

PCI-1727U

14-bit, 12-ch Analog Output Universal PCI Card with 32-ch Digital I/O



Features

- 12 independent analog output channels
- Fuse on each channel
- Universal PCI for 5 V and 3.3 V support
- BoardID™ switch
- Synchronized output function

Introduction

PCI-1727U provides twelve 14-bit analog output channels, and is pin-compatible with the ISA PCL-727 card for easy migration. It supports both ± 10 V and 0 ~ 20 mA current loop (sink). The card's onboard DC-to-DC converter ensures the full 10 V D/A output is always available.

Each analog output channel has a built-in fuse to protect the circuit, PC and the external devices. PCI-1727U is an ideal, economical solution for the applications which require multiple PID control loops. In addition to its analog outputs, PCI-1727U provides 16 TTL digital input and 16 TTL digital output channels that are easily applied with industrial on/off control applications.

Specifications

Analog Output

- **Channels** 12
- **Resolution** 14 bits
- **Output Rate** Static update
- **Output Range** (Software programmable)

Bipolar (V)	± 5
Unipolar (V)	0 ~ 5, 0 ~ 10
Current Loop (mA)	4 ~ 20

- **Slew Rate** 0.7 V/ μ s
- **Driving Capability** 15 mA
- **Operation Modes** Software polling, synchronized output
- **Current Loop Excitation Voltage** 8 ~ 36 V

Digital Input

- **Channels** 16
- **Compatibility** 5 V/TTL
- **Input Voltage** Logic 0: 0.8 V max.
Logic 1: 2.0 V min.
- **Input loading** 0.5 V @ 0.4 mA max. (low)
2.7 V @ 50 μ A max. (high)

Digital Output

- **Channels** 16
- **Compatibility** 5 V/TTL
- **Output Voltage** Logic 0: 0.5 V, Logic 1: 2.4 V
- **Output Capability** Sink: 0.8 mA @ 0.5 V
Source: 0.4 mA @ 2.4 V

General

- **Bus Type** Universal PCI V2.2
- **I/O Connectors** 1 x 37-pin D-type female connector
2 x 20-pin box header
- **Power Consumption** 5 V @ 460 mA typical, 500 mA max
12 V @ 150 mA typical, 100 mA max
- **Dimensions (L x H)** 175 x 100 mm (6.9" x 3.9")
- **Operating Temperature** 0 ~ 50° C (32 ~ 122° F)
- **Storing Temperature** -20 ~ 65° C (-4 ~ 149° F)
- **Storing Humidity** 5 ~ 95% RH, non-condensing

Ordering Information

- **PCI-1727U** 14-bit, 12-ch Universal Analog Output Card
- **PCL-10120-1** 20-pin flat cable, 1 m
- **PCL-10137-1** DB37 cable assembly, 1 m
- **ADAM-3937** DB37 wiring terminal for DIN-rail mounting
- **PCLD-780** Two 20-pin screw terminal board
- **PCLD-782** Opto-isolated D/I board
- **PCLD-785** Relay output board