

# PRODUCTS

The *Motion Coordinator* system is extremely modular, allowing the user to tailor the controller to their specific applications, this also allows the flexibility to incorporate new modules if the need should change, making the system “future proof”. Systems may be used with a stand alone program or alternatively commands can be sent from an external computer.

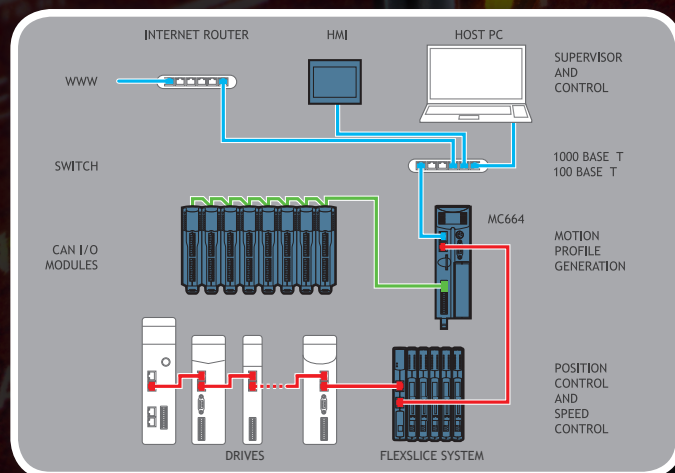
All *Motion Coordinators*, whether panel mount, rack mount, DIN-rail mount or a custom design format, allow digital or analogue I/O expansion with Trio's I/O modules. Special I/O requirements can also be accommodated using the CANopen protocol to control third party I/O modules. The Flexslice System offers fast high performance EtherCAT devices for Trio's range of EtherCAT *Motion Coordinators*.

Trio's UNIPLAY range of operator interfaces provide a robust and functional HMI using the Ethernet network. Third party HMI products, touchscreens, etc. can communicate to the *Motion Coordinator* via the Modbus-RTU serial protocol.

