I-8094H-G High Speed 4-Axis Motion Control Module with FRnet master & CPU inside

CE FC

Advantages & Features:

- I-8094H = Small system + MiniOS7 (DOS like OS) + I-8094F (4-axis motion control module)
- On board CPU + On board SRAM: 512KB + On board EEPROM: 512KB
- 4-step home modes with auto searching
- 2-axis position compare trigger output
- Support Macro Function and Macro Sequence (Integration Develop Environment)
- Programmable ring counter
- Work on a PAC: Wincon
- Expandable distributed I/O: 128 DI & 128 DO Via two-wired FRnet interface.

Applications:

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

| Ring | Programmable Ring counter | Programmable T/S Curve | 2/3-axis linear interpolation | 2-axis circular interpolation | FRnet DI·DO 128 DIs / DOs via FRnet | Compare Trigger | Auto-search home mode | Macro functions & sequences | On-board small system |

Introduction:

The i-8094H is a 4-axis pulse-type stepping/servo motor control module that can be used on any of the ICP DAS Wincon series controllers, and is suitable for general-purpose motion applications. This module features a built-in 80186 CPU for further process as well as one port of FRnet, and the other parts of the module are just identical to the i-8094 itself. 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 CPU let this module be able to do motion without a PAC. When working with a PAC, it also allows users to add additional functions by calling user-defined subroutines (macro functions). Therefore, users can build their special know-how inside this module. i-8094H 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-8094H 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 Wincon modules, can still be monitored. As a result of the low CPU loading requirements of the i-8094H, one or more motion modules may be used on a single Wincon controller. 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:

- 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
- 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
- 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:

- Driver supports for Win CE
- eVC++ is a recommended programming tool
- Macro-Program Tool EzMake
- FRNet I/O Tool EzConfig

Ordering Information:

Model No.	Product Description
i8094H	4-axis motion control module 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.