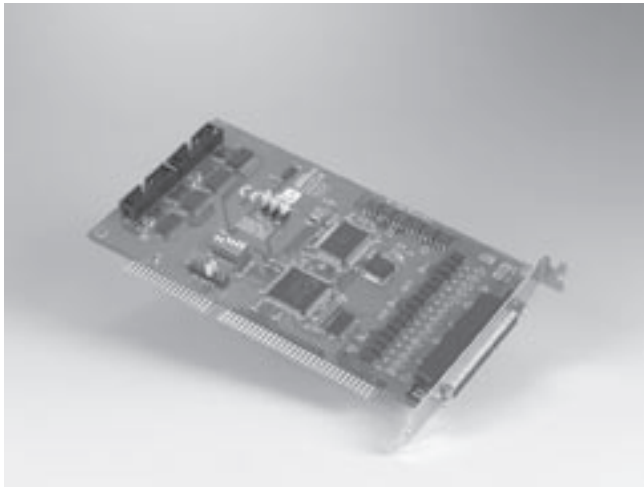# PCL-839+

3-axis Stepping Motor Control Card

Features

- Independent, simultaneous control of three stepping motors
- Optically-isolated outputs
- Five isolated digital inputs per axis for limit switches
- Half-size PC add-on card
- Up to 200 kpps step rate
- 16 DI and 16 DO

Introduction

PCL-839+ three axis intelligent stepping motor control card turns your IBM-compatible PC into a 3-axis motion-control station. The card's one PCD-4541 intelligent controller chips can execute a variety of motion-control commands. For advanced applications, we supply function libraries which you can link to your C program.

Programming PCL-839+

You can control each axis directly through the card's I/O registers. but use of the card's high-level interpreter is recommended. This interpreter reads high-level commands from a text file to perform specific tasks. We also supply function libraries which you can call from your C program. The libraries come with 'Turbo C' source code which you can recompile if you want to access the libraries from other C compilers.

Specifications

Pulse Type Motion Control

- **Motor Driver Support**   Stepping
- **Number of Axes**   3
- **Max. Output Speed**   200 kpps
- **Step Count Range**   0 ~ 16, 777, 215
- **Pulse Output Type**   Pulse/Direction, CW/CCW
- **Velocity Profiles**   T-Curve
- **Local I/O**
  Machine Interfaces: PEL x 3, MEL x 3, ORG x 3, SLD x 6
  General Inputs: 16 (5 V/TTL)
  General Outputs: 16 (5 V/TTL)

General

- **Bus Type**   ISA
- **Certifications**   CE
- **Connectors**   1 x DB-37 (limit switches and pulse output)
  1 x 20-pin flat cable (DIO)
- **Dimensions**   185 x 100 mm (7.3" x 3.9")
- **Power Consumption**   Max: 5 V @ 390 mA
- **Storing Humidity**   5 ~ 95% RH, non-condensing (IEC 68-2-3)
- **Operating Temperature**   0 ~ 60° C (32 ~ 140° F)
- **Storing Temperature**   -20 ~ 70° C (-4 ~ 158° F)

Ordering Information

- **PCL-839+**   3-axis stepping motor control card
- **PCL-10137-1**   DB-37 cable assembly, 1 m
- **PCL-10137-2**   DB-37 cable assembly, 2 m
- **PCL-10137-3**   DB-37 cable assembly, 3 m
- **ADAM-3937**   DB-37 wiring terminal for DIN-rail mounting
- **ADAM-3920**   20-pin flat cable wiring terminal for DIN-rail mounting

Applications

- X-Y table control
- Rotary machine control
- Robotics control
- Precision position control using stepping motors