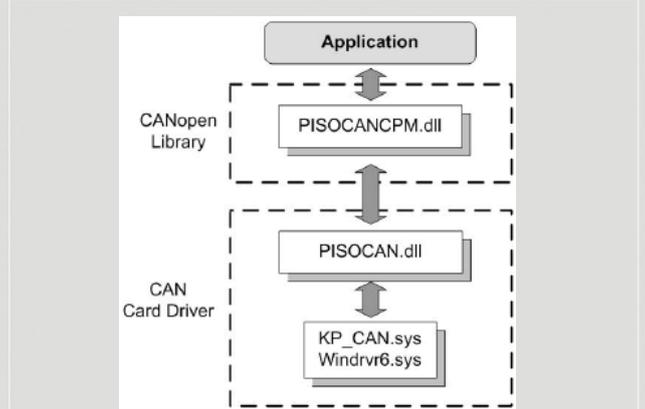# CANopen Series Products

CANopen Library for PISO-CAN200/400-D/T

CE FC

PISO-CAN200/400-D/T

Library Structure

In order to apply the CANopen protocol on the PISO-CAN/200/400 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-CAN200/400 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.
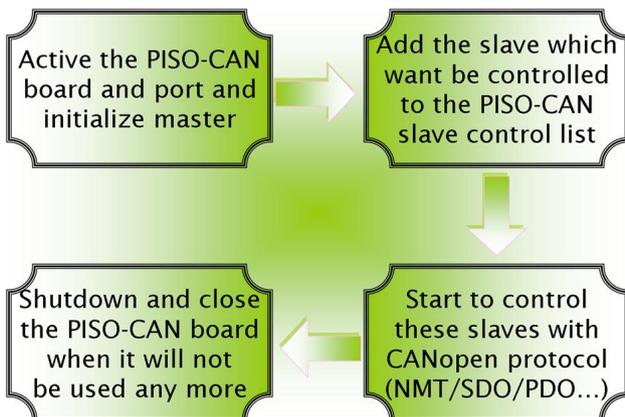
■ Features

- ■ NMT: Master
- ■ CANopen Version: DS-301 v4.01
- ■ Device Profile: DS-401
- ■ 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 98/ME/NT/2K/XP
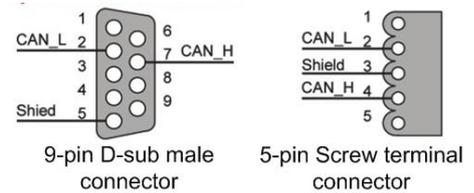
■ Demos Features

About the CANopen library, we provide VC++/VB/BCB demos for users to refer to. In these demos, all functions are used and users can refer these functions to design CANopen application himself. There also has detailed description of step by step with these demos in the fourth section of user manual. Users can develop their program more easily and quickly to follow the demos.
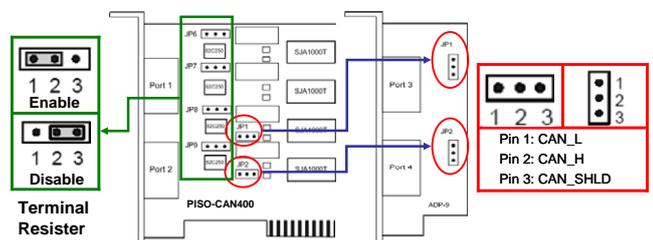
■ Pin Assignments

9-pin D-sub male connector

5-pin Screw terminal connector

■ Design Flowchart

Active the PISO-CAN board and port and initialize master

Add the slave which want be controlled to the PISO-CAN slave control list

Shutdown and close the PISO-CAN board when it will not be used any more

Start to control these slaves with CANopen protocol (NMT/SDO/PDO...)

