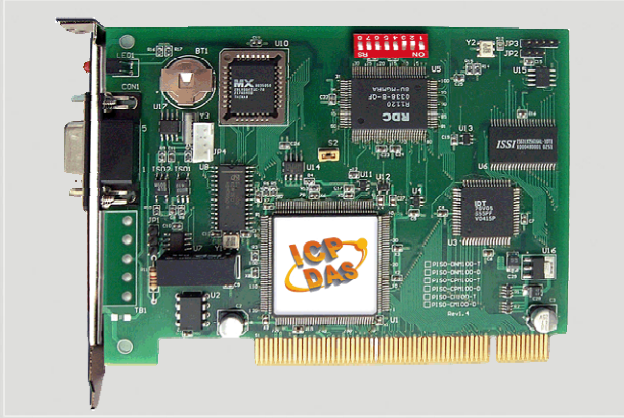




CANopen Series Products

Intelligent CANopen Master PCI Communication Board



PISO-CPM100-D



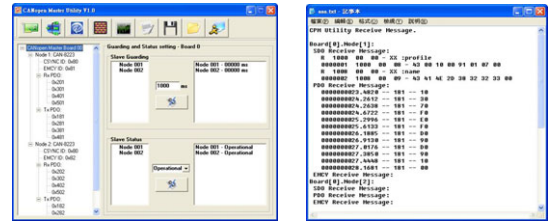
PISO-CPM100-T

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

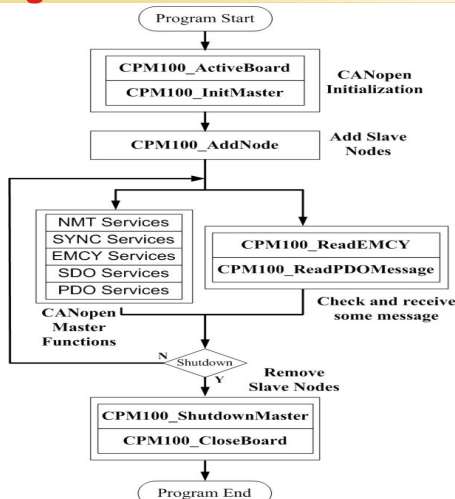
- NMT: Master
- CANopen Version: DS-301 v4.01
- Error Control: Support Guarding protocol
- Support EMCY receiving
- Provide dynamic PDO functions
- Provide 5 sets of SYNC cyclic transmission
- Transmission type of PDO is supported
- Support Multi-Master to Single-Slave architecture
- Auto select with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

Utility Features

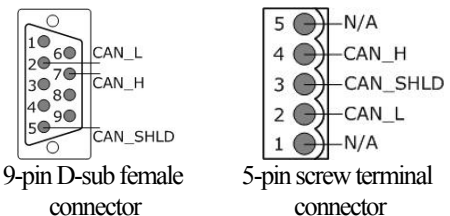


The software utility can easily to access the I/O data of all the slave devices. The users can monitor the input data of the specific slave device and change the output data to the remote slave device with this utility. Besides, the utility also can save the entire message that is received by PISO-CPM100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

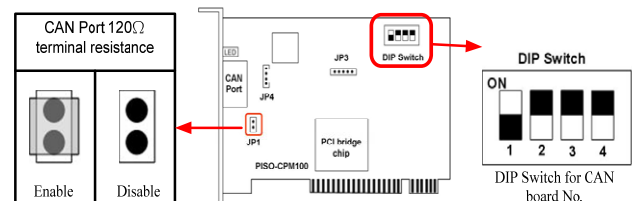
Design Flowchart



Pin Assignments



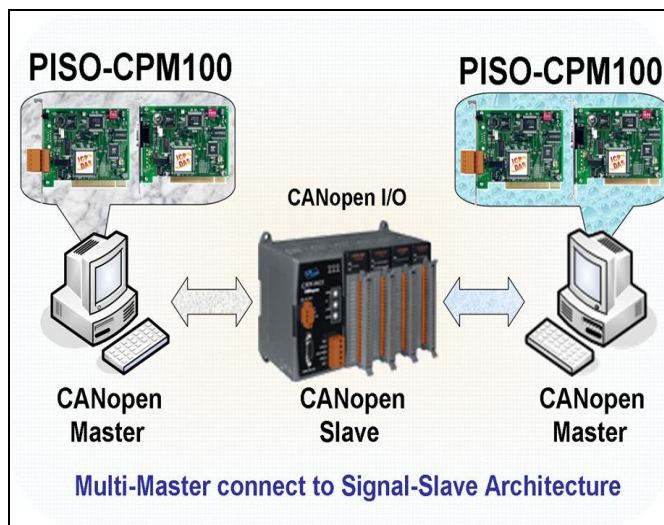
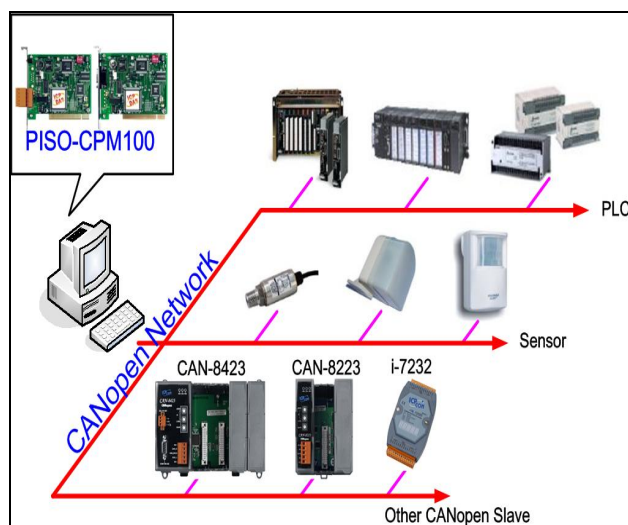
Terminal Resistor & DIP Switch



Hardware Specifications

Item	PISO-CPM100-D/T
Bus Type	33MHz 32bit 5V PCI bus(V2.1) plug and play mechanism
CPU	80186, 80MHz
Flash/SRAM/EEPROM	512K bytes / 512K bytes / 2K bytes
CAN Controller	Phillips SJA1000T CAN Controller
CAN Transceiver	Phillips 82C250 CAN Transceiver
CAN Interface	ISO/IS 11898-2, 9-pin D-sub female connector/5-pin screw terminal connector
Specific	Follow CiA DS-301 V4.01 and support CiA DS-401
Transfer Rate	Support 10K, 20K, 50K, 125K, 250K, 500K, 800K, 1M bps
Slave number	Each Port support maximum nodes up to 127
Communication	Support NMT/EMCY/SYNC/SDO/PDO/Error Control protocols
Data Exchange	PCI interface with DPRAM memory mapping
Library	Provide VC++6.0/VB6/BCB6 function libraries to process CANopen messages
Time Stamp	Timestamp of CAN message with at least ± 1 ms precision
Buffer Size	240 records CANopen PDO message receive buffer
Board No.	Select with DIP switch
Isolated	2500Vrms on CAN side
Terminal Resister	120 Ω terminal resister selected by jump
Driver Support	Windows 98/ME/NT/2K/XP
LEDs	Tx/Rx LED, Error LED
Power Consumption	+ 5V@300 mA
Operating Temp.	0 $^{\circ}$ C to 60 $^{\circ}$ C
Storage Temp.	-20 $^{\circ}$ C to 80 $^{\circ}$ C
Humidity	0~90%, non-condensing
Dimensions	130mm x 110mm (W x H)

Applications



Ordering Information

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