



STEP-200
ISA Bus, 2-axis High-speed
Stepper Motor Control Card
(Limited Functions and Economical)

Introduction

The **STEP-200** is a 2-axis, command-based stepper motor controller board for IBM PC/XT/AT bus-compatible devices. The board can also be used for pulse-type servo motor control (pulse input type). The board includes a built-in μ P that performs a variety of motion control commands and shares the loading of the host computer. A 2 KB FIFO is included as a command buffer, which provides a buffer time of 1360 ms. The hardware architecture of STEP-200 is ideal for the Windows operating system, and drivers for DOS and Windows are provided offering real-time motion control solutions for Windows systems.

If the PMDK is to be used for signal processing, users can refer to a range of samples provided by ICP DAS illustrating how to implement FFT, FIR and IIR, together with the resources provided by TI. In the future, ICP DAS will be providing a wider library of functions and examples that will further reduce the level of programming required by users in order to implement their custom applications. In summary, the PMDK is a highly cost-effective solution for users intending to develop custom applications for motion control, process control, I/O logic control, digital processing, and applications in a wide range of other domains.

Specifications

Model	STEP-200
General	
Number of Axes	2
Slot Interface	ISA bus
Pulse Output Rate	250 KHz (Max.)
Command Type	Pulse Command
Resolution	32-bit
Servo Update Rate	-
Pulse Output Mode	CW/CCW, PULSE/DIR
Operation Mode	Open loop
Linear Interpolation	-
Circular Interpolation	-
Speed Curve Profile	T-curve
Synchronous Action	-
Ring Counter Mode	32-bit
Position Control Mode	Incremental mode and absolute mode
Position Compare Trigger	10 KHz
Encoder Interface	-

Ordering Information

STEP-200	ISA Bus, 2-axis High-speed Stepper Motor Control Card (Limited Functions and Economical) Includes: CA-PC25M (25-pin Male D-Sub Connector with Plastic Cover)
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Accessories

DN-25	I/O Connector Block with 25-pin/9-pin D-Sub Connector (DIN-Rail Mounting)
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Features

- 2-axis independent, simultaneous stepper motor control/servo motor control (Pulse input type)
- Drivers for DOS, Windows 95/98/ME, Windows NT
- Embedded Microprocessor
- Command Type Interface
- Linear and circular interpolation
- Acceleration/deceleration:
Automatic trapezoidal acceleration/deceleration
- Output polarity can be programmable
- 5 optical isolated digital inputs per axis for limit switches



Software Support

Windows Driver/DLL/Lib	Windows 95/98/ME/NT4.0
DOS Library	DOS 6.2
Labview Development Kit	-
Linux Library	-

Model	STEP-200
Encoder Counter	-
Encoder Counting Rate	-
I/O Isolation	2500 Vrms optical isolation
Connector	25-pin D-Sub
Motion Relative I/O	
Mechanical Switch Input	Home, forward, backward limit, EMG
Servo I/O Interface	Output: SVON
Digital Input	
Digital Input Channels	-
Digital Output	
Digital Output Channels	-
Power	
Power Consumption	+5 V @ 500 mA
Environmental	
Operating Temperature	0 ~ +50°C
Storage Temperature	-20 ~ +70°C
Ambient Relative Humidity	0 ~ 90% RH, non-condensing