





■ Features

- Embedded 32-bit microprocessor
- NXP 82C250 CAN transceiver
- Fully compatible with ISO 11898-2 standard
- Supports both CAN 2.0A and CAN 2.0B specifications
- Storage Timestamp with a precision of at least ±1 ms DIP switch to select board number
- Dual port RAM communication mechanism
- Embedded RTC (real time clock)

PISO-CM200U-D PISO-CM200U-T

Intelligent 2-port PCI CAN Communication Card



■ Introduction

The PISO-CM200U represents a very powerful and economic solution of an active CAN board with two CAN channels, covering a wide range of CAN applications. The 32-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 two CAN controllers without losing data, even in systems with a high bus load. In addition, users can develop their own CAN application on PC side by using the PISO-CM200U library. When the PISO-CM200U is active, the data exchange between users' application and CAN Bus firmware is performed via the memory mapping method of the PISO-CM200U.

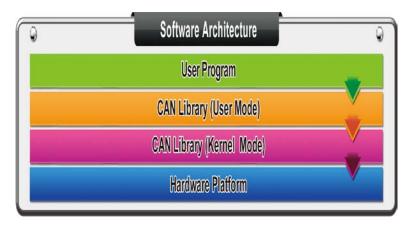
■ Hardware Specifications

CPU 32-bit MCU DPRAM 16 KB RTC (Real Time Clock) Yes Bus Interface Type Universal PCI, 5 V, 33 MHz, 32-bit, plug and play Board No. Configurable via DIP switch CAN Interface Controller BOSCH C_CAN Transceiver NXP 82C250 Channel number 2 Connector 9-pin Male D-Sub 5-pin screw 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 VDC for DC-to-DC, 3000 Vrms for photo-couple Terminal Resistor Jumper for 120 Ω terminal resistor LED Indicators/Display System LED Indicators Yes, two (round) as Communication Indicators, Rx/Tx, ERR Software Driver Windows XP/7/8/10 Library/Demo Languages C#.Net, VB.Net, VC++.Net Power Power Consumption 800 mA @ 5 V Mechanism Dimensions (L x W x D) 150 mm x 121 mm x 22 mm	Hardware Specific	Cations	
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Type Universal PCI, 5 V, 33 MHz, 32-bit, plug and play Board No. Configurable via DIP switch CAN Interface Controller BOSCH C_CAN Transceiver NXP 82C250 Channel number 2 Connector 9-pin Male D-Sub 5-pin screw 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 VDC for DC-to-DC, 3000 Vrms for photo-couple Terminal Resistor Jumper for 120 Ω terminal resistor LED Indicators/Display System LED Indicators Yes, two (round) as Communication Indicators, Rx/Tx, ERR Software Driver Windows XP/7/8/10 Library/Demo Languages C#.Net, VB.Net, VC++.Net Power Power Consumption 800 mA @ 5 V Mechanism Dimensions (L x W x D) 150 mm x 121 mm x 22 mm Environment Operating Temperature 0 ~ 60 °C Storage Temperature -20 ~ 70 °C	RTC (Real Time Clock)	Yes	
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Baud Rate (bps) 10 k, 20 k, 50 k, 125 k, 250 k, 500 k, 800 k, 1 M (allow user-defined baud rate) 3000 VDC for DC-to-DC, 3000 Vrms for photo-couple Terminal Resistor Jumper for 120 Ω terminal resistor LED Indicators/Display System LED Indicators Yes, two (round) as Communication Indicators, Rx/Tx, ERR Software Driver Windows XP/7/8/10 Library/Demo Languages C#.Net, VB.Net, VC++.Net Power Power Consumption 800 mA @ 5 V Mechanism Dimensions (L x W x D) 150 mm x 121 mm x 22 mm Environment Operating Temperature 0 ~ 60 °C Storage Temperature -20 ~ 70 °C	Channel number	2	
Isolation 3000 VDC for DC-to-DC, 3000 Vrms for photo-couple Terminal Resistor Jumper for 120 Ω terminal resistor LED Indicators/Display System LED Indicators Yes, two (round) as Communication Indicators, Rx/Tx, ERR Software Driver Windows XP/7/8/10 Library/Demo Languages C#.Net, VB.Net, VC++.Net Power Power Consumption 800 mA @ 5 V Mechanism Dimensions (L x W x D) 150 mm x 121 mm x 22 mm Environment Operating Temperature 0 ~ 60 °C Storage Temperature -20 ~ 70 °C	Connector	9-pin Male D-Sub	5-pin screw terminal block
Terminal Resistor LED Indicators/Display System LED Indicators Yes, two (round) as Communication Indicators, Rx/Tx, ERR Software Driver Windows XP/7/8/10 Library/Demo Languages C#.Net, VB.Net, VC++.Net Power Power Consumption 800 mA @ 5 V Mechanism Dimensions (L x W x D) 150 mm x 121 mm x 22 mm Environment Operating Temperature 0 ~ 60 °C Storage Temperature -20 ~ 70 °C	Baud Rate (bps)	10 k, 20 k, 50 k, 125 k, 250 k, 500 k, 800 k, 1 M (allow user-defined baud rate)	
System LED Indicators Yes, two (round) as Communication Indicators, Rx/Tx, ERR Software Driver Windows XP/7/8/10 Library/Demo Languages C#.Net, VB.Net, VC++.Net Power Power Consumption 800 mA @ 5 V Mechanism Dimensions (L x W x D) 150 mm x 121 mm x 22 mm Environment Operating Temperature 0 ~ 60 °C Storage Temperature -20 ~ 70 °C	Isolation	3000 VDC for DC-to-DC, 3000 Vrms for photo-couple	
System LED Indicators Yes, two (round) as Communication Indicators, Rx/Tx, ERR Software Driver Windows XP/7/8/10 Library/Demo Languages C#.Net, VB.Net, VC++.Net Power Power Consumption 800 mA @ 5 V Mechanism Dimensions (L x W x D) 150 mm x 121 mm x 22 mm Environment Operating Temperature 0 ~ 60 °C Storage Temperature -20 ~ 70 °C	Terminal Resistor	Jumper for 120 Ω terminal resistor	
Driver Windows XP/7/8/10 Library/Demo Languages C#.Net, VB.Net, VC++.Net Power Power Consumption 800 mA @ 5 V Mechanism Dimensions (L x W x D) 150 mm x 121 mm x 22 mm Environment Operating Temperature 0 ~ 60 °C Storage Temperature -20 ~ 70 °C	LED Indicators/Display		
Driver Windows XP/7/8/10 Library/Demo Languages C#.Net, VB.Net, VC++.Net Power Power Consumption 800 mA @ 5 V Mechanism Dimensions (L x W x D) 150 mm x 121 mm x 22 mm Environment Operating Temperature 0 ~ 60 °C Storage Temperature -20 ~ 70 °C	System LED Indicators	Yes, two (round) as Communication Indicators, Rx/Tx, ERR	
Library/Demo Languages C#.Net, VB.Net, VC++.Net Power Power Consumption 800 mA @ 5 V Mechanism Dimensions (L x W x D) 150 mm x 121 mm x 22 mm Environment Operating Temperature 0 ~ 60 °C Storage Temperature -20 ~ 70 °C	Software		
Power Consumption 800 mA @ 5 V Mechanism Dimensions (L x W x D) 150 mm x 121 mm x 22 mm Environment Operating Temperature 0 ~ 60 °C Storage Temperature -20 ~ 70 °C	Driver	Windows XP/7/8/10	
Power Consumption 800 mA @ 5 V Mechanism Dimensions (L x W x D) 150 mm x 121 mm x 22 mm Environment Operating Temperature 0 ~ 60 °C Storage Temperature -20 ~ 70 °C	Library/Demo Languages	C#.Net, VB.Net, VC++.Net	
Mechanism Dimensions (L x W x D) 150 mm x 121 mm x 22 mm Environment Operating Temperature 0 ~ 60 °C Storage Temperature -20 ~ 70 °C	Power		
Dimensions (L x W x D) 150 mm x 121 mm x 22 mm Environment Operating Temperature 0 ~ 60 °C Storage Temperature -20 ~ 70 °C	Power Consumption	800 mA @ 5 V	
Environment Operating Temperature 0 ~ 60 °C Storage Temperature -20 ~ 70 °C	Mechanism		
Operating Temperature 0 ~ 60 °C Storage Temperature -20 ~ 70 °C	Dimensions (L x W x D)	150 mm x 121 mm x 22 mm	
Storage Temperature -20 ~ 70 °C	Environment		
	Operating Temperature	0 ~ 60 °C	
Humidity 5 ~ 85% RH, non-condensing	Storage Temperature	-20 ~ 70 °C	
	Humidity	5 ~ 85% RH, non-condensing	