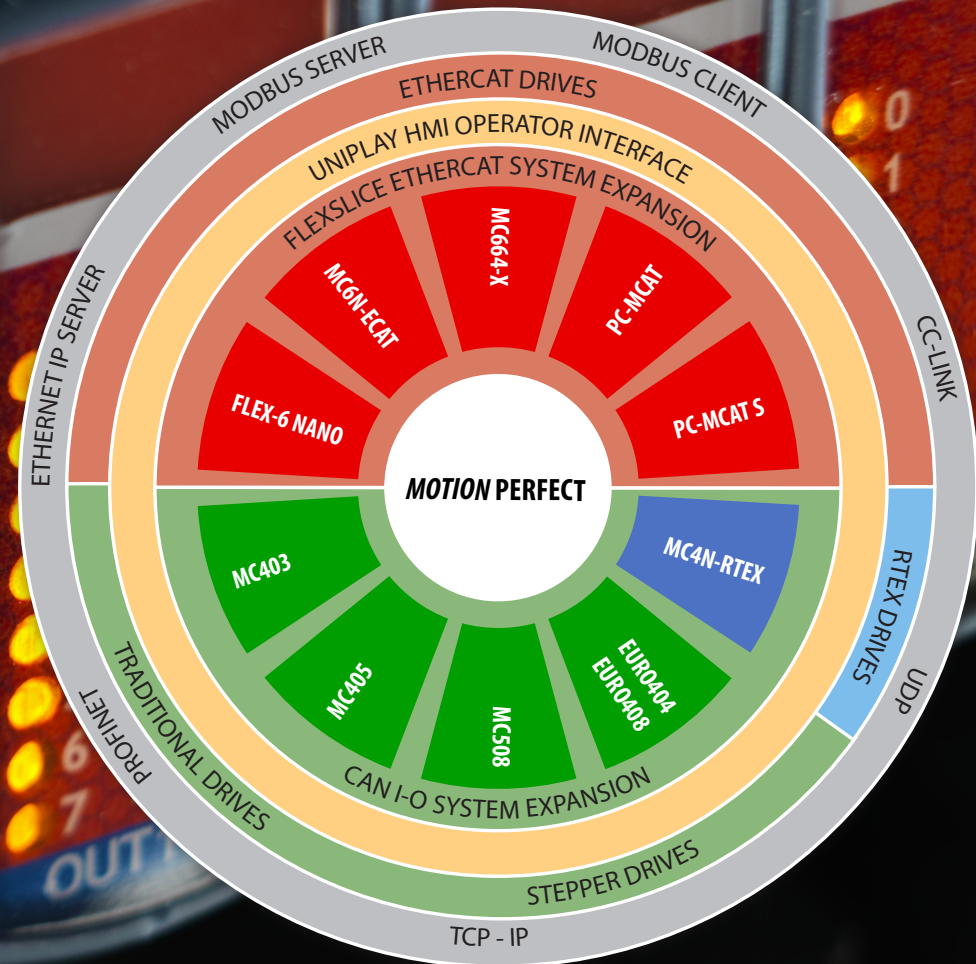
## System Set-Up

The MC4/5/6 range includes advanced networking technology for connection to Digital Servos, CANbus and Factory Networks. Access to all parts of the system by network connections allows reduced down-time with automated fault reporting and analysis.

With a MC664 *Motion Coordinator*, it is possible to control a machine with up to 128 axes (64 stepper/servo and 64 virtual), 1024 digital inputs, 1024 digital outputs, 32 analogue inputs and 16 analogue outputs.



Preliminary specifications may change without notice



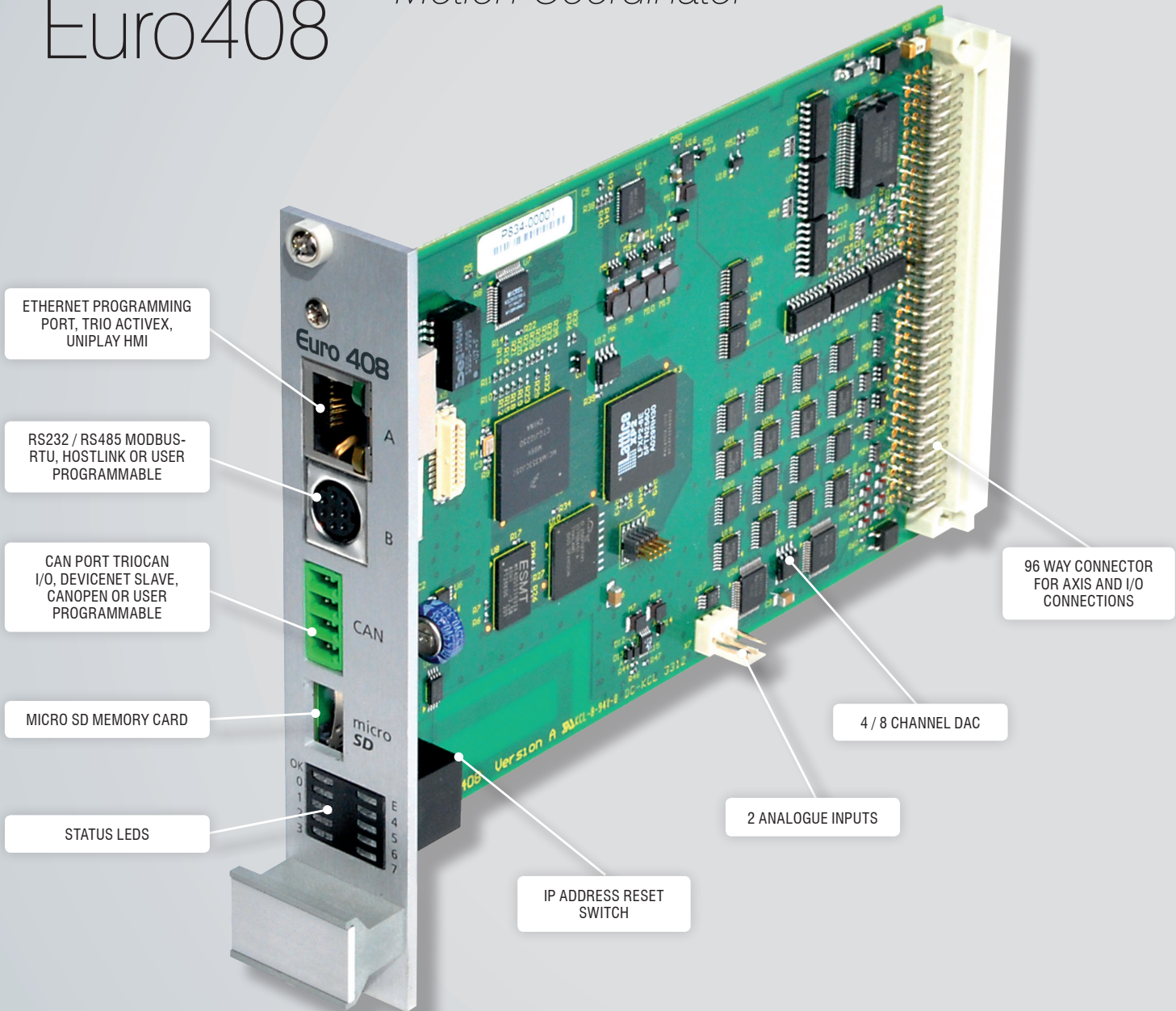
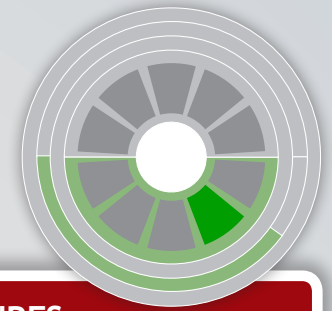
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# Euro404 Euro408

