ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

**Artisan Technology Group**
(217) 352-9330 | sales@artisantg.com | artisantg.com

**Full-service, independent repair center**
with experienced engineers and technicians on staff.

**We buy your excess, underutilized, and idle equipment**
along with credit for buybacks and trade-ins.

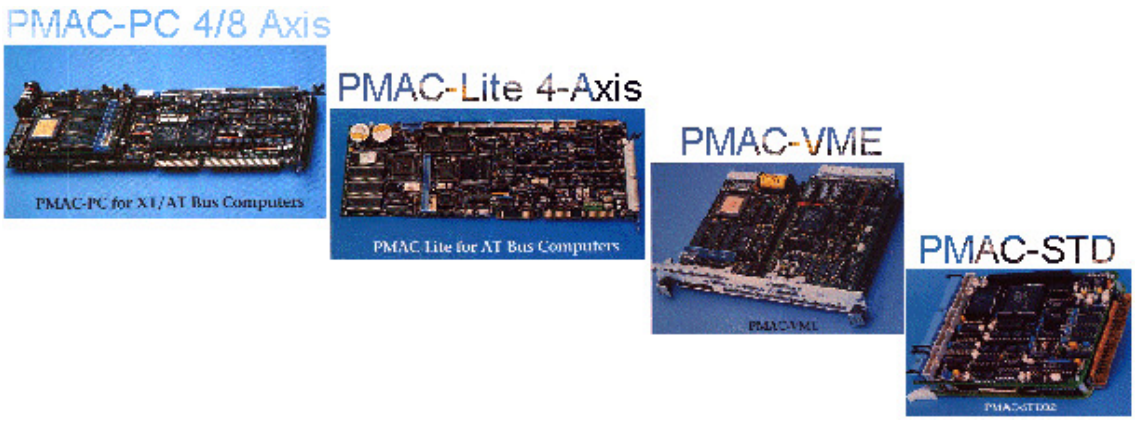
**Custom engineering**
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

**Expert team | Trust guarantee | 100% satisfaction**

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *OMRON / Delta Tau PMAC-PC* at our website: *Click HERE*

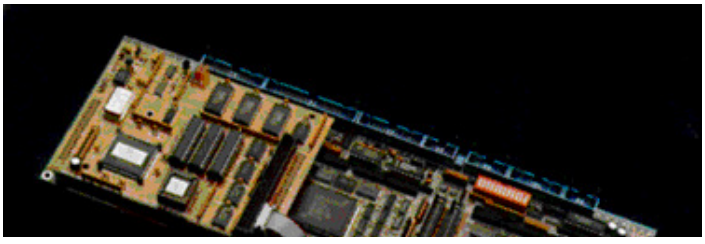



# - Basic 4/8 Axis PMAC Specifications -

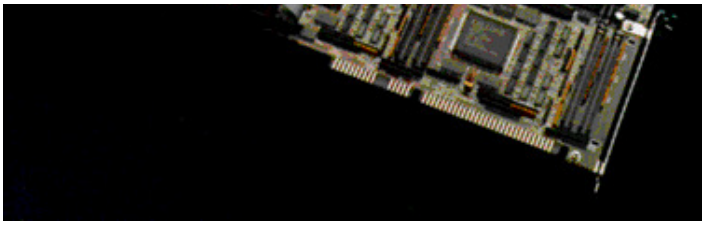
- Motorola DSP 56001, 56002, and 56003 Digital Signal Processors
- Battery Backed Ram, Flash Memory, or Combinations of Flash & Battery Backed
- Up to 8 Servo Axes per Board
- Available in 20, 40, 60 and 80 MHz Versions
- High Servo Update Rate …Default @ 2.2 KHz - Increase or Decrease Servo Rate based on Application Requirements …
- PC, VME or STD32 Bus Versions (All PMACs can run entirely Stand-Alone
- Position Range +/-64 Billion Counts
- 16-Bit DAC Output Resolution
- 10-40Mhz Encoder Count Rates
- Control any Type of Motor
- 200 - 1000+ Blocks/Second Execution Rates
- Multi-Axis 3-D Interpolation - Linear/Circular
- "S-Curve" Acceleration and Deceleration - Full or Partial
- Cubic Trajectory Calculations, Splines
- 1..8 Coordinate Systems (All Axis Synchronized 1-C.S., Independent-Asynchronous Axis Commanded Independently … Application Definable, Translation & Rotation
- Independent Program Execution in each Coordinate System (C.S.)
- Bus Port, RS-232/422, and HiSpeed Dual-Port Ram Communications Option
- "G-Code" and "M-Code" Command Processing for CNC
- 2-Axis Motion Control From AutoCAD Files
- PID plus Notch (Resonance Control) and Feed-Forward Filter
- Auto-Tuning of Motors
- Axis Scaling in User Units (Inch, Metric, Degrees, etc.)
- Electronic Cams, Gearing, Ratios
- Lead-Screw Compensation
- Dual-Feedback - Position (Load) and Velocity (Motor) - Stability
- Dead-Band Control
- Calculation: 56-Bit and Residuals (Accuracy … Smoothness
- On-Board Data Gathering/Logging for System Analysis
- Hardware Based: High-Speed Position Capture and Compare
- 2048 Floating-Point Variables per PMAC
- Inverse Kinematics Computations

