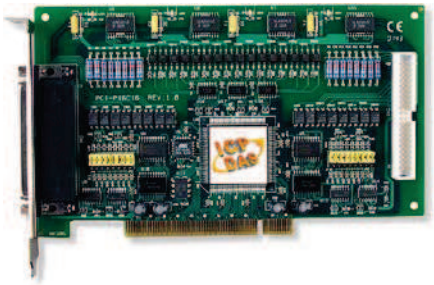
# PCI-P16C16

PCI Bus, 16-ch isolated digital input and
16-ch open-collector output Board (Sink, NPN)



## Features

- PCI Bus (5 V) interface
- 16-ch optically isolated digital input
- 16-ch open collector digital output
- Selectable DC signal input filter
- AC Signal input with filter
- External power status LED indicator
- Supports Plug & Play to obtain I/O resources
- No more manually settings of I/O address and IRQ

## Introduction

The PCI-P16C16 is a 5 V PCI card that support "Plug & Play" functionality to automatically obtain I/O resources from the BIOS. This card contains 16 optically isolated digital input channels and 16 open collector (sink, NPN) digital output channels. The DI channels provide 5000 Vrms isolation protection that allows the input signals to be completely floated so as to prevent ground loops and isolate the host computer from damaging voltages. The open collector output (DO) channels are typically used for alarm and warning notification, control of signal output, control of external circuits that require a higher voltage level, and signal transmission applications, etc. The PCI-P16C16 contains a single DB-37 connector and a single 40-pin box header and includes a 40-pin to DB-37 flat cable for easy wiring.

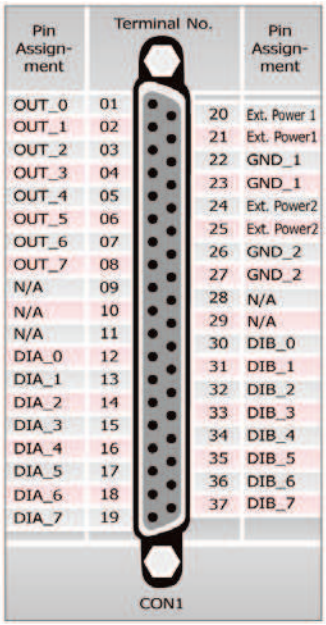
## Software

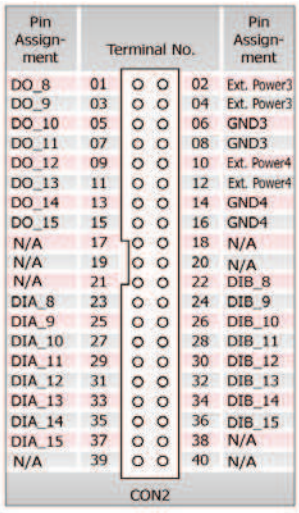
- DOS Lib and TC/BC/MSC sample program (with source codes)
- VB/VC/Delphi/BCB/VB.NET/C#.NET/VC.NET/MATLAB sample programs with source codes
- DLL and OCX SDK for 32-bit/64-bit Windows XP/2003/Vista/2008/7/8
- Support LabVIEW and Linux

## 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 |
| **Digital Output** | |
| Isolation Voltage | 5000 Vrms |
| Channels | 16 |
| Compatibility | Sink, Open Collector |
| Output Capability | DC: 600 mA/+30 V for one channel @ 100% duty |
| **General** | |
| Bus Type | 5 V PCI, 32-bit, 33 MHz |
| Connectors | Female DB37 x1;<br>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-P16C16 | PCI Bus, 16-ch isolated digital input and 16-ch open-collector output (Sink, NPN).<br>Includes one CA-4037W cable and two CA-4002 D-Sub connectors. |