



PIO-D48

PCI BUS 48-BIT OPTO-22 COMPATIBLE DIO BOARD



Functional Description

The PIO-D48 provides 48 TTL digital I/O lines. The PIO-D48 consists of two 24-bit bi-direction ports. Each 24-bit port supports three 8-bit groups A, B, C. Each 8-bit group can be configured to function as either inputs or latched outputs. All groups are configured as inputs upon power-up or reset. Outputs of the I/O buffers are pulled up through 10K resistors to +5VDC. Outputs can be changed to pull down by jumper selection on the board. This pull-up/pull-down mechanism assures that there are no erroneous outputs at power-up until the board is initialized by application software.

The PIO-D48 has one D-Sub connector and one 50-pin flat-cable header. The header can be connected to a 50-pin flat-cable. The flat-cable can be connected to ADP-37/PCI or ADP-50/PCI adapters. The adapter can be fixed on the chassis. It can be installed in a 5 V PCI bus and can support truly " Plug & Play".

Features

- PCI Bus
- Up to 48 channels of digital I/O
- All I/O lines buffered on the board
- Eight-bit groups independently selectable for I/O on each 24-bit port
- Tri-stateable I/O ports under software control
- SMD, short card, power saving
- Connects directly to DB-24PD, DB-24RD, DB-24PRD, DB-24POR, DB-24SSR, DB-24C or any OPTO-22 compatible daughter boards

- One 32-bit programmable internal pacer timer
- One 16-bit event counter
- Interrupt source : 4 channels
- Pull-up or pull-down resistors on I/O lines
- Emulate two industrial-standard 8255 mode 0
- high output driving capability
- One D-Sub connector, one 50-pin flat-cable heade
- Automatically detected by Windows 95/98/NT
- No base address or IRQ switches to set

Applications

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

Specifications

- All inputs are TTL compatible
Logic high voltage: 2.4V (Min.)
Logic low voltage: 0.8V (Max.)
- All outputs are TTL compatible
Sink current: 64 mA (Max.)
Source current: 32 mA (Max.)
- Power consumption: +5V / 500mA

Environmental

- Operating Temperature: 0 to 60 °C
- Storage Temp.: -20 °C to 80 °C
- Humidity: 0 to 90 % non-condensing
- Dimension: 156 mm x 105 mm

Software

- PCI-DIO Development Toolkit for DOS
- PCI-DIO Development Toolkit for Win95
- PCI-DIO Development Toolkit for WinNT

Order Description

- PIO-D48: PCI bus 48-bit opto-22 DIO board
- PIO-D48/S: PIO-D48 with ADP-37/PCI adapter

Options

- 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
- ADP-37/ PCI adapter: 50-pin opto-22 ports to DB-37 for PCI Bus I/O board
- ADP-50/PCI: Extender, extends 50-pin flat-cable connectors to PC slot windows, for PCI Bus I/O board
- PCI-DIO LabVIEW Development Toolkit for Win95
- PCI-DIO LabVIEW Development Toolkit for WinNT

Pin Assignment
CN1

PA_0	37	●	●	19	GND
PA_1	36	●	●	18	Vcc
PA_2	35	●	●	17	GND
PA_3	34	●	●	16	N.C.
PA_4	33	●	●	15	GND
PA_5	32	●	●	14	N.C.
PA_6	31	●	●	13	GND
PA_7	30	●	●	12	N.C.
PC_0	29	●	●	11	GND
PC_1	28	●	●	10	PC_0
PC_2	27	●	●	09	PC_1
PC_3	26	●	●	08	PC_2
PC_4	25	●	●	07	PC_3
PC_5	24	●	●	06	PC_4
PC_6	23	●	●	05	PC_5
PC_7	22	●	●	04	PC_6
GND	21	●	●	03	PC_7
Vcc	20	●	●	02	N.C.
		●	●	01	N.C.

CN2

PC 7	1	●	●	2	GND
PC 6	3	●	●	4	GND
PC 5	5	●	●	6	GND
PC 4	7	●	●	8	GND
PC 3	9	●	●	10	GND
PC 2	11	●	●	12	GND
PC 1	13	●	●	14	GND
PC 0	15	●	●	16	GND
PB 7	17	●	●	18	GND
PB 6	19	●	●	20	GND
PB 5	21	●	●	22	GND
PB 4	23	●	●	24	GND
PB 3	25	●	●	26	GND
PB 2	27	●	●	28	GND
PB 1	29	●	●	30	GND
PB 0	31	●	●	32	GND
PA 7	33	●	●	34	GND
PA 6	35	●	●	36	GND
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
Vcc	49	●	●	50	GND