

MC404-Z

4 Axis Stepper Controller

Low Cost *Motion Coordinator*

The MC404-Z is a low cost panel mount motion controller, targeting high volume stepper applications. With just one version that has all features as standard, there is no requirement for axis configuration with Feature Codes before use.

The MC404-Z runs the same Motion-iX programs and IEC 61131-3 supported languages as other Trio products and is fully compatible with *Motion Perfect*. Of the 4 axis ports, 3 are RS422 pulse output for pulse driven servo or stepper drives. The 4th port can be configured as either pulse output or encoder input.

The built-in Ethernet port allows programming and connection of common HMI and PLC protocols directly to the MC404-Z.

Two serial ports are provided for connection to a range of peripheral devices. Additional digital and analogue Input/Output modules connect through the familiar Trio CAN IO port.



- 4 Stepper (Pulse + Direction / Quadrature) Outputs
- 1 Axis can be used for Encoder Input
- 16 Isolated Digital Inputs
- 8 Isolated Digital Outputs (NPN)
- 1 Solid State Relay Output
- 0-10V Analogue Output
- 10/100 Base-T Ethernet Port
- Micro SD Card Socket
- RS232 Port
- RS485 Port
- Real Time Clock
- Panel Mount
- 528MHz ARM Cortex-M7 Processor
- External RAM: 256Mb, 166MHz, SDRAM
- Internal RAM: 512KB on-chip RAM (Built-in Processor)

Preliminary specifications may change without notice

— THE MOTION SPECIALIST —

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9 way D-type Axis connectors

Pin Number	Axis 0 to 2	Axis 3 (Stepper OR Encoder)	
		Encoder In	Stepper Out
1	Step+	Enc. A	Step+
2	Step-	Enc /A	Step-
3	Dir+	Enc B	Dir+
4	Dir-	Enc /B	Dir-
5	0V Stepper	0V Enc	0V Step
6	Enable+	Enc Z	Enable+
7	Enable-	Enc /Z	Enable-
8	N/C	5V*	5V*
9	N/C	N/C	N/C

*5V supply is limited to 150mA total for all axes

18 way IO Connector

Pin Number	Function
1	Common Bank0
2	IN0
3	IN1
4	IN2
5	IN3
6	IN4
7	IN5
8	IN6
9	IN7
10	Common Bank1
11	IN8
12	IN9
13	IN10
14	IN11
15	IN12
16	IN13
17	IN14
18	IN15

Product Code

P855 4 Axis Stepper *Motion Coordinator*

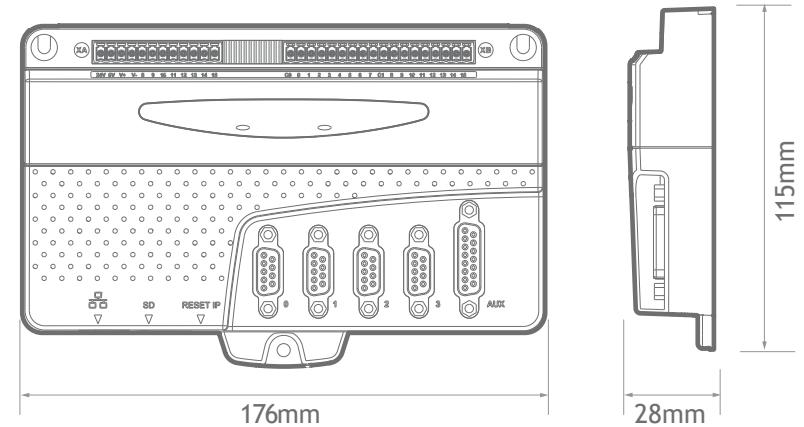


15 way Auxiliary D-Sub Connector

Pin Number	Function	Note
1	RS232 Transmit	Serial Port #1
2	RS485 Data In A Rx+	Serial Port #2
3	RS485 Data Out Y Tx+	Serial Port #2
4	0V*	
5	AIN (Analog In)	0V to 10V max, 12 bits
6	WDOG+	Positive Solid State Output
7	CAN HIGH	CANBUS
8	0V*	
9	RS232 Receive	Serial Port #1
10	RS485 Data In B Rx-	Serial Port #2
11	RS485 Data Out Z Tx-	Serial Port #2
12	0V*	
13	AOUT (Analog Out)	0V to 10V max, 10 bits
14	WDOG-	Negative Solid State Output
15	CAN LOW	CANBUS

Output Connections (NPN)

Pin Number	Function
1	24V (Main board)
2	0V (Main board)
3	24V (Output circuitry)
4	0V (Output circuitry)
5	OP8
6	OP9
7	OP10
8	OP11
9	OP12
10	OP13
11	OP14
12	OP15



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