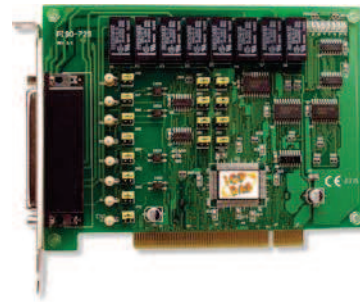# PISO-725

PCI Bus, 8-ch isolated digital input and
8-ch relay output Board

Features ▶▶▶

- PCI Bus (5 V) interface
- 8-ch isolated digital input
- 8-ch electromechanical relay output (Form C x4, Form A x4)
- Jumper selectable isolated or non-isolated digital inputs
- State-changed interrupt for all digital inputs

- 3750 Vrms photo-isolation protection
- Supports relay output status read back
- Onboard relay output status LED indicators
- Support Plug & Play to obtain I/O resources
- No more manually setting of I/O address and IRQ

Introduction

The PISO-725 card supports 5 V PCI bus. These cards provide 8 electromechanical relay output channels and 8 isolated/non-isolated digital input channels. The digital inputs can be set to either isolated or non-isolated via a hardware jumper. Each of the digital inputs will generate an interrupt signal if the state is changed, which is very useful when monitoring for contact closures/openings as it is not necessary to continuously poll the inputs. The isolated DI channels use a short optical transmission path to transfer an electronic signal between elements of a circuit and keep them electrically isolated. With 3750 Vrms isolation protection, these DI channels allow the input signals to be completely floated so as to prevent ground loops and isolate the host computer from damaging voltages. Relays are used where it is necessary to control a circuit using a low-power signal (with complete electrical isolation between the control and controlled circuits), or where several circuits must be controlled by one signal. All relays are de-energized (off) while powering-on, and support On/Off status read back. The PISO-725 can be used in various applications, including contact closure, external voltage sensing, load sensing and I/O control.

Software

- DOS Lib and TC/BC/MSC sample program (with source codes)
- VB/VC/Delphi/BCB/VB.NET/C#.NET/VC.NET/MATLAB sample programs with source codes

- DLL and OCX SDK for 32-bit/64-bit Windows XP/2003/Vista/2008/7/8
- Support LabVIEW and Linux

Hardware Specifications

Digital Input	
Isolation Voltage	3750 Vrms
Channels	8
Input Logic Low	0~1 V
Input Logic High	9~24 V
Input Impedance	1.2 KΩ, 1 W
Relay Output	
Channels	8
Relay Type	DPDT (Form C)
Contact Rating	AC: 120 V @ 0.3 A DC: 30 V @ 1 A
Operate Time	5 ms (Typical)
Release Time	10 ms (Typical)
Insulation Resistance	1000 MΩ
Life	Mechanical: 100,000 ops. (30 V/1 A)
General	
Bus Type	5 V PCI, 32-bit, 33 MHz
Connectors	Female DB-37 x1
Power Consumption	300 mA @ +5 V
Operating Temperature	0 °C ~ +60 °C
Storage Temperature	-20 °C ~ +70 °C
Humidity	5 ~ 85% RH, non-condensing

Pin Assignments

Pin Assignment	Terminal No.		Pin Assignment
NO_0	01		
COM_0	02	20	NO_3
NC_0	03	21	COM_3
NO_1	04	22	NC_3
COM_1	05	23	NO_4
NC_1	06	24	COM_4
NO_2	07	25	NO_5
COM_2	08	26	COM_5
NC_2	09	27	NO_6
NO_7	10	28	COM_6
COM_7	11	29	GND
DIA_0	12	30	DIB_0
DIA_1	13	31	DIB_1
DIA_2	14	32	DIB_2
DIA_3	15	33	DIB_3
DIA_4	16	34	DIB_4
DIA_5	17	35	DIB_5
DIA_6	18	36	DIB_6
DIA_7	19	37	DIB_7

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Ordering Information

PISO-725	PCI Bus, 8-ch isolated digital input and 8-ch relay output board. Includes one CA-4002 D-Sub connector.