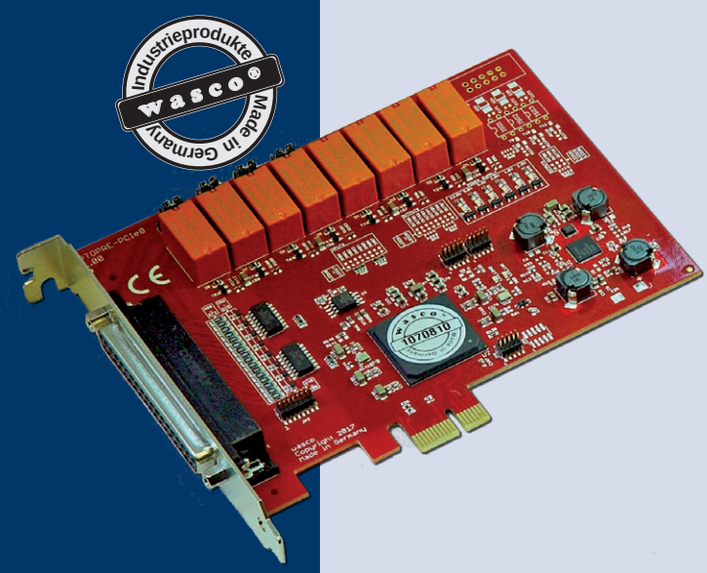
OPTOPRE-PCIe8STANDARD

Digital PCIe I/O Interface Card with eight Optocoupler Inputs, eight Relay Outputs and Board Identification



8 optocoupler inputs

8 relais outputs 2 A

board identification

OPTOPRE-PCIe8STANDARD provides 8 digital inputs and 8 digital outputs, every single channel is galvanically isolated. The inputs are isolated by eight high-quality optocouplers, the outputs by eight relays. Each input is protected from harmful voltage peaks by additional protection diodes. Two input voltage ranges are adjustable by setting jumpers. The output relays manage a switching current of up to 2 A. The optocouplers and the signals of the relays are connected to a 37-pin Sub-D jack on a board mounted slot bracket. Furthermore, the card provides a jumper block for card identification in order to distinguish several identical cards in your system.
The pin assignment is identical to PCI bus card OPTOPRE-PCI8. Therefore a changeover to OPTOPRE-PCIe8STANDARD is easy to realize.

SPECIFICATIONS

Optocoupler Inputs
Optocouplers LTV-944
8 channels, optically isolated
Galvanic isolation also between every single channel with each two separate connections for each of the channels
Overvoltage protection by protection diodes
Two different jumper selectable input voltage ranges

Range 1	high = 14..30 Volt
	low = 0..2 Volt
Range 2:	high = 5..15 Volt
	low = 0..1 Volt

Input frequency: max. 10 kHz

Relay Outputs
8 channels, galvanically isolated
Galvanic isolation also between every single channel with each two discrete connections for each of the channels
Relay type: Tyco PE014012
Contact: 1 changeover contact
Switching current: 2 A max.
Switching voltage: max. 50 V AC/ 30 V DC
Switching capacity: 100 VA / 60 W
Isolation: Coil/Contact 500 V eff
Mech. lifetime: max. 15 * 10^6 switching cycles without load
Contact lifetime: 2A, 50V AC at changeover, max. 10^5 switching cycles
Operation cycles under load: 6/min max.
Operation cycles without load: 1200/min max.
Circuit time: typ. 5 ms
Dropout time: typ. 2 ms
Bounce time NO contact: typ. 1 ms
Bounce time NC contact: typ. 5 ms

