

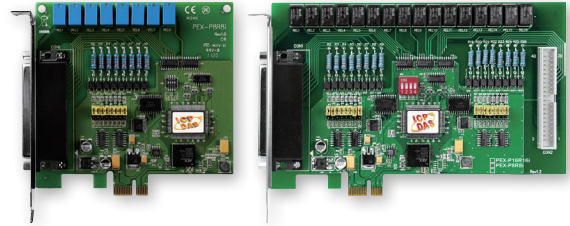
PEX-P8R8i/PEX-P16R16i

PCI Express, 8/16-channel Isolated Digital Input and 8/16-channel Relay Output Board



PEX-P8R8i

PEX-P16R16i



Features

- PCI Express x1 Interface
- Supports Card ID (SMD Switch)
- 8/16-channel Relay Output
 - 7 ms Relay Release Time
- 8/16-channel Isolated Digital Input
 - Selectable DC Signal Input Filter
 - AC Signal Input with Filter
 - 2000 V_{DC} Photo-isolation Protection

Introduction

The PEX-P8R8i/PEX-P16R16i series utilizes the PCI Express bus and is designed as an easy replacement for the PISO-P16R16U board without requiring any modification to either the software or the driver.

The PEX-P8R8i/PEX-P16R16i provides 8/16 photocoupler Digital Input channels with 3750 V_{rms} isolation protection, and allows the input signals to be completely floated to prevent ground loops. The boards are also equipped with 8/16 Relay Output channels that can be used for controlling the ON/OFF state of external devices, for driving external relays or small power switches, or for activating alarms, etc.

Software

Drivers

- 32/64-bit Windows XP/2003/2008/7/8/10
- Linux

Sample Programs

- DOS Lib and TC/BC/MSC Demo
- LabVIEW Toolkit
- VB/VC/Delphi/BCB/VB.NET/C#.NET/VC.NET/MATLAB Demo

Hardware Specifications

Model	PEX-P8R8i	PEX-P16R16i
Digital Input		
Isolation Voltage	2000 V _{DC} (Photocoupler)	
Channels	8	16
Input Voltage	Logic 1: AC/DC +5 ~ +24 V (AC 50 ~ 1 kHz) Logic 0: AC/DC 0 ~ +1 V	
Response Speed	Without Filter: 50 kHz (Typical) With Filter: 0.455 kHz (Typical)	
Relay Output		
Channels	8	16
Relay Type	4 SPDT, 4 SPST	8 SPDT, 8 SPST
Contact Rating	Voltage: 120 V _{AC} /24 V _{DC} Current: 1 A	
Operating Time	1 ms (Typical)	
Lifetime	Mechanical: 5,000,000 ops. Electrical: 100,000 ops.	
Insulation Resistance	1000 MΩ @ 500 V _{DC}	
General		
Bus Type	PCI Express x1	
Card ID	Yes (4-bit)	
Connectors	Female DB37 x 1	Female DB37 x 1, 40-pin Box Header x 1
Power Consumption	450 mA @ +3.3 V; 200 mA @ +12 V	
Operating Temperature	0°C to +60°C	
Humidity	5 to 85% RH, Non-condensing	

Pin Assignments

Pin Assignment	Terminal No.	Pin Assignment
NO_0	01	NO_3
COM_0	02	COM_3
NC_0	03	NC_3
NO_1	04	NO_4
COM_1	05	COM_4
NC_1	06	NO_5
NO_2	07	COM_5
COM_2	08	NO_6
NC_2	09	COM_6
NO_7	10	GND
COM_7	11	DIB_0
DIA_0	12	DIB_1
DIA_1	13	DIB_2
DIA_2	14	DIB_3
DIA_3	15	DIB_4
DIA_4	16	DIB_5
DIA_5	17	DIB_6
DIA_6	18	DIB_7
DIA_7	19	

Pin Assignment	Terminal No.	Pin Assignment
NO_8	01	NO_11
COM_8	03	COM_11
NC_8	05	NC_11
NO_9	07	NO_12
COM_9	09	COM_12
NC_9	11	NO_13
NO_10	13	COM_13
COM_10	15	NO_14
NC_10	17	COM_14
NO_15	19	GND
COM_15	21	NO_22
DIA_8	23	DIB_9
DIA_9	25	DIB_10
DIA_10	27	DIB_11
DIA_11	29	DIB_12
DIA_12	31	DIB_13
DIA_13	33	DIB_14
DIA_14	35	DIB_15
DIA_15	37	N/A
N/A	39	N/A

CON2 (PEX-P16R16i only)

Ordering Information

PEX-P8R8i CR	PCI Express, 8-channel Isolated Digital Input, 8-channel Relay Output Board (RoHS). Includes one CA-4002 D-sub Connector.
PEX-P16R16i CR	PCI Express, 16-channel Isolated Digital Input, 16-channel Relay Output Board (RoHS). Includes one CA-4037W Cable and two CA-4002 D-sub Connectors.