

PRODUCT SELECTION GUIDE

☑ = Available as standard ☑ = Optional at extra cost ☒ = Not available

		PANEL MOUNT			PC BASED	CARD BASED		DRIVE-IN
		MC464	MC206X	MC302X	PCI208	Euro209	Euro205x	MC302-K
AXES	Maximum Number of Axes	64	8	2	8	16	8	2
	Number of discrete wired Axes	24	5	2	8	9	5	1 (note a)
PERFORMANCE	Execution benchmark (lines/mS)	278	19	14	20	20	20	13
	Processor	64 bit MIPS	32 Bit DSP	32 Bit ARM	32 Bit DSP	32 Bit DSP	32 DSP	32 Bit ARM
	Clock Frequency	400Mhz	120Mhz	64Mhz	120Mhz	150Mhz	120Mhz	64Mhz
	Servo Update rate (note j)	2ms-125µS	2ms-250µS	1ms-250µS	2ms-250µS	2ms-250µS	2ms-250µS	1ms-250µS
	Encoder input frequency	6Mhz	6Mhz	6Mhz	6Mhz	6Mhz	6Mhz	1.5Mhz
	Stepper output frequency	2Mhz	2Mhz	2Mhz	2Mhz	2Mhz	2Mhz	
	User Memory	8MByte	512KByte	512KByte	512KByte	1MByte	256KByte	120KByte
	Maximum data table size	512,000 (note l)	32,000	16,000	32,000	32,000	32,000	4,000
	Flash Data Memory	16 x 16,000	16 x 16,000	☒	16 x 16,000	16 x 16,000	16 x 16,000	☒
	Position register precision	64Bit	32Bit	32Bit	32Bit	32Bit	32Bit	32Bit
	Maths precision	Double FP	FP	Emulated FP	FP	FP	FP	Emulated FP
	Real Time Clock	☑	☒	☒	☒	☒	☒	☒
DRIVE INTERFACES	Stepper (Step & Direction)	☑	☑	☑	☑	☑	☑	☑
	Servo (+/-10V & Encoder)	☑	☑	☑	☑	☑	☑	☑ (note b)
	Sercos	☑	☑	☒	☒	☑	☑	☒
	SLM	☑	☑	☒	☒	☑	☑	☒
	CANopen (note c)	☒	☑	☒	☑	☑	☑	☒
	Piezo (note d)	☑	☑	☑	☑	☑	☑	☒
	Panasonic RTEX	☑	☒	☒	☒	☒	☒	☒
	EtherCAT	☑	☒	☒	☒	☒	☒	☒
	Hydraulic (note e)	☑	☑	☑	☑	☑	☑	☒
	Profibus (note f)	☑	☑	☒	☒	☑	☑	☒
	DeviceNet	☑	☑	☑	☑	☑	☑	☑
	CANopen	☑	☑	☑	☑	☑	☑	☑
COMMUNICATION	USB (V1.1)	☑	☑	☒	☒	☒	☑	☒
	Ethernet (10/100) base-T	☑ (10/100)	☑ (10)	☒	☒	☑ (10/100)	☑ (10)	☒
	Ethernet IP	☑	☑	☒	☒	☑	☑	☒
	MODBUS-RTU	☑	☑	☑	☑	☑	☑	☑
	MODBUS-TCP/IP	☑	☑	☒	☒	☑	☑	☒
	RS232/RS485	☑	☑	☑	☒	☑	☑	RS232
	CC-Link	☑	☒	☒	☒	☒	☒	☒
	ProfiNet	☑	☒	☒	☒	☒	☒	☒
	Bluetooth	☑	☒	☒	☒	☒	☒	☒
	Anybus support	☑	☒	☒	☒	☒	☒	☒
	Hostlink	☑	☑	☑	☑	☑	☑	☑
	PHYSICAL	Width	56mm	182mm	101mm	180mm	170mm	170mm
Height		201mm	107mm	94mm	106mm	129mm	129mm	140mm
Depth		155mm	53mm	48mm	15mm	25mm	25mm	20mm
Weight		750g	325g	200g	90g	170g	170g	90g

