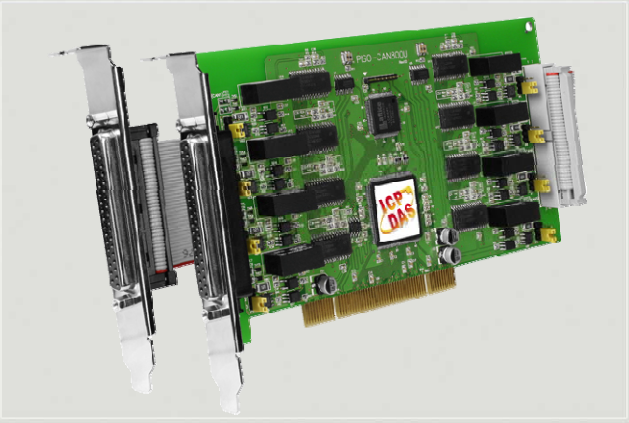
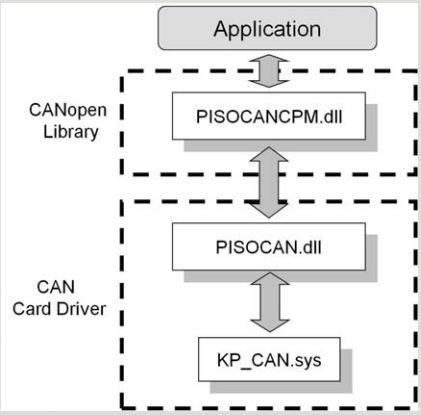
CANopen Series Products

CANopen Library for PISO-CAN800U-D



PISO-CAN800U-D



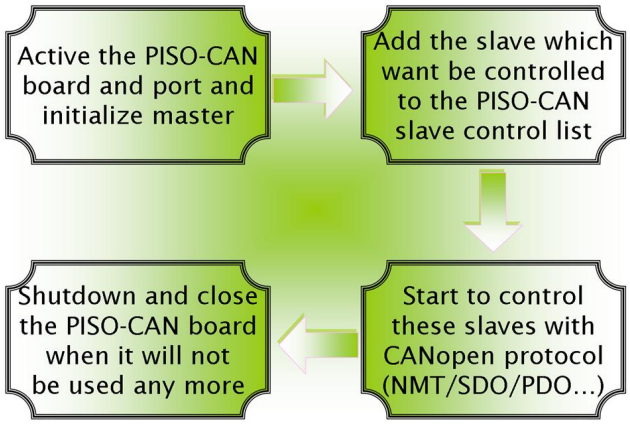
Library Structure

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

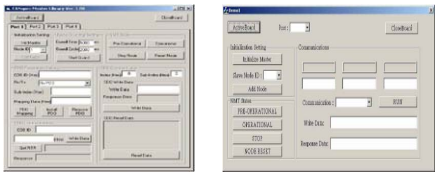
Features

- NMT: Master
- CANopen Version: DS-301 v4.02
- Error Control: Support Guarding protocol
- Support EMCY receiving
- Provide dynamic PDO functions
- Support SYNC protocol
- Transmission type of PDO is supported
- Support SDO download/upload segment protocol
- Support SDO download/upload block protocol
- Driver support Windows 2K/XP/7

Design Flowchart

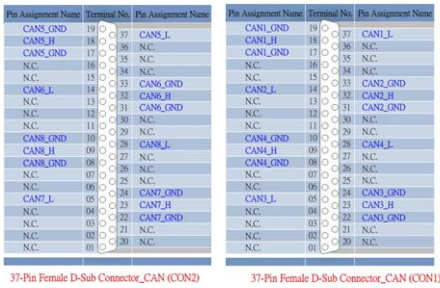


Demos Features



About the CANopen library, we provide VC++/VB/BCB demos for users to use. In these demos, all functions are used and users can refer these functions to design their CANopen application.

