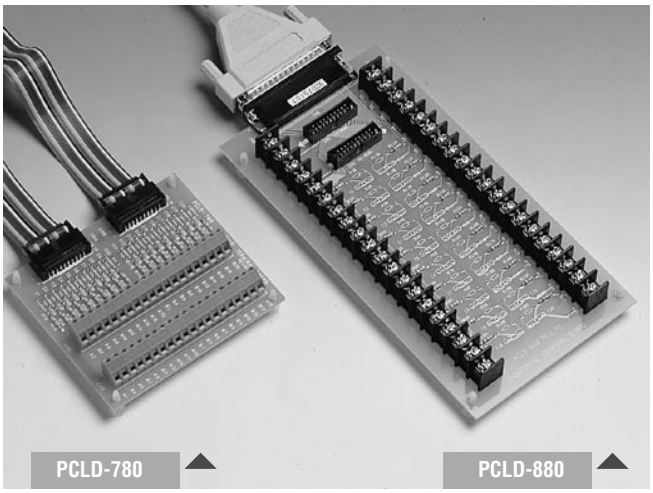
PCLD-780
PCLD-880

Screw Terminal Board
Industrial Wiring Terminal Board w/Adapter



Features

- Pin to Pin design
- Low-cost universal screw-terminal boards for industrial applications
- 40 terminal points for two 20-pin flat cable connector ports
- Reserved space for signal-conditioning circuits such as low-pass filter, voltage attenuator and current-to-voltage conversion
- Table-top mounting using nylon standoffs. Screws and washers provided for panel or wall mounting

PCLD-780 only

- Screw-clamp terminal-blocks allow easy and reliable connections
- Dimensions: 102 x 114 mm (4.0" x 4.5")

PCLD-880 only

- Supports PC-LabCard™ products with DB-37 connectors
- Industrial-grade terminal blocks (barrier-strip) permit heavy-duty and reliable connections
- Dimensions: 221 x 115 mm (8.7" x 4.5")

Introduction

The PCLD-780 and PCLD-880 universal screw-terminal boards provide convenient and reliable signal wiring for PC-LabCard™ products with 20-pin flat-cable connectors. The PCLD-880 is also equipped with a DB-37 connector to support PC-LabCard™ products with DB-37 connectors.

The PCLD-780 and PCLD-880 let you install passive components on the special PCB layout to construct your own signal-conditioning circuits.

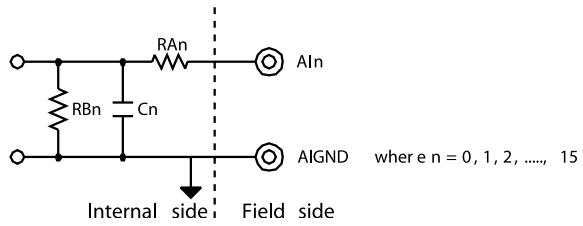
You can easily construct a low-pass filter, attenuator or current-to-voltage converter by adding resistors and capacitors onto the board's circuit pads.

Applications

- Field wiring for analog and digital I/O channels of PC-LabCard™ products which employ the standard 20-pin flat cable connectors or DB37 connectors (only PCLD-880)
- Signal conditioning circuits can be implemented as illustrated in the following examples:

a) Straight-through connection (factory setting)

RAn = 0Ω jumper



RBn = none

Cn = none

b) 1.6 KHz (3dB) low pass filter

RAn = 10 KΩ

RBn = none

Cn = 0.01ΩF

$$f_{3dB} = \frac{1}{2\pi RAnCn}$$

c) 10 : 1 voltage attenuator:

RAn = 9 KΩ

RBn = 1 KΩ

Cn = none

$$\text{Attenuation} = \frac{RBn}{RAn + RBn}$$

(Assume source impedance << 10 KΩ)

d) 4 ~ 20 mA to 1 ~ 5 VDC signal converter:

RAn = 0 Ω (short)

RBn = 250 Ω (0.1% precision resistor)

Cn = none

Pin Assignments

CN1

A1	1	2	A2
A3	3	4	A4
A5	5	6	A6
A7	7	8	A8
A9	9	10	A10
A11	11	12	A12
A13	13	14	A14
A15	15	16	A16
A17	17	18	A18
A19	19	20	A20

CN2

B1	1	2	B2
B3	3	4	B4
B5	5	6	B6
B7	7	8	B8
B9	9	10	B10
B11	11	12	B12
B13	13	14	B14
B15	15	16	B16
B17	17	18	B18
B19	19	20	B20

CN5 (PCLD-880 only)

A1	1	20	A2
A3	2	21	A4
A5	3	22	A6
A7	4	23	A8
A9	5	24	A10
A11	6	25	A12
A13	7	26	A14
A15	8	27	A16
A17	9	28	A18
A19	10	29	A20
B1	11	30	B2
B3	12	31	B4
B5	13	32	B6
B7	14	33	B8
B9	15	34	B10
B11	16	35	B12
B13	17	36	B14
B15	18	37	B16
B17	19		

Ordering Information

- **PCLD-780** Screw terminal Board, two 1m 20-pin flat cables (PCL-10120-1)
- **PCLD-880** Industrial Wiring Terminal Board, two 1m 20-pin flat cables (PCL-10120-1), and one PCL-10501 adapter (20-pin analog flat connector to DB37 connector)
- **PCL-10137-1** DB37 cable assembly, 1m
- **PCL-10137-2** DB37 cable assembly, 2m
- **PCL-10137-3** DB37 cable assembly, 3m