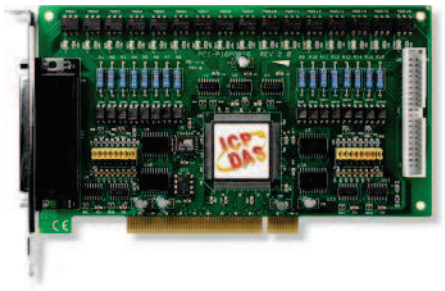
PCI-P16POR16

PCI Bus, 16-ch isolated digital input and
16-ch PhotoMos relay output Board



Features

- PCI Bus (5 V) interface
- 16-ch optically isolated digital input
- 16-ch PhotoMos Relay output
- 5000 Vrms photo-isolation protection
- Selectable DC signal input filter
- AC signal input with filter
- LED power indicator
- Long life and high reliability PhotoMos relay
- Low leakage current when PhotoMos relay is off
- No Contact bounce, no sparking
- No acoustical noise
- High speed DIO operation
- Support Plug & Play to obtain I/O resources
- No more manually setting of I/O address and IRQ

Introduction

The PCI-P16POR16 is a PCI card supporting both the 5 V PCI bus. Each contains 16 optically isolated input channels and 16 PhotoMos relay output channels. Both the isolated DI channels and the PhotoMos relay channels use a short optical transmission path to transfer an electronic signal between elements of a circuit and keep them electrically isolated. The PCI-P16POR16 provides 5000 Vrms for DI channel isolation protection, allowing the input signals to be completely floated so as to cut down ground loops, block voltage spikes, and isolate the host computer from damaging voltages. PhotoMos 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. The PCI-P16POR16 can be used in various applications, such as controlling the ON/OFF state of external devices, driving external relays or small power switches, activating alarms, contact closure, sensing external voltages or switches, etc.

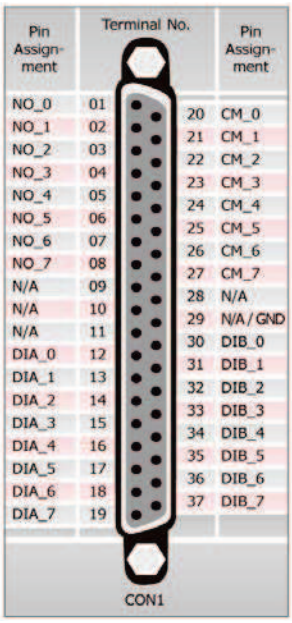
Software

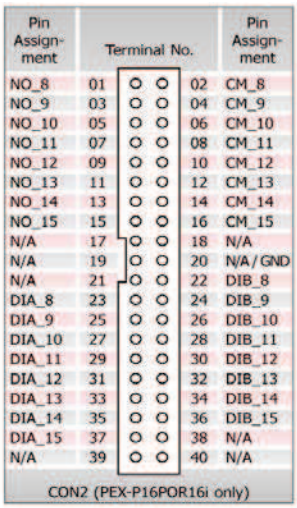
- DOS Lib and TC/BC/MSC sample program (with source codes)
- VB/VC/Delphi/BCB/VB.NET/C#.NET/VC.NET/MATLAB sample programs with source codes
- DLL and OCX SDK for 32-bit/64-bit Windows XP/2003/Vista/2008/7/8
- Support LabVIEW and Linux

Hardware Specifications

Digital Input	
Isolation Voltage	5000 Vrms (Photo-couple)
Channels	16
Input Logic Low	0~1 V
Input Logic High	5~24 V (AC 50 ~ 1 kHz)
Input Impedance	1.2 KΩ, 1 W
Relay Output	
Channels	16
Relay Type	PhotoMos Relay (Form A)
Contact Rating (Voltage)	300 V (AC peak or DC)
Contact Rating (Current)	130 mA
Operate Time	0.7 ms (Typical)
Release Time	0.05 ms (Typical)
Insulation Resistance	23 Ω
General	
Bus Type	5 V PCI, 32-bit, 33 MHz
Connectors	Female DB37 x1; 40-pin box header x1
Power Consumption	800 mA @ +5 V
Operating Temperature	0 °C ~ +60 °C
Storage Temperature	-20 °C ~ +70 °C
Humidity	5 ~ 85% RH, non-condensing

Pin Assignments





Ordering Information

PCI-P16POR16 CR	PCI Bus, 16-ch isolated digital input and 16-ch PhotoMos relay output board. (RoHs) Includes one CA-4037W cable and two CA-4002 D-Sub connectors.