Pin Assignments

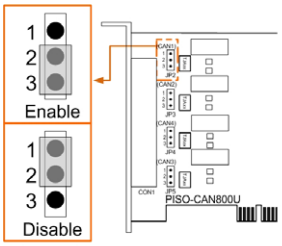


37-Pin Female D-Sub Connector_CAN (CON2)

37-Pin Female D-Sub Connector_CAN (CON1)

DB-37 to Male DB-9 Connector_CAN

Terminal Resister & External Port

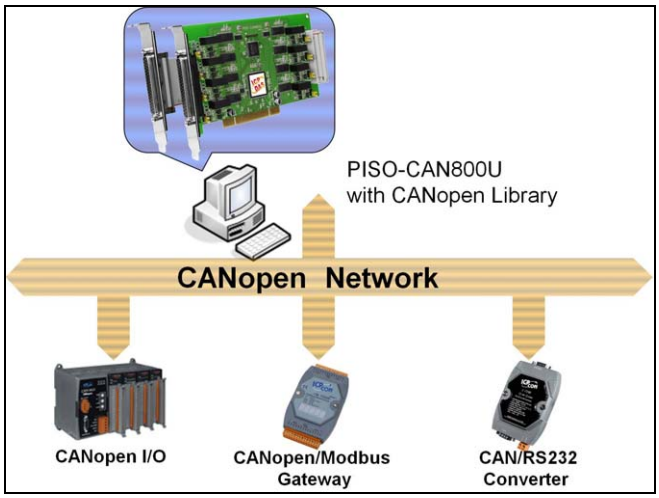


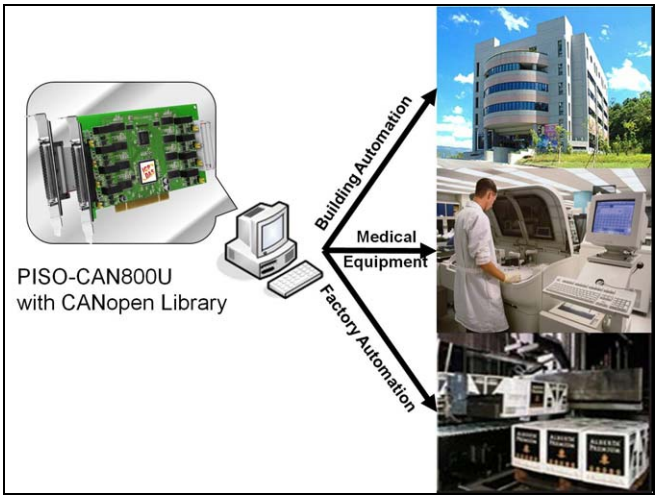
Terminal Resister

Hardware Specifications

Bus Interface	
Type	Universal PCI, 3.3 V and 5 V, 33 MHz, 32-bit, plug and play
CAN Interface	
Controller	NXP SJA1000T with 16 MHz clock
Transceiver	NXP TJA1042
Channel number	8
Connector	Female DB-37
Baud Rate (bps)	10 k, 20 k, 50 k, 125 k, 250 k, 500 k, 800 k, 1 M (allow user-defined baud rate)
Isolation	3000 V_{DC} for DC-to-DC, 2500 Vrms for photo-couple
Terminal Resistor	Switch for 120 Ω terminal resistor
Specification	ISO-11898-2, CAN 2.0A and CAN 2.0B
Software	
Driver	Windows 2K/XP/7
Library	VB 6.0, VC++ 6.0, BCB 5.0.
Power	
Power Consumption	800 mA @ 5 V
Environment	
Operating Temp.	0 ~ 60 ℃
Storage Temp.	-20 ~ 70 ℃
Humidity	5 ~ 85% RH, non-condensing
Dimensions	193mm x 22mm x 93mm (W x L x H)

Applications





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°)
CA-9-3715D	DB-37 Male (D-sub) to 4-Port DB-9 Male (D-sub) cable. 1.5 M (180°)
SG-770	7/14 channel Surge Protector