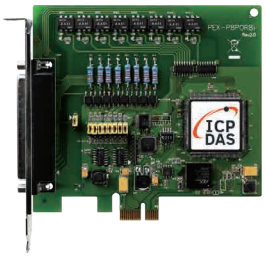
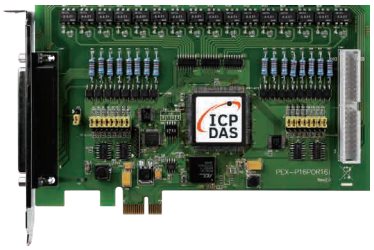
PEX-P8POR8i



PEX-P16POR16i



PEX-P8POR8i

PCI Express, 8-ch Isolated DI and 8-ch PhotoMOS Relay Output Board

PEX-P16POR16i

PCI Express, 16-ch Isolated DI and 16-ch PhotoMOS Relay Output Board

Features

- PCI Express x1 Interface
- Supports Card ID (SMD Switch)
- LED Power Indicator
- 8/16-channel Isolated Digital Input
  - Selectable DC Signal Input Filter
  - AC Signal Input with Filter
  - 2000 VDC Photo-isolation Protection
- 8/16-channel PhotoMOS Relay Output
  - Supports DO Status Readback (Register Level)
  - 0.05 ms Release Time
  - Long Life and High Reliability PhotoMos Relay
  - Low Leakage Current when PhotoMos Relay is OFF
  - No Contact Bounce, No Sparking

Introduction

The PEX-P8POR8i / PEX-P16POR16i series utilizes the PCI Express bus and designed as an easy replacement for the PCI-P8POR8 / P16POR16 series without requiring any modification to either the software or the driver.

The PEX-P8POR8i / PEX-P16POR16i provides 8/16 photocoupler Digital Input channels with 2000 VDC isolation protection, and allows the input signals to be completely floated to prevent ground loops. It is also equipped with 8/16 PhotoMOS Relay Outputs channels that can be used for controlling the ON/OFF state of external devices, for driving external relays or small power switches, or for activating alarms, etc.

The cards support various OS versions, such as Linux, DOS, Windows. DLL and Active X control together with various language sample program based on Turbo C++, Borland C++, Microsoft C++, Visual C++, Borland Delphi, Borland C++ Builder, Visual Basic, C#.NET, Visual Basic.NET and LabVIEW are provided in order to help users to quickly and easily develop their own applications.

Software

Drivers

- ☑ 32/64-bit Windows 10/11
- ☑ Linux

Sample Programs

- ☑ DOS Lib and TC/BC/MSC Demo
- ☑ VB/VC/Delphi/VB.NET/C#.NET/VC.NET/LabVIEW/Python/MATLAB

Ordering Information

PEX-P8POR8i CR	PCI Express, 8-ch Optically Isolated Digital Input and 8-ch PhotoMOS Relay Output Board (RoHS) Includes one CA-4002 D-Sub connector
PEX-P16POR16i CR	PCI Express x1, 16-ch isolated digital input and 16-ch PhotoMOS Relay output (RoHS) Includes one CA-4037W cable and two CA-4002 D-Sub connectors

Hardware Specifications

Model	PEX-P8POR8i	PEX-P16POR16i
Hardware		
Card ID	Yes (4-bit)	
Connector	Female DB37 x 1	Female DB37 x 1 40-pin box header x 1
Digital Input		
Channels	8	16
Type	Wet Contact , Photocoupler	
Sink/Source (NPN/PNP)	Sink/Source	
ON Voltage Level	AC/DC 5 ~ 24 V (AC 50 ~ 1 kHz)	
OFF Voltage Level	AC/DC 0 ~ 1 V	
Response Speed	Without Filter: 50 kHz (Typical) With Filter: 0.455 kHz(Typical)	
Trigger Mode	Static Update	
Isolation	2000 VDC	
Relay Output		
Channels	8	16
Type	PhotoMos Relay (Form A)	
Contact Rating	Load Voltage: 300 V (AC peak or DC) Load Current: 130 mA	
Operate Time	0.7 ms (Typical)	
Release Time	0.05 ms (Typical)	
Electrical Endurance	Long Life and No Sparking	
PC Bus		
Type	PCI Express x 1	
Data Bus	16-bit	
Power		
Consumption	550 mA @ +3.3 V 250 mA @ +12 V	600 mA @ +3.3 V 300 mA @ +12 V
Mechanical		
Dimensions (mm)	113 x 173 x 22 (W x L x D)	113 x 118 x 22 (W x L x D)
Environment		
Operating Temperature	0 ~ +60°C	
Storage Temperature	-20 ~ +70°C	
Humidity	5 ~ 85% RH, Non-condensing	

