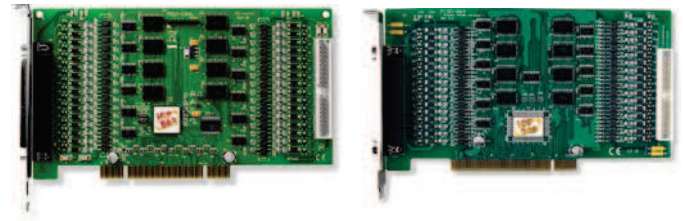# PISO-C64U/PISO-A64

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

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

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	

Pin Assignments

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.