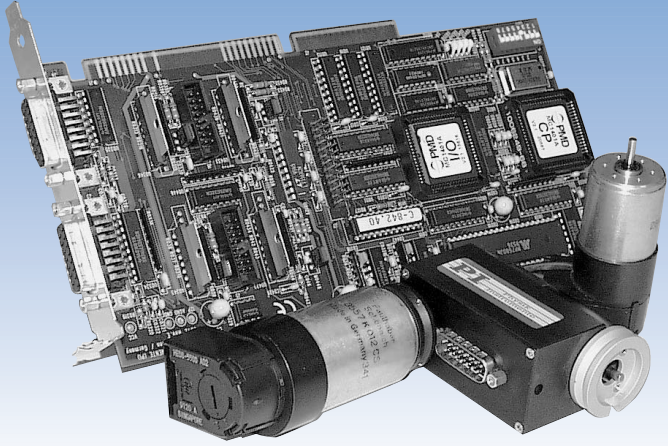


**C-842,
C-843***

**DC-Motor Controller
PC Board**

This product has been replaced by the C-843 PCI Board: Click here for more info



C-842.40 DC-motor controller board shown with several DC motors.

Ordering Information

- C-842.20**
DC-Motor Controller ISA PC Board, 2-Axis
- C-842.40**
DC-Motor Controller ISA PC Board, 4-Axis
- C-842.20B**
DC-Motor Controller ISA PC Board, 2-Axis, Brake Control
- C-842.40B**
DC-Motor Controller ISA PC Board, 4-Axis, Brake Control (on Ch 1 and 2)
- C-819.10**
Analog Joystick
- C-843.20***
DC-Motor Controller PCI PC Board, 2-Axis
- C-843.40***
DC-Motor Controller PCI PC Board, 4-Axis

** Consult www.pi.ws or call your PI Sales Engineer for availability.*

- **Simultaneous Control of up to 4 DC Servo-Motors**
- **Fast 32-bit Digital PID V-ff Servo Loop**
- **On-Board Linear Power Amplifiers (12-bit) and PWM Outputs**
- **Trapezoidal Curve, S-Curve and Velocity Contouring**
- **LabView™ Drivers, Libraries for C, PASCAL, etc.**
- **Programming Tools for Windows™**
- **Hardware Interrupts for Process Control**
- **High-Level Command Language Interface**
- **16 I/O Lines for Flexible Automation**
- **12 TTL Inputs for Limit & Origin Switches**
- **Electronic Gearing**
- **Motor-Brake Control Output**
- **Programmable Torque Limit**

The C-842/C-843 PC plug-in DC-motor controller board is a cost-effective solution for applications where a multi-axis precision positioner is to be computer-controlled by a PC.

On-Board Drivers

Integrated low-noise linear amplifiers allow operation of micropositioning systems with motor/gearhead drives from the card, without additional external amplifiers, reducing costs and simplifying the setup.

High-Performance PID Control

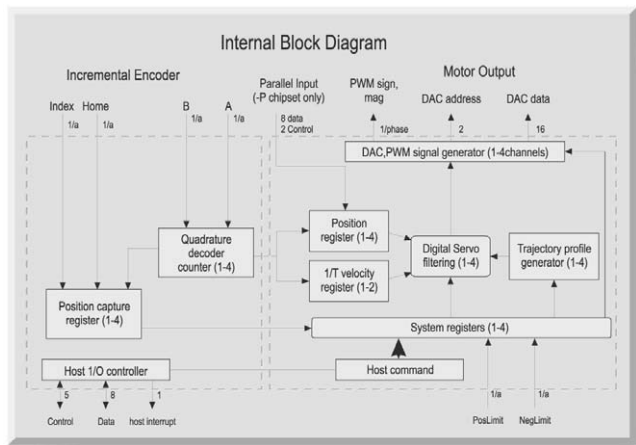
The C-842/C-843 employs a fast DSP (digital signal processor) providing high-performance PID motion control with many options for trajectory generation and filter settings. Position, velocity, acceleration and several other motion parameters can be programmed individually for each axis on-the-fly. The C-842 can be installed in any 16-bit ISA PC slot. The PCI compatible version has product number C-843*.

Any quadrature TTL (A/B) incremental encoder can be used for position feedback (linear scales and rotary encoders, interferometers). Eight TTL inputs and eight TTL outputs are available for flexible automation (trigger functions, etc.).

Programming

The C-842/C-843 offers full access to the internal processor functions. Programmers can use hex commands and 32-bit parameters for very fast communication (3,000 data units/sec). The motor controller also comes with a variety of software tools such as LabView™ drivers, libraries in C, PASCAL and BASIC, and the WinMove operating program for instant, easy operation with no low-level programming required. Windows™ programming is supported by 32-bit and 16-bit DLLs (see page 9-16 for further information on the software tools included).

** Consult www.pi.ws or call your PI Sales Engineer for availability.*



C-842.40 Block diagram