

I-87120

Programmable CAN Interface Module

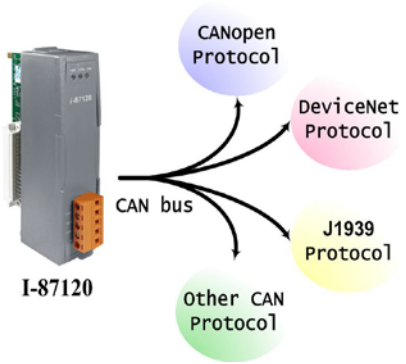
Features

- 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 resister
- 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 hose units can be arranged to be a CAN converter, CAN slave device and CAN master device in a CAN network.

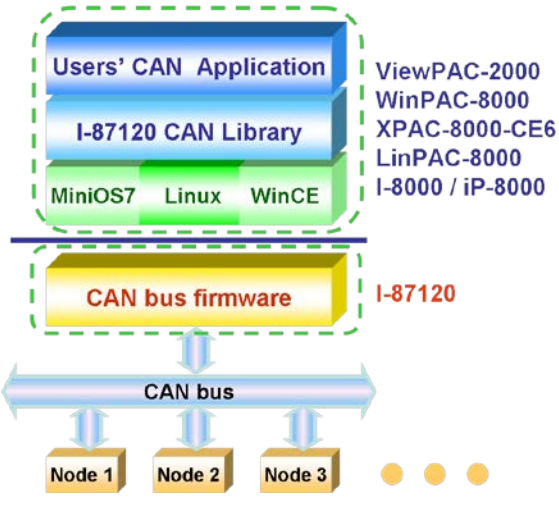
Firmware Features



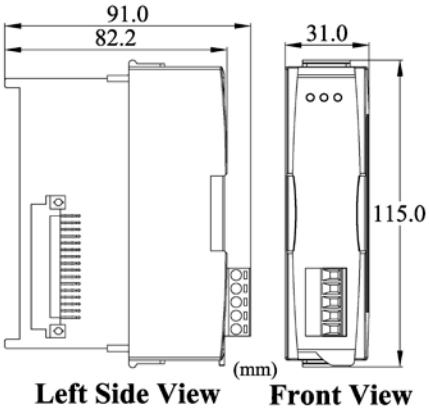
- Initialize function of user-defined
- Interrupt function of user-defined
- Loop function of user-defined
- ASCII command function of user-defined
- Binary code command function of user-defined
- Standard firmware inside

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

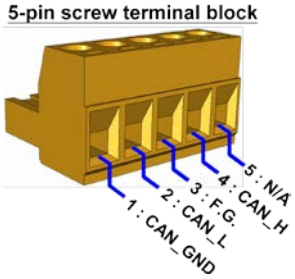


Dimensions (Units: mm)



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

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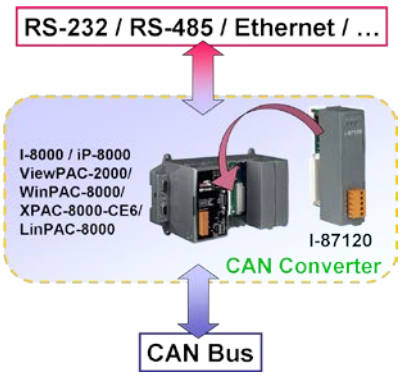
Hardware Specifications

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 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_{DC} for DC-to-DC, 2500 Vrms 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_{DC}
Power Consumption	2 W
Mechanism	
Dimensions	31mm x 91mm x 115mm (W x L x H)
Environment	
Operating Temp.	-25 ~ 75 ℃
Storage Temp.	-30 ~ 80 ℃
Humidity	10 ~ 90% RH, non-condensing

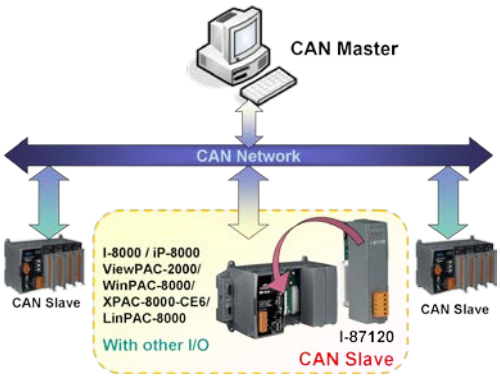
Application



I-87120 is as CAN master



I-87120 is as CAN converter



I-87120 is as CAN slave

Ordering Information

I-87120 CR	1-port Programmable CAN Module (Serial Bus Type) (RoHS)

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