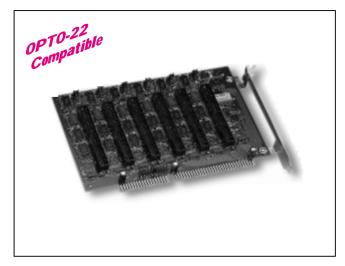


**DIO-144** 144-BIT OPTO-22 DIO Board



# **Functional Description**

The DIO-144 Provides 144 TTL digital I/O lines. The DIO-144 emulates 8255 mode 0 and has a increased output current of 15 mA (source) and 64 mA (sink), this allows it to control LED, relay and others. The DIO-144 consists of eighteen 8 bit bi-directional ports and 2 input lines for interrupt enable and interrupt. The three 8 bit port are named port A(PA), port B(PB), port C(PC). The port C can be split into two four bit. All port are configured as inputs upon power-up or resetting. The DIO-144 use 4 I/O address. The base address is selectable from 200 to 3FF hex. The interrupt signal can be connected to any of the interrupt levels 2 through 7.

## **Features**

- Double side SMT, half card, power saving
- 144 digital I/O lines
- Emulate six industrial-standard 8255 mode 0
- Buffer output for higher driving capability than 8255
- Programmable interrupt handling
- Six 50-pin flat cable connector
- Output status readback
- Connects directly to DB-24P, DB-24R, DB-24PR, DB-24C, DB-24POR, DB-24SSR, DB-16P8R or any OPTO-22 compatible daughter board
- IRQ LEVEL: IRQ3~IRQ15
- Interrupt Trigger by: Event/Timer/Port C3

## **Applications**

- Factory automation
- Product test
- Test automation
- Digital I/O control
- Alarm monitoring

## **Specifications**

- Logic inputs and outputs Input logic high voltage: 2.0V(Min)/5.0V(Max) Input logic low voltage: -0.5V(Min)/0.8V(Max)
- Input load current: -0.45mA(Min)/+70µA
- Output sink current: +64mA(Max)
- Output source current: -15mA
- All outputs and inputs are TTL Compatible
- Power consumption: +5V @ 900 mA typical
- Environment:

Operating Temperature: 0 to 50°C Storage Temperature: -20°C to 70°C Humidity: 0 to 90 % Dimensions:182mm x 110 mm

#### **Software**

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

# **Ordering Description**

DIO-144: 144-bit OPTO-22 DIO Board

## **Options**

- DB-24P: 24-channel OPTO-isolated input terminal board
- DB-24R: 24-channel relay terminal board
- DB-24PR: 24-channel power relay terminal board
- DB-24C: 24-channel Open-Collector Output board
- DB-24POR: 24-channel Photo Mos relay Output board
- DB-24SSR: 24-channel Solid State relay Output board
- DB-16P8R: 16-channel opto-isolated digital input & 8-channel relay output board
- DN-50: I/O connector block with DIN-Rail mounting and 50-PIN Header
- ADP-37: 37-pin Extender
- ADP-50: 50-pin Extender
- DIO LabVIEW Development Toolkit for Win95
- DIO LabVIEW Development Toolkit for WinNT