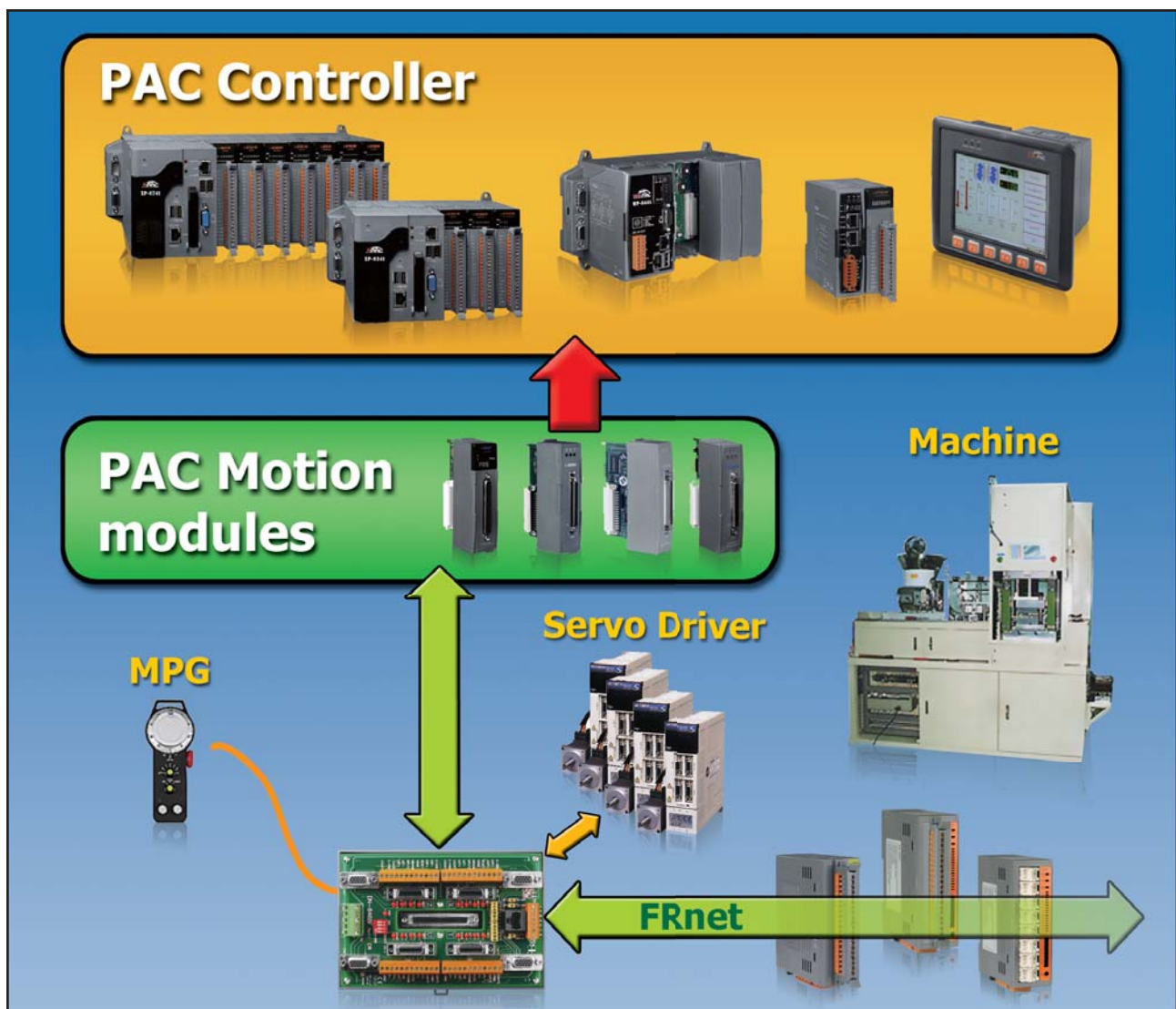# 6.7. Motion Control Modules

☑ Introduction

The i-8092/4/F/A/H is a 2/4-axis stepping/pulse-type servo motor control module that can be used on the ICPDAS PAC series controllers, and is suitable for general-purpose motion control application.This module 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 2/3(4 Axes only)- axis linear interpolation, 2-axis circular interpolation, T/S-curve acceleration/deceleration, various synchronous actions(4 Axes only), automatic homing(4 Axes only), and others. In addition, most of the motion control functions are performed with light load on the processor. While driving the motors, the motion status, and the other I/O status on the PAC modules, can still be monitored. As a result of the low CPU loading requirements, one or more motion modules may be used on a single PAC controller. ICPDAS 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.

The i8092F/4F/4H modules have 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.

☑ Applications

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● Selection Guide

Motion Control Modules (Parallel Bus)								
Model Name	I-8090W	I-8091W	I-8092F	I-8093W	I-8094	I-8094F	I-8094A	I-8094H
Pictures				NEW				
Encoder Input								
Axis	2	-	2	3	4			
Counter (bits)	16	-	32	32	32			
Speed (pps)	1 M	-	1 M	1 M	1 M			
Signal	CW/CCW, A/B, Pulse/Dir	-	CW/CCW, A/B	CW/CCW, A/B, Pulse/Dir	CW/CCW, A/B			
Command Pulse Output								
Axis	-	2	2	-	4			
Counter (bits)	-	32	32	-	32			
Speed (pps)	-	1 M	4 M	-	4 M			
Signal	-	CW/CCW, Pulse/Dir	CW/CCW, Pulse/Dir	-	CW/CCW, Pulse/Dir			
System								
Watchdog	-				-	-	-	-
Programmable CPU (MiniOS7 inside)	-				-	-	Yes	Yes
FRnet	-	-	Yes	-	-	Yes	-	Yes
Isolation	2500 Vrms				2500 Vrms			
Power Consumption	3.4 W	3.9 W	1.9 W	2 W	2 W	2.5 W	3 W	3.5 W
Optional Accessories	DN-25	DN-25	DN-8237	-	DN-8468	DN-8468	DN-8468	DN-8468

DN-25
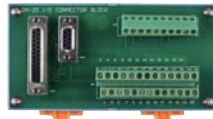
DN-8237 Series List

DN-8468 Series List
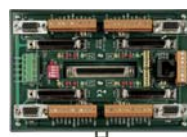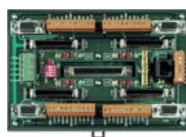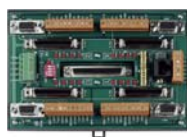
DN-8468GB	DN-8468MB	DN-8468PB	DN-8468YB	DN-8468DB	DN-8468FB
DN-8468GB is for general purpose usage	DN-8468MB is for Mitsubishi servo J2 Amplifier	DN-8468PB is for Panasonic servo minas A Amplifier	DN-8468YB is for Yaskawa servo Amplifier	DN-8468DB is for Delta ASDA A servo Amplifier	DN-8468FB is for FUJI FALDIC-W servo Amplifier

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