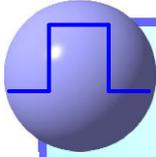




Bridging the Gap between Real World and Computer



DIO8216 PCIe-BUS

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



Features

- ▶ PCIe plug and play function with card ID for 16 identical cards
- ▶ 16 isolated DI and 16 isolated DO channels
- ▶ High voltage isolation on all isolated channel (2500 Vac)
- ▶ Programmable debounce at 50Hz, 100Hz, 200Hz, 1KHz and no de-bounce for input
- ▶ No output transition during start-up
- ▶ Output status readback
- ▶ External triggered interrupt (on IN07~IN00 and TTL IO07~IO00)
- ▶ Input counter / frequency counter (on IN07~IN00 and TTL IO07~IO00)
- ▶ Keep output state after hot reset (jumper selectable)
- ▶ Watch dog timer with default output on OUT07~OUT00
- ▶ 32-bit timer with time up interrupt

Introduction

The DIO8216 card offers 16 isolated digital input channels and 16 isolated digital output channels for the PCIe bus. The card featured with Input Counter function and external trigger interrupt function on isolated input port0 or TTL input port0. 32 bit timer and WDT(watch dog timer) with default output are the other highlights.

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

Specifications (With Matched Wiring Board)

Input Section

- ▶ Input channel : 16 isolated digital input
- ▶ Rated input voltage : DC 24V
- ▶ ON state : 8Vdc(max), 4mA(min)
- ▶ OFF state : 12Vdc(min), 3mA(max)
- ▶ Software debounce : No debounce, 50Hz, 100Hz, 200Hz, 1KHz
- ▶ Switching speed : 10KHz max. (limit by photo coupler speed and debounce filter)
- ▶ Interrupt : IN07 ~ IN00, TTL IO07~IO00
- ▶ Counter/frequency counter : IN07~IN00, TTL IO07~IO00

Output Section

- ▶ Output channel : 16 isolated digital output
- ▶ Output rating : 3A @250Vac, 30Vdc (Relay)
1A @ 24Vdc (PMOS)
1A @ 120Vdc (NMOS) with wiring board
- ▶ Switching speed : 20KHz(max)(MOS out only)

TTL IO

- ▶ Port : 2
- ▶ Direction : software programmable on port base
- ▶ Software debounce : No debounce, up to 8MHz

Timer

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

Main Card General

- ▶ Card ID : 4-bit
- ▶ Insulation resistance : 100M Ohm (min) at 1000Vdc
- ▶ Isolation Voltage : 2500Vac 1Min
- ▶ Connector : Centronic type SCSI II 68pin connector
- ▶ Operation Temperature : 0 °C ~ +70 °C
- ▶ Storage Temperature : -20 °C ~ +80 °C
- ▶ Operation Humidity : 5~95% RH, non-condensing
- ▶ Dimensions : 165(W)*110(H)mm, 6.5(W)*4.4(H)in

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
- ▶ Low speed counter
- ▶ Frequency counter
- ▶ Hardware event capture

