

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 ±1ms precision
- DIP switch to select board number
- Dual port RAM communication mechanism
- RTC (real time clock) inside

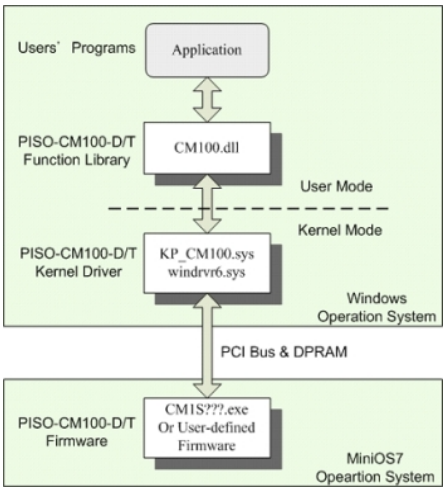
PISO-CM100U-D PISO-CM100U-T

Intelligent PCI CAN Communication Card

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.

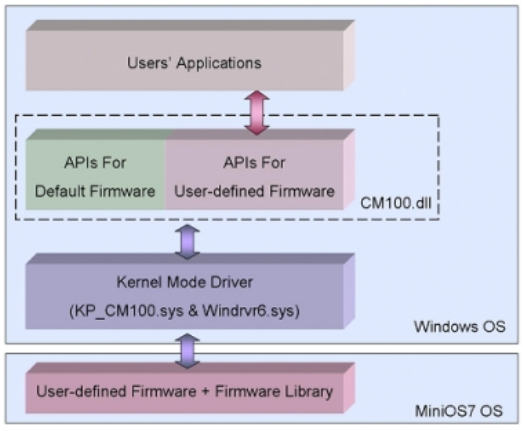
Firmware Features



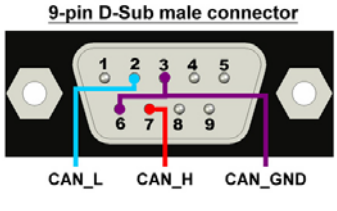
- Support user-defined firmware
- Provide 4 functions of firmware for user-defined
- 2048 CAN message reception buffer
- Cyclic transmission precision is ±1%
- Provide 5 sets of cyclic transmission
- Easy to update firmware
- High performance to process CAN message

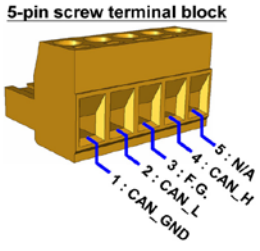
Host Library

- 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

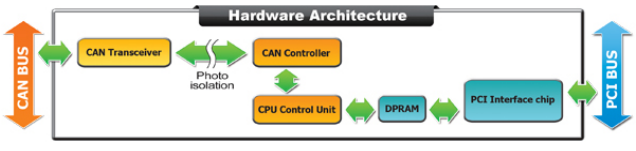


Pin Assignments





Hardware Architecture

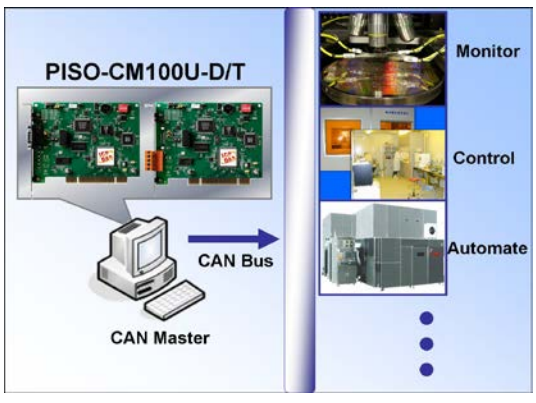


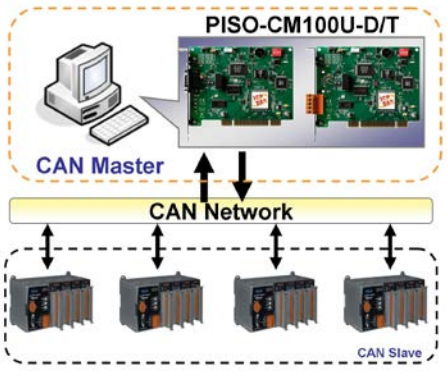
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Hardware Specifications

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_{DC} for DC-to-DC, 2500 Vrms 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 ℃	
Storage Temp.	-20 ~ 70 ℃	
Humidity	5 ~ 85% RH, non-condensing	

Flow Diagram for Applications





Ordering Information

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

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