■ Terminal Resister & External Port

1 2 3 Enable

1 2 3 Disable

Terminal Resister

PISO-CAN400

ADP-9

Pin 1: CAN_L
Pin 2: CAN_H
Pin 3: CAN_SHLD

Hardware Specifications

Model Name	PISO-CAN200-D/T	PISO-CAN400-D/T
Bus Interface		
Type	PCI bus, 5 V, 33 MHz, 32-bit, plug and play.	
CAN Interface		
Controller	NXP SJA1000T with 16 MHz clock	
Transceiver	NXP 82C250	
Channel number	2	4
Connector	5-pin screwed terminal block (N/A ,CAN_L, CAN_SHLD, CAN_H, N/A) 9-pin male D-Sub 9-pin male 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)	
Isolation	1000 V_{DC} for DC-to-DC, 2500 Vrms for photo-couple	
Terminator Resistor	Switch for 120 Ω terminator resistor	
Specification	ISO-11898-2, CAN 2.0A and CAN 2.0B	
Software		
Driver	Windows 98/ME/NT/2K/XP.	
Library	VB 6.0, VC++ 6.0, BCB 5.0.	
Power		
Power Consumption	250 mA @ 5 V	300 mA @ 5 V
Environment		
Operating Temp.	0 ~ 60 ℃	
Storage Temp.	-20 ~ 80 ℃	
Humidity	0 ~ 90% RH, non-condensing	
Dimensions	126mm x 22mm x 85mm (W x L x H)	

Applications
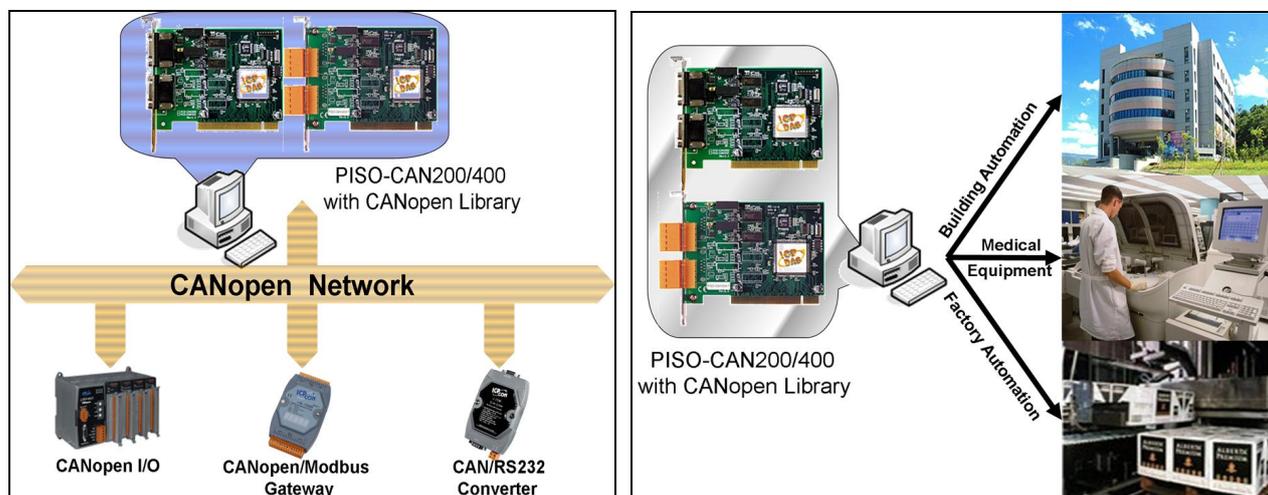
Ordering Information

PISO-CAN200-D	2-Port Isolated Protection CAN Communication Board with 9-pin D-sub connector.
PISO-CAN200-T	2-Port Isolated Protection CAN Communication Board with 5-pin screw terminal connector.
PISO-CAN400-D	This product includes a 2-port isolated protection CAN card and 2-port ADP-9-D (expansion daughter board). The connector of each CAN port is 9-pin D-sub connector.
PISO-CAN400-T	This product includes a 2-port isolated protection CAN card and 2-port ADP-9-T (expansion daughter board). The connector of each CAN port is 5-pin screwed terminal connector.

ADP-9-D	2-port CAN expansion daughter board with D-sub 9-pin connectors.
ADP-9-T	2-port CAN expansion daughter board with screwed terminal connectors.