AMAX-3110

Standalone 6-axis pulse train motion controller



Features

- 6-axis Servo / Stepping pulse motor control
- On-board 16 Digital Input and 12 Digital Output
- Pulse output 5MHz, mode CW/CCW, A/B, Pulse Direction
- Pulse input 5MHz, mode x1, x2, x4 A/B phase, CW/CCW
- Support hand wheel x 1
- Support 6D position comparison trigger, position latch, PWM
- Support 6D Linear, 3D Circular Interpolation
- LAN x 2, USB x 1, RS-232 x 1, RS-485 x 1
- Modbus TCP/RTU
- Multi-tasking ARES script Programming
- Retain memory (FRAM)
- Easily visible LED indicators on board to do diagnosis
- Suitable for wall mount or DIN-rail mounting (option)



Introduction

The AMAX-3110 is a 6 axes pulse train standalone motion controller with compact design to save panel space. It is based on ARM processor that makes it ideal for real time motion and I/O control and has built-in softmotion kernel which provides 2-6 linear interpolation, 3D circular interpolation and various application focus motion functions such as position compare trigger and latch in.The AMAX-3110 solutions also provides ARES Developer software which supports ARES BASCI programing to shorten the development time.

Specifications

	CPU	Dual-core Cortex-A9 667MHz
System	RAM	DDR3L 512MB
	Retain memory (FRAM)	FRAM 64Kb (8K Byte)
	eMMC space	8GB
System IO	Ethernet	RJ-45 x 1 (10/100Mbps)
	EtherCAT	Reserved
	RS232/485	RS-232 x 1 (2400 - 115200bps) RS-485 x 1(2400 - 115200bps)
	USB	USB 2.0 x 1 (Host)
Motion	Pulse Output	6-Axis CW/CCW, A/B, Pulse Direction Mode 5Mpps Output Voltage 3Vdc
	Pulse Intput	6Ch. (A,B,Z) A/B phase , CW/CCW Mode 5MHz Input Voltage 5V (Max.) Range -2,147,483,647 ~ +2,147,483,648 (32bits)
	Hand Wheel	Input mode x4 A/B phase 250kHz Input Voltage 5V (Max.)
Motion IO	Digital Input	EMG x 1, ORG x 6, LMT± x 6, INP x 6, ALM x 6, RDY x 6 Input Voltage 24V(Max.) Input delay : 1ms (Max.)
	Digital Output	SVON x 6, ERC x 6, RST x 6 Output Voltage Open Collector 24Vdc (Max.) Sink Current 20mA/CH Input delay: 1ms (Max.)
	Latch In	2Ch. Input Voltage 24V 100kHz
	Compare Trigger	2Ch. (single-Ended) Input Voltage 24V Sink Current 500mA/CH 100kHz
	PWM	2Ch.(Differential) Output Voltage 3Vdc (Max.) 5MHz

Specifications (Cont.)

		10.01
General I/O	Digital Input	16 Ch. Input Voltage 24V(Max.) Input delay : 1ms (Max.)
	Digital Output	12 Ch. Output Voltage Open Collector 24Vdc (Max.) Sink Current 500mA/CH Input delay time 1ms (Max.)
General	LED	Power/ RUN/ ERROR/ UPD / IO Status
	Rotary Switch	4bits x 1
	Input Voltage	24VDC +/- 15%
	Power Consumption	17W
	Dimension (W x H x D)	150 x 180 x 21 mm
	Certifications	CE, FCC Class A
	Relative Humidity	5~95% RH non-condensing
	Operation Temperature	0 to 60 degree C
	Storage Temperature	-20 to 85 degree C

Ordering Information

■ **AMAX-3110-06AE** Standalone 6-axis pulse train motion controller

Accessories

PCL-30153PA5-S2E
 PCL-30153YS5-S2E
 PCL-30153MJ3-S2E
 PCL-30153MJ3-S2E
 PCL-30153DA2-S2E
 DB25 to SCSI-50 Cable for Yaskawa Sigma V/7, 2m
 DB25 to SCSI-50 Cable for Mitsubishi J3/J4, 2m
 DB25 to SCSI-50 Cable for Delta A2, 2m

• **1950016395T101** Din rail kit