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

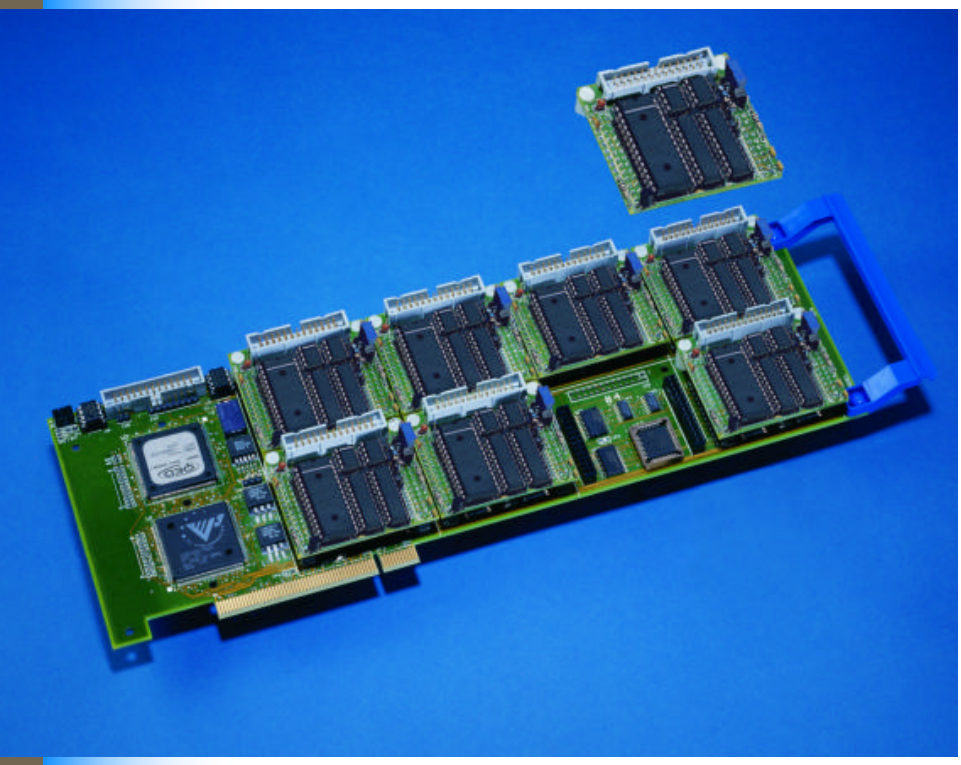
Expert team | Trust guarantee | 100% satisfaction

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

Find the *Precision MicroControl DCX-PCI100* at our website: *Click HERE*

DCX-PCI100 Motion Controller

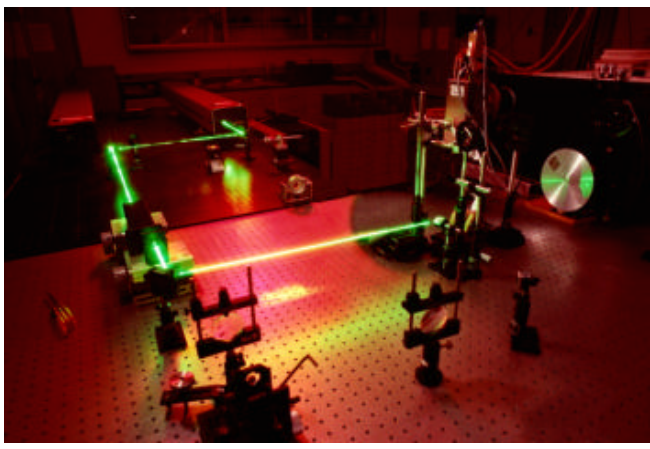
An Introductory Guide to the DCX-PCI100 Motion Control Card...



