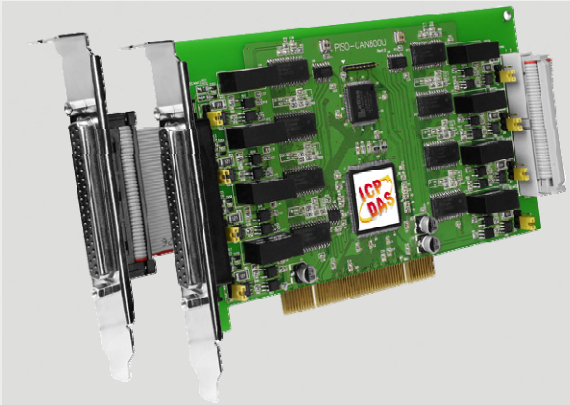
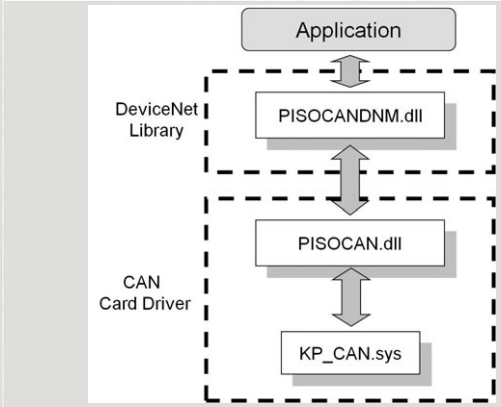
DeviceNet Series Products

DeviceNet Library for PISO-CAN800U-D



PISO-CAN800U-D



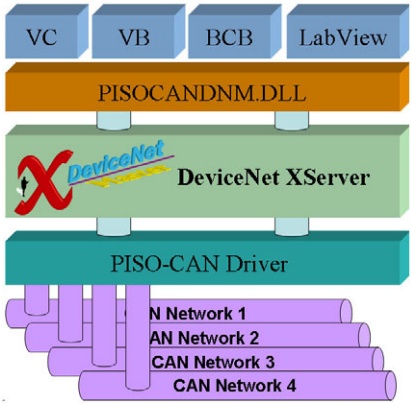
Library Structure

In order to apply the DeviceNet protocol on the PISO-CAN800U-D easily, we provides the DeviceNet application Tools, which are DeviceNet library and DeviceNet diagnosis application tool. If users want to develop an industrial application with DeviceNet protocol, the DeviceNet library is very helpful to be applied with the PISO-CAN800U-D as the DeviceNet devices with the features of DeviceNet protocol. Besides, if the monitor and diagnosis of DeviceNet message on the CAN network is considered, the DeviceNet diagnostic application tool can be used to achieve this purpose.

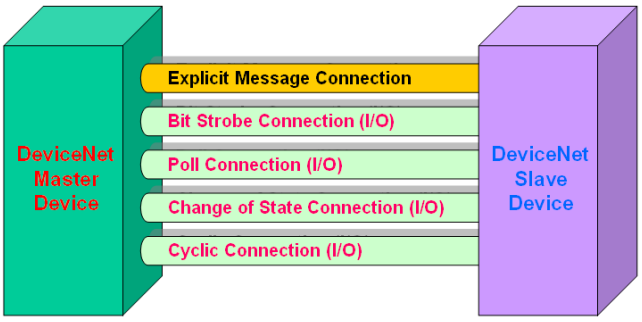
Features

- DeviceNet Version: Volume I & II, Release 2.0
- Programmable master MAC ID and baud rate
- Baud Rate: 125K, 250K, 500K bps
- Support Group 2 and UCMM connection
- I/O Operating Modes: Poll, Bit-Strobe, Change of State / Cyclic
- I/O Length: 512 Bytes max (Input/Output) per slave
- Slave Node : 63 nodes max
- Support auto-search slave device function.
- Support on-line adding and removing devices
- Support auto-detect Group 2 and UCMM device
- Auto-reconnect when the connection is broken
- Status LED: RUN, MS, NS

