



# CANopen Series Products

## Intelligent CANopen Master PCI Communication Board



PISO-CPM100-D



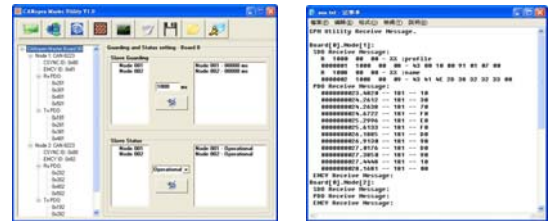
PISO-CPM100-T

The PISO-CPM100 has followed the CiA CANopen specification DS-301 V4.01. 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.

### Features

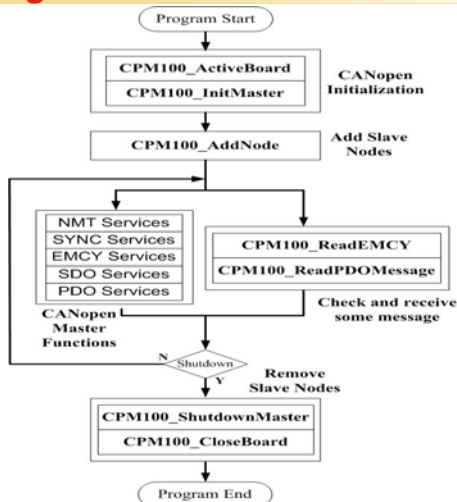
- NMT: Master
- CANopen Version: DS-301 v4.01
- Error Control: Support Guarding protocol
- Support EMCY receiving
- Provide dynamic PDO functions
- Provide 5 sets of SYNC cyclic transmission
- Transmission type of PDO is supported
- Support Multi-Master to Single-Slave architecture
- Auto select with expedition mode or segment mode
- Support Windows 98/ME/NT/2K/XP

### Utility Features

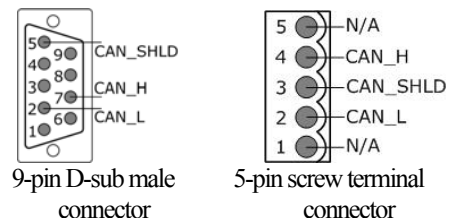


The software utility can easily access the I/O data of all the slave devices. The users can monitor the input data of the specific slave device and change the output data to the remote slave device with this utility. Besides, the utility also can save the entire message that is received by PISO-CPM100 to a text file to help user to analyze the messages.

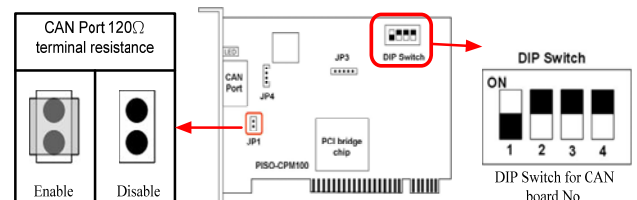
### Design Flowchart



### Pin Assignments



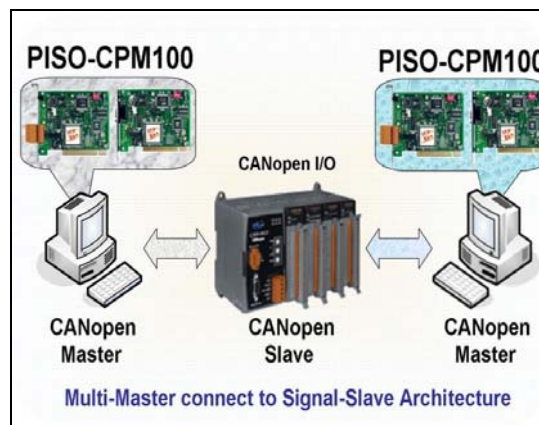
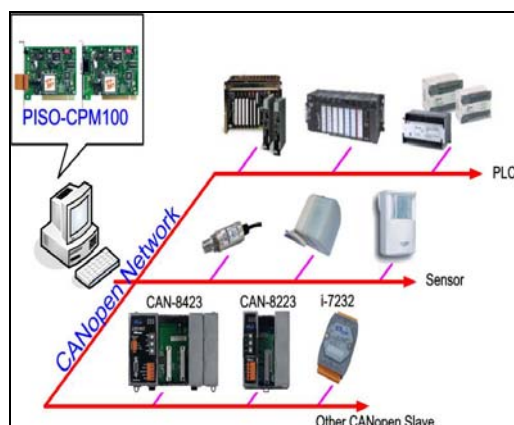
### Terminal Resistor & DIP Switch



## Hardware Specifications

Model Name	PISO-CPM100-D	PISO-CPM100-T
<b>Hardware</b>		
CPU	80186, 80 MHz or compatible	
SRAM/Flash/EEPROM	512 KB / 512 KB / 2 KB	
<b>Bus Interface</b>		
Type	PCI bus, 5 V, 33 MHz, 32-bit, plug and play.	
Board No.	By DIP switch	
<b>CAN Interface</b>		
Controller	NXP SJA1000T with 16 MHz clock	
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 (m)	Depend on baud rate (for example, max. 1000 m at 50 kbps )	
Isolation	1000 VDC for DC-to-DC, 2500 Vrms for photo-couple	
Terminator Resistor	Jumper for 120 $\Omega$ terminator resistor	
Specification	ISO-11898-2, CAN 2.0A and CAN 2.0B	
Protocol	CANopen DS-301 ver4.02, DS-401 ver2.1	
<b>LED</b>		
Round LED	Green LED, Red LED	
<b>Software</b>		
Driver	Windows 98/ME/NT/2K/XP.	
Library	VB 6.0, VC++ 6.0, BCB 6.0.	
<b>Power</b>		
Power supply	Unregulated +10 ~ +30 VDC	
Power Consumption	300 mA @ 5 V	
<b>Mechanism</b>		
Dimensions	127mm x 121mm (W x H)	
<b>Environment</b>		
Operating Temp.	0 ~ 60 $^{\circ}$ C	
Storage Temp.	-20 ~ 80 $^{\circ}$ C	
Humidity	0 ~ 95% RH, non-condensing	

## Applications



## Ordering Information

<b>PISO-CPM100-D</b>	CANopen firmware built-in and one standalone intelligence CAN communication port with D-sub 9-pin female connector
<b>PISO-CPM100-T</b>	CANopen firmware built-in and one standalone intelligence CAN communication port with 5-pin screw terminal connector