

# I/O Cards

## PIO-D96U

Universal PCI, 96-ch OPTO-22 Compatible DIO Board



### Features ▶▶▶▶

- Universal PCI (3.3 V/5 V) interface
- Emulate 4 industrial-standard 8255 PPI port (mode 0)
- D/O with higher driving capability
- 96-ch 5 V TTL DIO
- Bi-direction programmable I/O ports under software control
- Card ID function (SMD Switch)
- One 32-bit programmable internal timer
- DIO response time is about 1 us (1 MHz max.)
- 4 Interrupt sources

### Introduction

The PIO-D96U card is the new generation product that ICP DAS provides to meet RoHS compliance requirement. The new PIO-D96U card is designed as a drop-in replacement for the PIO-D96, and users can replace the PIO-D96 by the PIO-D96U directly without software/driver modification.

The PIO-D96U universal PCI card supports 3.3 V/5 V PCI bus. These cards provide 96 TTL digital I/O lines that consist of twelve 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-D96U also adds a Card ID switch on-board. Users can set Card ID and then recognize the board by the ID via software when using two or more PIO-D96U 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

Digital I/O	
I/O Channels	96-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 DB37 x1, 50-pin box header x3
Power Consumption	600 mA @ +5 V
Operating Temperature	0 °C ~ +60 °C
Storage Temperature	-20 °C ~ +70 °C
Humidity	5 ~ 85% RH, non-condensing

### Pin Assignments

CON1				CN1/CN2/CN3			
N.C.	1	20	+5V	PC_7	1	2	GND
N.C.	2	21	GND	PC_6	3	4	GND
PB_7	3	22	PC_7	PC_5	5	6	GND
PB_6	4	23	PC_6	PC_4	7	8	GND
PB_5	5	24	PC_5	PC_3	9	10	GND
PB_4	6	25	PC_4	PC_2	11	12	GND
PB_3	7	26	PC_3	PC_1	13	14	GND
PB_2	8	27	PC_2	PC_0	15	16	GND
PB_1	9	28	PC_1	PB_7	17	18	GND
PB_0	10	29	PC_0	PB_6	19	20	GND
GND	11	30	PA_7	PB_5	21	22	GND
GND	12	31	PA_6	PB_4	23	24	GND
N.C.	13	32	PA_5	PB_3	25	26	GND
GND	14	33	PA_4	PB_2	27	28	GND
N.C.	15	34	PA_3	PB_1	29	30	GND
GND	16	35	PA_2	PB_0	31	32	GND
N.C.	17	36	PA_1	PA_7	33	34	GND
GND	18	37	PA_0	PA_6	35	36	GND
+5V	19			PA_5	37	38	GND
				PA_4	39	40	GND
				PA_3	41	42	GND
				PA_2	43	44	GND
				PA_1	45	46	GND
				PA_0	47	48	GND
				+5V	49	50	GND

### Ordering Information

PIO-D96U CR	Universal PCI, 96-ch TTL DIO Board (RoHS)
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