

# I/O Cards

## PIO-D24U/PIO-D56U

Universal PCI, 24/56-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
- 24/56 buffered TTL digital I/O lines
- Double side SMD, short card
- Three 8-bit bi-direction I/O ports
- Card ID function (SMD Switch)
- 4 Interrupt sources
- DIO response time is about 1 us(1 MHz max.)

### Introduction

The PIO-D24U/D56U cards are the new generation product that ICP DAS provides to meet RoHS compliance requirement and is designed as completely compatible with the PIO-D24/D56. Users can replace the PIO-D24/D56 by the PIO-D24U/D56U directly without software/driver modification.

The PIO-D24U/D56U supports 3.3 V/5 V PCI bus. The PIO-D24U/D56U consists of three 8-bit bi-direction ports. The 8-bit ports are named as port A (PA), port B (PB) and port C (PC) respectively. All ports are configured as inputs upon power-up or reset. In addition, the PIO-D56/D56U provides additional 16-bit digital inputs and 16-bit digital outputs.

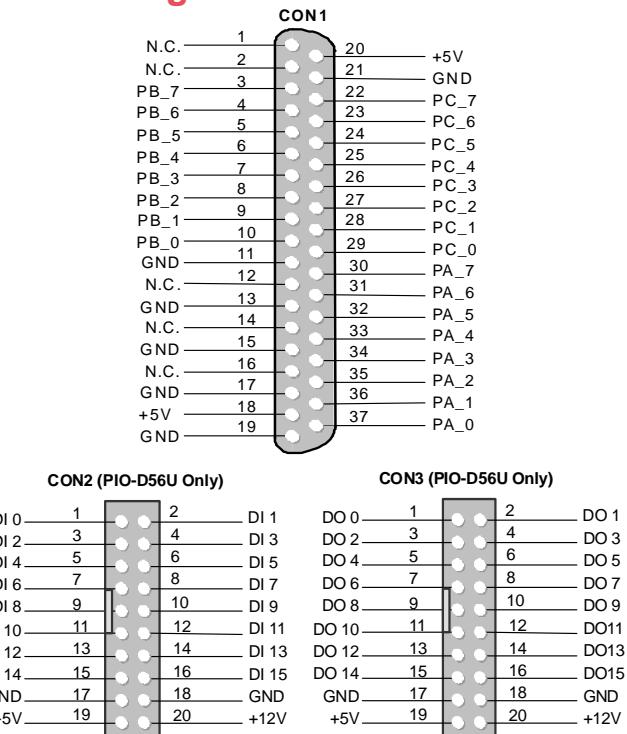
### Software

- 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-D24U	PIO-D56U
<b>Digital I/O</b>		
I/O Channels	24-ch, 5 V TTL	56-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	Female Db-37 x1, 20-pin Male box header x2
Power Consumption	420 mA @ + 5 V	580 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, 24-ch TTL DIO Board (RoHS)
PCI-D56U CR	Universal PCI, 56-ch TTL DIO Board (RoHS)