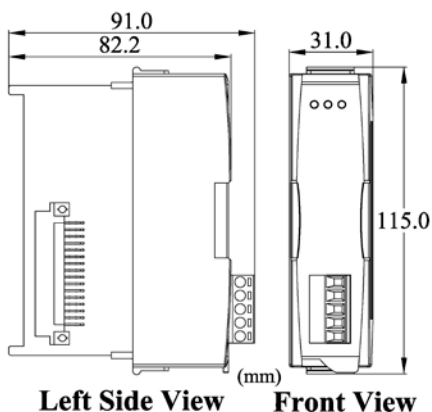
The I-87120 is a kind of CAN communication module, and need to be plugged into a MCU (main control unit), such as I-8000, iP-8000, ViewPAC-2000, WinPAC-8000, LinPAC-8000 and XPAC-8000-CE6 series. I-87120 gives a way to connect these ICPDAS host unit with CAN network. We provide the libraries and several demos of these host devices with GCC, eVC++, VC++2005, C#.Net and VB.Net. And we also provide the library and demos of the firmware for designed the user-defined I-87120. Owing to the features of MCUs, these host units can be arranged to be a CAN converter, CAN slave device and CAN master device in a CAN network.

### Firmware Features



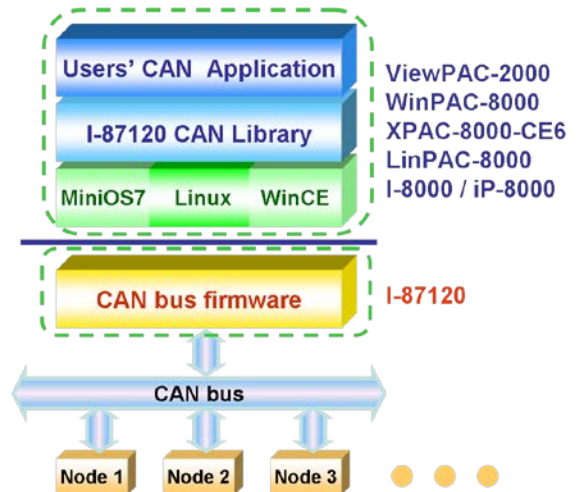
- Initialize function of user-defined
- Interrupt function of user-defined
- Loop function of user-defined
- ASCII command function of user-defined
- Binary code command function of user-defined
- Standard firmware inside

### Dimensions (Units: mm)



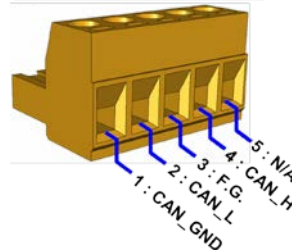
### Host Library

- Provide function libraries to send and receive CAN message easily
- Provide C++ firmware demo to build user-defined firmware
- Provide GCC, TC/BC, eVC++, VC++2005, C#.Net, VB.Net demo for different series MCUs
- Support I-8000/ iP-8000/ ViewPAC-2000/ WinPAC-8000/ LinPAC-8000/ XPAC-8000-CE6



### Pin Assignments

5-pin screw terminal block

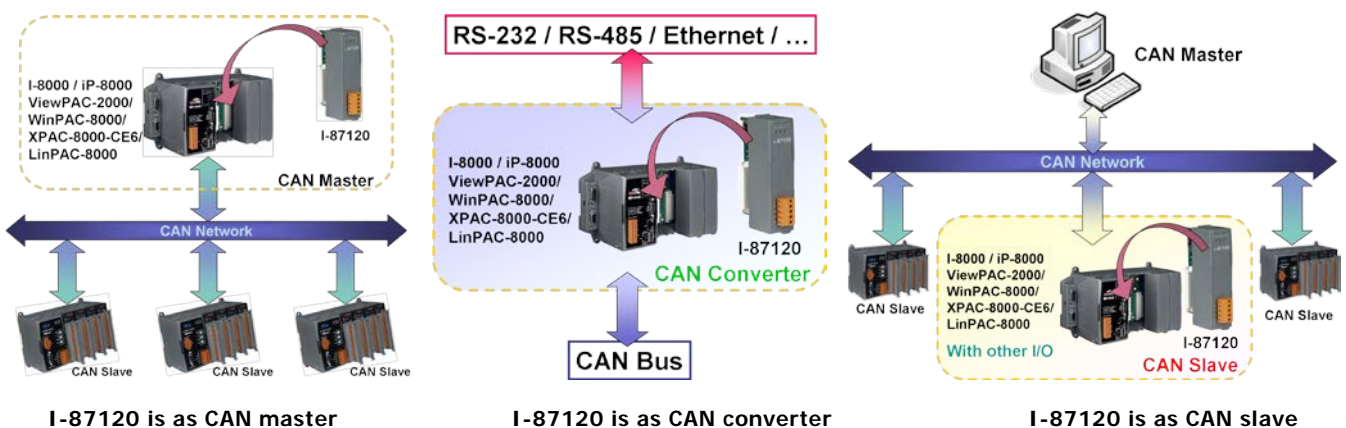


| Pin No. | Description       |
|---------|-------------------|
| 1       | CAN Ground        |
| 2       | CAN low bus line  |
| 3       | CAN Shield        |
| 4       | CAN high bus line |
| 5       | Non-available     |

## Hardware Specifications

| Hardware                  |  |
|---------------------------|--|
| CPU                       | 80186, 80 MHz or compatible  |
| SRAM/Flash/EEPROM         | 512 KB / 512 KB / 2 KB   |
| RTC (Real Time Clock)     | Yes  |
| CAN Interface             |  |
| Controller                | NXP SJA1000T with 16 MHz clock   |
| Transceiver               | NXP 82C250   |
| Channel number            | 1  |
| Connector                 | 5-pin screw terminal block (CAN_GND, CAN_L, CAN_SHLD, CAN_H, N/A)                |
| Baud Rate (bps)           | 10 k, 20 k, 50 k, 125 k, 250 k, 500 k, 800 k, 1 M (allow user-defined baud rate) |
| Transmission Distance (m) | Depend on baud rate (for example, max. 1000 m at 50 kbps )                       |
| Isolation                 | 3000 V <sub>DC</sub> for DC-to-DC, 2500 V <sub>rms</sub> for photo-couple        |
| Terminal Resistor         | Jumper for 120 Ω terminal resistor   |
| Specification             | ISO-11898-2, CAN 2.0A and CAN 2.0B   |
| LED                       |  |
| Round LED                 | Tx/Rx LED, ERR LED   |
| Software                  |  |
| Driver                    | I-8000/iP-8000/ViewPAC-2000/WinPAC-8000/LinPAC-8000/XPAC-8000-CE6                |
| Library                   | TC/BC, GCC, VB.Net 2003, C#.Net 2003, VB.Net 2005, C#.Net 2005, eVC++ 4.0        |
| Power                     |  |
| Power supply              | Unregulated +10 ~ +30 V <sub>DC</sub>  |
| Power Consumption         | 2 W  |
| Mechanism                 |  |
| Dimensions                | 31mm x 91mm x 115mm (W x L x H)  |
| Environment               |  |
| Operating Temp.           | -25 ~ 75 °C  |
| Storage Temp.             | -30 ~ 80 °C  |
| Humidity                  | 10 ~ 90% RH, non-condensing  |

## Application



## Ordering Information

|                   |   |
|-------------------|---|
| <b>I-87120 CR</b> | 1-port Programmable CAN Module (Serial Bus Type) (RoHS) |
|-------------------|---|