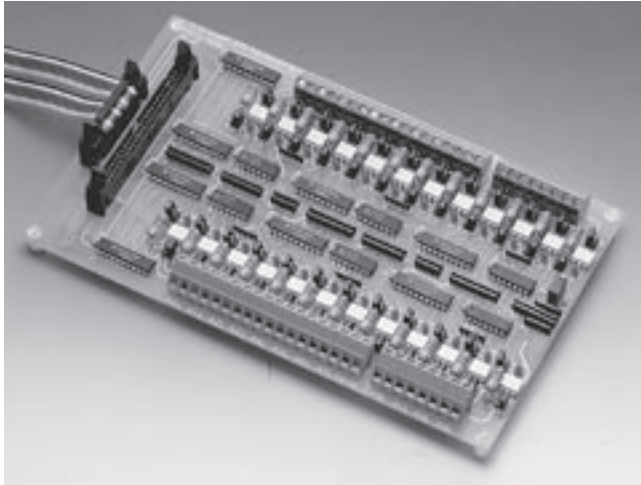


# PCLD-782 PCLD-782B

16-ch Opto-Isolated DI Board

16/24-ch Opto-Isolated DI Board



CE

## Features

- Compatible with all PC-LabCard™ products with DI channels on either 20-pin flat cable or 50-pin Opto-22 compatible connectors.
- 16 or 24 optically-isolated digital input channels
- Built-in screw terminals for easy input wiring
- LEDs indicate input logic status
- Inputs buffered with voltage comparators

## Introduction

PCLD-782 and PCLD-782B digital input daughterboards feature high-voltage (> 1,500 V<sub>DC</sub>) optical isolation on all inputs. PCLD-782 provides 16 input channels accessible through one 20-pin flat cable connector, which is standard on most PC-LabCard™ products. The PCLD-782B provides either 16 or 24 channels, depending on what connector you use. The PCLD-782B's 20-pin connector lets you access 16 channels, similar to the PCLD-782, but also provides a 50-pin Opto-22 connector with access to 24 channels.

Both cards have onboard screw terminals for easy input wiring. Optically isolated signal conditioning provides isolation between separate channels, as well as between each input channel and the PC. This isolation prevents floating potential and ground loop problems while protecting the input lines from potentially damaging fault conditions.

A red LED on each input channel indicates its status. If the input signal is high, the LED is lit. You can configure each channel to work in either isolated or non-isolated mode. A variable resistor adjusts the threshold level for all 24 isolated input channels simultaneously.

## Specifications

### Digital Input

- Input Channels** 24 (PCLD-782B), 16 (PCLD-782)
- Input Range** 0 ~ 24 V<sub>DC</sub>
- Input Resistance** 560 Ω
- Isolation Voltages** 1,500 V<sub>DC</sub> min.
- Threshold Voltage** 1.5 V<sub>DC</sub> (VR adjustable)

### General

- Certifications** CE
- Connectors**  
Digital Input: Screw terminals (#12 ~ 22 AWG)  
Controller: PCLD-782: 1 x 20-pin flat cable connector (CN1)  
PCLD-782B: 1 x 20-pin flat cable connector (CN1) and 1 x 50-pin Opto-22 connector (CN2)
- Dimensions (L x W)**  
PCLD-782: 3U– 205 x 114 mm (8.1" x 4.5")  
PCLD-782B: 4U– 220 x 132 mm (8.7" x 5.2")
- LED Indicators** Indicates input logic status
- Mounting** 4 x screw holes for flat surface mounting

## Ordering Information

- PCLD-782B** 16/24-ch Opto-isolated DI Board, user's manual, one 1m 20-pin flat cable assembly (P/N: PCL-10120-1) and one 1.2m 50-pin flat cable (P/N: PCL-10150-1.2)
- PCLD-782** 16-ch Opto-isolated DI Board, user's manual and 1 x 1 m 20-pin flat cable assembly (P/N: PCL-10120-1)
- PCL-10120-1** 20-pin flat cable assembly, 1 m
- PCL-10120-2** 20-pin flat cable assembly, 2 m
- PCL-10150-1.2** 50-pin flat cable, 1.2 m (for connecting the PCL-722 or 724 to the PCLD-885, 782B or 785B)

## Pin Assignments

CN1				CN2			
DI0	1	2	DI1	DI23	1	2	GND
DI2	3	4	DI3	DI22	3	4	GND
DI4	5	6	DI5	DI21	5	6	GND
DI6	7	8	DI7	DI20	7	8	GND
DI8	9	10	DI9	DI19	9	10	GND
DI10	11	12	DI11	DI18	11	12	GND
DI12	13	14	DI13	DI17	13	14	GND
DI14	15	16	DI15	DI16	15	16	GND
GND	17	18	GND	DI15	17	18	GND
+5 V	19	20	+12 V	DI14	19	20	GND
				DI13	21	22	GND
				DI12	23	24	GND
				DI11	25	26	GND
				DI10	27	28	GND
				DI9	29	30	GND
				DI8	31	32	GND
				DI7	33	34	GND
				DI6	35	36	GND
				DI5	37	38	GND
				DI4	39	40	GND
				DI3	41	42	GND
				DI2	43	44	GND
				DI1	45	46	GND
				DI0	47	48	GND
				+5 V	49	50	GND