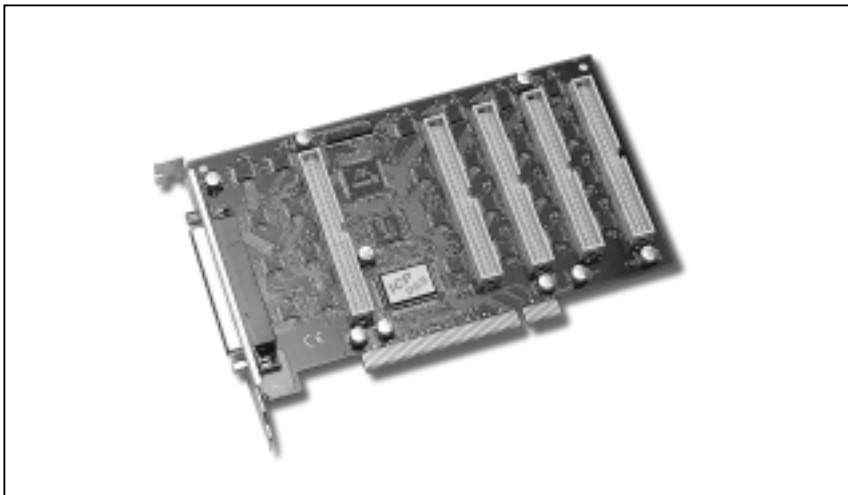# PIO-D144
PCI BUS 144-BIT OPTO-22 DIO BOARD

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

Functional Description

The PIO-D144 provides 144 TTL digital I/O lines. The PIO-D144 consists of six 24-bit bi-direction ports. Each 24-bit port supports three 8-bit groups A, B and C. Each 8-bit group can be configured to function as either inputs or latched outputs. All ports are configured as inputs upon power-up or reset.

The PIO-D144 has one D-Sub connector and five 50-pin flat-cable headers. Each header can be connected to a 50-pin flat-cable. The flat-cable can be connected to ADP-37/PCI or ADP-50/PCI adapter. 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, Double side SMD, short card, power saving
- Connects directly to DB-24PD, DB-24RD, DB-24PRD, DB-16P8R, DB-24POR, DB-24SSR, DB-24C or any OPTO-22 compatible daughterboards
- Up to 144 channels of Digital I/O
- Interrupt source: 4 channels
- High output driving capability
- one D-Sub connector, five 50-pin flat cable connector
- 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 / 1.1 A

Environmental

- Operating Temperature: 0 to 60°C
- Storage Temp.: -20°C to 80 °C
- Humidity: 0 to 90 % non-condensing
- Dimension: 180 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-D144: PCI bus 144-bit opto-22 DIO board

Options

- DB-24PD: 24 channel isolated D/I board

Pin Assignment
CON1

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

CON2, CON3, CON4, CON5 & CON6

Signal	Pin		Pin	Signal
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