PEX-P8R8i/PEX-P16R16i

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

Features

- PCI Express x1, Plug & Play
- 8/16-ch Relay output, 8/16-ch isolated digital input
- AC signal input with filter
- 7 ms relay release time
- Supports Card ID (SMD Switch)
- Selectable DC signal input filter
- 2000 V_{DC} photo-isolation protection

Introduction

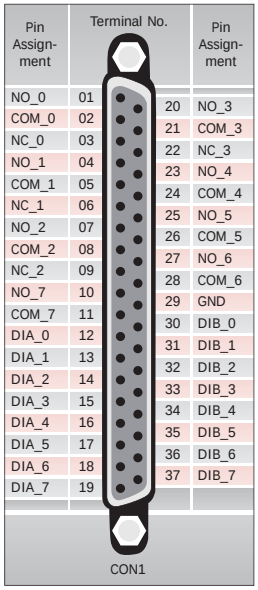
The PEX-P8R8i/PEX-P16R16i is a PCI Express card with programmable digital I/O interface. It provides 8/16 photocoupler digital inputs with 2000 V_{DC} isolation protection, allows the input signals to be completely floated to prevent the ground loops. It is also equipped with 8/16 relay outputs for controlling ON/OFF of external devices, driving external relays or small power switches, and activating alarms... etc.

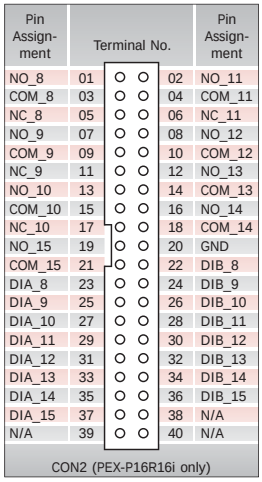
The PEX-P8R8i/PEX-P16R16i is designed as easy replacement for the PISO-P16R16U, and users can replace the PISO-P16R16U with the PEX-P8R8i/PEX-P16R16i directly without any software/driver modification.

Software

- DOS Lib and TC/BC/MSC sample program (with source codes)
- DLL and OCX SDK for 32-bit and 64-bit Windows XP/2003/ Vista/2008/7
- VB/VC/Delphi/BCB/VB.NET/C#.NET sample programs with source codes
- Supports LabVIEW and Linux

Pin Assignments





Hardware Specifications

Models	PEX-P8R8i	PEX-P16R16i
Digital Input		
Isolation Voltage	2000 V_{DC} (Photo-couple)	
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}	
Contact Rating (Current)	1 A	
Operate Time	1 ms (typical)	
Release Time	7 ms (typical)	
Life	Mechanical: 5,000,000 ops. Electrical: 100,000 ops.	
Insulation Resistance	1000 MΩ	
General		
Bus Type	PCI Express x1	
Card ID	Yes (4-bit)	
Connectors	Female DB-37 x 1	Female DB-37 x 1, 40-pin box header x 1
Power Consumption	800 mA @ +5 V	
Operating Temperature	0 °C ~ +60 °C	
Humidity	5 ~ 85% RH, non-condensing	

Ordering Information

PEX-P8R8i CR	PCI Express, 8-ch Isolated Digital Input, 8-ch Relay Output Board Includes one CA-4002 D-Sub connector.
PEX-P16R16i CR	PCI Express, 16-ch Isolated Digital Input, 16-ch Relay Output Board Includes one CA-4037W cable and two CA-4002 D-Sub connectors.