

ECAT-4XMO/ECAT-TRG4

4-Channel Motion Control and High Speed Trigger EtherCAT Bridge Module

Features

- 4 table trigger—10 Mhz max w/ FIFO 255 points
- 4 linear trigger—10 Mhz max.
- 4 channel latch response—3 MHz max. w/ 255 points
- Hardware emergency stop interface
- Supports gantry function up to 32 sets with MainDevice
- Power-off memory for axis parameter
- Supports encoder re-driver function
- Supports advanced point table



ECAT-4XMO



ECAT-TRG4

Introduction

The ECAT-4XMO and ECAT-TRG4 are EtherCAT SubDevice modules with high-speed position comparison trigger and encoder single re-driver function, helping machine and equipment builders to use multiple triggers simultaneously for AOI, glue dispensing, display tests, and storage assembly applications.

Additionally, the ECAT-4XMO has 4-axis motion control with bridge function between EtherCAT and non-EtherCAT. Advanced motion control functions help machine and equipment builders to increase their motor selection portfolio, like leaner, step, servo, direct drive, and AC motors, making it ideal for a variety of automation industry applications.

Ordering Information

• ECAT-4XMO

4-channel motion control and high-speed trigger module for the bridge connected to EtherCAT

ECAT-TRG4

4-channel high speed position comparison and trigger module

Specifications

Model Name	ECAT-4XMO	ECAT-TRG4
EtherCAT Communication	1	
Communication Cycle Time	250 / 500 / 1000 / 2000 microsecond	
Number of Controllable Axes	4	
Support Motion modes	Single axis move, multi axes move trigger & stop, jog move, advanced single move & interpolation, advanced point table, gear/gantry function, manual pulse generator function, (please refer to ADLINK's APS function library)	
I/O		
Motion I/O	PEL, MEL, ORG, LTC (per axis)	-
Servo I/O	SVON, RDY, RST, ALM, INP, ERC (per axis)	-
Pulse Output	OUT/DIR, up to 12 MHz pin (OUT/DIR) CW/CCW, up to 12 MHz	-
Encoder Input	OUT/DIR L	ip to 8 MHz ip to 8 MHz p to 20 MHz
Encoder Re-driver	Encoder input OUT/DIR signal sharing to output pin, up to 10 MHz	
Trigger Output	4 linear trigger max. 10 Mhz 4 table trigger max. 10Mhz w/ FIFO 255 points Table size = 8192 points/axis	
Latch input	Source type, DI/PWM 4-channel latch response max. 3 Mhz with 255 points (multiple and single point size = 5256 points)	
GPIO	4DI, 4DO (4DO and RST are common pin, selected by DIP switch)	
EMG	Per Module	
DIP Switch	6 bits for ID setting 4 bits for EA1+/-, EB1+/- open/short selection between CN6 and D-SUB 26P 2 bits for DO connect to alarm reset pin of D-SUB 26P (ECAT-4XMO only)	
General Specifications		
Power Consumption	Max = 5W, (power supply input 24V DC±10%)	
Protection	Over current, short, reverse, 1A	
Operating temperature	0 to 50°C	
Non-operating temperature	-40 to 70°C Relative humidity: 10 to 90%, non-condensing	
Dimension	165.3 x 74.9 x 52.7 mm (W x D x H)	
Certificate		
EMC	FCC Part 15b, and EN55032 (CISPR 32) for Class B	
Safety	IEC62368; IEC61010	



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