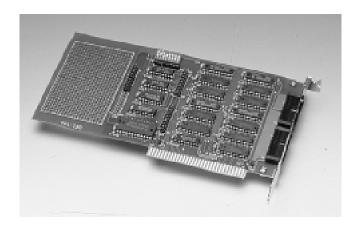
# PCL-720

## Digital I/O and Counter Card



### **Features**

- · 32 TTL-level digital input channels
- · 32 TTL-level digital output channels
- · High output driving capacity
- · Low input loading
- · Three programmable counter/timer channels
- · User configurable clock source
- · Breadboard area for custom circuits

### Introduction

The PCL-720 digital I/O and counter card is a PC-compatible add-on card with 32 digital input channels, 32 digital output channels and three programmable counter/timer channels.

Its digital I/O channels are TTL-compatible and use 74LS244 driver/ buffer circuits to provide high output driving capacity. These buffered circuits also require lower input loading current than regular TTL circuits.

The PCL-720's 8254 programmable counter/timer provides three flexible 16-bit counter/timer channels. You can generate waves and pulses by programming the 8254. Jumper settings determine the clock crystal frequency. The PCL-720 also includes a breadboard area perfect for customized circuits.

### **Applications**

### Digital Input

- · Contact-closure monitoring
- · Switch-panel status sensor
- · BCD interface receiver
- · Digital signal interface

### Digital Output

- · Industrial On/Off controller
- · Digital signal interface
- · BCD interface driver

#### Counter/Timer

- · Period and pulse-width measurement
- · Event and frequency counting
- · Waveform and pulse generation

### **Specifications**

### Digital Input

• Input lines: 32

· Logic level 0: 0.8 V max.

• Logic level 1: 2.0 V min.

### Digital Output

• Output lines: 32

• Logic level 0: 0.5 V max. @ 24 mA (sink)

Logic level 1: 2.0 V min. @ 15 mA (source)

#### Programmable Counter/Timer

• Frequency range: 0 ~ 2.6 MHz

· Counters: 3 independent 16-bit counters

· Modes: Six programmable modes

· Usable pins: CLOCK and GATE for each channel

### Clock Source

· Clock frequency:

 $2\,$  MHz,  $1\,$  MHz,  $500\,$  kHz or  $250\,$  kHz; jumper selectable

• Frequency divider: Divided by 1, 10, 100 or user adjustable

#### General

· I/O port address:

Eight consecutive bytes from hex 200 ~ 3F8

Breadboard area:

 $651\ (31\ x\ 21)$  plated-through "donuts", each with a .036" hole on 0.10" centers

• Power consumption: +5 V @ 500 mA typical

• Operating temperature:  $0 \sim +60^{\circ} \text{ C} (32 \sim 140^{\circ} \text{ F})$ 

• Storage temperature:  $-20 \sim +70^{\circ} \text{ C} (-4 \sim 158^{\circ} \text{ F})$ 

Operating humidity: 5 ~ 95% RH non-condensing (refer to IEC 68-2-3)

· Connectors: Five 20-pin male ribbon-cable connectors.

• Dimensions: 205 mm (L) x 100 mm (H) (8" x 3.9")

### Ordering Information

PCL-720: Digital I/O and counter card, user's manual

PCL-10120-1: 20-pin flat cable, 1 m PCL-10120-2: 20-pin flat cable, 2 m PCLD-780: Screw terminal board

PCLD-782B: 24/16 Channel opto-isolated D/I board PCLD-785B: 24/16 Channel relay output board

PCLD-786: SSR and relay driver board

PCLD-885: 16-Channel power relay (form A) output board PCLS-OCX: ActiveX Control for data acquisition and control

ADAM-3920: 20-pin flat cable wiring terminal for DIN-rail mounting