# PCI Bus Motion Boards

# PISO-PS200 High Speed 2-Axes Motion Control Card



#### Features:

- Independent 2-axis motion control
- Support for hand wheel and jog functions
- Continuous interpolation function
- 2-axis linear interpolation function
- 2-axis circular interpolation function
- Programmable T/S-curve acceleration and deceleration
- Expandable distributed I/O: 128 DI & 128 DO Via twowired FRnet interface.

## **Applications:**

- X-Y-Z Table
- Fix-Pitch Stamping Machine
- Transfer Machine
- Spinner
- Load/Unload













#### **Introduction:**

The PISO-PS200 is a 2-axis stepping/pulse-type servo motor control card that can be used on any IPC with 5V PCI bus, and is suitable for general-purpose motion applications. This card also contains one port of FRnet which allows IPC to expand its fast remote I/O easily. This two-wired FRnet can have maximum 128 DI and 128 DO, and they are automatically scanned with a period of 2.88 ms. PISO-PS200 contains a high-performance motion ASIC. Apart from a wide speed range, this intelligent motion controller also has a variety of motion control functions built in, such as 2-axis linear interpolation, 2-axis circular interpolation, T/S-curve acceleration/deceleration, various synchronous actions, automatic homing, and others. In addition, most of the PISO-PS200 motion control functions are performed with little load on the processor. The motion status, FRnet I/O, and the other I/O cards on IPC can still be monitored while driving. As a result of the low CPU loading requirements of the PISO-PS200, one or more motion cards can be used on a single IPC. ICP DAS has also provided a variety of functions and examples to reduce the need for programming by users, making it a highly cost-effective solution for motion builders.

### **Specifications:**

- 2 controllable axes
- Maximum Pulse output frequency 4Mpps
- 32-bits up/down counter range -2,147,483,648 ~ +2,147,483,647
- Acceleration/deceleration range
  - 125 ~ 1 x 10^6 PPS/S ; 62.5×10^3 ~ 500 x 10^6 PPS/S
- ▶ Input/Output Signals for each axis
- All I/O signal are optically isolated 2500Vrms
- Command Pulse output pins ±N and ±P
- Encoder signals input pins ±A and ±B
- Encoder index signal input pins ±Z
- Mechanical signal input pins ±LMT, HOME and NHOME
- Servo-motor interface I/O pins INP, ALAM and SRV\_ON Servo ON
- Manual pulse generator signal input pin ±EXP
- Connectors 68-pins SCSI-type connector
  Operating Temp -20 ~ + 75°C
- Storage Temp -30 ~ +85°C
- Departing Humidity 10 ~ 85% non-condensing
- Storage Humidity 5 ~ 90% non-condensing
- External Power supply(Input) 24V DC (connect to terminal board)

#### **Software supported:**

- Driver supports for Windows XP/2K
- ➡ Programming Tools: VC/VB/BCB

#### **Ordering Information:**

Model No.	Product Description
PISO-PS200	2-axes motion control card
DN-8237GB	The daughter board for General Purpose
DN-8237DB	The daughter board for Delta ASDA A Amplifier.
DN-8237MB	The daughter board for Mitsubishi J2S Amplifier.
DN-8237PB	The daughter board for Panasonic MINAS A Amplifier.
DN-8237YB	The daughter board for Yaskawa Sigma II Amplifier.
CA-3710	DB-37 Male D-sub cable 1M, Cable for Daughter Board(45°)
CA-3720	DB-37 Male D-sub cable 2M, Cable for Daughter Board(45°)
CA-3710DM	DB-37 Male D-sub cable 1M, Cable for Daughter Board(180°)
CA-3730DM	DB-37 Male D-sub cable 3M, Cable for Daughter Board(180°)
CA-3750DM	DB-37 Male D-sub cable 5M, Cable for Daughter Board(180°)
CA-2P4C-0100	The cable for FRNet modules; Length:100m

Note: You may choose these terminal boards depending on your original motors and drivers. Moreover, we also provide plenty of cables for you. Please see the last chapter-Accessories.