



## PISO-CM100U-D PISO-CM100U-T

Intelligent PCI CAN Communication Card

### Features

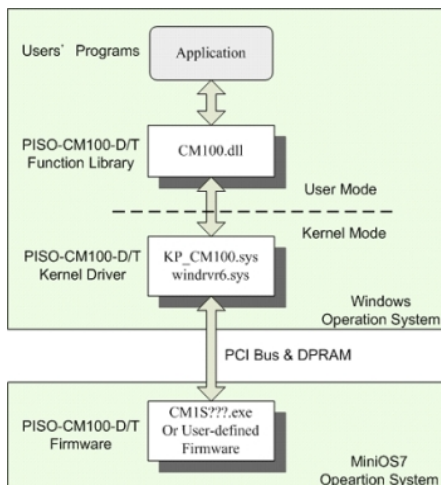
- Microprocessor inside with 80186, 80MHz
- 82C250 CAN transceiver
- SJA1000T CAN controller
- Fully compatible with ISO 11898-2 standard
- Support both CAN 2.0A and CAN 2.0B
- Timestamp with at least  $\pm 1\text{ms}$  precision
- DIP switch to select board number
- Dual port RAM communication mechanism
- RTC (real time clock) inside



### Introduction

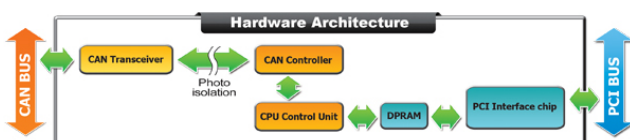
The PISO-CM100U represents a very powerful and economic solution of an active CAN board with one CAN channel, covering a wide range of CAN applications. The 16-bit on-board microcontroller allows, among many other features, the filtering, preprocessing, and storage (with timestamp) of CAN messages as well as the real-time transmission of CAN messages. Under the effect of the powerful microcontroller, this card can be made for one CAN controller without losing data, even in systems with a high bus load. In addition, users can develop their own CAN application by using the PISO-CM100U library. When the PISO-CM100U is active, the data exchange between users' application and CAN bus firmware is performed via the memory mapping method of the PISO-CM100U.

### Firmware Features



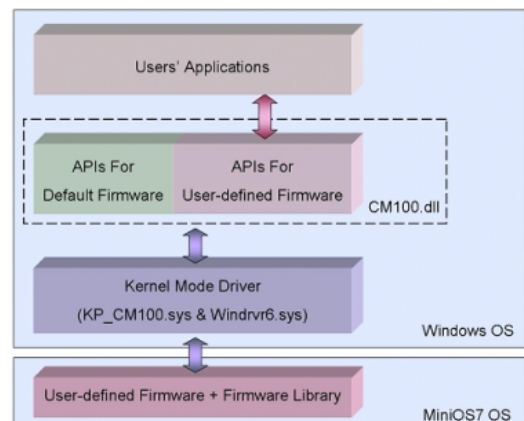
- Support user-defined firmware
- Provide 4 functions of firmware for user-defined
- 2048 CAN message reception buffer
- Cyclic transmission precision is  $\pm 1\%$
- Provide 5 sets of cyclic transmission
- Easy to update firmware
- High performance to process CAN message

### Hardware Architecture

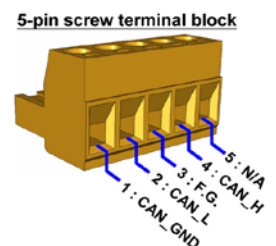
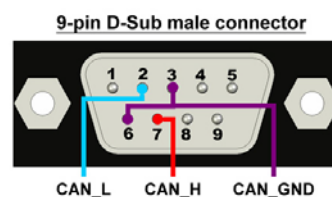


### Host Library

- Driver for Windows XP/7/8/10
- Provide VC++, VB, BCB Delphi demos and libraries
- Support DPRAM read/write functions
- Provide user-defined interrupt function



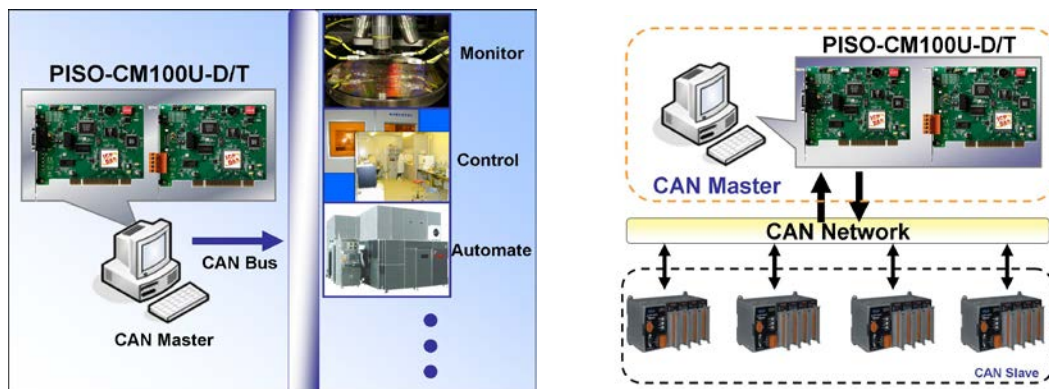
### Pin Assignments



## ■ Hardware Specifications

Model Name	PISO-CM100U-D		PISO-CM100U-T
Hardware			
CPU	80186, 80 MHz or compatible		
SRAM/Flash/EEPROM	512 KB / 512 KB / 16 KB		
DPRAM	8 KB		
NVRAM	31 bytes (battery backup, data valid for up to 10 years)		
RTC (Real Time Clock)	Yes		
Bus Interface			
Type	Universal PCI, 3.3 V and 5 V, 33 MHz, 32-bit, plug and play		
Board No.	By DIP switch		
CAN Interface			
Controller	NXP SJA1000T with 16 MHz clock		
Transceiver	NXP 82C250		
Channel number	1		
Connector	9-pin male D-Sub	5-pin screwed terminal block	
Baud Rate (bps)	10 k, 20 k, 50 k, 125 k, 250 k, 500 k, 800 k, 1 M (allow user-defined baud rate)		
Isolation	3000 V <sub>DC</sub> for DC-to-DC, 2500 V <sub>rms</sub> for photo-couple		
Terminal Resistor	Jumper for 120 Ω terminal resistor		
LED			
Round LED	Rx/Tx LED, ERR LED		
Software			
Driver	Windows XP/7/8/10, InduSoft		
Library	VB 6.0, VC++ 6.0, BCB 6.0, Delphi 4.0		
Power			
Power Consumption	300 mA @ 5 V		
Mechanism			
Dimensions	138mm x 22mm x 105mm (W x L x H)		
Environment			
Operating Temp.	0 ~ 60 °C		
Storage Temp.	-20 ~ 70 °C		
Humidity	5 ~ 85% RH, non-condensing		

## ■ Flow Diagram for Applications



## ■ Ordering Information

<b>PISO-CM100U-D CR</b>	Intelligent CAN interface with one Isolated Protection CAN Communication Port and 9-Pin D-sub connector for universal PCI bus systems (RoHS)
<b>PISO-CM100U-T CR</b>	Intelligent CAN interface with one Isolated Protection CAN Communication Port and 5-Pin Screw Terminal Connector for universal PCI bus systems (RoHS)