## PMAC2 Feature Summary

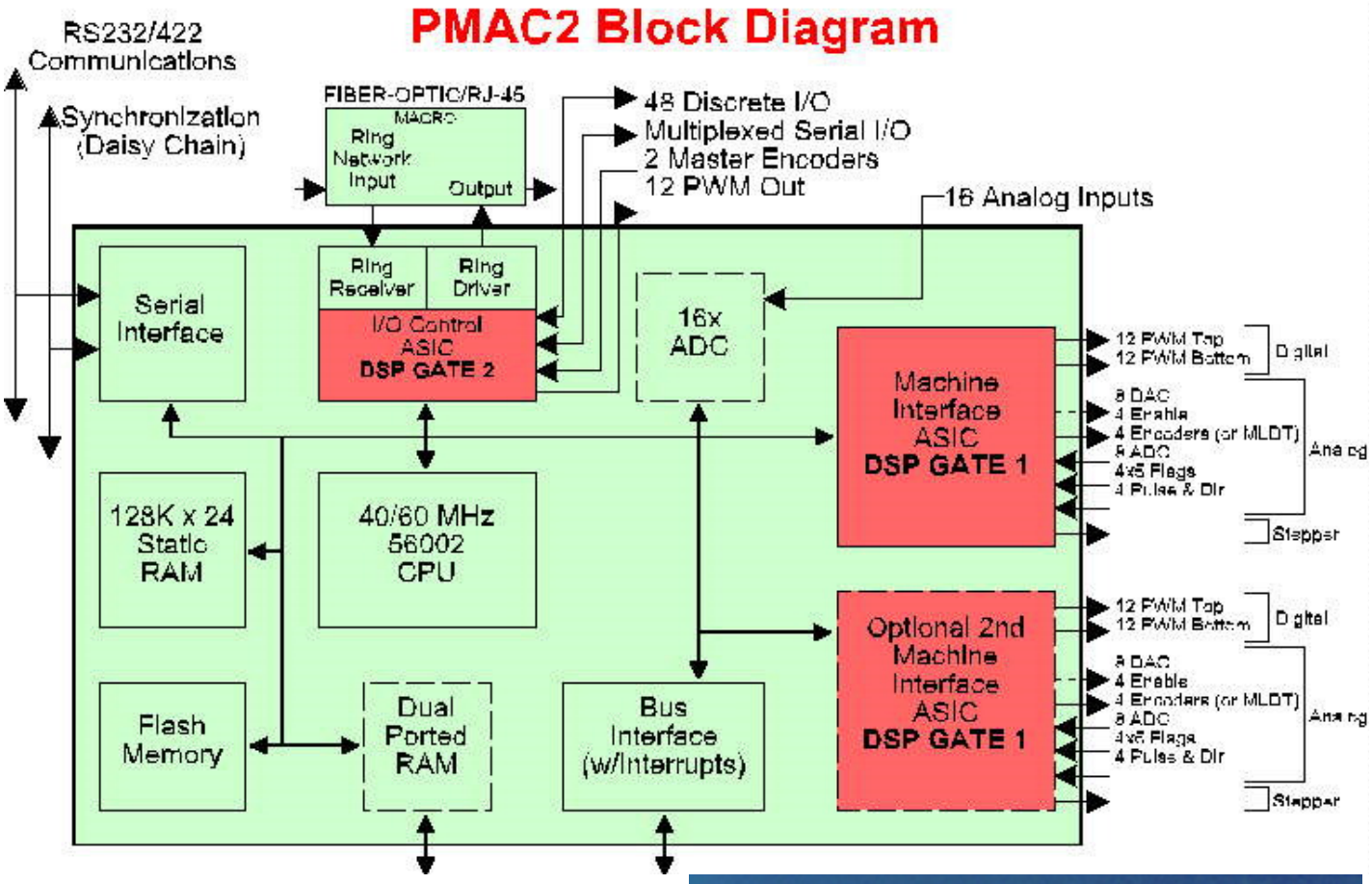
- Speed, 56002 CPU, 40 MHz and optional 60 Mhz and 80 Mhz.
- Customer retains all existing application (User) programs.



