



Bridging the Gap between Real World and Computer

DIO3264A/B



64-Channel Digital I/O Card (64 Photo-Coupler Isolated DI)

Features

- ▶ PCI plug and play function with card ID for 16 identical cards
- ▶ 64 inputs with photo-coupler isolation
- ▶ 2 TTL input/output (DIO3264B)
- ▶ Build-in input de-bounce circuit / programmable digital de-bounce circuit (DIO3264B)
- ▶ Accept external interrupt at IN00, IN01 / IN07~ IN00, IN17~ IN10 (DIO3264B)
- ▶ 8 input with counter function (DIO3264B)
- ▶ 32-bit timer on 1us time base (DIO3264B)

Introduction

The DIO3264A/B is the new version of PCI 64 isolated digital input card. The DIO3264A is the direct replacement of DIO3264, you can use the new hardware without update the software. DIO3264B must use new driver and it is the upgrade version of DIO3264A. If you have used the DIO3264A with new driver, you can upgrade to DIO3264B seamlessly. The function convention is the same but DIO3264B with more functions such as 2 TTL IO port and more useful IO functions.

DI 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 : 64 isolated digital input
- ▶ Rated input voltage : DC 24V
- ▶ ON state : 2.8Vdc(max) 4.5mA(min)
- ▶ OFF state : 8Vdc(min),3mA(max)
- ▶ Switching speed : 10K (limit by photo-coupler speed or by debounce circuit)
- ▶ Debounce : 2KHz max. (with on board default debounce)(DIO3264A) software programmable @ 100, 200, 1K, 2K Hz and no debounce (DIO3264B)
- ▶ Input counter : 16-bit (IN07 ~ IN00) (DIO3264B)

TTL IO (DIO3264B)

- ▶ Port : 2
- ▶ Direction : software programmable on port base

Timer (DIO3264B)

- ▶ 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
- ▶ PCI bus data width : 32-bit
- ▶ I/O connector : 68 pin female SCSI II connector
- ▶ Wiring board : 1 with round cable hook to main card
- ▶ External supply : DC 24±4V
- ▶ Operation Temperature : 0 ~ +70° C
- ▶ Storage Temperature : -20 °C ~ +80 °C
- ▶ Operation Humidity : 5~95% RH, non-condensing
- ▶ Dimensions : 159(W)*106(H)mm, 6.3(W)*4.2(H)in

Note



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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
- ▶ Counting Application

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

- ▶ **DIO3264A** : 64-channel Digital I/O Card for 64 Photo-coupler isolated DI
- ▶ **DIO3264B** : 64-channel Digital I/O + 16TTL I/O Card for 64 Photo-coupler isolated DI
- ▶ **ADP3264ADIN** : DIN rail mounted wiring board for 64 input P.85
- ▶ **M266868150** : 68-pin SCSI-II cable 1.5 M for P1 I.18
- ▶ **M266868300** : 68-pin SCSI-II cable 3.0 M for P1 I.18
- ▶ **JS51050** : DIN rail mounted dummy wiring board (D type 25P male to terminals) for JM1 TTL I/O (DIO3264B only) I.12
- ▶ **M270325X4** : D type 25P male-female cable 1.5M for JM1 (DIO3264B only) I.17
- ▶ **M270325X4S** : D type 25P male-female cable 1.5M, shielding for JM1 (DIO3264B only) I.17
- ▶ **M270325X0** : D type 25P male-female cable 3.0M (DIO3264B only) for JM1 (DIO3264B only) I.17
- ▶ **M270325X0S** : D type 25P male-female cable 3.0M, shielding for JM1 (DIO3264B only) I.17
- ▶ **SM23404** : Extension kit for JM1 (bracket and flat cable for 25p female D type connector) (DIO3264B only)

Pin Assignments

JM1		JF1			
IO00	1	+24Vin	68	34	+24Vin
IO01	2	+24Vin	67	33	+24Vin
IO02	3	IN77	66	32	IN76
IO03	4	IN75	65	31	IN74
IO04	5	IN73	64	30	IN72
IO05	6	IN71	63	29	IN70
IO06	7	IN67	62	28	IN66
IO07	8	IN65	61	27	IN64
GND	9	IN63	60	26	IN62
GND	10	IN61	59	25	IN60
GND	11	IN57	58	24	IN56
+5Vout_PC	12	IN55	57	23	IN54
+5Vout_PC	13	IN53	56	22	IN52
		IN51	55	21	IN50
		IN47	54	20	IN46
		IN45	53	19	IN44
		IN43	52	18	IN42
		IN41	51	17	IN40
		IN37	50	16	IN36
		IN35	49	15	IN34
		IN33	48	14	IN32
		IN31	47	13	IN30
		IN27	46	12	IN26
		IN25	45	11	IN24
		IN23	44	10	IN22
		IN21	43	9	IN20
		IN17	42	8	IN16
		IN15	41	7	IN14
		IN13	40	6	IN12
		IN11	39	5	IN10
		IN07	38	4	IN06
		IN05	37	3	IN04
		IN03	36	2	IN02
		IN01	35	1	IN00

Note