

PISO-C64U/PISO-A64

Universal PCI/PCI Bus, 64-ch Optically Isolated Digital Output Board (Sink/Source)



Features **>>>**

- Universal PCI (3.3 V/5 V) interface for PISO-C64U
- PCI Bus (5 V) interface for PISO-A64
- 64-ch optically isolated D/O (Sink, NPN) for PISO-C64U
 64-ch optically isolated D/O (Source, PNP) for PISO-A64

- Card ID function (SMD Switch) for PISO-C64U
- Output status Readback for PISO-C64U
- 4 isolated banks when using 4 isolated external power supplies
- 3750 Vrms photo-isolated protection

Introduction -

The PISO-C64U universal PCI card supports 3.3 V/5 V PCI bus while the PISO-A64 supports 5 V PCI bus. These cards provide 64 optically isolated digital output channels, each of which offers a PNP transistor (PISO-A64) or Darlington transistor (PISO-C64U) and an integrated suppression diode for the inductive load. These DO channels are allocated into four isolated banks when using four isolated external power supplies. These DO channels act as an interface to field logic signals, eliminate ground-loop problems, and isolate the host computer from damaging voltages. The open collector outputs (DO channels) are typically used for alarm and warning notification, signal output control, control for external circuits that require a higher voltage level, and signal transmission applications, etc. These cards contains has a single DB-37 connector and a single 40-pin male header, each of which contains 32 output channels.

The PISO-C64U also adds a Card ID switch on-board. Users can set Card ID and then recognize the board by the ID via software when using two or more PIO-C64U cards in one computer.

🗾 Software _

- DOS Lib and TC sample program (with source codes)
- VB/VC/Delphi/BCB/VB.NET/C#.NET/VC.NET/MATLAB sample
- programs with source codes

Hardware Specifications —

Models	PISO-C64U	PISO-A64				
Digital Output						
Isolation Voltage	3750 Vrms					
Channels	64					
Compatibility	Sink, Open Collector	Source, Open Collector				
Output Capability	100 mA/+30 V for one channel @ 100% duty	100 mA/+30 V for one channel @ 60% duty				
General						
Bus Type	3.3 V/ 5 V Universal PCI, 32-bit, 33 MHz	5 V PCI, 32-bit, 33 MHz				
Connectors	Female Db-37 x1, 40-pin Male box header x1					
Power Consumption	800 mA @ +5 V					
Operating Temperature	0 °C ~ +60 °C					
Storage Temperature	-20 °C ~ +70 °C					
Humidity	5 ~ 85% RH, non-condensing					

Ordering Information_

PISO-C64U CR	Universal PCI, 64-ch Optically Isolated Open-collector Digital Output board. (Sink, NPN, RoHs) Includes one CA-4037B cable and two CA-4002 D-Sub connectors.						
PISO-A64 CR	PCI Bus, 64-ch Optically Isolated Open-collector Digital Output board. (Source, PNP, RoHs) Includes one CA-4037B cable and two CA-4002 D-Sub connectors.						

- DLL and OCX SDK for 32-bit/64-bit Windows XP/2003/Vista/2008/7/8
- Support LabVIEW and Linux

Pin Assignments –

Pin Assign- ment	Terminal No.		Pin Assign- ment	Pin Assign- ment	Terminal No.				Pin Assign- ment	
				mont	DO 32-47(-)	01	0	0	02	DO 48-63(-)
Ext power GND(-)	01		20	EXT Power GND(-)	DO_32	03	0	0	04	DO_48
DO_0	02	•	20		DO_33	05	0	0	06	DO_49
DO 1	03	• •		DO_16	DO_34	07	0	0	08	DO_50
DO 2	04	•	22	DO_17	DO_35	09	0	0	10	DO_51
DO 3	05	. •	23	DO_18	DO_36	11	0	0	12	DO_52
DO 4	06		24	DO_19	DO_37	13	0	0	14	DO_53
	07		25	DO_20	DO_38	15	0	0	16	DO_54
DO_5	100		26	DO_21	DO_39 DO 40	17 19	10	00	18 20	DO_55 DO 56
DO_6	08	۰.	27	DO 22	DO_40 DO_41	21	20	0	20	DO_56
DO_7	09	•	28	DO 23	DO 42	23	6	0	24	DO 58
DO_8	10		29	DO 24	DO 43	25	0	0	26	DO 59
DO_9	11	•	30	DO 25	DO 44	27	0	õ	28	DO 60
DO_10	12	•	31	DO 26	DO 45	29	0	õ	30	DO 61
DO_11	13	•	1215	and the second second	DO_46	31	0	0	32	DO_62
DO 12	14	• •	32	DO_27	DO_47	33	0	0	34	DO_63
DO 13	15	. •	33	DO_28	DO 32-47(+)	35	0	0	36	DO 48-63(+)
DO 14	16		34	DO_29	N.C.	37	0	0	38	N.C.
DO_15	17		35	DO_30	N.C.	39	0	0	40	N.C.
	18		36	DO_31			-			
Ext Power(+) 0-15		••	37	EXT POWER(+) 16-31			CO	NZ		
N.C.	19									
		CONI								