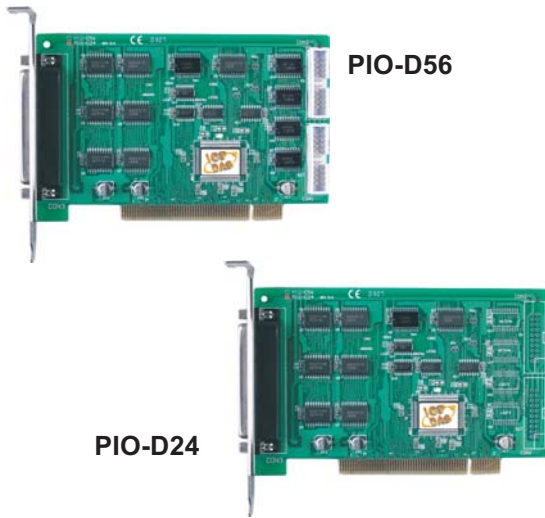


PIO-D56/D24

PCI bus 56/24-bit DIO board



PIO-D56

PIO-D24

Functional Description

The PIO-D56/D24 consists of one 24-bit port, one 16-bit input port and one 16-bit output port (only for PIO-D56). The 24-bit port emulate mode 0 of the industry standard 8255 programmable peripheral interface (PPI) chip. Each PPI offers three 8-bit ports, Port A, Port B and Port C. The 24-bit bi-directional ports are configured as inputs upon power-up or reset.

Applications

- Factory automation
- Laboratory automation
- Communication switching
- Industrial automation

Specifications

Digital Input

- All inputs are TTL compatible
- Logic high voltage: 2.4V min
- Logic low voltage: 0.8V max

Digital Output

- All outputs are TTL compatible
- OPTO-22 output (CON3)
 - Sink current: 64 mA max
 - Source current: 32 mA max
- 16-channel output (CN1)
 - Sink current: 8 mA max
 - Source current: 0.4 mA max

General Specifications

- I/O connector: one D-sub 37-pin female
two 20-pin ribbon male (PIO-D56)
- Power requirements: +5V@580 mA (PIO-D56)
+5V@420 mA (PIO-D24)
- Operating temperature: 0 ~ 60°C
- Operating humidity: 0 ~ 90% non-condensing
- Storage temperature: -20 ~ 80°C
- Dimensions: 143 mm x 105 mm

Features

- 32-bit +5V PCI bus, Plug & Play
- 56-bit digital I/O (PIO-D56)
- 24-bit digital I/O (PIO-D24)
- High driving capability
- Four interrupt sources: PC0, PC1, PC2, PC3
- DIO response time is about 0.77 us (1.3 MHz max.)

Pin Assignment

CON3				CON1			
PA_0	37	19	GND	DI0	1	2	DI1
PA_1	36	18	Vcc	DI2	3	4	DI3
PA_2	35	17	GND	DI4	5	6	DI5
PA_3	34	16	N.C.	DI6	7	8	DI7
PA_4	33	15	GND	DI8	9	10	DI9
PA_5	32	14	N.C.	DI10	11	12	DI11
PA_6	31	13	GND	DI12	13	14	DI13
PA_7	30	12	N.C.	DI14	15	16	DI15
PC_0	29	11	GND	GND	17	18	GND
PC_1	28	10	PB_0	+5V	19	20	+12V
PC_2	27	9	PB_1				
PC_3	26	8	PB_2	CON2			
PC_4	25	7	PB_3	DO0	1	2	DO1
PC_5	24	6	PB_4	DO2	3	4	DO3
PC_6	23	5	PB_5	DO4	5	6	DO5
PC_7	22	4	PB_6	DO6	7	8	DO7
GND	21	3	PB_7	DO8	9	10	DO9
Vcc	20	2	N.C.	DO10	11	12	DO11
		1	N.C.	DO12	13	14	DO13
				DO14	15	16	DO15
				GND	17	18	GND
				+5V	19	20	+12V

Ordering Information

Standard

- PIO-D56:** PCI bus 56-bit DIO board
- PIO-D24:** PCI bus 24-bit DIO board

Optional

- DB-24PD:** 24-channel isolated D/I board
- DB-24RD:** 24-channel relay board
- DB-24PRD:** 24-channel power relay board
- DB-16P8R:** 16-channel isolated D/I and 8-channel relay output board
- DB-24POR:** 24-channel PhotoMOS relay output board
- DB-24SSR:** 24-channel solid state relay output board
- DB-24C:** 24-channel open-collector output board
- DB-24OD:** 24-channel open-drain output board
- DB-16P:** 16-channel OPTO-isolated digital input board
- DB-16R:** 16-channel relay output board
- DN-20:** 2x20 pin header DIN-rail mounting terminal board
- DN-37:** 2x37 pin header DIN-rail mounting terminal board
- ADP-20/PCI:** 20-pin extender