ICP DAS

DeviceNet Series Products

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

CE FC

PISO-CAN200/400-D

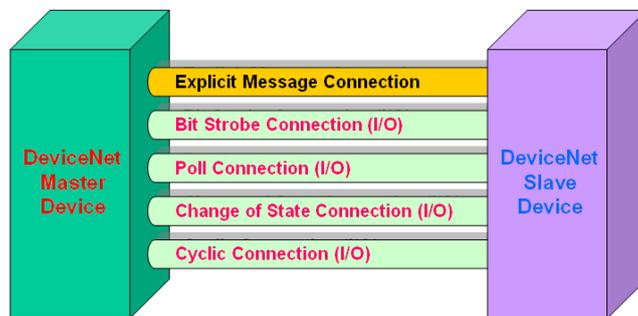### PISO-CAN200/400-T

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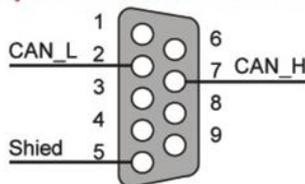
Features

- 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
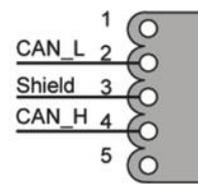- Auto-reconnect when the connection is broken
- Status LED: RUN, MS, NS

Library Layer

VC | VB | BCB | LabView

PISOCANDNM.DLL

DeviceNet XServer

PISO-CAN Driver

N Network 1
AN Network 2
CAN Network 3
CAN Network 4

DeviceNet Messaging

DeviceNet Master Device

Explicit Message Connection
Bit Strobe Connection (I/O)
Poll Connection (I/O)
Change of State Connection (I/O)
Cyclic Connection (I/O)

DeviceNet Slave Device

Pin Assignments

CAN_L 2
CAN_H 7
Shied 5
1 6 3 8 4 9

CAN_L 2
Shield 3
CAN_H 4
1 5

9-pin D-sub male connector

5-pin Screw terminal connector
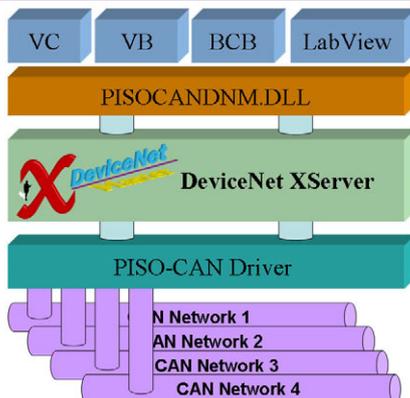
Establish Connection Flowchart

1 Add Device Into firmware → **2** Configure Connection → **3** Start Device → **4** Access I/O Data
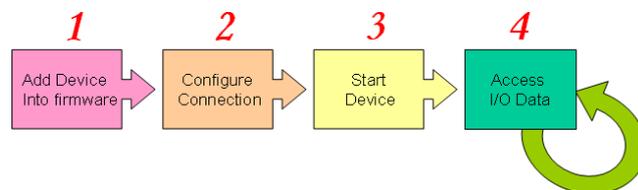
Hardware Specifications

Model Name	PISO-CAN200-D/T	PISO-CAN400-D/T
Bus Interface		
Type	PCI bus, 5 V, 33 MHz, 32-bit, plug and play	
Board No.	By system decision	
CAN Interface		
Controller	NXP SJA1000T with 16 MHz clock Microprocessor inside with 20MHz	
Transceiver	NXP 82C250	
Channel number	2	4
Connector	5-pin screwed terminal block (CAN_L, CAN_SHLD, CAN_H, N/A for others) 9-pin male D-Sub (CAN_GND, CAN_L, CAN_SHLD, CAN_H, CAN_V+, N/A for others)	
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 98/ME/NT/2K/XP	
Library	VB 6.0, VC++ 6.0, BCB 6.0	
Power		
Power Consumption	250 mA @ 5 V	300 mA @ 5 V
Mechanism		
Dimensions	126mm x 22mm x 85mm (W x L x H)	
Environment		
Operating Temp.	0 ~ 60 ℃	
Storage Temp.	-20 ~ 70 ℃	
Humidity	5 ~ 85% RH, non-condensing	

Application
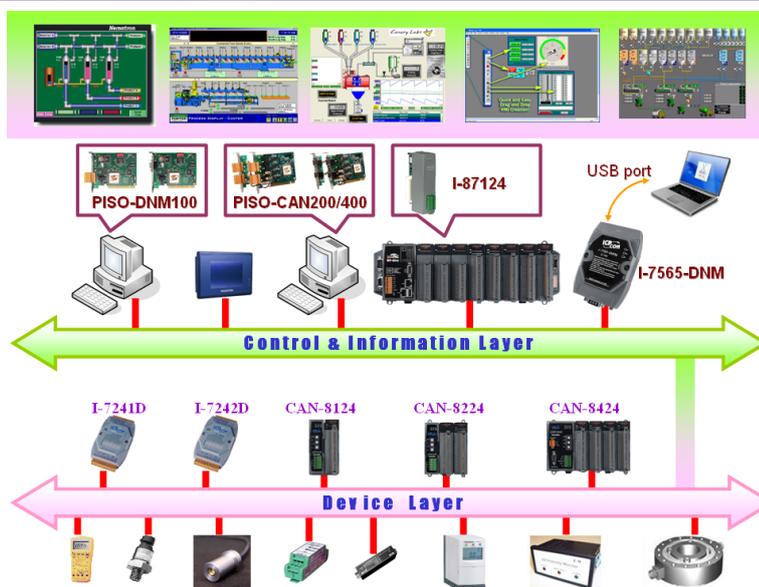
Ordering Information

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 9-pin D-Sub connectors.
ADP-9-T	2-port CAN expansion daughter board with 5-pin screwed terminal connectors.