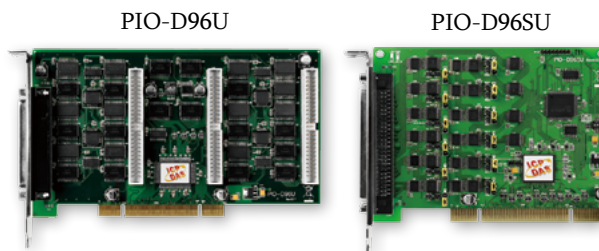


PIO-D96U/PIO-D96SU

Universal PCI, 96-channel Digital I/O Board



Features

- Universal PCI (3.3 V/5 V) Interface, Plug & Play
- 96-channel Digital I/O
- Twelve 8-bit Bi-directional Programmable I/O Ports
- All I/O Lines Buffered on the Board
- 4-channel Interrupt Source
- Buffer Output for Higher Driving Capability
- Supports Card ID (SMD Switch)
- Supports DO Status Readback (Register Level)
- DI/O Response Time is about 1 μ s (1 MHz)

Introduction

The PIO-D96U/D96SU card is designed as a direct replacement for the PIO-D96, without requiring any modification to the software or the driver.

The PIO-D96U provides four connectors for I/O wiring, while the PIO-D96SU provides a single high-density connector that reduces the amount of installation space required for the card in the computer.

The PIO-D96U/D96SU Universal PCI card supports the 3.3 V/5 V PCI bus, and provides 96 TTL Digital I/O lines that consist of twelve 8-bit bi-directional ports. Each group of three 8-bit ports is arranged on the connector as Port A (PA), Port B (PB) and Port C (PC), respectively, and all ports are configured as inputs on power-up or after a reset.

The PIO-D96U/D96SU card also includes an onboard Card ID switch that enables the board to be recognized via software if two or more boards are installed in the same computer.

Hardware Specifications

Models	PIO-D96U	PIO-D96SU
Programmable DIO		
Channels	96	
Digital Input		
Compatibility	5 V/TTL	
Input Voltage	Logic 0: 0.8 V Max. ; Logic 1: 2.0 V Min.	
Response Speed	1 MHz	
Digital Output		
Compatibility	5 V/TTL	
Output Voltage	Logic 0: 0.4 V Max.; Logic 1: 2.4 V Min.	
Output Capability	Sink: 6 mA @ 0.33 V Source: 6 mA @ 4.77 V	
Response Speed	1 MHz	
General		
Bus Type	3.3 V/5 V Universal PCI, 32-bit, 33 MHz	
Card ID	Yes (4-bit)	
Connectors	Female DB37 x 1 50-pin Box Header x 3	Female SCSI II 100-pin x 1
Power Consumption	600 mA @ +5 V	
Operating Temperature	0°C to +60°C	
Humidity	5 to 85% RH, Non-condensing	

Ordering Information

PIO-D96U CR	Universal PCI, 96-channel Digital I/O Board (RoHS).
PIO-D96SU CR	Universal PCI, 96-channel Digital I/O Board (SCSI II Connector, RoHS)

Software

Drivers

- 32/64-bit Windows XP/2003/2008/Vista/7/8
- Linux
- DASyLab

Sample Programs

- DOS Lib and TC Demo
- LabVIEW Toolkit
- VB/VC/Delphi/BCB/MATLAB Demo
- VB.NET/C#.NET/VC.NET Demo

Pin Assignments

PIO-D96U			PIO-D96SU		
Pin Assignment	Terminal No.	Pin Assignment	Pin Assignment	Terminal No.	Pin Assignment
N.C.	01	20 +5V	PA_00	01	51 PA_10
N.C.	02	21 GND	PA_01	02	52 PA_11
PB_7	03	22 PC_7	PA_02	03	53 PA_12
PB_6	04	23 PC_6	PA_03	04	54 PA_13
PB_5	05	24 PC_5	PA_04	05	55 PA_14
PB_4	06	25 PC_4	PA_05	06	56 PA_15
PB_3	07	26 PC_3	PA_06	07	57 PA_16
PB_2	08	27 PC_2	PA_07	08	58 PA_17
PB_1	09	28 PC_1	PB_00	09	59 PB_10
PB_0	10	29 PC_0	PB_01	10	60 PB_11
GND	11	30 PA_7	PB_02	11	61 PB_12
N.C.	12	31 PA_6	PB_03	12	62 PB_13
GND	13	32 PA_5	PB_04	13	63 PB_14
N.C.	14	33 PA_4	PB_05	14	64 PB_15
GND	15	34 PA_3	PB_06	15	65 PB_16
N.C.	16	35 PA_2	PB_07	16	66 PB_17
GND	17	36 PA_1	PC_00	17	67 PC_10
+5 V	18	37 PA_0	PC_01	18	68 PC_11
GND	19		PC_02	19	69 PC_12
			PC_03	20	70 PC_13
			PC_04	21	71 PC_14
			PC_05	22	72 PC_15
			PC_06	23	73 PC_16
			PC_07	24	74 PC_17
			GND	25	75 GND
			PA_20	26	76 PA_30
			PA_21	27	77 PA_31
			PA_22	28	78 PA_32
			PA_23	29	79 PA_33
			PA_24	30	80 PA_34
			PA_25	31	81 PA_35
			PA_26	32	82 PA_36
			PA_27	33	83 PA_37
			PA_28	34	84 PB_30
			PB_21	35	85 PB_31
			PB_22	36	86 PB_32
			PB_23	37	87 PB_33
			PB_24	38	88 PB_34
			PB_25	39	89 PB_35
			PB_26	40	90 PB_36
			PB_27	41	91 PB_37
			PC_20	42	92 PC_30
			PC_21	43	93 PC_31
			PC_22	44	94 PC_32
			PC_23	45	95 PC_33
			PC_24	46	96 PC_36
			PC_25	47	97 PC_37
			PC_26	48	98 PC_38
			PC_27	49	99 PC_39
			+ 5 V	50	100 + 5 V

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PCI Bus Data Acquisition Boards