



Bridging the Gap between Real World and Computer

DIO3216B



32-Channel Digital I/O Card (16 DI and 16 DO Photo-Coupler Isolated)

Features

- ▶ 16 isolated DI and 16 isolated DO channels
- ▶ High voltage isolation on all isolated channel (2500Vac)
- ▶ Software debounce : No debounce, 100Hz, 200Hz, 1KHz
- ▶ No output transition during start-up
- ▶ Output status read back
- ▶ External triggered interrupt (on IN07~IN00)
- ▶ Keep output state after hot reset (jumper selectable)

Introduction

The DIO3216B card offers 16 isolated digital input channels and 16 isolated digital output channels for the PCI bus. All the I/O's provide good noise immunity. It can be used in industrial automation and lab automation applications.

Bit manipulation and output status read back function make this card very easy to program. 16 identical cards with different ID can be hooked on PCI-bus.

Dll is provided for WinXP, Win7 and later or LINUX platform and sample programs come with VB source code.

Applications

- ▶ Accept :
 - P.B./M.S./EMG./Contact -
 - Start/Stop/Limit switch/sensor
 - Interlock/selective Sw. Proximity switch
 - Aux. contact of transducer / detector
- ▶ As I/O of S/W PLC Controller
- ▶ Industrial ON/OFF control

Specifications

(With Matched Wiring Board)

Input Section

- ▶ Input channel : 16 isolated digital input
- ▶ Software debounce : No debounce, 100Hz, 200Hz, 1KHz
- ▶ ON State : 2.8Vdc(max) 4.5mA(min)
- ▶ OFF State : 8Vdc(min) 3mA(max)
- ▶ Switching speed : 10KHz max. (limit by photo coupler speed and debounce filter)
- ▶ Interrupt : IN07 ~ IN00

Output Section

- ▶ Output channel : 16 isolated digital output
- ▶ Output Range : Open collector 0Vdc ~ 45Vdc (on card)
- ▶ Output Rating : 3A @250Vac, 30Vdc (Relay)
 - 1A @ 24Vdc (PMOS)
 - 2A @ 240Vac (SSR)
- ▶ Sink Current : 500mA(peak) per channel (on card)
- ▶ Switching Speed : 20KHz(max)(MOS out only)

Main Card General

- ▶ Card ID : 4-bit
- ▶ Insulation Resistance : 100M Ohm (min) at 1000Vdc
- ▶ Isolation Voltage : 2500Vac 1Min
- ▶ Connector : Two 20-pin male flat-cable connectors
- ▶ Operation Temperature : 0 °C ~ +70 °C
- ▶ Storage Temperature : -20 °C ~ +80 °C
- ▶ Operation Humidity : 5~95% RH, non-condensing
- ▶ Dimensions : 130(W)*102(H)mm, 5.2(W)*4.1(H)in

Pin Assignments

ADP9201_JM1

EXT +24Vin	20 19	EXT +24Vin
EXTG	18 17	EXTG
EXT_OUT07	16 15	EXT_IN07
EXT_OUT06	14 13	EXT_IN06
EXT_OUT05	12 11	EXT_IN05
EXT_OUT04	10 9	EXT_IN04
EXT_OUT03	8 7	EXT_IN03
EXT_OUT02	6 5	EXT_IN02
EXT_OUT01	4 3	EXT_IN01
EXT_OUT00	2 1	EXT_IN00

ADP9201_JM2

EXT +24Vin	20 19	EXT +24Vin
EXTG	18 17	EXTG
EXT_OUT17	16 15	EXT_IN17
EXT_OUT16	14 13	EXT_IN16
EXT_OUT15	12 11	EXT_IN15
EXT_OUT14	10 9	EXT_IN14
EXT_OUT13	8 7	EXT_IN13
EXT_OUT12	6 5	EXT_IN12
EXT_OUT11	4 3	EXT_IN11
EXT_OUT10	2 1	EXT_IN10



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Software Support

► PC OS Support

WinXP, Win7 and later or Linux O.S.
Embedded XP, Win CE (at request)

► Library

DLLs, VI library

► Develop Software

Visual C++, Visual Basic,
Borland C/C++ Builder, LabVIEW etc

► Example Source Code

Visual Basic

Ordering Information

- **DIO3216B** : 32-channel Digital I/O Card for 16 DI and 16 DO Photo-coupler isolated
- **ADP9201DIN(R)** : DIN rail mounted wiring board with 16 I/O LED indicators and Relay output for 8 DI, 8DO P.79
- **ADP9201DIN(P)** : DIN rail mounted wiring board with 16 I/O LED indicators and PMOS output for 8 DI, 8DO P.79
- **ADP9201DIN(S)** : DIN rail mounted wiring board with 16 I/O LED indicators and SSR output for 8 DI, 8DO P.79
- **JS51053** : DIN rail mounted dummy wiring board for ADP9201_JM1/ADP9201_JM2 I.12
- **M23207** : 20-pin flat cable 1.5 M for ADP9201_JM1/ADP9201_JM2 I.17
- **M23209** : 20-pin flat cable 3.0 M for ADP9201_JM1/ ADP9201_JM2 I.17

Note