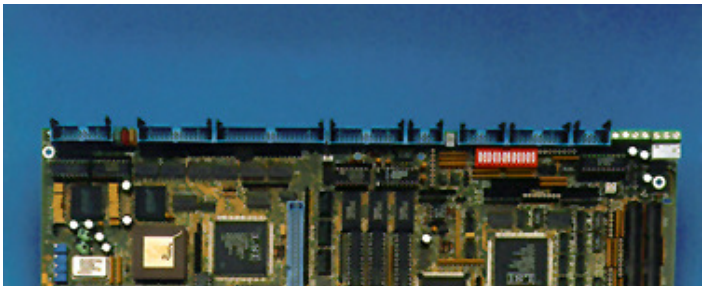

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com



- Two new large Gate Arrays (40K + gate equivalence).
    1. - Direct digital PWM outputs for driving digital amps. Current loop closed on-board.
    2. - Pulse and direct on output on-board for stepper motors.
    3. - MLDT (Magnetostrictive Linear Displacement Transducer) measurement performed on-board, with 120 MHz clock for high resolution positon measurement.
    4. - Hall effect read on-board for motor phasing.
    5. - Fiber Optical/RJ 45 high speed serial link MACRO (Motion Control Ring, Optical).
- Flash ROM replaces battery (Save function takes 8 seconds).
- Firmware change possible via Bus or RS232 (no battery used).
- Buffered I/O for Robust Control.
- Most I/O connectors are still there plus new I/O added.
- 16 A/D converter channels on-board (option).
- Dual ported RAM on-board (option).
- Uses partial surface mount technology.
- Has PC and VME formats, also PMAC2-Lite (4 axis only) and PMAC2-Ultra Lite (MACRO only).
- Requires new accessory, 8E (Analog) and 8F (Digital).

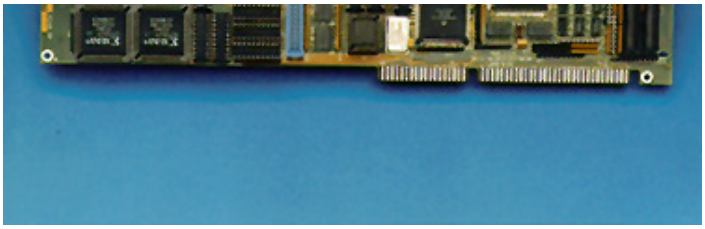



## PMAC2 - Multiple Operational Modes



- Single analog ouput, position feedback (Classic Analog +/-10V).
- Dual analog ouput, position feedback (commutation, AC induction or DC brushless).


Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com



- Pulse and direction output, optional feedback (stepper motor).
- Direct PWM output, current and position feedback (digital drive).
- Ring network output, ring network feedback (fiber optic, MACRO).
    1. -Position, Velocity, Torque or PWM Commands can be transmitted over the MACRO ring.
    2. -Position feedback values, encoder/resolver, are read via the MACRO Ring
    3. -Amplifier diagnostic information (Current, Bus Voltage, Temperature, Shunt Status).
    4. -I/O Control can be mixed with Axis Control.
- Communication via RS232, ISA Bus, MACRO, DPRAM.

Copyright ©1995 Delta Tau Data Systems, Inc..
All Rights Reserved
PMAC® , MACRO-Ring®, New Ideas in Motion® and others ...
are registered trademarks of Delta Tau Data Systems, Inc.





Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

**Artisan Technology Group** is an independent supplier of quality pre-owned equipment

## Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

## We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

## Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP