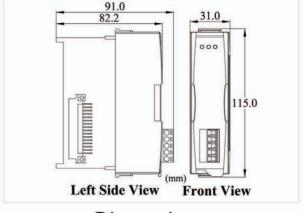


CAN Module

Programmable CAN Interface Module







I-87120

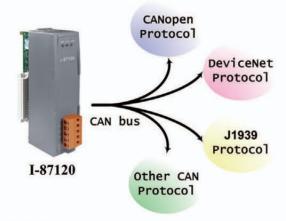
Dimensions

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, WinPAC-8000, LinPAC-8000 and XPAC-8000 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 EVC++ 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 hose units can be arranged to be a CAN converter, CAN slave device and CAN master device in a CAN network.

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 resister
- Max transmission speed up to 1 Mbps for CAN
- Max transmission distance over 1000m

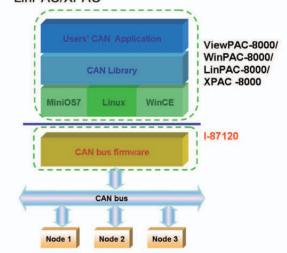
Firmware Features



- 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

Host Library

- Provide C/C++ function libraries to send and receive CAN message
- Provide C++ demo for I-8000 series MCU
- Provide GCC, EVC++ / C#.Net / VB.Net demo for different series MCUs
- Support I-8000/IP-8000/ViewPAC/WinPAC/ LinPAC/XPAC



Pin Assignments

| Pin 2 | 1 | No use |
|-------|-------------------|-------------------|
| Pin 2 | 2 | |
| | 2 | CAN high bus line |
| Pin 3 | 3 | CAN Shield |
| ={ | 4 | CAN low bus line |
| Pin 4 | 5 | No use |
| | Pin 3 Pin 4 Pin 5 | Pin 3 4 5 |

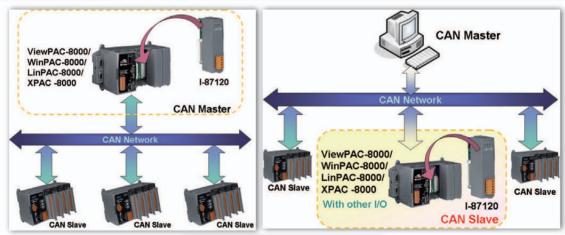
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Hardware Specifications

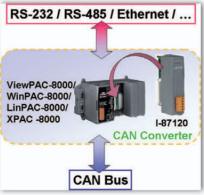


| Hardware | |
|---------------------------|--|
| CPU | 80186, 80 MHz or compatible |
| SRAM/Flash/EEPROM | 512 KB / 512 KB / 2 KB |
| RTC (Real Time Clock) | Yes |
| CAN Interface | |
| Controller | NXP SJA1000T with 16 MHz clock |
| Transceiver | NXP 82C250 |
| Channel number | 1 |
| Connector | 5-pin screwed terminal block (CAN_L, CAN_SHLD, CAN_H, N/A for others) |
| 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 | 1000 V _{DC} for DC-to-DC, 2500 Vrms for photo-couple |
| Terminator Resistor | Jumper for 120 Ω terminator resistor |
| Specification | ISO-11898-2, CAN 2.0A and CAN 2.0B |
| LED | |
| Round LED | Tx/Rx LED, ERR LED |
| Software | |
| Driver | For I-8000/IP-8000/ViewPAC/WinPAC/LinPAC/ XPAC |
| 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 _{DC} |
| 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



I-87120 is as CAN master



I-87120 is as CAN slave

I-87120 is as CAN converter

Ordering Information

| Module with one programmable CAN port, I-8000/IP-8000/ViewPAC/WinPAC/LinPAC/ |
|--|
| XPAC library, 80186 80 MHz CPU, 512 KB Flash and SRAM, 120 Ω terminal resister selected by jumper. |
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