

# PCI-P16C16

16-channel isolated digital input & 16-channel open-collector output board



## Features

- 32-bit +5V PCI Bus, Plug & Play
- 16-channel open-collector output
- 16-channel optical isolated digital input
- AC/DC signal input
- AC signal input with filter
- On-board LED indication for external power status

## Functional Description

The PCI-P16C16 provides 16-channel optically isolated input and 16-channel open-collector output. The PCI-P16C16 has one 37-pin D-sub connector and one 40-pin header. The 40-pin to DB-37 flat-cable can be fixed on the case wall.

## Applications

- Factory Automation
- Laboratory Automation
- Communication Switching
- Industrial Automation

## Specifications

### Isolated Digital Input

- Number of channels: 16
- Type: non-polarized OPTO-Isolated
- Isolated voltage: 5000V
- Photo-coupler: PC-814
- Input current: 20 mA max (24V)
- Input voltage: AC/DC 5-24V (AC 50~1KHz)
- Input impedance: 1.2K $\Omega$  / 1W
- Withstanding voltage: 1KV
- Response time: 20  $\mu$  S (without filter)  
2.2mS (with filter)

### Isolated Digital Output

- Number of channels: 16
- Type: open collector Darlington transistor
- Sink current: 400 mA/channel
- External power: 30V max
- Response time: 30KHz max

## General Specifications

- I/O connector:  
one 37-pin D-Sub & one 40-pin header
- Power requirements: +5V @ 320 mA
- Operating temperature: 0 ~ 60°C
- Operating humidity: 0 ~ 90% non-condensing
- Storage temperature: -20 ~ 80°C
- Dimensions: 180 mm x 105 mm

## Pin Assignment

OUT_0	1		20	Ext.Power 1
OUT_1	2		21	Ext.Power 1
OUT_2	3		22	GND 1
OUT_3	4		23	GND 1
OUT_4	5		24	Ext.Power 2
OUT_5	6		25	Ext.Power 2
OUT_6	7		26	GND 2
OUT_7	8		27	GND 2
	9		28	
	10		29	
	11		30	DIB_0
DIA_0	12		31	DIB_1
DIA_1	13		32	DIB_2
DIA_2	14		33	DIB_3
DIA_3	15		34	DIB_4
DIA_4	16		35	DIB_5
DIA_5	17		36	DIB_6
DIA_6	18		37	DIB_7
DIA_7	19			

## Ordering Information

### Standard

**PCI-P16C16:** 16-channel isolated digital input & 16-channel open-collector output board

### Optional

**DN-37:** 2x37-pin connector DIN-rail mounting terminal board

**DB-37:** 37-pin D-sub directly connector terminal board