

# PCL-711B

## Analog and Digital I/O Card



CE

### Features

- 8 single-ended analog inputs
- Programmable A/D input range
- A/D, D/A with pacer
- One analog output
- 12-bit A/D and D/A resolution
- 16 digital inputs
- 16 digital outputs
- Includes versatile drivers in popular programming languages plus calibration, demo and example programs
- Screw-terminal board and cable included

### Introduction

PCL-711 offers four of the most popular I/O functions for PC/AT and compatible systems: A/D conversion, D/A conversion, digital input and digital output. The inexpensive PCL-711 is ideal for entry level applications. The features of this half-sized card include: eight 12-bit analog inputs, one 12-bit analog output, 16 digital inputs and 16 digital outputs. In addition, it comes with a 20-point screw-terminal board and a flat cable connector. PCL-711 performs a variety of I/O jobs, and features solid software support and a large selection of available daughterboards and accessories. It is an ideal and affordable performer for OEMs, schools and hobbyists who require a combination of analog and digital I/O.

### Specifications

#### Analog Input

- **Channels** 8 single-ended
- **Resolution** 12 bits
- **Max. Sampling Rate** 40 kS/s
- **FIFO Size** N/A
- **Overvoltage Protection**  $\pm 30 V_{DC}$
- **Input Impedance**  $>10 M\Omega$
- **Sampling Modes** Software, pacer or external trigger
- **Input Range (V)**  $\pm 5, \pm 2.5, \pm 1.25, \pm 0.625, \pm 0.3125$
- **Accuracy**  $\pm 2$  LSB

#### Analog Output

- **Channels** One double-buffered channel
- **Resolution** 12 bits
- **Output Rate** Static Update
- **Output Range** 0 ~ 5 V or 0 ~ 10 V
- **Driving Capability** 10 mA

#### Digital Input

- **Channels** 16
- **Compatibility** 5 V/TTL
- **Input Voltage** Logic 0: 0.8V max.  
Logic 1: 2.0V min.

#### Digital Output

- **Channels** 16
- **Compatibility** 5 V/TTL
- **Output Voltage** Logic 0: 0.8 V max.  
Logic 1: 2.0 V min.
- **Output Capability** Sink: 8 mA  
Source: 0.4 mA

#### General

- **Bus Type** ISA
- **I/O Connectors** 1 x 20-pin flat cable connector for A/D and D/A  
1 x 20-pin flat cable connector for digital input  
1 x 20-pin flat cable connector for digital output
- **Dimensions (L x H)** 155 x 100 mm (6.1" x 3.9")
- **Power Consumption** +5 V @ 500 mA typical, 1.0 A max.  
+12 V @ 50 mA typical, 100 mA max.  
-12 V @ 14 mA typical, 20 mA max.
- **Operating Temperature** 0 ~ 50° C (32 ~ 122° F)
- **Storing Temperature** -20 ~ 65° C (-4 ~ 149° F)
- **Storing Humidity** 5 ~ 95% RH non-condensing (refer to IEC 68-2-3)
- **Certifications** CE

### Ordering Information

- **PCL-711S** PCL-711B card, user's manual, driver CD-ROM, PCLD-7115 and 1 m 20-pin flat cable (PCL-10120-1)
- **PCL-711B** PCL-711B card only (PCLD-7115, 1 m 20-pin cable, user manual and driver CD-ROM NOT included).
- **PCL-10120-1** 20-pin flat cable, 1 m
- **PCL-10120-2** 20-pin flat cable, 2 m

### Applications

- DC voltage measurement
- Transducer/sensor interfacing
- Process control
- Contact closure monitoring
- Digital signal and BCD interfacing
- Industrial On/Off control
- Multiplexer and relay control