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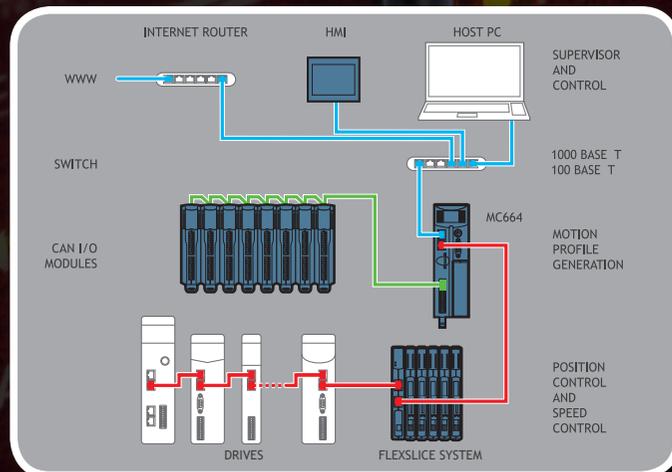
All *Motion Coordinators*, whether panel mount, rack mount, DIN-rail mount or a custom design format, allow digital or analogue I/O expansion with Trio's I/O modules. Special I/O requirements can also be accommodated using the CANopen protocol to control third party I/O modules. The Flexslice System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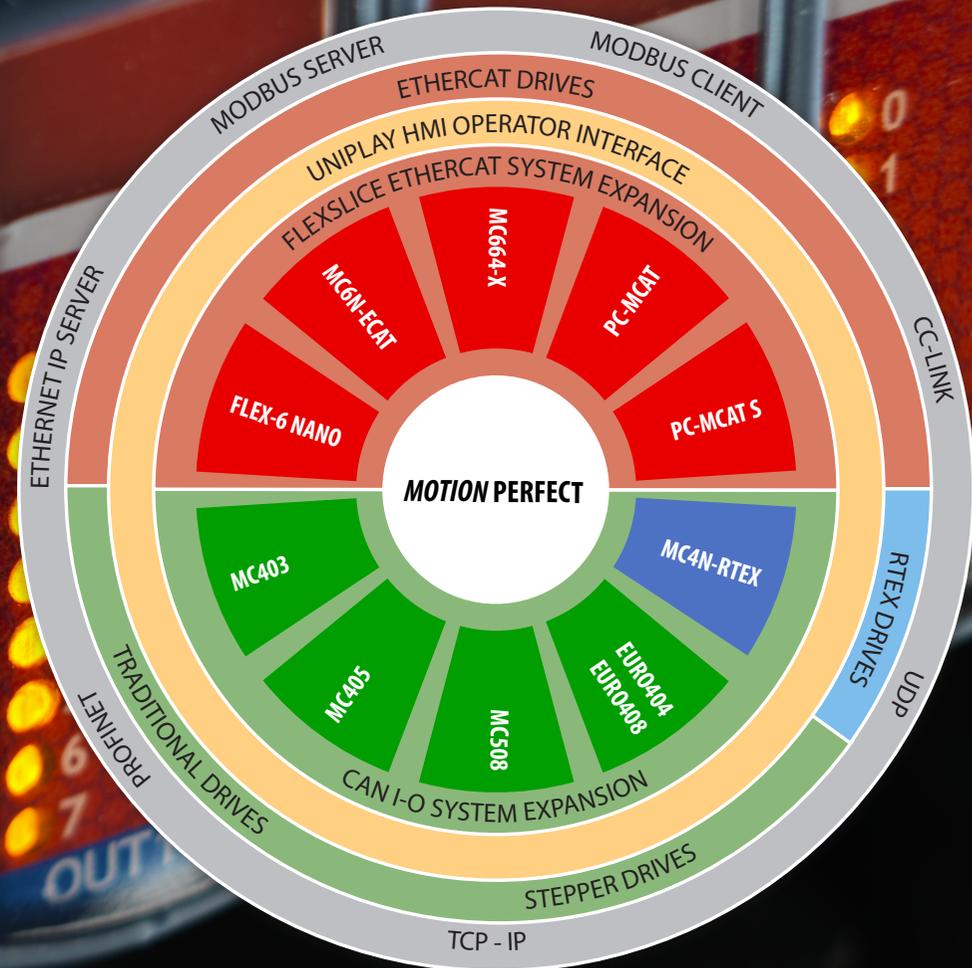
System Set-Up

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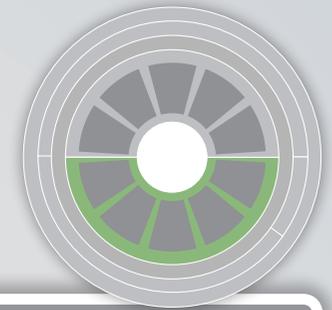
With a MC664 *Motion Coordinator*, it is possible to control a machine with up to 128 axes (64 stepper/servo and 64 virtual), 1024 digital inputs, 1024 digital outputs, 32 analogue inputs and 16 analogue outputs.