The DCX-PCI 100 Series card is based on field-proven technology designed to control miniature brush DC servo motors in applications such as optoelectronic R&D and production, lab automation and medical and scientific instrumentation. Features include:

- 1 to 8 axes of servo control
- Economical PCI card form-factor
- Drive up to 8 small DC servo motors directly
- No external amplifiers needed
- 12 Volts, 0.5 Amp = 6 Watts power per channel.
- Independent position or velocity control of 1 to 8 axes simultaneously
- Up to 32 general-purpose analog inputs and 32 general-purpose analog outputs
- 3.3 KHz servo loop update rate each axis (up to 8 axes)
- On-the-fly parameter and trajectory changes
- On-board multi-tasking of up to ten independent user programs - frees host PC for other tasks
- Fully programmable in C, C++, LabVIEW, Visual Basic, Delphi, or easy-to-use on-board command language
- Supports PMC's Motion Integrator suite of graphical setup, tuning and diagnostic programs
- Full support for Windows 98/NT/2000/XP

- ***An exceptionally cost-effective PCI-bus motion control card***
- ***Control and drive up to eight small DC servo motors or motorized actuators***
- ***From 1 to 8 servo amplifiers on-board***
- ***No external amplifiers needed***
- ***Native LabVIEW support via our extensive Motion VI library***
- ***Powerful Windows software for superior ease-of-use and programming flexibility***



PMC Motion Control
Precision MicroControl Corp. Since 1987

DCX-PCI100 Series Specifications

Processor

- Motherboard: 32-bit MIPS RISC processor / with 64-bit floating-point co-processor
- Axis modules: 32 bit microcontroller (one per axis)

Communication

- PC-PCI bus via dual-ported RAM
- High speed binary communication
- ASCII mode communication also available

Programming

- Programmable using C/C++, Visual Basic or Delphi (Pascal)
- Native LabVIEW/BridgeVIEW support via our Motion VI Library
- Native drivers for Windows 98/NT/2000/XP
- Motion Integrator™ graphical Windows utilities for tuning, setup and diagnostics
- On-board Motion Command Language with multitasking of up to 10 tasks

Motion Capabilities

- 1 to 8 control axes per card
- Direct drive of up to 8 small DC servos – no external amplifier needed
- Independent point-to-point positioning of up to 8 axes
- Independent velocity control of up to 8 axes
- Position, velocity, gain and jog control modes
- Motion trajectory & parameters can be changed on-the-fly

Memory

- 4 Mbytes RAM
- Non-volatile user program memory: 64K
- 256 general purpose user registers (variables)

Kinematic Ranges

- Position: 32 bit
- Velocity and acceleration: 32 bit

Servo Control Signals

- Amplified drive output for small servo motors (12 volts, <0.5 Amp)
- ±10V command signal with 12-bit DAC resolution
- Simultaneous update of all axes

Servo Filter

- Proportional/Integral/Derivative (PID) servo filter
- 3.3 KHz servo loop rate per axis (up to 8 axes)

Position Feedback

- Quadrature incremental encoder with index
- 1 MHz encoder count rate for each axis (up to 8 axes)
- Single-ended or differential inputs (A+, A-, B+, B-, I+, I-)
- 32-bit resolution

Dedicated I/O *(each axis)*

- Axis inputs: Home, ± limits, amp fault
- Axis outputs: Amp enable

General Purpose I/O

- 16 digital I/O on motherboard, 8 inputs and 8 outputs
- Up to 128 additional configurable digital I/O
- Up to 64 analog I/O, 12-bit resolution

Other Features

- Windows Flash Wizard for quick firmware updates
- Programmable in user units
- On-board watchdog timer with external or PC-bus reset

Connections

- 26 pin dual-row IDC ribbon header for each axis module
- 26 pin dual-row IDC ribbon header for on-board digital I/O
- Direct connection compatibility with many models of motorized 5micropositioning actuators
- Plug-compatible interface adapter for Opto 22 or Grayhill relay racks
- Optional axis interconnect adapters with individually labeled screw terminals

Environmental & Mechanical

- Operating temperature: 0-55 ºC (32-131 ºF) R.H. non-condensing
- Size: 314mm x 107mm (12.3" x 4.2")

www.pmccorp.com

PMC Precision MicroControl Corp. Motion Control Since 1987

2075-N Corte del Nogal
Carlsbad, CA 92009 USA
Tel 760-930-0101 • Fax 760-930-0222

information: info@pmccorp.com
Sales: sales@pmccorp.com
Tech Support: support@pmccorp.com
Web: www.pmccorp.com

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