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Pin Assignments

Pin Assign-ment	Terminal No.		Pin Assign-ment
NO_0	01	20	CM_0
NO_1	02	21	CM_1
NO_2	03	22	CM_2
NO_3	04	23	CM_3
NO_4	05	24	CM_4
NO_5	06	25	CM_5
NO_6	07	26	CM_6
NO_7	08	27	CM_7
N/A	09	28	N/A
N/A	10	29	N/A / GND
N/A	11	30	DIB_0
DIA_0	12	31	DIB_1
DIA_1	13	32	DIB_2
DIA_2	14	33	DIB_3
DIA_3	15	34	DIB_4
DIA_4	16	35	DIB_5
DIA_5	17	36	DIB_6
DIA_6	18	37	DIB_7
DIA_7	19		

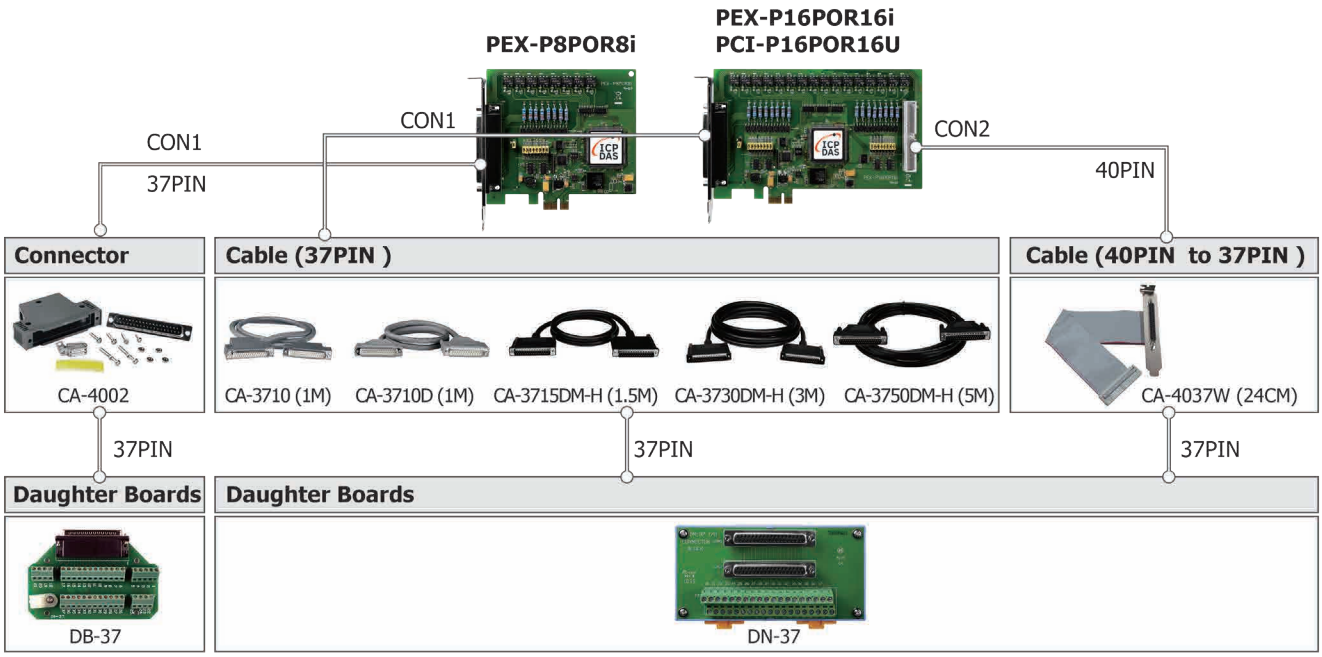
CON1

Pin Assign-ment	Terminal No.		Pin Assign-ment
NO_8	01	02	CM_8
NO_9	03	04	CM_9
NO_10	05	06	CM_10
NO_11	07	08	CM_11
NO_12	09	10	CM_12
NO_13	11	12	CM_13
NO_14	13	14	CM_14
NO_15	15	16	CM_15
N/A	17	18	N/A
N/A	19	20	N/A / GND
N/A	21	22	DIB_8
DIA_8	23	24	DIB_9
DIA_9	25	26	DIB_10
DIA_10	27	28	DIB_11
DIA_11	29	30	DIB_12
DIA_12	31	32	DIB_13
DIA_13	33	34	DIB_14
DIA_14	35	36	DIB_15
DIA_15	37	38	N/A
N/A	39	40	N/A

CON2 (PEX-P16POR16i only)

Accessories

CA-3710 CR	DB-37 Male-Male D-sub cable 1 M (Cable for Daughter Board (45°)) (RoHS)
CA-3710D CR	DB-37 Male-Male D-sub cable 1 M (Cable for Daughter Board (180°)) (RoHS)
CA-3715DM-H CR	DB-37 Male-Male Cable, 1.5 M, 180° (RoHS)
CA-3730DM-H CR	DB-37 Male-Male Cable, 3.0 M, 180° (RoHS)
CA-3750DM CR	DB-37 Male-Male Cable, 5.0 M, 180° (RoHS)
CA-3750DM-H CR	DB-37 Male-Male Cable, 5.0 M, 180° (RoHS)
DB-37 CR	Directly connect signal to D-sub 37-pin connector (RoHS)
DN-37 CR	DIN Rail Mounting 37-pin Connector (RoHS)



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