Connectors
1 * 37-pin Sub-D female connector

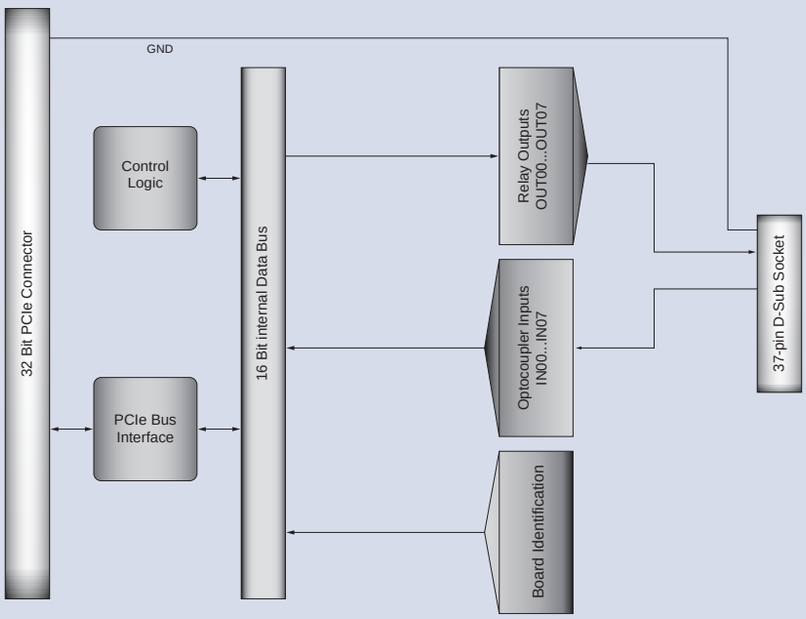
Bus system
32-bit PCIe-Bus

Dimensions
137 mm x 111 mm (l x b)

Other
Control LED for power supply

Phone: +49.8071.9187.0
Fax: +49.8071.9187.40
www.messcomp.com/info@messcomp.com

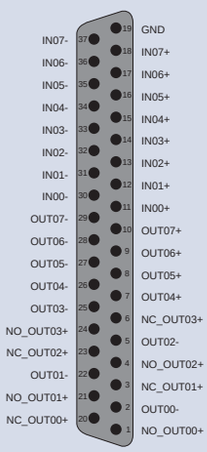
Block Diagram



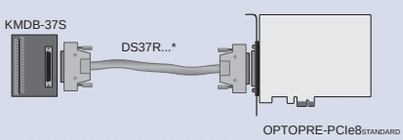
Pin Assignment

Anodes and cathodes of the inputs as well as positive and negative connections of the output relays are led to the 37-pin Sub-D female socket CN1 for each channel individually. The ground of the computer also is connected to this plug connector. CN1 is placed at the board's slot bracket, so optimal connections with strain relief to peripheral is easily to obtain.

Sub-D Socket CN1



Connection Technique (Application Examples)



* DS37R100DS37 or DS37R200DS37 or DS37R500DS37

Programming

Windows®:
Driver and program examples for VB.NET, C++.NET, C#.NET
Linux®:
Driver and program examples for C and C++ (see manual)
on enclosed CD or download at:
www.messcomp.com, Section Support - Software

Scope of Delivery

Interface Card OPTOPRE-PCIe8STANDARD
German Manual (English on Request)
Driver and sample programs on CD

Order Information

OPTOPRE-PCIe8STANDARD EDP No. A-823600
I/O Card

Suitable Accessories

DS37R500DS37 EDP No. A-202800
Shielded connection line (approx. 5 m) to connect KMDB-37 to a 37-pin Sub-D jack

DS37R200DS37 EDP No. A-202400
Shielded connection line (approx. 2 m) to connect KMDB-37 to a 37-pin Sub-D jack

DS37R100DS37 EDP-No. A-202200
Shielded connection line (approx. 1 m) to connect KMDB-37 to a 37-pin Sub-D jack

KMDB-37 EDP No. A-2046
Terminal module with a 37-pin screw terminal block with prototype area for soldering, to connect to a 37-pin Sub-D jack

KMDB-37S EDP No A-204910
Terminal module with a 38-pin screw terminal block to connect to a 37-pin Sub-D jack

For more detailed information about the here listed and other accessories we refer to the corresponding data sheets