

## 1 Port Intelligent CANopen Master Board



*PISO-CPM100U-D*



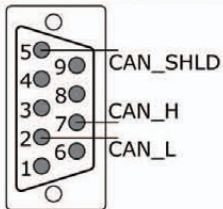
*PISO-CPM100U-T*

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.

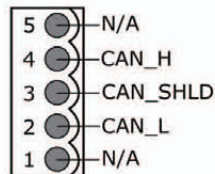
### Features

- NMT: Master
- CANopen Version: DS-301 v4.02
- Error Control: Support Guarding and Heart beat 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
- Support Windows 2K/XP

### Pin Assignments

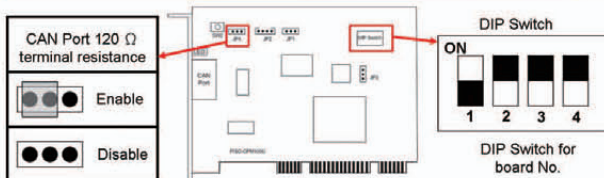


9-pin D-sub male connector

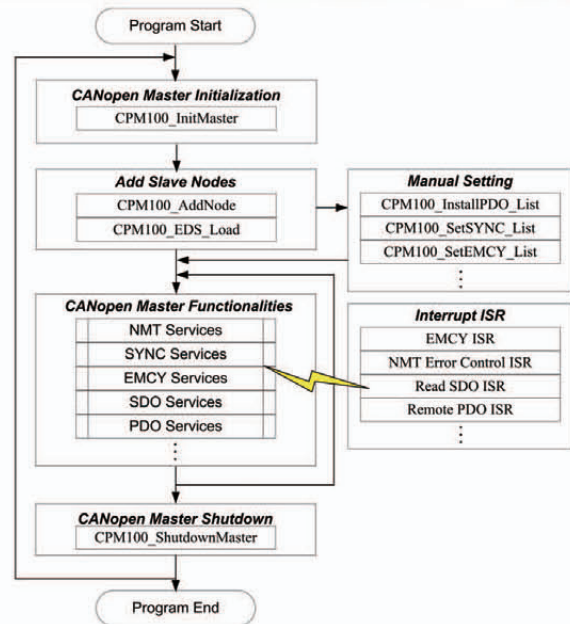


5-pin screw terminal connector

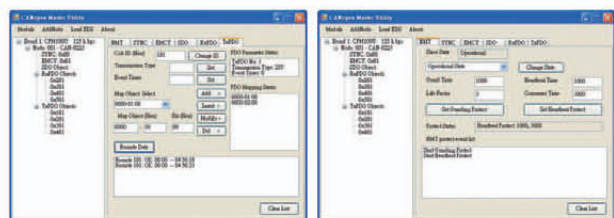
### Terminal Resistor & DIP Switch



### Design Flowchart



### Demos Features

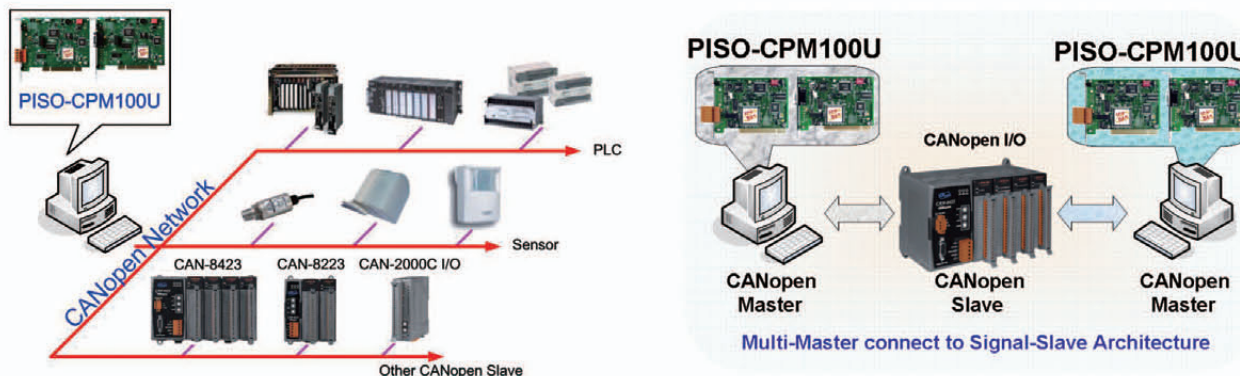


The software utility can easily access the I/O data of all the slave devices. The users can monitor the input data of the specific slave device and change the output data to the remote slave device with this utility.

## Hardware Specifications

Model Name	PISO-CPM100U-D	PISO-CPM100U-T
<b>Hardware</b>		
CPU	80186, 80 MHz or compatible	
SRAM/Flash/EEPROM	512 KB / 512 KB / 2 KB	
<b>Bus Interface</b>		
Type	Universal PCI supports both 5 V and 3.3 V PCI bus	
Board No.	By DIP switch	
<b>CAN Interface</b>		
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 <sub>DC</sub> for DC-to-DC, 2500 V <sub>rms</sub> for photo-couple	
Terminator Resistor	Jumper for 120 Ω 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 2K/XP	
Library	VB 6.0, VC++ 6.0, BCB 6.0	
<b>Power</b>		
Power Consumption	300 mA @ 5 V	
<b>Mechanism</b>		
Dimensions	138 mm x 22mm x 105 mm (W x L x H)	
<b>Environment</b>		
Operating Temp.	0 ~ 60 °C	
Storage Temp.	-20 ~ 70 °C	
Humidity	5 ~ 85% RH, non-condensing	

## Application



## Ordering Information

PISO-CPM100U-D	1 Port Intelligent CANopen Master Universal PCI Board for D-sub 9-pin male connector
PISO-CPM100U-T	1 Port Intelligent CANopen Master Universal PCI Board for 5-pin screw terminal connector