PCI-1242
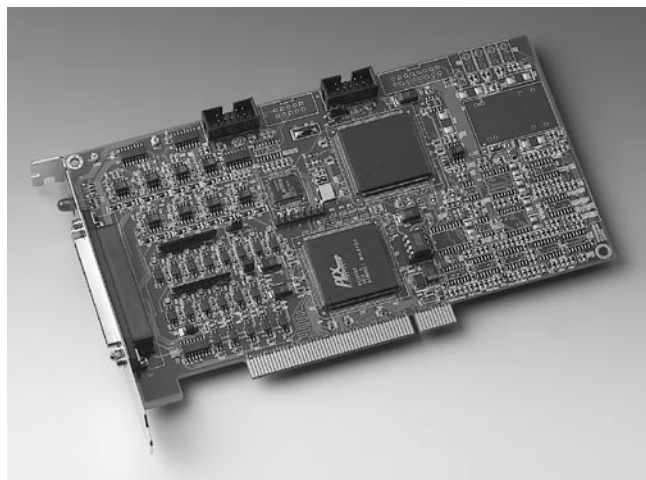
4-Axis Pulse-Type Motor Control Card Servo Motor Control Card

Features

- PCI Bus interface
- 4-axis servo or stepping motor pulse command control
- 5 -channel encoder input
- 13 dedicated input and 5 dedicated output
- 128 remote serial input / output interfaces

FCC CE

Introduction

PCI-1242 applied motion ASIC sends the pulse of each axis with DDA (Digital Differential Analyzer) algorithm to realize 4 axis servo positioning and synchronized control. Under the pulse output control, the encoder value can be read back from the encoder input port. So, it will be easier to carry out the software close loop control in stepping motor application. At the control of each axis, there is one set of sensor input point, including home point, plus limit point and minus limit point. In addition, there are inhibit signal output points, position ready output point, and emergency stop input point. For other input / output points, this board uses wire-saving I/O design, which can be expanded to 64 points input and 64 point output maximum.

Specifications

Hardware

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

Motion

- **Positioning Axes** 4
- **DDA Pulses** 1024 ~ 32767 Pulse/DDA Cycle
- **DDA Cycle** 25 µs ~ 3350 ms Programmable
- **Pulse Output Format** Pulse/DirectionCW/CCW A/B Phase
- **Error Counter** 16 Bits
  (For Output Pulse)
- **Remote IO** 64 IN/64 OUT Maximum
- **Encoder Input** 5 Axes
- **Interface** Differential Input with Photo-Isolation
- **Input Format** A/B/Z Phase Pulse /DirectionCW/CCW
- **Decoder** x0, x1, x2, x4, Software programmable in A/B/Z phase input
- **Encoder Counter** 32 bits
- **Latch** 15 trigger signal for each axis

Local IO

- **Home Sensor** 4
  Signal Inputs
- **Positive Over Travel** 4
  Signal Inputs
- **Negative Over Travel** 4
  Signal Inputs
- **Inhibit Signal Outputs** 4
- **Emergency Stop Input** 1
- **Position Ready Output** 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-1242** 4-axis Pulse-type Servo Motor Control Card
- **PCL-10168** 68-pin SCSI-II cable with male connectors on both ends and special shielding for noise reduction, 1 and 2 m
- **ADAM-3968** 68-pin SCSI-II Wiring Terminal Board for DIN-rail mounting
- **ADAM-3941** Wiring terminal for PCI-1241/1242 with LEDs
- **PCLD-8241** 64 DI / 64 DO Remote IO Board

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