

AMAX-4270

4-channel High Speed Trigger and Latch EtherCAT Module

NEW



Features

- 4-channel 32-bit encoder counters
- Encoder input mode : CW/CCW , Pulse/Direction, A/B Phase
- Encoder input signal : A, B, Z
- Encoder input frequency : 5 MHz(Maximum)
- 4-channel trigger DO for position compare
- Trigger output frequency : 10kHz
- Trigger output mode : sink, source, TTL
- Supports trigger delay time setting for each channel
- 4-channel latch DI for position latch
- Latch input frequency : 10kHz
- Board ID is switchable
- Suitable for wall-mount

Introduction

AMAX-4270 is the EtherCAT subDevice with 4-channel high speed trigger and latch function. It provides 32-bit 4-channel counter/encoder for incremental encoders, which supports CW/CCW, Pulse/Direction and A/B mode. The trigger output supports sink, source and TTL type with 10kHz frequency, providing trigger delay time function for each trigger output channel and 1D, 2D position compare. AMAX-4270 has 4-channel latch input with 10kHz for latching encoder value.

AMAX-4270 features high speed trigger and latch function that can help users to achieve the AOI, glue dispensing, measurement, and storage assembly applications.

Specifications

EtherCAT	Cycle Time	500/1000 microsecond
	Mode	Free run, SM, DC
Encoder Input	Channel	4
	Differential Input	A, B, Z
	Resolution	32bit
	Mode	A/B Phase, CW/CCW, Pulse/Direction
	Max. frequency	5MHz
	Input voltage	5-14V _{DC}
Latch Input	Input voltage Logic	Logic 0: $\Delta V > -200mV_{DC}$ Logic 1: $\Delta V > +200mV_{DC}$
	Channel	4
	Type	Opto-isolated
	Max. frequency	10KHz@cycle time = 500us
	Input voltage	L(max): 7V _{DC} H(min): 8V _{DC} H(max): 30V _{DC}
	Max. input delay time	Input delay: 1ms (Max.)
	Latch In	150us
	Input Resistance	3.21Kohm
Trigger Output	FIFO	512 per channel
	Channel	4
	Type	Sink/Source/TTL
	Max. frequency	10KHz@cycle time = 500us
	Sink/Source Voltage	Low: 16V _{DC} High: 26V _{DC}
	TTL Voltage	5V _{DC}
	Max. sink current	500mA per channel
	Max. output delay time	1us
	Protection	2,500V Isolation
	FIFO	512 per channel
General	Connector	RJ45 x 2; Terminal x 4
	LED	Power/ RUN/ ERROR/ Status
	Rotary Switch	2
	Input Voltage	24V _{DC} \pm 10%
	Power Consumption	Typical: 24V/0.14A Max.: 24V/0.20A
	Dimension (H x W x D)	150 x 45 x 120 mm
	Operation Degree	0 to 60 degree C
	External Power Voltage	5VDC/120mA per channel (for Encoder)
	Certifications	CE, FCC Class

Ordering Information

- **AMAX-4270-AE** 4-channel High Speed Trigger and Latch EtherCAT Module