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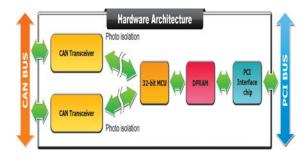


■ Firmware Features

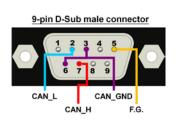


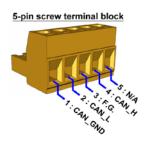
- Drivers provided for Windows XP/7/8/10
- Demos and libraries provided for C#.Net, VB.Net and VC++.Net
- Transmission/reception buffer for up to 256 CAN messages
- Cyclic transmission precision is ±1ms
- · Allows a maximum of 5 sets of cyclic transmission messages
- Cyclic transmission message precision: ±1ms
- Easy to update firmware

Hardware Architecture

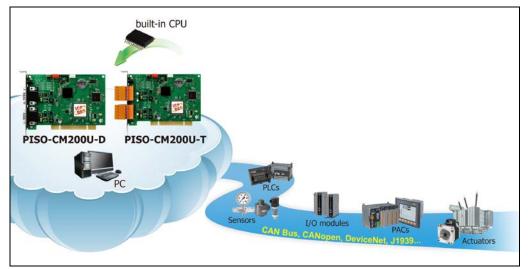


■ Pin Assignments





Applications



Ordering Information

PISO-CM200U-D CR Connector for universal PCI bus systems (RoHS)	gent CAN interface with two Isolated Protection CAN Communication Port and 9-Pin D-sub	
	Connector for universal PCI bus systems (RoHS)	
PISO-CM200U-T CR Intelligent CAN interface with two Isolated Protection CAN Communication Port and 5-Pin Scre	gent CAN interface with two Isolated Protection CAN Communication Port and 5-Pin Screw	
Terminal Connector for universal PCI bus systems (RoHS)	Terminal Connector for universal PCI bus systems (RoHS)	

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