INTERNET ROUTER · HMI · HOST PC · SUPERVISOR AND CONTROL · WWW · 1000 BASE T 100 BASE T · SWITCH · MC664 · MOTION PROFILE GENERATION · CAN I/O MODULES · POSITION CONTROL AND SPEED CONTROL · DRIVES · FLEXSLICE SYSTEM

MODBUS SERVER · ETHERCAT DRIVES · MODBUS CLIENT · UNIPLAY HMI OPERATOR INTERFACE · FLEXSLICE ETHERCAT SYSTEM EXPANSION · ETHERNET IP SERVER · CC-LINK · RTEX DRIVES · UDP · TCP - IP · STEPPER DRIVES · CAN I-O SYSTEM EXPANSION · TRADITIONAL DRIVES · PROFINET

MC6N-ECAT · MC664-X · PC-MCAT · PC-MCAT S · FLEX-6 NANO · MC4N-RTEX · MC403 · MC405 · MC508 · EURO404 EURO408

MOTION PERFECT

TRIO MOTION TECHNOLOGY

CAN I/O Modules

Trio Motion Technology's range of digital and analogue input/output expansion modules are designed to enable simple and scalable and low-cost I/O extension for Trio's *Motion Coordinators*. In addition to 24V input, output and bi-directional modules, there are relay and analogue I/O modules.

CANbus is used for communication and control between the *Motion Coordinator* and the CAN I/O modules. CANbus is a tried and tested, well known data link in industry which is reliable, noise immune and flexible. All CAN I/O modules are compatible with any *Motion Coordinator* that has a CANbus port.

As well as being able to connect to any *Motion Coordinator* using Trio's own high speed CANbus protocol, each CAN module can run the DS401 CANopen protocol allowing them to be used with other CANopen masters. Protocol selection is by DIP switches on the front of the module.

When using the TrioCANbus protocol, a *Motion Coordinator* can handle up to 16 Digital Input modules and 16 Digital Output modules, a total of 32 Digital modules and 4 Analogue modules. The CAN 16 I/O module counts as one Input and one Output module.

P317: CAN 16-OUT DIGITAL

The Trio CAN 16 Output modules can provide up to 256 distributed output channels at 24Vdc level.

Outputs	16 x 24V sourcing (PNP) output channels
Configuration	2 x 8 output channels
Output Capacity	1A per bank of 8 250mA/channel
Network Speed	500KBit/s
Protocols	TrioCAN I/O / CANopen DS401
Compliance	RoHS, CE and UL

P318: CAN 16-IN DIGITAL

The Trio CAN 16 Input modules can provide up to 256 distributed input channels at 24Vdc level.

Inputs	16 x 24V sourcing (PNP) input channels
Configuration	2 x 8 input channels
Network Speed	500KBit/s
Protocols	TrioCAN I/O / CANopen DS401
Compliance	RoHS, CE and UL

P319: CAN 16-IN / OUT DIGITAL

The Trio CAN 16 Input / Output modules can provide up to 256 distributed bi-directional I/O channels at 24Vdc level.

Inputs	16 x 24V Input channels with 2500V isolation
Outputs	16 x 24V sourcing (PNP) output channels
Configuration	2 x 8 bi-directional input/output channels
Output Capacity	1A per bank of 8 250mA/channel.
Network Speed	500KBit/s
Protocols	TrioCAN I/O / CANopen DS401
Compliance	RoHS, CE and UL

P326: CAN 8-IN/4-OUT ANALOGUE I/O

The Trio CAN Analogue I/O modules can provide up to 32 analogue input and 16 output channels.

Inputs	8 x ± 10V inputs with isolation from CANbus
Outputs	4 x + 10V outputs with isolation from CANbus
Network Speed	500KBit/s
Protocols	TrioCAN I/O / CANopen DS401
Compliance	RoHS, CE and UL

P327: CAN 8-RELAY OUT

The Trio CAN 8 Relay modules can provide 128 distributed low power relay channels per *Motion Coordinator*.

Outputs	8 x relays 30Vdc / 49V ac
Configuration	4 x NO+NC contacts and 4 x NO only contacts
Network Speed	500KBit/s
Protocols	TrioCAN I/O / CANopen DS401
Compliance	RoHS, CE and UL

OVERALL DIMENSIONS

130mm
26mm
85mm

TRIO MOTION TECHNOLOGY