



Features

- Eight 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

The PCL-711S is a fully-integrated package that 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-711S 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.

The PCL-711S 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.

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

Specifications

Analog Input

- **Channels:** 8 single-ended
- **A/D converter:** 12 bit, 25 ms conversion time
- **Input range (V):** ± 5 , ± 2.5 , ± 1.25 , ± 0.625 , ± 0.3125
- **Trigger mode:** Software, pacer or external trigger
- **Data transfer:** Program control, interrupt (IRQs 2 ~ 7)
- **Accuracy:** 0.01% of reading ± 1 LSB
- **Common mode rejection:** 60 dB typical
- **Input impedance:** >10 MW
- **Input overvoltage:** ± 30 V_{DC} max.

Analog Output

- **Channel:** One 12-bit double-buffered channel
- **D/A range:** 0 ~ 5 V or 0 ~ 10 V
- **Settling time:** 30 msec.

Digital Input

- **Channels:** 16, TTL level

Digital Output

- **Channels:** 16
- **Logic level 0:** 0.5 V max. @ 8 mA (sink)
- **Logic level 1:** 2.4 V min. @ 0.4 mA (source)

General

- **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)
- **Storage temperature:** -20 ~ 65° C (-4 ~ 149° F)
- **Operating humidity:** 5 ~ 95% RH non-condensing (refer to IEC 68-2-3)
- **I/O ports:** 16 consecutive I/O ports per card
- **Connector:** One 20-pin flat-cable connector for A/D and D/A
One 20-pin flat-cable connector for digital input
One 20-pin flat-cable connector for digital output
- **Dimensions:** 155 mm (L) x 100 mm (H) (6.1" x 3.9")

Ordering Information

- **PCL-711S:** PCL-711B card, user's manual, utility diskette with language drivers, 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's manual and utility diskette NOT included).
- **PCLS-OCX:** ActiveX Control for data acquisition and control