CAN Module

PCI104 CAN Communication Module

CE FC RoHS
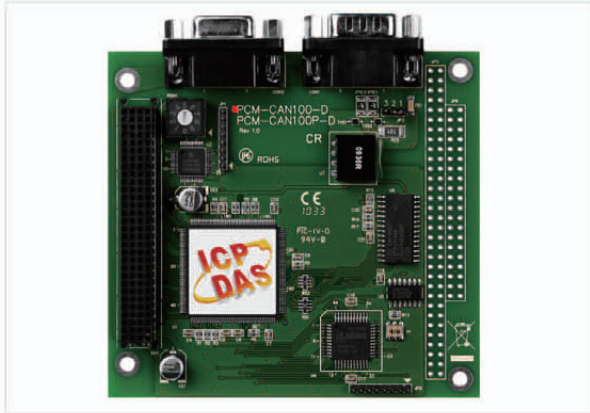
PCM-CAN100

Dimensions

22 mm
91 mm
22 mm
96 mm
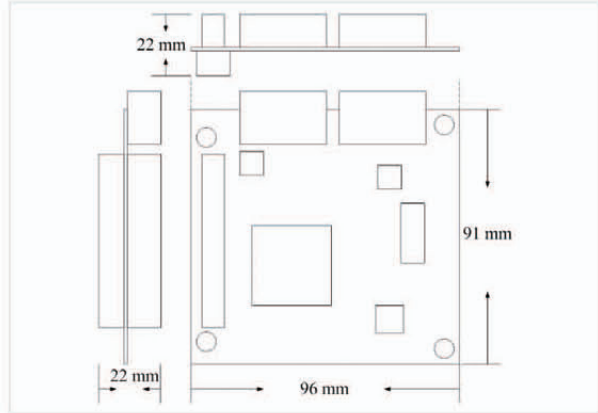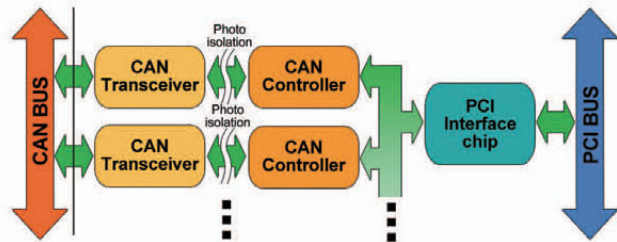
The PCM-CAN100 can represent a CAN solution on a high quality PCI104 hardware in industrial environment compliant with CAN 2.0A and CAN 2.0B specification. It has 1 independent CAN bus communication ports with 9-pin D-sub male connector and 1 bypass CAN port with 9-pin D-sub female connector, and has the ability to cover a wide range of CAN applications. Besides, PCM-CAN100 uses the CAN controller Phillips SJA1000T and transceiver 82C250, which provide bus arbitration, error detection with auto correction and re-transmission function. It can be installed in both 3.3 V and 5 V PCI slot and supported truly "Plug & play".
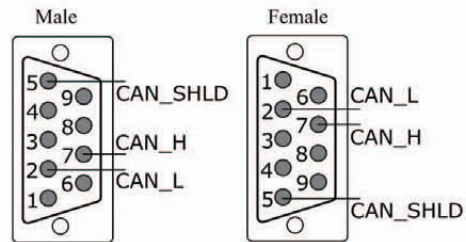
Features

- PCI104 compliant
- 9-pin male D-sub male and female connector
- Compatible with CAN 2.0 parts A and B
- Fully compatible with ISO 11898-2 standard
- Support CAN bard from 10 kbps ~ 1 Mbps
- 2500 Vrms photo couple isolation on the CAN bus
- Built-in jumper to select 120 Ω terminal resister
- 3 kV galvanic isolation
- 1 independent and 1 bypass CAN channels
- Direct memory mapping to the CAN controller
- Provide VB6.0, VC++6.0, Delphi, BCB6.0 demos
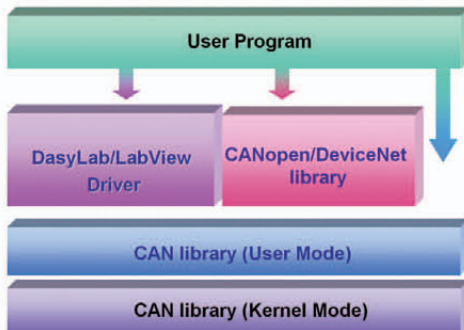- Driver support Windows 98/ME/NT/2K/XP/WinCE

Hardware architecture

Pin Assignments

Male
5 9 CAN_SHLD
4 8
3 7 CAN_H
2 CAN_L
1

Female
1 6 CAN_L
2 7 CAN_H
3 8
4 9
5 CAN_SHLD

Software Layer

User Program

DasyLab/LabView Driver

CANopen/DeviceNet library

CAN library (User Mode)

CAN library (Kernel Mode)

