

## FLEX-6 NANO

## 64 Axis EtherCAT Motion Coordinator

SYSTEM





The Flex-6 Nano is a compact, integrated EtherCAT solution offering up to 64 Axes of motion. The on-board memory can be boosted to 32 GByte with the addition a micro SD card.

The Flex-6 Nano "plugs" straight into our Flexslice System removing the need for the EtherCAT coupler (P366).

Trio's Flexslice input/output system modules provide a robust, high speed and flexible solution for both motion control and general automation. EtherCAT cycle times down to 125 µsecs are supported and the bus coupler uses EBUS technology to bring all the sub-modules on to the EtherCAT network with no degradation in performance.

The Flexslice system makes available a selection of digital and analogue I/O terminals as well as motion modules with pulse + direction outputs designed for precise positioning of stepper and servo motors via suitable drive technology.

The digital I/O modules have high-speed functionality. In addition, analogue modules and axis modules may be fitted to make a superbly tailored system that can be placed remotely from the master if needed.

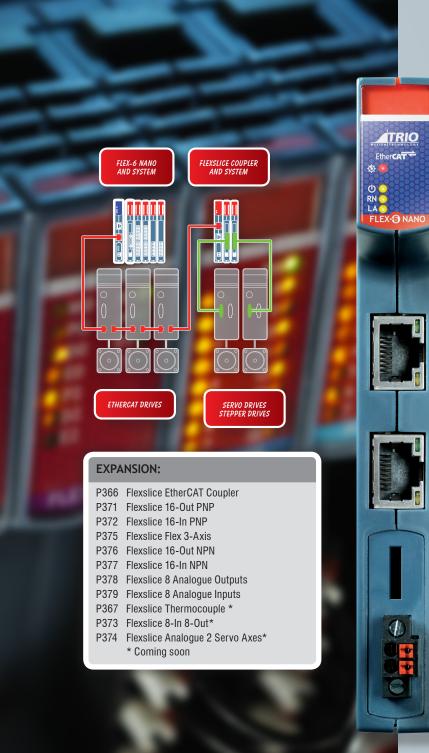
All Flexslice modules support automatic addressing with the master to automatically detect and configure the modules on startup. The bus coupler can support up to 16 input/output modules which have a positive mechanical lock and bus connector, making a reliable EBUS connection through the backplane. The complete assembly can be DIN rail mounted.



## **FEATURES**

- **★** Up to 64 EtherCAT Digital Drive Axes
- **★** EtherCAT Cycle Times Down to
- ★ 1 GHz i.MX7 Dual ARM Cortex A7 Core Processor
- ★ 128 Mbyte DDR3 Memory
- **★** 128 Mbyte Fast Serial NOR Flash
- ★ Real Time Clock
- **★** Built in Ethercat Coupler for Direct Access to Trio's Flexslice Slaves
- ★ Cycle Time as Low as 125us
- **★** Field programmable with *Motion* Perfect
- ★ High Performance. Flexible Topology and Simple Configuration
- **★** Bus Cycle Time Synchronised with Motion Coordinator Servo Period
- ★ Ethercat Protocol to Individual Modules Using the EBUS System
- **★** I/O Functions Tightly Synchronised to Motion Using Ethercat Distributed Clocks
- ★ Practical Push-In Connector Options – No Break Outs Required
- **★** Clip-Together Design With 'Quick Release' Locks For Mechanical Integrity
- \* RoHS, CE and UL Approved







The Micro SD Card port allows the memory to be expanded to up to 32 GByte.



The Flex-6 Nano plugs straight into the Flexslice System via the **EBUS** connector allowing expansion of the system.



PRODUCT CODES: P600 Flex-6 Nano

P605 Flex-6 Nano

4 Axes P601 Flex-6 Nano P602 Flex-6 Nano 8 Axes P603 Flex-6 Nano 16 Axes P604 Flex-6 Nano 32 Axes

2 Axes

64 Axes

EtherCAT slave

Flexslice EBUS

and the EtherCAT

connected via the

nodes are

## **HIGHLIGHTS:**

Multitasking Operating System Comprehensive Motion Library TrioBasic Motion Language IEC611-3 Programming **UNIPLAY HMI Support Robotic Functions** Multi-protocol Communications Support **OVERALL DIMENSIONS** TRIO 107mm