



### Features

- 144 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-722 is a full-size PC add-on card that offers 144 programmable digital I/O lines divided into six main ports. Each port emulates the operation of an 8255 Programmable Peripheral Interface (PPI) in mode 0 but provides higher driving capacity than the 8255. Each port in turn consists of three subsidiary 8-bit ports (A, B, C). You can individually configure each of these 8-bit ports by software for input or output.

The PCL-722 provides an additional readback function which lets you monitor the digital output status by taking readings directly from the output port.

### Applications

- High-density mixed digital I/O
- Digital I/O control
- Industrial monitoring and control
- Interfacing with parallel I/O devices
- Direct interfacing with Opto-22 compatible I/O module racks

### Specifications

- **I/O lines:** 144 (24 bits x 6 ports)
- **Programming mode:** 8255 PPI mode 0
- **Interrupts:** Bits 0 and 3 of Port C can generate an interrupt to IRQ 2, 3, 4, 5, 6 or 7

#### Digital output

##### Port A and Port B

Logic 0: 0.4 V max. @ 12 mA (sink)  
Logic 1: 2.4 V min. @ 8.0 mA (source)

##### Port C

Logic 0: 0.5 V max. @ 24 mA (sink)  
Logic 1: 2.0 V min. @ 15 mA (source)

#### Digital input

##### Port A and Port B

Logic Level 0: 0.8 V max.  
Logic Level 1: 2.0 V min.

##### Port C

Logic Level 0: 0.8 V max.  
Logic Level 1: 2.0 V min.

#### General

- **Power consumption:** +5 V @ 1.3 A typical  
+5 V @ 1.8 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:**  
Six 50-pin male ribbon-cable connectors. Pin assignments are fully compatible with Opto-22 I/O module racks
- **Dimensions:** 334 mm (L) x 100 mm (H) (13.2" x 3.9")

### Ordering Information

- **PCL-722:** 144-bit digital I/O card, utility disk and user's manual
- **PCL-10150-1.2:** 50-pin flat cable, 1.2 m
- **PCLD-7216:** 16-channel carrier board for SSR I/O modules
- **PCLD-782B:** 24/16-channel opto-isolated digital input board
- **PCLD-785B:** 24/16-channel relay output board
- **PCLD-885:** 16-channel 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