*Motion Coordinator*



- ### FEATURES
- \* Linear, Circular, Helical and Spherical Interpolation
  - \* Flexible CAM shapes, Linked Motion
  - \* EnDAT and SSI Absolute Encoder Supported
  - \* Hardware Linked Outputs for Camera / Laser Control
  - \* Ethernet-IP / Modbus TCP / Ethernet Interface Built-In
  - \* 125 – 2000 $\mu$ sec Selectable Servo Update
  - \* Precise 64 bit Motion Calculations on ARM11 Processor with VFP
  - \* IEC 61131 Programming
  - \* Multi-tasking BASIC Programming
  - \* Text File Handling
  - \* Robotic Transformations
  - \* Micro SD Memory Card Slot
  - \* CANopen I/O Expansion
  - \* 3U Rack Mount Format
  - \* RoHS and CE Approved

The Euro404 and Euro408 *Motion Coordinators* are designed to provide a powerful yet cost effective control solution for OEM machine builders that are prepared mount the unit and provide the power supplies required.

Both the Euro404 and Euro408 are high specification *Motion Coordinators* using a high performance ARM11 processor, with up to 4 / 8 flexible axis ports and 4 / 8 Voltage outputs respectively. The flexible axis ports can be configured in software as feedback devices or pulse direction outputs. As outputs they can be used as pulse and direction with stepper or servo drives or they can operate as a simulated encoder output. When configured as feedback they can be either incremental encoder input or one of three popular absolute encoder types; SSI, Tamagawa or Endat. Any feedback axis with a Voltage output can be used to form a closed loop servo.

