Motion

CK3M Programmable Multi-axis controller

Product Guide





Overview

Capable of precise linear motor drive control and nanoscale positioning, Omron's PMAC (Programmable Multi Axis Controller) has been widely appreciated by manufacturers of semiconductor manufacturing equipment and other leading-edge equipment.

Omron's new CK3M packs the PMAC's superior motion control capability, multi-vendor connectivity and flexible development capability into a streamlined and compact design. This next-generation motion controller removes constraints and barriers to help maximize your machine's capabilities.

Target Customers

- OEMs and system integrators in need of flexible servo connectivity and high-speed, high-precision motion control
- Existing Delta Tau customers looking at next generation machines
- Customers with G Code, M Code and C++ programming needs

Primary Benefits

- Delivers industry-leading output speeds of 50 µs / 5 axes
- Provides precise path control
- Enables high-precision positioning
- Interfaces with virtually any motor type for precise machine operation
- Supports G-Code, ANSI C and original programming languages
- Facilitates the customization of machine control
- Enables the free combination of CK3M expansion units

Key features

- Ultra-high-speed synchronous control
- Fast servo cycle time for precise path control
- Advanced encoders
- Various actuators
- Programming flexibility
- Custom servo algorithms
- Modular design

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CK3M Product Selection

CPU Units	Description
CK3M-CPU101	CPU 1GB RAM 0 ECAT Axis
CK3M-CPU111	CPU 1GB RAM 4 ECAT Axis
CK3M-CPU121	CPU 1GB RAM 8 ECAT Axis

Related Products

Type	Product Name	Description	
Axial Interface Units			
NPN	CK3W-AX1313N	DirectPWM output	Digital quadrature/serial encoder
	CK3W-AX1414N	DA output (Filtered PWM)	Digital quadrature/serial encoder
	CK3W-AX1515N	DA output (True DAC)	Digital quadrature/serial encoder
	CK3W-AX2323N	DirectPWM output	Sinusoidal encoder/Serial encoder
PNP	CK3W-AX1313P	DirectPWM output	Digital quadrature/serial encoder
	CK3W-AX1414P	DA output (Filtered PWM)	Digital quadrature/serial encoder
	CK3W-AX1515P	DA output (True DAC)	Digital quadrature/serial encoder
	CK3W-AX2323P	DirectPWM output	Sinusoidal encoder/Serial encoder
Digital I/O Units			
	CK3W-MD7110	16 inputs & outputs NPN	
	CK3W-MD7120	16 inputs & outputs PNP	
Analog Input Units			
	CK3W-AD2100	-10 to 10 V 4 points	
	CK3W-AD3100	16 inputs & outputs PNP	
Expansion Modules			
	CK3W-EXM01	Expansion Master Unit	
	CK3W-EXS02	Expansion Slave Unit	
	CK3W-CAX003A	Expansion cable	
Power Supply			
	CK3W-PD048	Power Supply for CK3M-CPU1*1	

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