Multi-axis Motion Modules for PAC

1-8094F-G High Speed 4-Axis Motion Control Module with FRnet master



Advantages & Features:

- Independent 4-axis motion control
- Support for hand wheel and jog functions
- 4-step home modes with auto searching
- 2/3-axis linear interpolation function
- 2-axis circular interpolation function
- Programmable T/S-curve acceleration and deceleration
- Programmable ring counter
- Work on a PAC: Wincon & I-8000 and WinPAC
- 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 i-8094F is a 4-axis pulse-type stepping/servo motor control module that can be used on any of the ICP DAS I-8000 Wincon and WinPACseries series controllers, and is suitable for general-purpose motion applications. It is a module that has full functions of i-8094 plus one port of FRnet. The FRnet port allows this module to expand its fast remote I/O easily. This two-wired FRnet can automatically scan its 128 DI and 128 DO with a period of 2.88 ms. This module contains a high-performance motion ASIC. Apart from a wide range of speed, this intelligent motion controller also has a variety of built-in motion control functions, such as 2/3- axis linear interpolation, 2-axis circular interpolation, T/S-curve acceleration/deceleration, various synchronous actions, automatic homing, and so on. In addition, most of the i-8094F motion control functions are performed with little load on the processor. While driving the motors, the motion status, and the other I/O status on the i-8000 or Wincon or winPAC modules, can still be monitored. As a result of the low CPU loading requirements of the i-8094F, one or more motion modules may be used on a single i-8000 Wincon or winPAC controller. ICP DAS has also provided a wide range of functions and examples to reduce the need for programming by users, making it a highly cost-effective solution for motion builders.

Specifications:

- 4-Axis Motion Control
- 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 ; 62.5x10^3 ~ 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

- Servo-motor interface I/O pins
 - INP, ALAM and SRV_ON Servo ON
- Connectors 68-pins SCSI-type connector
- Operating Temp -20 ~ + 75
- Storage Temp -30 ~ +85
- Operating Humidity 10 ~ 85% non-condensing
- Storage Humidity 5 ~ 90% non-condensing
- External Power supply (Input) 24V DC (connect to terminal board)

Software support:

- Development software: Win CE->eVC/VC.net/VB.net
- MiniOS7->TC3.0/MSC/BC3.0
- EzGo assists the motion system developer to debug any wiring problem, and provides the programming code.
- FRNet I/O Tool EzConfig

Ordering Information:

| Model No. | Product Description |
|----------------|------------------------------------------------------|
| i-8094F-G | 4-axis motion control module |
| DN-8468GB | The daughter board for General Purpose |
| DN-8468DB | The daughter board for Delta ASDA A Amplifier. |
| DN-8468MB | The daughter board for Mitsubishi J2S Amplifier. |
| DN-8468PB | The daughter board for Panasonic MINAS A Amplifier. |
| DN-8468YB | The daughter board for Yaskawa Sigma II Amplifier. |
| DN-8468FB | The daughter board for FUJI FALDIC-W servo Amplifier |
| CA-SCSI15 | 68-pin SCSI-II cable, length: 1.5 m |
| CA-SCSI30 | 68-pin SCSI-II cable, length:3 m |
| CA-SCSI50 | 68-pin SCSI-II cable, length:5 m |
| 4PCA-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.