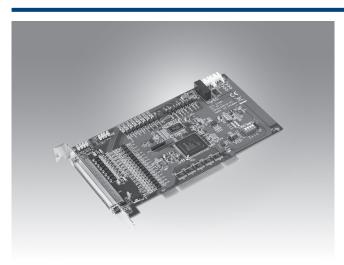
# PCI-1245L

## 4-Axis Stepping and Servo Motor Control Universal PCI Card



#### **Features**

- Encoder input is 10 MHz for 4xAB mode, 2.5 MHz for CW/CCW mode
- Pulse output up to 1 Mpps and the output type can be switched to differential or single-end by jumper setting
- Supports 2 axis linear interpolation
- Supports 3 axis linear interpolation (PCI-1245LIO only)
- Supports 2 axis arc interpolation (PCI-1245LIO only)
- Supports T/S-curve
- Supports speed override
- Hardware emergency input
- · Watchdog timer
- Supports programmable acceleration/deceleration rate
- Programmable interrupt
- RDY dedicated input channels & SVON/ERC dedicated output channels are switchable for general input and output purposes
- Supports extra 16 isolated DI / 16 isolated DO via wiring board (PCI-1245LIO only)



### Introduction

The PCI-1245Lare 4-axis universal PCI card supporting (both 3.3 V and 5 V signal slots) stepping/pulse-type servo motor control cards designed for entry-level applications which need to control JOG, point to point, continuous move, and interpolation motion such as 2-axis linear. In addition, all Advantech motion controllers use the "Common Motion API" architecture which is a unified user programming interface and graphical utility. This architecture saves application maintenance and upgrades. Programmers can benefit from integrating any Advantech SoftMotion controller without changing large amounts of the application code. User-friendly examples decrease programming workload, helping users complete configuration and diagnosis easily.

## **Specifications**

#### **Pulse Type Motion Control**

Motor Driver Support Pulse-type servo/stepping

Number of Axes

Interpolation
 2-axis linear interpolation

Max. Output Speed 1 Mbps

■ **Step Count Range** ±2, 147, 483, 646

Pulse Output Type
 Pulse/direction (1-pulse, 1-direction type), CW/CCW
 (2-pulse type) or single-ended +5V output

Range of command and actual position

Position Counters
 Velocity Profiles
 Range of comman
 T-Curve, S-Curve

velocity Profile
 Local I/O

Machine Interfaces: LMT+, LMT-, ORG

Servo Driver Interfaces: ALM, INP

#### **Encoder Interface**

• Input Type Quadrature (A/B phase) or up/down

Counts per Enc. Cycle x1, x2, x4 (A/B phase only)

Input Range 3~10 V Isolation Protection 2.500 Vnc

Max. Input Frequency 10 MHz under 4xAB mode

#### General

Bus Type Universal PCI V2.2

Connectors
 1 x 100-pin SCSI female connector

Dimensions (L x H)
 Power Consumption
 175 x 100 mm (6.9" x 3.9")
 Typical: 5 V @ 0.6 A

Typical: 5 V @ 0.6 A Max.: 5 V @ 1 A

■ **Humidity** 5 ~ 95% RH, non-condensing (IEC 60068-2-3)

Operating Temperature 0 ~ 60°C (32 ~ 140°F)
 Storage Temperature -20 ~ 85°C (-4 ~ 185°F)

## **Ordering Information**

PCI-1245L-AE
 4-axis Stepping/Pulse-type Servo Motor Control
Universal PCI Card

#### **Accessories**

■ MTB-3956LIO-AE 100-pin DIN-rail SCSI 4-axis Motion Wiring Board

w/ I/O-extension (Only for PCI-1245LIO)

ADAM-3956-AE
 ADAM-3955-AE
 100-pin DIN-rail SCSI 4-axis Motion Wiring Board
 50-pin DIN-rail SCSI 2-axis Motion Wiring Board

■ ADAM-3952-AE 50-pin DIN-rail SCSI and Box Header Board

PCL-101100M-1E/2E/3E 100-pin SCSI Cable, 1m/2m/3m

**PCL-10251-1E/2E/3E** 100-pin SCSI to Two 50-pin SCSI Cable, 1m/2m/3m

PCL-20153PA5-S2E
 50-pin Cable to Panasonic A4/A5 Servo, 2 m

PCL-20153YS5-S2E
 PCL-20153MJ3-S2E
 50-pin Cable to Yaskawa Sigma V/7 Servo, 2 m
 50-pin Cable to Mitsubishi J3/J4 Servo, 2 m

• **PCL-20153DA2-S2E** 50-pin Cable to Delta A2 Servo, 2 m