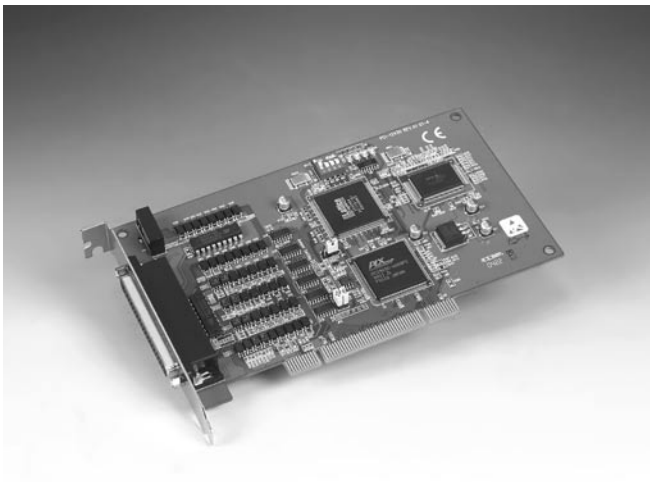
PCI-1243U

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** 4
- **Max. Output Speed** 400 kpps
- **Step Count Range** 0 ~ 16, 777, 215
- **Pulse Output Type** Pulse/Direction, CW/CCW
- **Position Counters** ±16, 777, 215
- **Home Modes** 4
- **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: 8
  General Outputs: 8

Isolated Digital Input

- **Channels** 8
- **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 kΩ

Isolated Digital Output

- **Channels** 8
- **Output Type** Sink (NPN)
- **Isolation Protection** 3,750 V_{RMS}
- **Output Voltage** 5 ~ 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** CE
- **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
- **Storing Humidity** 5 ~ 95% RH, non-condensing (IEC 68-2-3)
- **Operating Temperature** 0 ~ 60° C (32 ~ 140° 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