

Bridging the Gap between Real World and Computer

DIO6208/16



16/32-Channel Digital I/O PCI-104 Module (8/16 DI and 8/16 DO Photo-Coupler Isolated)

Features

- ▶ 8 isolated DI and 8 isolated DO channels (DIO6208)
16 isolated DI and 16 isolated DO channels (DIO6216)
- ▶ 32-bit timer with time up interrupt
- ▶ 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 DIO6208/16 card offers 8/16 isolated digital input channels and 8/16 isolated digital output channels for the PCI-104. 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. 4 identical cards with different ID can be hooked on PCI-104.

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 : 8 isolated digital input (DIO6208)
16 isolated digital input (DIO6216)
- ▶ Software debounce : No debounce, 100Hz, 200Hz, 1KHz
- ▶ ON State : 2.8Vdc(max) 4.5mA(min)
- ▶ OFF State : 8Vdc(min) 3mA(max)
- ▶ Switching Speed : limited by photo-coupler speed
- ▶ Interrupt : IN07~IN00

Output Section

- ▶ Output channel : 8 isolated digital output (DIO6208)
16 isolated digital output (DIO6216)
- ▶ Output Range : Open collector 0Vdc ~ 45Vdc (on card)
- ▶ Output Rating : 3A @250Vac, 30Vdc (Relay)
1A @ 24Vdc (PMOS)
2A @ 240Vac (SSR)(with wiring board)
- ▶ Sink Current : 500mA(peak) per channel (on card)
- ▶ Switching Speed : 20KHz(max)(MOS out only)

Timer

- ▶ Length : 32 bit @1us
- ▶ Interrupt : time up interrupt

Main Card General

- ▶ Card ID : 0~3
- ▶ Insulation Resistance : 100M Ohm (min) at 1000Vdc
- ▶ Isolation Voltage : 2500Vac 1Min
- ▶ Connector : One 20-pin male flat-cable connectors (DIO6208)
Two 20-pin male flat-cable connectors (DIO6216)
- ▶ Operation Temperature : 0 °C ~ +70 °C
- ▶ Storage Temperature : -20 °C ~ +80 °C
- ▶ Operation Humidity : 5~95% RH, non-condensing
- ▶ Dimensions : 90(W)*96(H)mm, 3.6(W)*3.8(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_IN10	1 2	EXT_OUT10
EXT_IN11	3 4	EXT_OUT11
EXT_IN12	5 6	EXT_OUT12
EXT_IN13	7 8	EXT_OUT13
EXT_IN14	9 10	EXT_OUT14
EXT_IN15	11 12	EXT_OUT15
EXT_IN16	13 14	EXT_OUT16
EXT_IN17	15 16	EXT_OUT17
EXTG	17 18	EXTG
EXT +24Vin	19 20	EXT +24Vin



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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, Linux

Ordering Information

- **DIO6208** : 16-channel Digital I/O Card for 8 DI and 8 DO Photo-coupler isolated
- **DIO6216** : 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