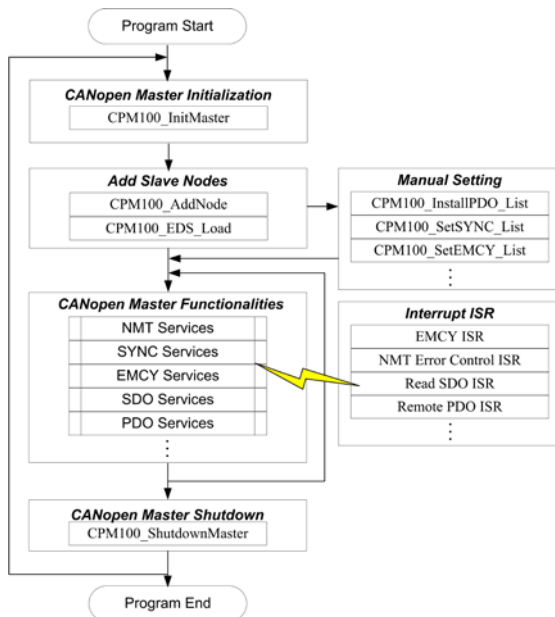## ☰ Features

- ■ NMT: Master
- ■ CANopen Version: DS-301 v4.01
- ■ Error Control: Support Guarding and Heartbeat protocol
- ■ Support EMCY receiving
- ■ Provide dynamic PDO functions
- ■ Provide 5 sets of SYNC cyclic transmission
- ■ Transmission type of PDO is supported
- ■ Support Multi-Master to Single-Slave architecture
- ■ Auto select with expedition mode or segment mode
- ■ Support load EDS file

CE FC RoHS

PISO-CPM100U-T
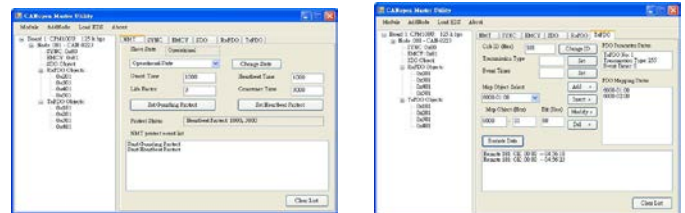## 1 Port Intelligent CANopen Master Universal PCI Board

☰ Introduction

The PISO-CPM100U has followed the CiA CANopen specification DS-301 V4.02. With the built-in 80186 80M Hz CPU, this card can be applied in high transmission applications. The 16-bit on-board microcontroller with real-time O.S., MiniOS7, allows many features, such as real-time message transmission and reception, filtering, preprocessing, and storage of CAN messages. It supports the timestamp of PDO message with at least 1 ms precision. Assorted with the free tool (CPM_Utility), users can easily manage and integrate with CANopen industrial devices.
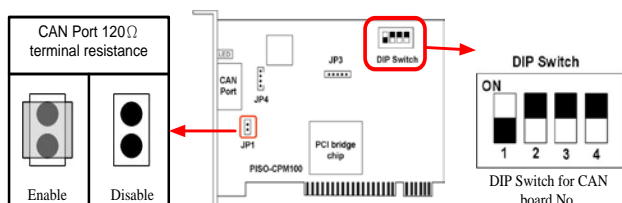
☰ Design Flowchart
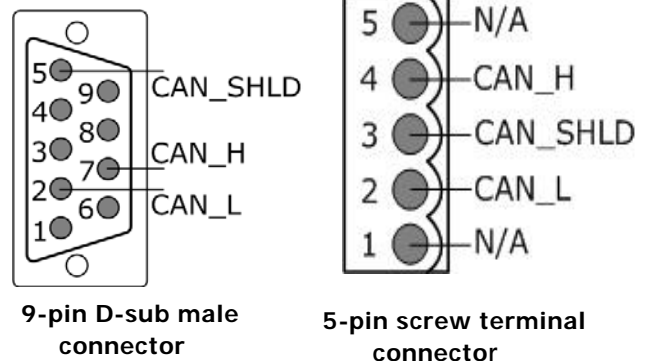

