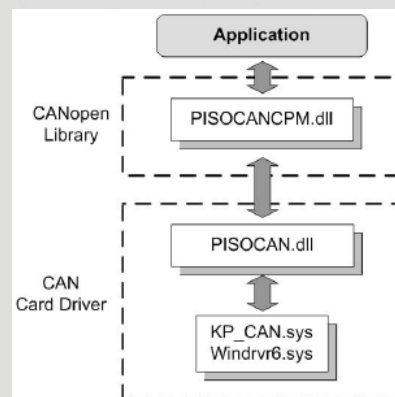# CANopen Series Products

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
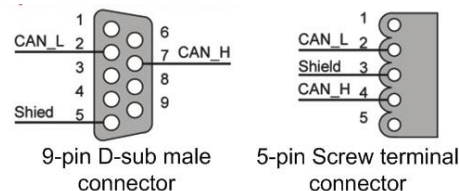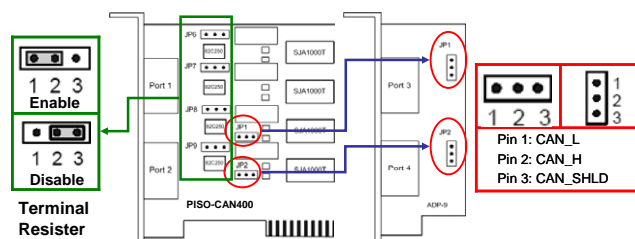- Driver support Windows 98/ME/NT/2K/XP
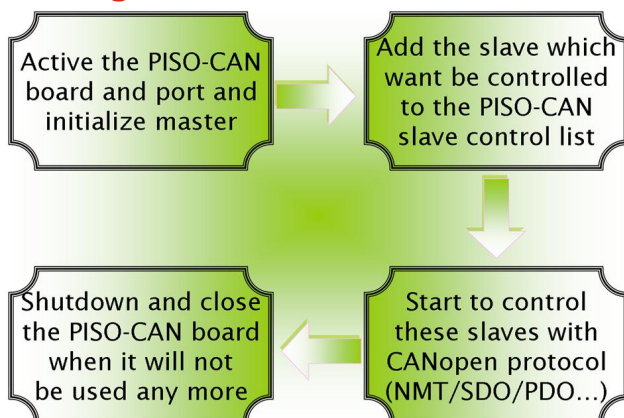
Demos Features
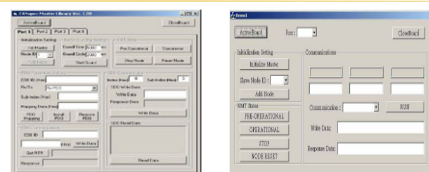
About the CANopen library, we provide VC++/VB/BCB demos for users to refer to. In these demos, all functions are used and users can refer these functions to design CANopen application himself. There also has detailed description of step by step with these demos in the fourth section of user manual. Users can develop their program more easily and quickly to follow the demos.
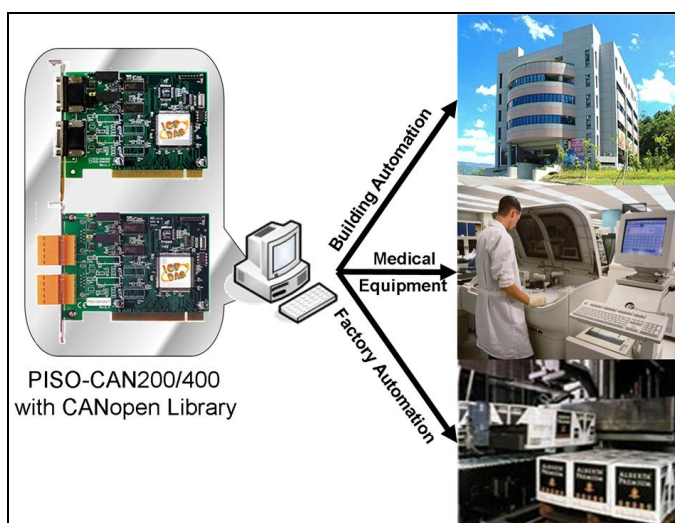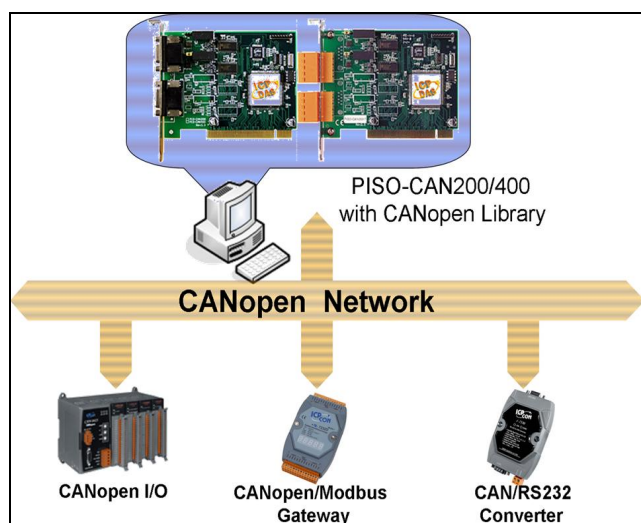
Pin Assignments

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

Terminal Resister

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

Hardware Specifications

Item	PISO-CAN200-D/T	PISO-CAN400-D/T
Bus Type	33MHz 32bit 5V PCI bus (V2.1) plug and play.	
CAN port	2 independent CAN ports	4 independent CAN ports
CAN Controller	Phillips SJA1000 CAN Controller with 16MHz	
CAN Transceiver	Phillips 82C250 CAN Transceiver	
CAN Interface	ISO/IS 11898-2, 5-pin screw terminal connector or 9-pin D-sub connector	
Signal Support	CAN_H: CAN high bus line, CAN_L: CAN low bus line	
CAN specific	Compatible with CAN specification 2.0 parts A and B.	
Transfer Rate	Programmable transfer rate up to 1 Mbps	
Terminal Resister	120Ω terminal resister selected by switch	
Driver Support	Windows 98/ME/NT/2K/XP	
Isolated	2500Vrms on CAN side	
Power Consumption	+ 5V@ 250 mA	+ 5V@ 300 mA
Operating Temp.	0℃~60℃	
Storage Temp.	-20℃~80℃	
Humidity	0~90% non-condensing	
Dimensions	130mm x 110mm (W x H)	

Applications

PISO-CAN200/400 with CANopen Library

CANopen Network

CANopen I/O   CANopen/Modbus Gateway   CAN/RS232 Converter

PISO-CAN200/400 with CANopen Library

Building Automation
Medical Equipment
Factory Automation

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.