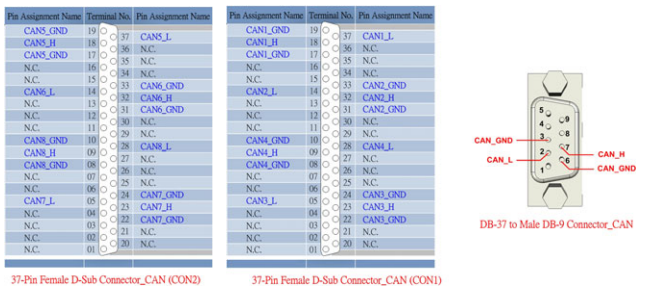
Library Layer



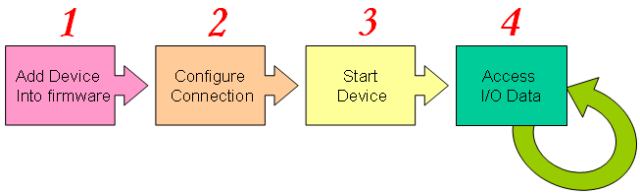
DeviceNet Messaging



Pin Assignments



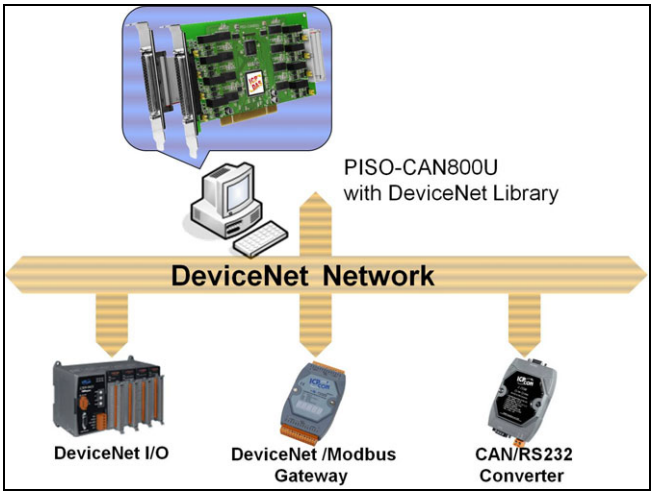
Establish Connection Flowchart

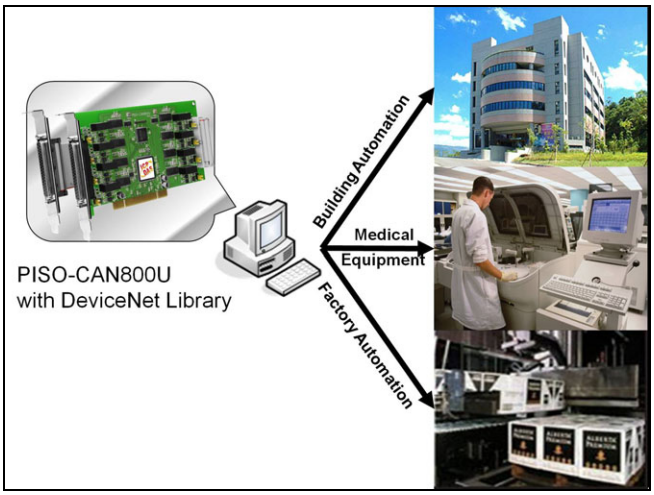


Hardware Specifications

Bus Interface	
Type	Universal PCI, 3.3 V and 5 V, 33 MHz, 32-bit, plug and play
Board No.	By system decision
CAN Interface	
Controller	NXP SJA1000T with 16 MHz clock
Transceiver	NXP TJA1042
Channel number	8
Connector	Female DB-37
Baud Rate (bps)	125 k, 250 k, 500 k
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
Terminator Resistor	Jumper for 120 Ω terminator resistor
Specification	ISO-11898-2, CAN 2.0A and CAN 2.0B
Protocol	DeviceNet Volumn I ver2.0, Volumn II ver2.0
Software	
Driver	Windows 2K/XP/7
Library	VB 6.0, VC++ 6.0, BCB 6.0
Power	
Power Consumption	800 mA @ 5 V
Mechanism	
Dimensions	193mm x 22mm x 93mm (W x L x H)
Environment	
Operating Temp.	0 ~ 60 ℃
Storage Temp.	-20 ~ 70 ℃
Humidity	5 ~ 85% RH, non-condensing

Application





Ordering Information

PISO-CAN800U-D CR	8-Port Isolated Protection Universal PCI CAN Communication Board (RoHS) Includes One CA-4037W and Two CA-4002 Connectors

CNT-CAN	CAN bus Connector
CA-0910-C	9-pin Female D-sub & 3-wire CAN bus cable (1M)
CA-4002	37-pin Male D-sub connector with plastic cover.
CA-4037W	40-pin flat & D-sub 37-pin Female cable 24 cm Cable
CA-4037B	40-pin flat & D-sub 37-pin Female cable 24 cm Cable
CA-9-3705	DB-37 Male (D-sub) to 4-Port DB-9 Male (D-sub) cable. 0.3 M (90°) <pin assignment>
CA-9-3715D	DB-37 Male (D-sub) to 4-Port DB-9 Male (D-sub) cable. 1.5 M (180°) <pin assignment>
SG-770	7/14 channel Surge Protector