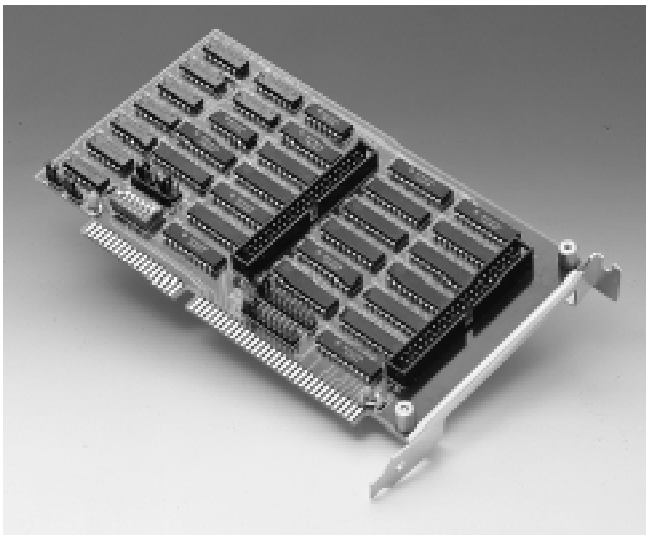
PCL-731

48-bit Digital I/O Card



Features

- 48 digital I/O lines
- Emulates 8255 PPI mode 0
- Buffered circuits for higher driving capacity than the 8255
- Interrupt handling
- Output status readback
- Pin compatible with Opto-22 I/O module racks

Introduction

The PCL-731 offers 48 programmable digital I/O lines. Each port emulates the operation of an 8255 Programmable Peripheral Interface (PPI) chip in mode 0, but provides a higher driving capacity than the 8255.

The card's DIO ports are combined into 8-bit ports, six for the PCL-731. You can configure each port individually by software for either input or output. The card can directly interface with SSR module carrier boards through a 50-pin Opto-22 compatible connector.

The PCL-731 is a low-cost alternative of the PCL-722. Like the PCL-722 it provides a readback feature which lets you monitor the status of the output by reading back the output port directly.

Applications

- Digital I/O control
- Industrial monitoring and control
- Interfacing with parallel I/O devices
- Interfacing with Opto-22 compatible I/O module racks

Specifications

- **I/O lines**: 48
- **Programming mode**: 8255 PPI mode 0
- **Interrupt**: Bit 0 of one port can generate an interrupt to IRQ 2~15
- **Interrupt triggering**: Rising or falling edge triggering, jumper-selectable
- **Digital output**: Logic 0: 0.4 V max. @ 24 mA (sink)
  Logic 1: 2.4 V min. @ 15 mA (source)
- **Digital input**: Logic 0: 0.4 V max.
  Logic 1: 2.4 V min.

General

- **Power consumption**:+5 V @ 0.5 A typical
  +5 V @ 0.8 A max.
- **Operating temperature:** 0 ~ +60° C (32 ~ 140° F)
- **Storage temperature:** -20 ~ +70° C (-4 ~ 158° F)
- **Operating humidity:** 5 ~ 95% RH non-condensing (refer to IEC 68-2-3)
- **Connectors**: 2x50-pin male ribbon-cable connectors
- **Dimensions**: 185 mm (L) x 100 mm (H) (7.3" x 3.9")

Pin Assignments

PC 7	1	2	GND
PC 6	3	4	GND
PC 5	5	6	GND
PC 4	7	8	GND
PC 3	9	10	GND
PC 2	11	12	GND
PC 1	13	14	GND
PC 0	15	16	GND
PB 7	17	18	GND
PB 6	19	20	GND
PB 5	21	22	GND
PB 4	23	24	GND
PB 3	25	26	GND
PB 2	27	28	GND
PB 1	29	30	GND
PB 0	31	32	GND
PA 7	33	34	GND
PA 6	35	36	GND
PA 5	37	38	GND
PA 4	39	40	GND
PA 3	41	42	GND
PA 2	43	44	GND
PA 1	45	46	GND
PA 0	47	48	GND
+5 V	49	50	GND

Ordering Information

- **PCL-731**: 48-bit digital I/O card and manual
- **PCL-10150-1.2**: 50-pin flat cable, 1.2 m
- **PCLD-782B**: 24/16-ch. opto-isolated digital input board
- **PCLD-785B**: 24/16-ch. relay output board
- **PCLD-7216**: 16-ch. carrier board for SSR I/O modules
- **PCLD-885**: 16-ch. power relay (Form A) output board
- **PCLS-OCX**: ActiveX Control for data acquisition and control.
- **ADAM-3950**: 50-pin flat cable wiring terminal for DIN-rail mounting