PCI-1241

4-Axis Voltage-type Servo Motor Control Card



Features

- PCI Bus interface
- 4-axis servo positioning control
- 5-channel encoder input
- 4 channel 16-bit D/A Converters
- 13 dedicated input and 5 dedicated output
- 6 channel 12-bit A/D converter (Optional)
- 256 remote serial input/ output interfaces

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Introduction

PCI-1241 uses an ASIC for 4-axis servo positioning and synchronized control with a DDA (Digital Differential Analyzer) to evenly move each axis. Closed-Loop control is implemented with P control, and -10 to +10 V signals are used for outputs to the speed type servo motor driver. It can be applied to multi-axis precision servo control, and it can also read back motor encoder values via its encoder input port to allow stepping motor control. In the control of each axis, there is a set of sensor input points, including: home points, plus limit points and minus limit points. Furthermore, there are inhibit signal output points, position ready output points and an emergency stop input point. It can be expanded up to 128 points input and 128 points output. Additionally, the board reserves a set of 6-channel A/D conversion.

Specifications

Hardware

185 x 109 mm Size System Clock 40 MHz Bus Interface PCI

Motion

Positioning Axes

 Max. DDA Commands 210-15 pulses

 DDA Cycle 25 μs ~3350ms Programmable

 Velocity Command +/- 10V Range

 Pulse Output Format Pulse/DirectionCW/CC WA/B Phase

 Error Counter 16 bits

(For Output Pulse)

128 IN/128 OUT Maximum Remote IO D/A Converter 4 channels, 16-bit resolution

A/D Converter 6 channels, 12-bit resolution with differential inputs

(Optional)

 Encoder Input 5 axes

 Interface Differential Input with Photo-Isolation A/B/Z Phase Pulse /DirectionCW/CCW Input Format

Decoder x0, x1, x2, x4, Software programmable in A/B/Z phase

 Encoder Counter 32 bits

Latch 15 trigger signals for each axis

Local IO

Home Sensor Signal

Input

Positive Over Travel

Signal Input

Negative Over Travel **Signal Inputs**

Inhibit Signal Outputs 4

Emergency Stop Inputs 1

Position Ready Outputs 1

Software Support

Device driver for DOS, Windows® 95/98/2000/NT/XP

Motion control library MCCL for DOS, Windows® 95/98/2000/NT/XP

Ordering Information

PCI-1241 4-axis Voltage-type Servo Motor Control Card

PCL-10168 68-pin SCSI-II cable with male connectors on both ends and special shielding for noise reduction,

 ADAM-3968 68-pin SCSI-II Wiring Terminal Board for DIN-rail

mounting

ADAM-3941 Wiring terminal for PCI-1241/1242 with LEDs

64 DI / 64 DO Remote IO Board PCLD-8241

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