FEEDBACK	Reference Encoder In (note h)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Resolver	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (note o)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (note o)	<input checked="" type="checkbox"/> (note o)	<input checked="" type="checkbox"/>
	SSI Abs encoder	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (note k)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (note k)	<input checked="" type="checkbox"/> (note k)	<input checked="" type="checkbox"/> (note k)	<input checked="" type="checkbox"/>
	EnDat Abs encoder	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (note k)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (note k)	<input checked="" type="checkbox"/> (note k)	<input checked="" type="checkbox"/> (note k)	<input checked="" type="checkbox"/>
	Tamagawa Abs encoder	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (note k)	<input checked="" type="checkbox"/> (4 max)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
I/O	Inputs 24Vdc	8	8	4	20	16	16	12 + 5 (note i)
	Outputs 24Vdc	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	10	8	8	8 + 2 (note i)
	Bi-directional I/O 24Vdc	8	8	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	0-10V analogue Inputs	<input checked="" type="checkbox"/> 2x12Bit	<input checked="" type="checkbox"/> 1x10Bit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> 4x12Bit	<input checked="" type="checkbox"/> 4x12Bit <input checked="" type="checkbox"/> 2x12Bit	<input checked="" type="checkbox"/> 2x12Bit	<input checked="" type="checkbox"/> 2x16Bit (note i)
	Number of registration Inputs	58 max	4	2	8	8	4	<input checked="" type="checkbox"/>
	Registration Input Speed	1µS	200µS	200µS	200µS	200µS	200µS	<input checked="" type="checkbox"/>
EXPANSION I/O	Digital I/O points (note p)	512	288	288	288	288	288	288
	12Bit ±10V analogue inputs	32	32	32	32	32	32	32
	12Bit 0-10V analogue outputs	16	16	16	16	16	16	16
PROGRAMMING	Multitasking TrioBASIC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Number of Tasks (note g)	22	7	3	7	7	7	3
	IEC61131	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	G-Code	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	HPGL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	DXF Import	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
POWER	Supply Voltage dc	24V	24V	24V	3.3V or 5V /24V (note m)	5V / 24V (note m)	5V / ±12V / 24V (note m)	5V / 24V (note m)
	Consumption	625mA I/O 1A max	300mA I/O 1A max	150mA I/O 1A max	480mA/1.25A Max	500mA/1A Max	900mA/50mA/1A Max	120mA/1A Max
EXPANSION I/O	Max. Daughter boards	<input checked="" type="checkbox"/>	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1	1	<input checked="" type="checkbox"/>
	Max. Expansion modules	7	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Micro SD Memory slot	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (note n)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	SD Memory slot	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FREE SUPPORT SOFTWARE	Motion Perfect	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	TrioPC ActiveX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	MC Loader ActiveX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Software Oscilloscope	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Autoloader	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Project Encryptor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Docmaker	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	CAD2Motion (DXF Import)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	IEC61131 Runtime	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	UL Approval	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(note q)	(note q)	<input checked="" type="checkbox"/>	(note q)
	CE Approval	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	(note q)	(note q)	(note q)	(note q)

- a. 1 axis built into drive, second axis is encoder or stepper input or encoder output available from drive.
- b. Controls the servo of the drive installed into only.
- c. Operates as a master, requires that the drive can synchronise to the CAN sync telegram and has a freely programmable PDO register.
- d. Requires setup of cross over offset parameters.
- e. Interface is +/-10V only no 4-20mA interface is available.
- f. Operates as Profibus DP slave for 16 input and 16 output word data transfer with Profibus master.

- h. Each Motion Coordinator has 2 fast tasks for high priority processing. Included in the number of tasks above.
- g. If optional, then reduces the maximum number of axes available.
- i. Extra Inputs and Outputs and analogue input available from drive.
- j. Servo loop closure rate dependant on number of axes installed.
- k. Contact Trio before specifying.
- l. 196,608 locations battery backed.

- m. 24Vdc supply required for I/O and CAN functionality only. Current depends on I/O configuration but figures quoted are maximum values.
- n. Requires optional P396 SD Card adapter.
- o. Available as daughterboard for axis 5.
- p. Maximum I/O points includes virtual I/O.
- q. Must be approved as part of the overall system.