Terminal Resistor

3 2 1
Enable

3 2 1
Disable

Terminal Resister
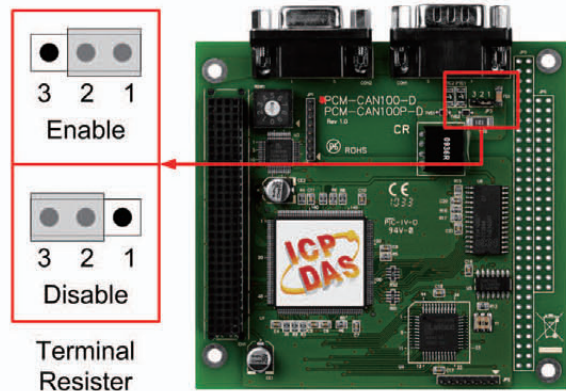
Hardware Specifications

Bus Interface	
Type	PCI-104
CAN Interface	
Controller	NXP SJA1000T with 16 MHz clock
Transceiver	NXP 82C250
Channel number	1 independent and 1 bypass
Connector	9-pin male and female D-Sub (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)
Terminator Resistor	Jumper for 120 Ω terminator resistor
Power	
Power Consumption	250 mA @ 5 V
Mechanism	
Dimensions	91mm x 96mm x 22mm (W x L x H)
Environment	
Operating Temp.	0 ~ 60 °C
Storage Temp.	-20 ~ 70 °C
Humidity	5 ~ 85% RH, non-condensing

Utility
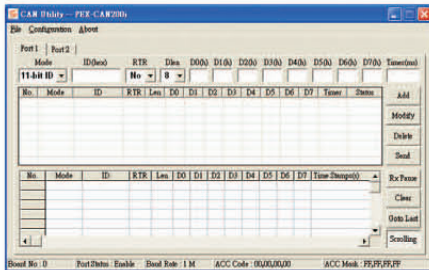
- Can be a CAN system monitor tool with CAN cards
- It is a good tool to test CAN system
- Send/Receive/Record CAN messages
- Provide cyclic transmission function
- Record the CAN messages with filtered ID and time stamp

Flow Diagram for Applications

Flow Chart of
"Send CAN Messages"

Flow Chart of
"Receive CAN Messages"

Flow Chart of
"Receive CAN Message with IRQ"
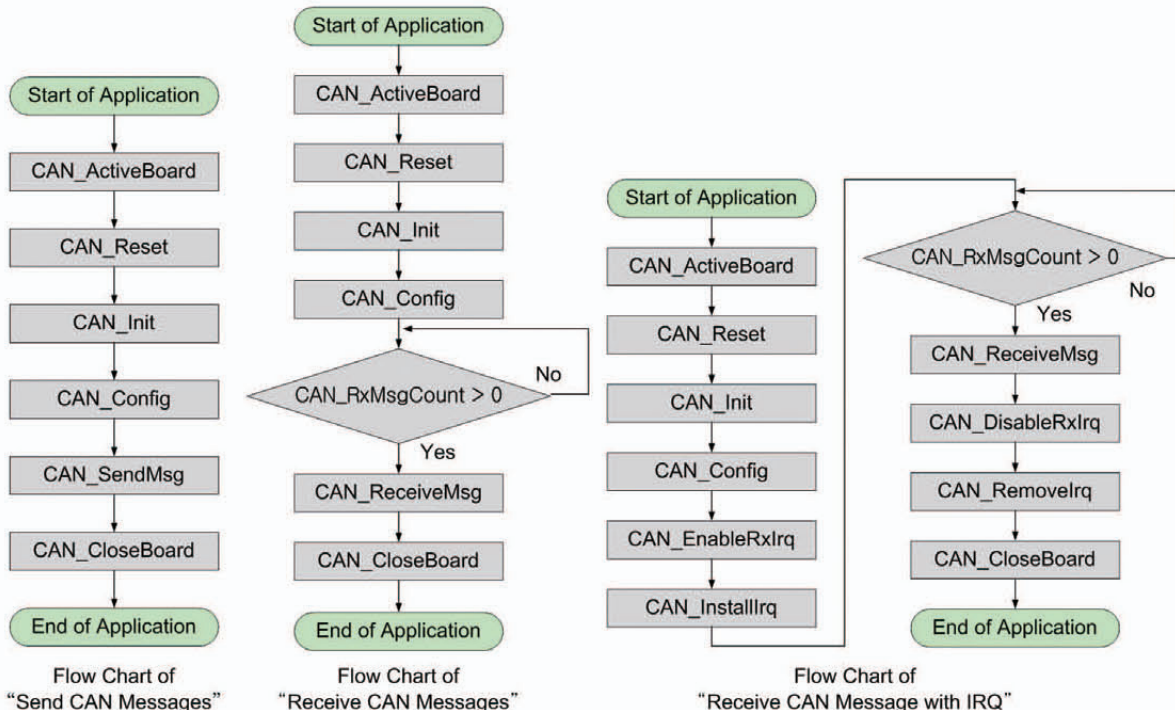
Ordering Information

PCM-CAN200-D CR	1-Port Isolated Protection CAN Communication PCI-104 Module with 9-pin Male and Female D-sub connector (RoHS)