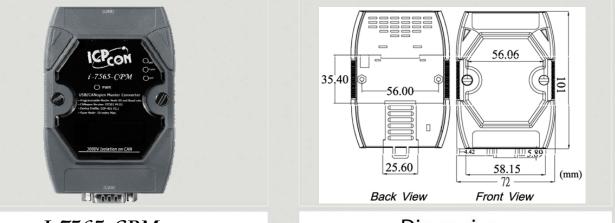
# CANopen Series Products

# **USB/CANopen Master Converter**



*I-7565-CPM* 

Dimensions

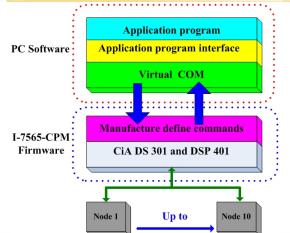
CE FC

TheI-7565-CPM was developed as a standardized CANopen network with highly flexible configuration capabilities. It is a CANopen master solution of USB interface, and has an 80 MHz 186 CPU inside. There is a CANopen protocol interpreter, I-7565-CPM firmware, running in the I-7565-CPM. User can use this converter to process the complex CANopen protocol without increasing the PC loading very much. The rich APIs of the I-7565-CPM library and easy-to-use utility tool can satisfy the requirements of variety and complex CANopen applications.



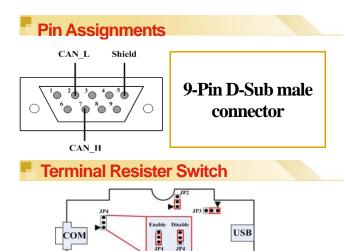
- NMT: Master
- CANopen Version: DS-301 v4.02
- Error Control: Node Guarding and Heartbeat protocol
- Allow EMCY receptions
- Provide dynamic PDO functions
- Support SYNC protocol
- Several transmission types of PDO are supported
- Support SDO download/upload segment protocol
- Provide CANopen standard baud rate
- PWR, ACT, ERR, and Tx/Rx LED indicator
- Allow max. 10 CANopen slaves

#### Main Structure



LED Indicators

| USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>CANOpen Master Converter<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB)<br>USB) |                                    |  |
|--|------------------------------------|--|
| LED.   | Description                        |  |
| PWR  | Indicate power status              |  |
| Tx/Rx  | Indicate CAN messages transmission |  |
| ACT  | Indicate firmware running status   |  |
| ERR  | Indicate the error status          |  |



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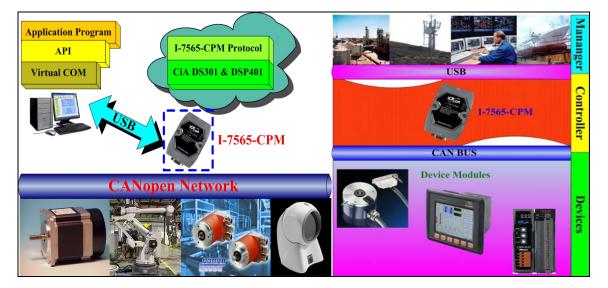
## Hardware Specifications



Nopen Series

| Hardware           |   |  |  |
|--------------------|---|--|--|
| CPU                | 80186, 80MHz.   |  |  |
| SRAM/Flash/EEPROM  | 512KB / 512KB /16KB   |  |  |
| ESD Protection     | 2 kV class A and 3 kV class B   |  |  |
| CAN Interface      |   |  |  |
| Controller         | Phillips SJA1000T CAN Controller  |  |  |
| Transceiver        | Phillips 82C250 CAN Transceiver   |  |  |
| Interface          | ISO/IS 11898-2, 9-pin male D-Sub(GAN_GND, CAN_L, CAN_SHLD, CAN_H, CAN_V+, N/A for others) |  |  |
| Transfer Rate      | Support 10K, 20K, 50K, 125K, 250K, 500K, 800K, 1M bps                                     |  |  |
| Specific           | Follow CiA DS-301 V4.02   |  |  |
| Slave number       | support maximum nodes up to 10  |  |  |
| USB Interface      |   |  |  |
| Connector          | USB Type B  |  |  |
| Transmission speed | 921.6 kbps  |  |  |
| LED                |   |  |  |
| Round LED          | PWR LED, ACT LED, ERR LED, Tx/Rx LED.   |  |  |
| Software           |   |  |  |
| Driver             | Windows 98/ME/NT/2K/XP.   |  |  |
| Library            | VC++6.0   |  |  |
| Power              |   |  |  |
| Power supply       | By USB interface.   |  |  |
| Mechanism          |   |  |  |
| Dimensions         | 72mm x 101mm x 33mm (W x L x H)   |  |  |
| Environment        |   |  |  |
| Operating Temp.    | $-25 \sim +75$ °C   |  |  |
| Storage Temp.      | $-30 \sim +80$ °C   |  |  |
| Humidity           | 10 ~ 90% RH, non-condensing   |  |  |

#### **Applications**



### Ordering Information

I-7565-CPM

Module with one CAN port, CANopen master library of VC++, 80186 80MHz CPU, 512K flash, 512K SRAM, 120 $\Omega$  terminator resister selected by jumper.