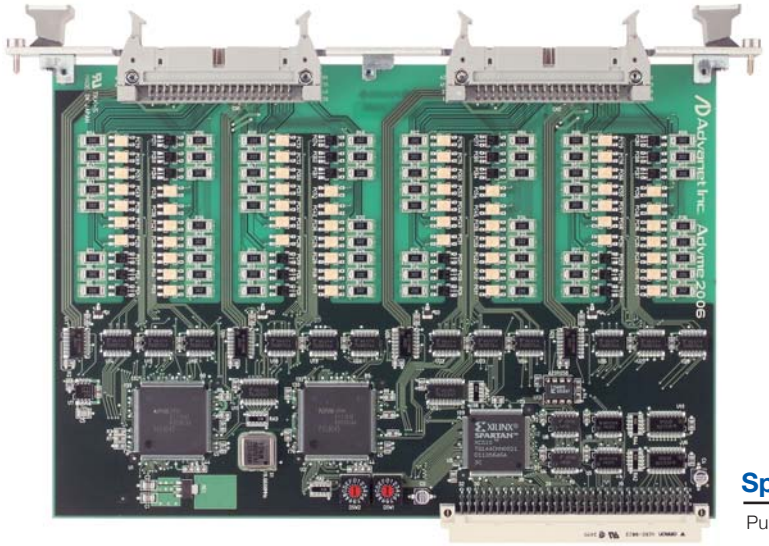
Advme2006

8-axis Pulse Control Board



Features

VME bus compliant 8-axis pulse control board equipped with two Nippon Pulse
Motor original PCL6045 pulse control LSI
Capable of controlling the speed and positioning of 8-axis pulse motors and servo motors
Use by connecting to a pulse-input type stepping motor driver or servo motor driver
Each axis is equipped with an independent general-purpose I/O board for connection with various stepping motor drivers and servo motor drivers
Supports drivers with micro-step control
Operation modes: Continuous, Positioning, Return to origin, Straight-line interpolation and Circular interpolation
Function for controlling S-curve acceleration and deceleration
Speed can be changed during operation in all modes
Target position (displacement) can be changed during operation in Positioning mode
Function for detecting loss of synchronism in stepping motors and an idling pulse output function
I/O interface function for server motor control, Independent status ID and interrupt level can be set for every four axes, Maximum output frequency of 6.5Mpps, Straight- line interpolation of 2 to 4 arbitrary axes and circular interpolation of 2 arbitrary axes for axes A to D and axes E to H
Each axis has the following four counters:
(1) 28-bit counter for management of the command position
(2) 28-bit counter for management of the machine position
(3) 16-bit counter for management command position and machine position deviation
(4) 28-bit counter for synchronous signal output
Five comparator functions for each axis, Double-height single-slot VME bus board,
VME bus occupies 256Bytes of A16 space, Capable of issuing interrupts in accordance with its operation/operation status as a D16, D8 (EO) slave

Specifications

Pulse controller
- No. of control axes : 8 axes (A,B,C,D,E,F,G and H)
- LSI : PCL6045 (Nippon Pulse Motor original)
- Interface format : Motorola type 16-bit
- Standard clock : 19.6608MHz

Interpolation functions
- Straight-line interpolation 2 to 4 arbitrary axes from amongst axes A to D
- Straight-line interpolation 2 to 4 arbitrary axes from amongst axes E to H
- Circular interpolation 2 arbitrary axes from amongst axes A to D
- Circular interpolation 2 arbitrary axes from amongst axes E to H

Pulse output
- Output pulse rate : Up to 6.5Mpps
- Output pulse mode : Two-pulse mode (CW/CCW) or single-pulse mode (POUT/PDIR)
- Output signal level : RS-422 level (capable of driving a photo-coupler input type driver)

Isolation : None

Pulse input
- Input pulse rate : 1.0Mpps max. A/B/Z (two-phase signal and zero-phase) or two-pulse mode
- Input pulse mode : (POUT/PDIR)
- Compatible : Software programmable for each axis
- input signal : Open collector output type rotary encoder
- Counter : 28-bit up-down counter
- Isolation method : High-speed photo-coupler (TLP115A equivalent) Isolated against the VME system and between signals on different axes

General-purpose digital output
- 2 points per axis, Open-collector mode, Photo-coupler isolation
- Rated voltage: Up to DC24V, Load current; Up to 10mA

General-purpose digital input
- 2 points per axis, Open-collector mode, Photo-coupler isolation
- Input resistance: Typ. 3kΩ
- Rated voltage: DC12 to 24V, Input current: Typ. 7.6mA at DC24V

VME bus Interrupt
- Occupies 128Bytes of A16 space, D16/D08 (EO) slave
- Arbitrary values can be set respectively for the interrupts from the controllers for the A to D axes and E to H axes, Data width: 8 bits

Power requirements : DC5.0V±5%

Board size : 262mm x 172mm x 20mm (excluding protrusions)

Note: The following specifications and product appearance are subject to change for enhancement without notice.

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