



## PISO-CAN200U-FD-D/ PISO-CAN200U-FD-T

2-Port CAN FD Universal PCI Card

# **Introduction** CAN FD (CAN with Flexible Data-Rate) is a newer extension version of the CAN 2.0 protocol. It was developed by Bosch and was released in 2012. It has been significantly improved during the standardization process and is nowadays in ISO 11898-1:2015. The CAN FD speeds up the data transmission and packs more data into each message.

PISO-CAN200U-FD series board is a very powerful and economic solution for an active CAN board, containing two CAN channels that cover a wide range of CAN applications. It uses Microchip CAN FD controllers and TI TCAN1042HG series transceivers, which provide bus arbitration and error detection features, combined with auto-correction and re-transmission functionality. As the PISO-CANFD series board is state-of-the-art, it can be installed in either a Universal PCI bus.

Specification	15			
Model	PISO-CAN200U-FD-D	PISO-CAN200U-FD-T		
PC Bus				
Туре	Universal PCI, 3.3 V and 5 V, 33 MHz, 32-bit, plug			
Турс	and play			
Board No.	By DIP switch			
CAN Interface				
Controller	Microchip M	1CP2518FD		
Transceiver	TI TCAN	1042HG		
Ports	2			
Connector	9-pin Male D-Sub 5-pin screw			
Baud Rate	CAN bit rates: 10 ~ 1000 kbps, CAN FD bit rates for data field: 100 ~ 10000 kbps			
Isolation	3000 VDC for DC-to-DC, 3000 Vrms for photo-couple			
Terminal Resistor	Jumper for 120 $\Omega$ terminator resistor			
Power				
Power Consumption	150 mA	. @ 5 V		
Software				
Drivers	Windows 7/8.1/1	.0 (32-bit/64-bit)		
Library/ Demo Languages	C#.Net, VB.Net	et, VC++.Net		
Mechanical				
Dimensions (mm)	121.7 x 21.6 x 9	92.7 (W x L x H)		
Environmental				
Operating Temperature	0 to 6	50 °C		
Storage Temperature	-20 to	70 °C		
Humidity	5 to 85% RH, N	Ion-condensing		
Attentions		-		

#### **Specifications**

#### Attention:

The maximum CAN FD data rate can be exceeded depending on the concrete operating conditions (cable length, network topology, settings,...), but it can also not be reached.

#### 🖿 Utility

Features

switchable

Bus

.Net

CE FC

Compatible with the ISO 11898-2 standard

CAN bit rates from 10 kbps to 1000 kbpsSupport CAN Bus message filter configuration

Board number selectable via DIP switch

Drivers provided for Windows 7/8.1/10

RoHS

Compatible with CAN specification 2.0 A/B and FD

CAN FD support for ISO and Non-ISO (Bosch) standards

CAN FD bit rates for data field from 100 kbps to 10 Mbps

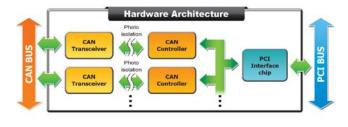
Built-in jumper to select 120 ohm terminal resister for CAN

Demos and libraries provided for C#.Net, VB.Net and VC++

X

CAN1 Ser	View Help Poet 2 Ind Message ssage Confi	0					
CAN1 Ser Send Mer Mode	nd Messag	0	_				
Send Mer		e					
Mode	ssage Confi						
	ID (Hex)	guration Type 1:CAN	DL 8	00.00.00	Data 0-00-00-00-00-00	Tr	mer (ms) 0
No MODE	(D(hex)	Type DL		Data		Timer	Status
	Aodify Dek	nte Del Tal			r Crit SendC		0
Scroll Mode OverWrite Mode Scrolling No MODE Dthex) Type DL Data TimeStamp(si A							
		199					
		-				-	
						_	
							- 1
						_	
						_	
<	1		<u> </u>	9		_	2
		Start Reco	rd	Rx Pause Cli	ear RecvC	at	0

#### Hardware Architecture



#### Pin Assignments

Pin Assignments for the 5-pin screw terminal connector			
Pin No.	Name	Description	
1	CAN_GND	CAN_Gnd, signal line for the CAN port.	5-pin screw terminal block
2	CAN_L	CAN_Low, signal line for the CAN port.	100
3	F.G.	Frame Ground.	A CANA
4	CAN_H	CAN_High, signal line for the CAN port.	Can Can
5	N/A	Not used	

## Applications



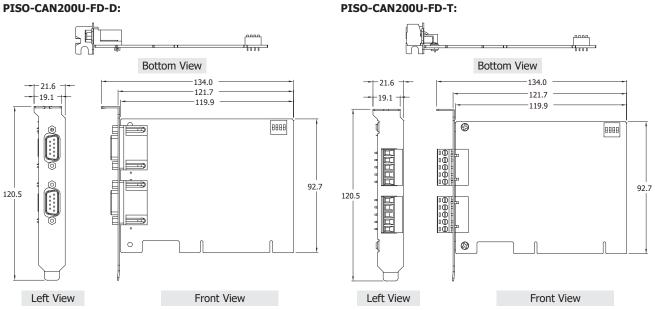
Pin Assignments for the 9-pin Male D-Sub connector			
Pin No.	Name	Description	
1	N/A	Not used	
2	CAN_L	CAN_Low, signal line for the CAN port.	
3	CAN_GND	CAN_Gnd, signal line for the CAN port.	9-pin D-Sub male connector
4	N/A	Not used	ພວ ເອ
5	N/A	Not used	CAN_H
6	CAN_GND	CAN_Gnd, signal line for the CAN port.	CAN_L
7	CAN_H	CAN_High, signal line for the CAN port.	
8	N/A	Not used	
9	N/A	Not used	

#### Software Architecture

9	Software Architecture	9
	User Program	
	CAN FD Library (User Mode)	
	CAN FD Library (Kemel Mode)	
	Hardware Platform	

## Dimensions (Units: mm)

#### PISO-CAN200U-FD-D:



#### **Ordering Information**

PISO-CAN200U-FD-D CR     2-port Isolated Protection CAN FD Universal PCI Card with 9-pin D-sub connector (RoHS)	
PISO-CAN200U-FD-T CR	2-port Isolated Protection CAN FD Universal PCI Card with 5-pin screw terminal connector (RoHS)