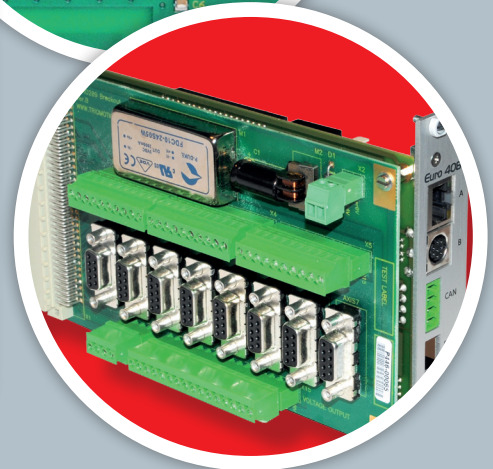
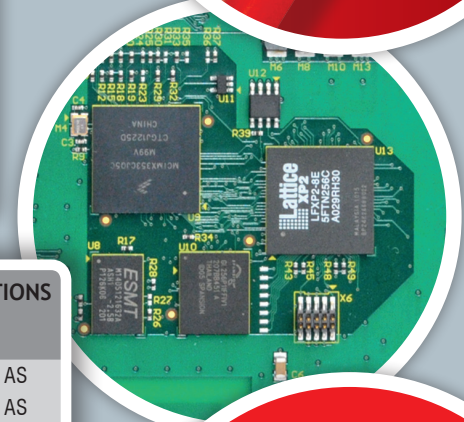
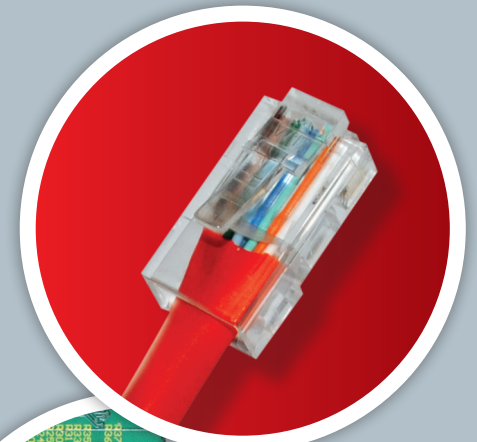
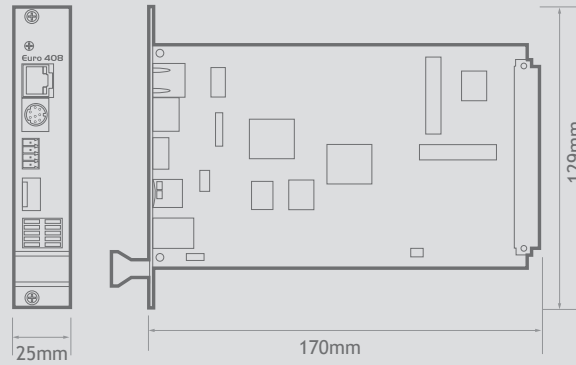
The built-in Ethernet port allows programming and connection of common HMI and PLC protocols directly to the *Motion Coordinator*. User programs can be written in Trio's established multi-tasking TrioBASIC language using the powerful *Motion Perfect v4* application development software making complex motion easy. Also available as an option are the industry standard IEC 61131-3 languages allowing a fully functional PLC programming system.

The Euro404 / 408 are each available in 2 different axis configurations. All models feature a total of 16 axes in software. Any axes not assigned to built-in hardware can be used as a virtual axis. Every axis can be programmed to move using linear, circular or helical or spherical interpolation, electronic cams, linked axes and gearboxes.

#### ACCESSORIES:

P317 - P327	CAN I/O Modules
P446	Euro Breakout Board
P750	Kinematic Runtime FEC
P843 - P844	UNIPLAY 7" & 10" HMI's

#### OVERALL DIMENSIONS



#### EURO404 PRODUCT OPTIONS

	P831	P832
Axis 0	Core	Extended + AS
Axis 1	Core	Extended + AS
Axis 2	Core	Extended + AS
Axis 3	Core	Extended + AS
Axis 4		
Axis 5		
Axis 6		
Axis 7		

#### EURO408 PRODUCT OPTIONS

P833	P834
Core	Extended + AS
Core	Extended + AS
Core	Extended + AS
Core	Extended + AS
Core	Extended + AS
Core	Extended + AS
Core	Extended + AS
Core	Extended + AS

CORE AXES – can be configured in software as pulse and direction outputs to stepper or servo drives. They can also be configured for incremental encoder feedback or simulated encoder output.

EXTENDED AXES – in addition to the Core functionality these axes can also be configured for SSI, Tamagawa or Endat absolute encoders.

AS - Analogue 'closed loop' Servo using built-in  $\pm 10V$  analogue output.