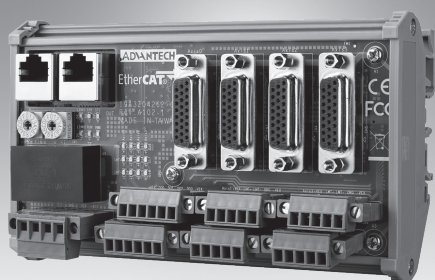


AMAX-3245

Advanced 4-axis EtherCAT Motion Slave Modules

NEW



Features

- Max. 5 MHz, 4-axis pulse output
- Encoder input is 10 MHz for 4xAB mode, 2.5 MHz for CW/CCW mode
- BoardID is switchable
- Easily visible LED indicators on board to do diagnosis
- Direct wire to servo drive to save terminal board space while installation
- Horizontal installation for servo or stepping motor driver
- Suitable for DIN-rail mounting
- Programmable interrupt
- Memory buffer (10K points) for trajectory planning which is designed in DSP
- 4-axis position compare triggering up to 100 KHz, and memory buffer is up to 100 K points
- Position latch
- Supports gantry mode by semi-closed loop pulse train control
- LTC-dedicated input channels & SVON/CMP/RST/ERC-dedicated Output channels are switchable for general input and output purposes

Introduction

AMAX-3245 provides the ability to connect step motor drives and servo motor drives with CW/CCW and Pulse/Direction interfaces to EtherCAT networks controlled by Advantech EtherCAT master PCI/PCIE-1203. AMAX-3245 has open frame designs for horizontal placement and an interface connector mounted on the board. With a to-servo-drive transfer cable, it can be conveniently connected to Mitsubishi J3/J4, Yaskwa Sigma V/7, and Panasonic A4/A5 servos.

AMAX-3245 is a 4-axis EtherCAT motion slave module that supports motion interpolation, axes synchronization, and continuous contouring. Advantech also provides a common motion API library, graphical utility, and user-friendly examples to reduce the programming load and facilitate easy configuration and diagnosis.

Specifications

Pulse-Type Motion Control

▪ Motor Driver Support	Pulse-type servo
▪ Number of Axes	4
▪ Max. Output Speed	5 Mpps
▪ Step Count Range	±134, 217, 728
▪ Pulse Output Type	OUT/DIR, CW/CCW
▪ Position Counter	±134, 217, 728
▪ Home Modes	16 home mode
▪ Velocity Profiles	T-Curve, S-Curve
▪ Local I/O	
General Input Signal	Input voltage: 24Vdc Max. Input delay: 100us Max. (isolation delay) Signal: EMG (emergency stop) ORG, LMT+, LMT- INPOS (in position signal) ALARM (servo alarm)
General Output Signal	Output voltage: Open collect 24Vdc Max Output delay: 100us Max. (isolation delay) Sink current: 500mA per channel Signal: SVON (servo on) RALM (reset driver alarm) ERC (counter clear signal)
General Purpose I/O:	4-ch DI/LTC (General DI can be switchable to LTC function) 4-ch DO/CMP (General DO can be switchable to CMP function)

Encoder Interface

▪ Input Type	A/B phase, CW/CCW
▪ Counts per Enc. Cycle	x1, x2, x4 (AB phase only)
▪ Input Range	Low: 0 ~ 0.5V High: 3.5 ~ 5V
▪ Isolation Protection	1,000 V _{RMS}
▪ Max. Input Frequency	10 MHz @ 4xAB

General

▪ Bus Type	EtherCAT
▪ Certification	CE, FCC Class A
▪ Connectors	2 x RJ-45 for communication port 1 x Terminal block (4P) for power 4 x DB-26 connector by transfer cable to servo drives 4 x Terminal block (5P) for home, Limit 1 x Terminal block (6P) for 4DI 1 x Terminal block (6P) for 4DO
▪ Dimensions (L x W x H)	153 x 90 x 53 mm (6 x 3.5 x 2.2")
▪ Power Consumption	6W MAX (250mA @ 24V)
▪ Power Input	24V _{dc} ± 10%
▪ Humidity	5 ~ 95% RH, non-condensing (IEC 60068-2-3)
▪ Operating Temperature	0 ~ 60°C (32 ~ 140°F)

Ordering Information

▪ AMAX-3245-AE	Advanced 4-axis EtherCAT Motion Slave Modules
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Accessories

▪ PCL-20153PA5-S2E	50-pin cable to Panasonic A4/A5 servo, 2 m
▪ PCL-20153YS5-S2E	50-pin cable to Yaskawa Sigma V/7 servo, 2 m
▪ PCL-20153MJ3-S2E	50-pin cable to Mitsubishi J3/J4 servo, 2 m
▪ PCL-20153DA2-S2E	50-pin cable to Delta A2 servo, 2 m