# **CAN Series Products**

# Intelligent PCI CAN Communication Card





## PISO-CM100U-D



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.

#### Hardware Features

- Microprocessor inside with 80186, 80MHz
- 82C250 CAN transceiver
- SJA1000T CAN controller
- Support both CAN 2.0A and CAN 2.0B
- Timestamp with at least ±1ms precision
- DIP switch to select board number
- Dual port RAM communication mechanism
- RTC (real time clock) inside

#### Firmware Features



- Support user-defined firmware
- Provide 4 functions of firmware for user-defined
- 2048 reception buffer and 256 transmission buffer
- Cyclic transmission precision is  $\pm 1\%$
- Provide 5 sets of cyclic transmission

- Easy to update firmware
  - High performance to process CAN message

#### Host Library

- Driver for Windows /2K/XP.
- Provide VC++, VB, BCB demos and libraries
- Support DPRAM read / write functions.
- Provide user-defined interrupt function.







## Hardware Specifications

Item	PISO-CM100U-D	PISO-CM100U-T
СРИ	Microprocessor inside with 80186 80MHz	
CAN Port Channels	1	
CAN Transceiver	Phillips 82C250	
CAN Controller	Phillips SJA1000T with 16MHz	
CAN Connector	9-pin D-sub female connector	5-pin screw terminal connector
Support Protocol	CAN 2.0A/2.0B	
Isolation	2500 Vrms on the CAN side	
Board Number	Selectable board number by DIP switch	
Terminator Resistor	Selectable 120Ω terminator resistor by jumper	
NVRAM	31 bytes	
DPRAM	8K bytes	
Flash/SRAM/EEPROM	512K/512K/2K bytes	
Software		
Driver	Provide Windows 98/ME/NT/2K/XP	
Baud Rate Configure	5K, 10K, 20K, 25K, 50K, 100K, 125K, 200K, 250K, 500K, 800K and 1Mbps	
Timestamp	Timestamp of CAN message with at least ±1ms precision	
Transmit Buffer	256 records CAN message transmission buffer size	
Receive Buffer	2048 records CAN message reception buffer size	
General		
Interface	Universal PCI supports both 5V and 3.3V PCI bus	
RTC	Real time clock inside	
LEDs	Rx/Tx LED: Rx/Tx data, Err LED: CAN error occur	
Power Consumption	+ 5V@ 300 mA	
Environment		
Operating Temp.	0°C~60°C	
Storage Temp.	-20°C ~80°C	
Humidity	0~90% non-condensing	
Dimensions	127mm x 121mm (W x H)	

## Applications



### Ordering Information

PISO-CM100U-D	Intelligent CAN interface with one Isolated Protection CAN Communication Port and 9-Pin D-sub connector for universal PCI bus systems.	
PISO-CM100U-T	Intelligent CAN interface with one Isolated Protection CAN Communication Port and 5-Pin Screw Terminal Connector for universal PCI bus systems.	