

# I/O Cards

## PIO-D144U/PIO-D168U

Universal PCI, 144/168-ch OPTO-22  
Compatible DIO Board



### Features ▶▶▶▶

- Universal PCI (3.3 V/5 V) interface
- Emulate 6/7 industrial-standard 8255 PPI port (mode 0)
- D/O with higher driving capability
- 144/168-ch 5 V TTL DIO
- Programmable interrupt
- Card ID function (SMD Switch)
- Output status Readback
- DIO response time is about 1 us (1 MHz max.)
- 4 Interrupt sources

### Introduction

The PIO-D144U/D168U card is the new generation product that ICP DAS provides to meet RoHS compliance requirement. The new PIO-D144U/D168U card is designed as a drop-in replacement for the PIO-D144/D168, and users can replace the PIO-D144/D168 by the PIO-D144U/D168U directly without software/driver modification.

The PIO-D144U/D168U universal PCI card supports 3.3 V/5 V PCI bus. These cards provide 144/168 TTL digital I/O lines, and these lines are grouped into eighteen 8-bit bi-direction ports. Every three ports on a connector are grouped and named as port A (PA), port B (PB) and port C (PC) respectively. All ports are configured as inputs upon power-up or reset.

The PIO-D144U/D168U also adds a Card ID switch on-board. Users can set Card ID and then recognizes the board by the ID via software when using two or more PIO-D144U/D168U cards in one computer.

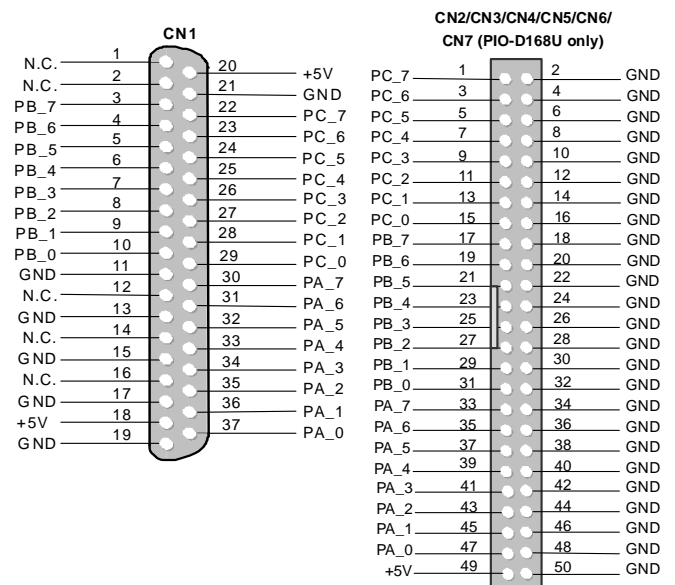
### Software

- 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

Models	PIO-D144U	PIO-D168U
<b>Digital I/O</b>		
I/O Channels	144-ch, 5 V TTL	168-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	
<b>General</b>		
Bus Type	Universal PCI, 3.3 V and 5 V, 33 MHz, 32-bit, Plug and Play	
Connectors	Female DB-37 x 1, 50-pin box header x5	Female Db-37 x1, 50-pin box header x6
Power Consumption	1300 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-D144U CR	Universal PCI, 144-ch TTL DIO Board (RoHS)
PCI-D168U CR	Universal PCI, 168-ch TTL DIO Board (RoHS)