



Universal PCI, 32-ch Optical Isolated DI and 32-ch Open Collector Isolated (Sink, NPN) DO Board

■ Introduction

PISO-P32S32WU has 32 channels of Isolated DI and 32 channels of Isolated open-collector output board (8-channel for 500 mA and 24-channel for 100 mA current sinking output, NPN), arranged into four isolated banks. Each input channel use a photo-coupler to isolate the card and computer from external signal. Each DO offers a NPN transistor and integral suppression diode for inductive load. PISO-P32S32WU requires external power to drive the D/I and D/O ports and supports Card ID (jumper) features for multi-board identification and supports both 5 V and 3.3 V PCI slot.

This interface board is easily installed in any PC. The board interface to field logic signals, eliminating ground-loop problems and isolating the host computer from damaging voltages. PISO-P32S32WU has one 37-pin D-Sub connector and one 40-pin male header. The 40-pin to DB-37 flat cable is used to fix with the case. The user can connect the digital signal through the second D-Sub connector. Each D-Sub connector contains 16 input channels and 16 output channels.

The cards support various OS versions, such as Linux, DOS, Windows. DLL and Active X control together with various language sample program based on Turbo C++, Borland C++, Microsoft C++, Visual C++, Borland Delphi, Borland C++ Builder, Visual Basic, C#.NET, Visual Basic.NET and LabVIEW are provided in order to help users to quickly and easily develop their own applications.

Applications

- Factory automation
- Product test
- Laboratory automation

■ Software

Drivers		
32/64-bit Windows 10/11	✓ Linux	
Sample Programs		
OOS Lib and TC/BC/MSC Demo		
VB/VC/Delphi/BCB/VB.NET/C#.NET/VC.NET/MATLAB Demo		

■ Features

- Universal PCI (3.3 V/5 V) Interface
- Supports Card ID (SMD Switch)
- 3750 Vrms Photo-isolation Protection
- Input Range up to 30 VDC
- 32 Optically-isolated Digital Input Channels
- 32 Optically-isolated Digital Output Channels (Sink, NPN)
 - □ 100 mA (24 Channels) Low Driving
 - ☐ 500 mA (8 Channels) High Driving











Hardware Specifications

Hardware		
Card ID	Yes (4-bit) for version 1.5 or above	
Connector	Female DB37 x 1 , 40-pin box header x 1	
Digital Input		
Channels	32	
Туре	Wet Contact , Photocoupler	
Sink/Source (NPN/PNP)	Sink/Source	
ON Voltage Level	9 ~ 24 V	
OFF Voltage Level	0 ~ 1 V	
Response Speed	4 kHz (Typical)	
Trigger Mode	Static Update	
Isolation	3750 Vrms (Using external power)	
Digital Output		
Channels	32	
Туре	Open Collector	
Sink/Source (NPN/PNP)	Sink (NPN)	
Operation Mode	Static Update	
Load Current	500 mA for one high driving channel @ 100% duty 500 mA for all high driving channels @ 100% duty (The GND pins all must be connected with GND of External Power) 100 mA for one low driving channel @ 100% duty 100 mA for all low driving channels @ 100% duty (The GND pins all must be connected with GND of External Power)	
Response Speed	4 kHz (Typical)	
Isolation	3750 Vrms (Using external power)	
PC Bus		
Туре	3.3 V/5 V Universal PCI, 32-bit, 33 MHz	
Data Bus	8-bit	
Power		
Consumption	600 mA @ +5 V	
Mechanical		
Dimensions (mm)	105 x 180 x 22 (W x L x D)	
Environment		
Operating Temperature	0 ~ +60°C	
Storage Temperature	-20 ∼ +70°C	
Humidity	5 ~ 85% RH, Non-condensing	

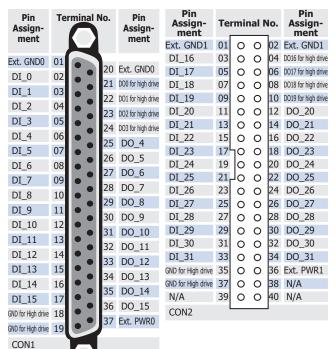
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Ordering Information

PISO-P32S32WU CR

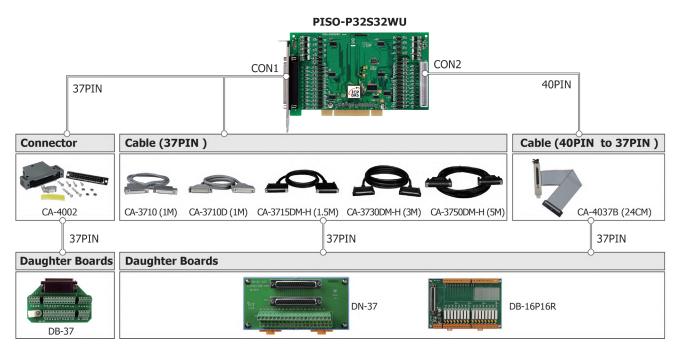
Universal PCI, 32-ch Optical Isolated DI and 32-ch Open Collector Isolated (Sink, NPN) DO Board (RoHS) Includes one CA-4037B cable and two CA-4002 D-Sub connectors

Pin Assignments



Accessories

	CA-3710 CR	DB-37 Male-Male D-sub cable 1 M (Cable for Daughter Board (45°)) (RoHS)
	CA-3710D CR	DB-37 Male-Male D-sub cable 1 M (Cable for Daughter Board (180°)) (RoHS)
	CA-3715DM-H CR	DB-37 Male-Male Cable, 1.5 M, 180° (RoHS)
	CA-3730DM-H CR	DB-37 Male-Male Cable, 3.0 M, 180° (RoHS)
2	CA-3750DM CR	DB-37 Male-Male Cable, 5.0 M, 180° (RoHS)
	CA-3750DM-H CR	DB-37 Male-Male Cable, 5.0 M, 180° (RoHS)
1001	CA-4002 CR	37-pin Male D-sub connector with plastic cover (RoHS)
	CA-4037B CR	40-pin flat & D-sub 37-pin Female cable 24 cm (RoHS)
	DB-16P16R CR	16-channel input terminal and 16-channel relay output board (RoHS) Include : CA-3710D Male- Male D-sub Cable 1.0 M
	DB-37 CR	Directly connect signal to D-sub 37-pin connector (RoHS)
	DN-37 CR	DIN Rail Mounting 37-pin Connector (RoHS)



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