

# **SECTION III**

## **Standard Motion Control Products**

# Multi-Axis Servo Controller System

Multi-Axis Drive/Controller Sub-System, based on the powerful Delta Tau PMAC® motion controller, allows for a complete high performance system solution. Package includes all components necessary, fully integrated, to get your application up and running fast, without having to worry about integration issues normally associated with PC-based motion controllers. Included are all power supplies, signal conditioning/distribution PCBs, and motor drivers, in one convenient Desktop or 19" Rackmount unit.



## Applications

- High-Speed/High-Resolution positioning systems.
- Video Inspection Systems
- Wafer Stepping Systems
- Laser Measurement Systems
- Laser Machining Systems
- Any Motion Control Application requiring state-of-the-art in motion control technology

## Complete System

Each system includes everything you need to get your application up and running quickly and easily:

- Software
- Joystick with Multi-speed Controls
- Instruction and Application Manual
- RS-232 Interface Cable
- Fully Wired Motors w/Limit Cables
- All Mating Connectors
- AC Power Cord

# High-Performance Motion Control Systems made simple!

## Features & Benefits

- 2-4 Axes standard - expandable to 8-Axis
- Control virtually any type of motor, including: Linear Servo, Brushless Servo, and Microstepper type motors
- Integrated Joystick Control, fully programmable hi/med/low speed, user definable, capable of controlling up to 8-Axis with single 3-Axis Joystick.
- Integrated Emergency Stop Control / External Brake Control
- Supports Dual Encoders (Velocity/Position Loop)
- High Speed Encoder Input Rate, up to 20MHz post-quadrature
- 55  $\mu$ s Servo Update Rate
- 36-bit Position Range (+-64 billion counts)
- Linear Error Compensation table
- Sine Commutation, Torque, and Velocity modes
- G-Code Command Processing
- Multiple Axis Control with Simultaneous Linear and Circular Interpolation
- 40MHz processors
- Advanced Auto-Tuning S/W and PID controls include: Lowpass and Notch Filters, AFF and VFF
- 16-bit Analog Input available (4 inputs if no Joystick), expandable to 8 channels
- 16-bits (8 in/8 out) User Definable Digital I/O, externally expandable to 2048
- User programmable PLCs allow for complete motion and control system integration
- High-Speed Bus Communications, RS-232/422 Interface, or Standalone Operation
- Software Library support - ActiveX, C++, C, Visual Basic
- Available in Desktop or 19" 5U Rackmount configurations