

PCM-3240

4-axis PC/104 Stepping/Pulse-type Servo Motor Control Card



Features

- PC/104 interface
- Independent 4-axis motion control
- Hand wheel and jog function
- 2/3-axis linear interpolation function
- 2-axis circular interpolation function
- Continuous interpolation function
- Programmable T/S-curve acceleration/deceleration rate
- Up to 4 MPPS pulse output for each axis
- Two pulse output types: CW/CCW or Pulse/Direction
- Up to 1 MHz encoder input for each axis
- Two encoder pulse input types: A/B phase or Up/Down
- Constant speed control
- Position management and software limit switch function
- BoardID™ switch

Introduction

PCM-3240 is a 4-axis stepping/pulse-type servo motor control card designed for general-purpose motion applications. PCM-3240 is a high-speed 4-axis motion control card for the PC/104 bus that simplifies stepping and pulse-type servo motor control, giving you added performance from your motors. The card's intelligent NOVA® MCX314-motion ASIC builds in a variety of motion control functions, such as 2/3-axis linear interpolation, 2-axis circular interpolation, T/S-curve acceleration/deceleration rate and more. In addition, the PCM-3240 performs these motion control functions without processor loading during driving. For advanced applications, we supply Windows® DLL drivers and user-friendly examples to decrease your programming load. Moreover, with a free bundled PCM-3240 motion utility, you can easily complete configuration and diagnosis.

Specifications

Pulse Type Motion Control

- **Motor Driver Support** Pulse-type servo/stepping
- **Number of Axes** 4
- **Interpolation** 2-axis linear, 3-axis linear, 2-axis circular
- **Max. Output Speed** 4 Mpps
- **Step Count Range** ±2, 147, 483, 646
- **Pulse Output Type** Pulse/Direction (1-pulse, 1-direction type), or CW/CCW (2-pulse type)
- **Position Counters** Range of Command, Range of Actual Position
- **Velocity Profiles** T-Curve, S-Curve
- **Local I/O**
 - Machine Interfaces: PEL x 4, MEL x 4, ORG x 4
 - Servo Driver Interfaces: ALM x 4, RDY x 4, SVON x 4, INP x 4
 - Position Compare I/O: CMP x 4
 - General Inputs: 3
 - General Outputs: 4

Encoder Interface

- **Input Type** Quadrature (A/B phase or Up/Down)
- **Counts per Enc. Cycle** x1, x2, x4 (A/B phase only)
- **Input Range** 5 ~ 25 V
- **Isolation Protection** 2,500 V_{DC}
- **Max. Input Frequency** 1 MHz

General

- **Bus Type** PC/104
- **Certifications** CE
- **Connectors** 2 x IDC 50-pin male
- **Dimensions** 96 x 91 mm
- **Power Consumption** Typical: 5 V @ 850 mA
Max: 5 V @ 1 A
- **Humidity** 5 ~ 95% RH, non-condensing (IEC 68-2-3)
- **Operating Temperature** 0 ~ 60° C (32 ~ 140° F)
- **Storing Temperature** -20 ~ 85° C (-4 ~ 185° F)

Ordering Information

- **PCM-3240** 4-axis stepping/pulse-type servo motor control card
- **PCL-10150-1.2** 50-pin flat cable, 1.2 m
- **ADAM-3950** 50-pin flat cable wiring terminal for DIN-rail mounting
- **PCL-12250-1** Two 50-pin flat cable to 100-pin SCSI connector, 1 m
- **ADAM-3952/J2S** PCM-3240 Wiring Board for Mitsubishi J2S series
- **ADAM-3952/PMA** PCM-3240 Wiring Board for Panasonic Minus A series
- **ADAM-39100** 100-pin SCSI-II wiring terminal for DIN-rail mounting
- **ADAM-3952** Wiring Terminal for DIN-rail mounting