☰ Demos Features

The software utility can easily to access the I/O data of all the slave devices. The users can monitor the input data of the specific slave device and change the output data to the remote slave device with this utility.
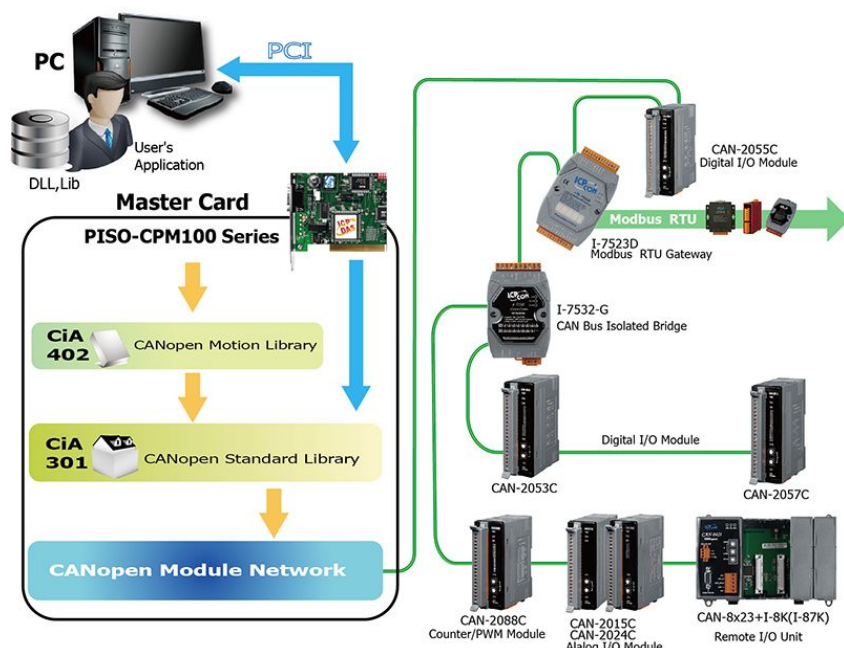
☰ Terminal Resister & DIP Switch

☰ Pin Assignments

9-pin D-sub male connector

5-pin screw terminal connector

■ Specifications

Hardware		
CPU	80186, 80 MHz or compatible	
SRAM/Flash/EEPROM	512 KB / 512 KB / 2 KB	
Bus Interface		
Type	Universal PCI supports both 5 V and 3.3 V PCI bus	
Board No.	By DIP switch	
CAN Interface		
Controller	NXP SJA1000T with 16 MHz clock Microprocessor inside with 80186 80 MHz	
Transceiver	NXP 82C250	
Channel number	1	
Connector	9-pin male D-Sub (CAN_L,CAN_SHLD, CAN_H, N/A for others)	5-pin screwed terminal block (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	
Transmission Distance	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	
Terminal Resistor	Jumper for 120 Ω terminal resistor	
Specification	ISO-11898-2, CAN 2.0A and CAN 2.0B	
Protocol	CANopen DS-301 ver4.02, DS-401 ver2.1	
LED		
Round LED	Green LED, Red LED	
Software		
Driver	Windows 2K/XP	
Library	VB 6.0, VC++ 6.0, BCB 6.0	
Power		
Power Consumption	300 mA @ 5 V	
Mechanism		
Dimensions	138 mm x 22mm x 105 mm (W x L x H)	
Environment		
Operating Temp.	0 ~ 60 ℃	
Storage Temp.	-20 ~ 70 ℃	
Humidity	5 ~ 85% RH, non-condensing	

■ Application

■ Ordering Information

PISO-CPM100U-T	1 Port Intelligent CANopen Master Universal PCI Board with 5-pin screw terminal connector