PCI-1243U

4-axis Low Cost Stepping Motor Control Universal PCI Card



Features

- 4 axis stepping motor control
- PCI universal bus
- Up to 400 k pulse output rate
- T-curve acceleration/deceleration
- Pulse/Dir and CW/CCW pulse output mode
- Up 24-bit step count
- Opto-Isolated Digital input and output
- Up to 1,500 Vrms system isolation
- BoardID™ switch





Introduction

PCI-1243U is a 4-axis intelligent stepping motor control card with universal PCI interface. The card's PCD-4541 motion controller can execute a variety of motion-control commands. For advanced applications, we supply a DLL so that programs can be created for the Microsoft® Windows® environment.

PCI-1243U is a cost-effective solution for PCI based motion control. Each axis can be controlled directly through the card's I/O registers. However, use of the card's high-level DLL driver is recommended. With the DLL driver, you can easily link to VC++®, Visual Basic® or BCB.

Specifications

Pulse Type Motion Control

 Motor Driver Support Stepping Number of Axes Max. Output Speed 400 kpps Step Count Range $0 \sim 16,777,215$ Pulse Output Type Pulse/Direction, CW/CCW

 Position Counters ±16, 777, 215

Home Modes

 Velocity Profiles T or S-curve acceleration/deceleration

Local I/O

Machine Interfaces: PEL x 4, NEL x 4, ORG x 4, SLD x 4, EMG x 1

General Inputs: General Outputs:

Isolated Digital Input

Channels

 Input Voltage Logic 0: 1 V

Logic 1: 12 V (24 V max.)

Isolation Protection $3,750 V_{RMS}$ ■ Opto-Isolator Response 25µs Input Resistance $4.7 \, \text{k}\Omega$

Isolated Digital Output

Channels

 Output Type Sink (NPN) Isolation Protection $3,750 V_{RMS}$ Output Voltage $5 \sim 30 V_{DC}$

Sink Current 200 mA max./channel; 1.1 A max. total

■ Opto-Isolator Response 25µs

General

Bus Type PCI V2.2 Certifications CF

Connectors 1 x DB-62 female **Dimensions** 175 x 100 mm (6.9" x 3.9") **Power Consumption** Typical: 5 V @ 340 mA Max: 5 V @ 500 mA mA

5 ~ 95% RH, non-condensing (IEC 68-2-3) Storing Humidity

• Operating Temperature $0 \sim 60^{\circ} \text{ C} (32 \sim 140^{\circ} \text{ F})$ Storing Temperature -20 ~ 80° C (-4 ~ 170° F)

Ordering Information

 PCI-1243U 4-axis Stepping Motor Control card PCL-10162-1 DB-62 Cable Assembly, 1 M PCL-10162-3 DB-62 Cable Assembly, 3 M

 ADAM-3962 DB-62 wiring terminal with DIN-rail mounting

 ADAM-3943 PCI-1243U wiring board with LED