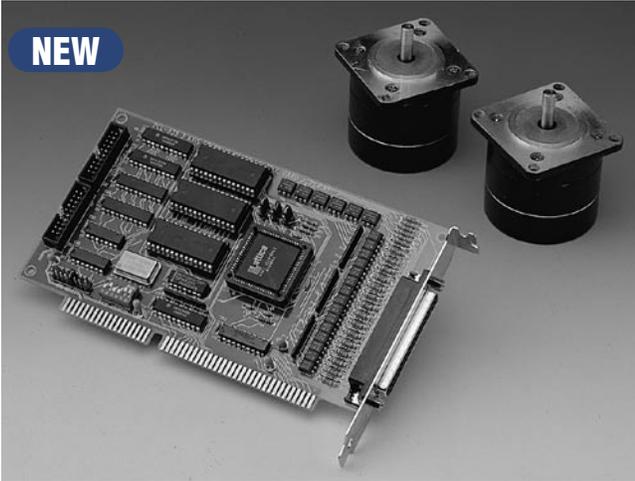


PCL-839+

3-axis Stepping Motor Control Card

NEW



CE

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 250 kpps step rate
- 16 DI and 16 DO

Introduction

The 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 the 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

- **Axes** 3, independent
- **Max. Step Count** 0~16,777,215
- **Max. Step Rate** 200 kpps
- **Acceleration/Deceleration** Automatic trapezoidal, ramping, programmable start run and sampling rate
- **Output Pulse Signal** Two pulse (CW/CCW) mode or one pulse (pulse, direction) mode. Optically coupled with 10 K pull-up resistor
- **Output Driving Capability** 20 mA @ 0.4 V (sink)
- **Output Polarity** Positive/negative, programmable
- **Limit Switches** Five per channel (home, forward/reverse end limit, forward/reverse high speed limit)

DI/O and Interrupt

- **DI/O** 16 digital inputs and 16 digital outputs, TTL compatible
- **Interrupt** IRQ 2, 4, 5, 7, 11, 12 or 15 for limit switches, jumper selectable

General

- **I/O Addresses** 16
- **Power Consumption** 5 V @ 390 mA max.
- **Operating Temperature** 0 ~ 60° C (32 ~ 140° F)
- **Storage Temperature** -20 ~ 70° C (-4 ~ 158° F)
- **Operating Humidity** 5 ~ 95% RH non-condensing (refer to IEC 68-2-3)
- **Connectors** DB37 for limit switches and pulse output; 20-pin flat cable for general DIO
- **Dimensions (L x H)** 185 x 100 mm (7.3" x 3.9")

Ordering Information

- **PCL-839+** Intelligent 3-axis stepping motor control card, user's manual and driver CD-ROM (cable not included)
- **PCL-10137-1** DB37 cable assembly, 1 m
- **PCL-10137-2** DB37 cable assembly, 2 m
- **PCL-10137-3** DB37 cable assembly, 3 m
- **ADAM-3937** DB37 wiring terminal for DIN-rail mounting

Applications

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