

# I/O Cards

## PIO-D48U

Universal PCI, 48-ch OPTO-22 Compatible  
DIO Board



### Features ▶▶▶▶

- Universal PCI (3.3 V/5 V) interface
- Emulate two industrial-standard 8255 PPI port (mode 0)
- D/O with higher driving capability
- One 16-bit event counter
- 48 buffered TTL digital I/O lines
- Six 8-bit bi-direction I/O lines
- Card ID function (SMD Switch)
- D/I with pull-high and pull-low jumpers
- DIO response time is about 1 us (1 MHz max.)
- One 32-bit programmable internal timer
- 4 Interrupt sources

### Introduction

The PIO-D48U is the new generation product that ICP DAS provides to meet RoHS compliance requirement and is designed as completely compatible with the PIO-D48. Users can replace the PIO-D48 by the PIO-D48U directly without software/driver modification.

The PIO-D48U supports 3.3 V/5 V PCI bus. These cards provide 48 TTL digital I/O lines, and these lines are grouped into six 8-bit bi-direction ports. Every three 8-bit ports are grouped as port A (PA), port B (PB) and port C (PC) on a connector, and the port C can be split into 2 nibble-wide(4-bit) parts. All ports are configured as inputs upon power-up or reset.

The PIO-D48U also adds a Card ID switch and pull-high/pull-low resistors for DI on board. Users can set Card ID on a board and recognize the board by the ID via software when using two or more PIO-D48U cards in one computer. The pull-high/pull-low resistors allow the DI status to be specified when the DI channels are unconnected; the DI status will remain in high or low status other than floating.

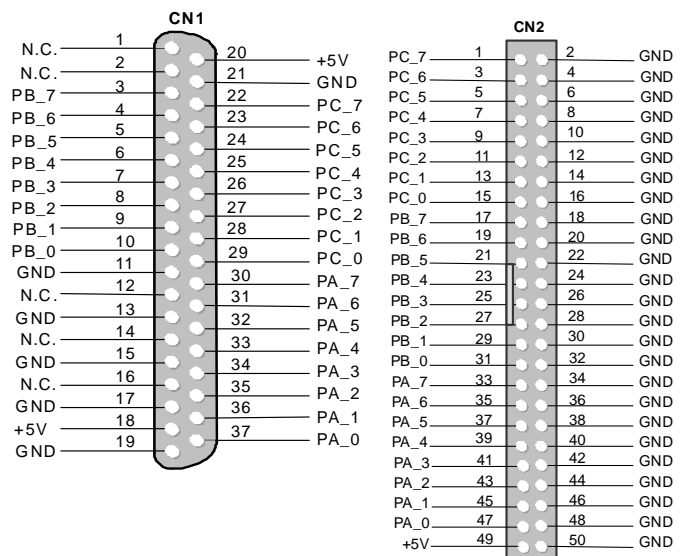
### Software

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

### Hardware Specifications

Digital I/O	
I/O Channels	48-ch, 5 V TTL
Input Logic Low	0.8 V max.
Input Logic High	2.4 V min.
Output Source Current	32 mA max.
Output Sink Current	64 mA max.
Programmable Interrupts	4
General	
Bus Type	Universal PCI, 3.3 V and 5 V, 33 MHz, 32-bit, Plug and Play
Connectors	Female Db-37 x1, 50-pin Male box header x1
Power Consumption	900 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-D24U CR	Universal PCI, 48-ch TTL DIO Board (RoHS)
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