



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; 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

Pin Assignment	Terminal No.	Pin Assignment	Pin Assignment	Terminal No.	Pin Assignment
OUT_0	01	20 Ext. Power 1	DO_8	01	02 Ext. Power3
OUT_1	02	21 Ext. Power1	DO_9	03	04 Ext. Power3
OUT_2	03	22 GND_1	DO_10	05	06 GND3
OUT_3	04	23 GND_1	DO_11	07	08 GND3
OUT_4	05	24 Ext. Power2	DO_12	09	10 Ext. Power4
OUT_5	06	25 Ext. Power2	DO_13	11	12 Ext. Power4
OUT_6	07	26 GND_2	DO_14	13	14 GND4
OUT_7	08	27 GND_2	DO_15	15	16 GND4
N/A	09	28 N/A	N/A	17	18 N/A
N/A	10	29 N/A	N/A	19	20 N/A
N/A	11	30 DIB_0	N/A	21	22 DIB_8
DIA_0	12	31 DIB_1	DIA_8	23	24 DIB_9
DIA_1	13	32 DIB_2	DIA_9	25	26 DIB_10
DIA_2	14	33 DIB_3	DIA_10	27	28 DIB_11
DIA_3	15	34 DIB_4	DIA_11	29	30 DIB_12
DIA_4	16	35 DIB_5	DIA_12	31	32 DIB_13
DIA_5	17	36 DIB_6	DIA_13	33	34 DIB_14
DIA_6	18	37 DIB_7	DIA_14	35	36 DIB_15
DIA_7	19		DIA_15	37	38 N/A
			N/A	39	40 N/A

Ordering Information

PCI-P16C16	PCI Bus, 16-ch isolated digital input and 16-ch open-collector output (Sink, NPN). Includes one CA-4037W cable and two CA-4002 D-Sub connectors.
------------	--