PCL-720+
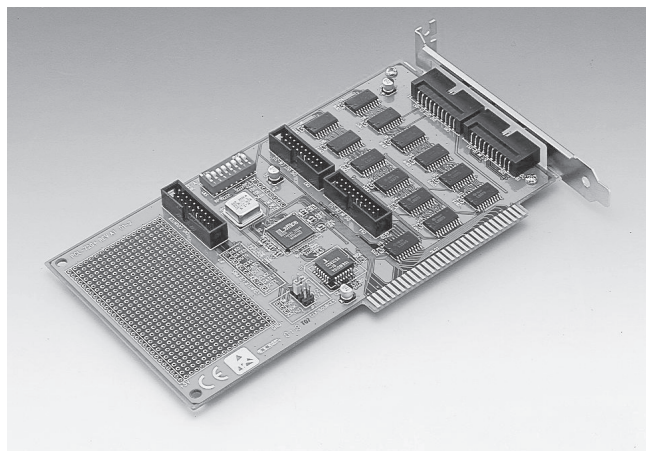
Features

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

CE

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.

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**   6 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**   540 (30 x 18) plated-through "donuts", each with a .036" hole on 0.10" centers. Further, provide +5 V on the left side, and provide GND on the right side
- **Power Consumption**   +5 V @ 500 mA typical
- **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**   Five 20-pin male ribbon-cable connectors
- **Dimensions (L x H)**   185 x 100 mm (7.3" x 4")

Ordering Information

- **PCL-720+**   Digital I/O and counter card, user's manual, user's manual and driver CD-ROM (cable not included)
- **PCL-10120-1**   20-pin flat cable, 1 m
- **PCL-10120-2**   20-pin flat cable, 2 m
- **PCLD-780**   Screw terminal board
- **PCLD-782**   24/16 Channel opto-isolated D/I board
- **PCLD-785**   24/16 Channel relay output board
- **PCLD-786**   SSR and relay driver board
- **PCLD-885**   16-Channel power relay (form A) output board
- **ADAM-3920**   20-pin flat cable wiring terminal for DIN-rail mounting

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

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