

PEC-3240

Intel® Celeron® M 1.0 GHz 4-axis Embedded Motion Controller with 32-ch Digital I/O



Features

- Onboard Celeron® M 1.0 GHz CPU
- 2 x RS-232 ports
- Two 10/100Base-T RJ-45 ports
- 2 x USB ports (one with lockable cable mechanism)
- Windows® XP Embedded SP2 ready solution
- Independent 4-axis motion control
- 32-ch isolated Digital I/O (16-ch inputs and 16-ch outputs)
- 2/3-axis linear, 2-axis circular interpolation function
- Continuous interpolation
- Up to 4 Mpps output; up to 1MHz encoder input
- Two pulse output types: CW/CCW or pulse/direction
- Two encoder pulse input types: A/B or CW/CCW

Introduction

PEC-3240 is a standalone embedded motion controller that provides 4-axis motion and 32 isolated digital inputs/outputs. This controller also supports serial communication ports and several other networking interfaces. The Windows XP Embedded OS offers a pre-configured image with optimized onboard device drivers. You can seamlessly integrate your applications into Windows XP Embedded and speed up your system development with this application ready controller.

Specifications

General

- **Certifications** CE, FCC Class A
- **Dimensions (W x D x H)** 255 x 152 x 59 mm (10" x 6.0" x 2.3")
- **Power Consumption** 24 W (Typical)
- **Power Requirements** 10 ~ 30 V_{DC} (e.g 24 V @ 2 A) (Min. 48 W), AT
- **Weight** 2.4 kg (Typical)
- **OS Support** Windows XP Embedded, Windows 2000/XP

System Hardware

- **CPU** Celeron M 1.0 GHz
- **Memory** 512 MB DDR SDRAM
- **Indicators** LEDs for Power, IDE and LAN (Active, Status)
- **Keyboard/Mouse** 1 x PS/2
- **Storage** SSD: 2 x internal type I/II CompactFlash® slot

I/O Interface

- **Serial Ports** 2 x RS-232 with DB9 connectors
- **Serial Port Speed** 50 ~ 115.2 kbps
- **LAN** 2 x 10/100Base-T RJ-45 ports
- **USB Ports** 2 x USB, EHCI, Rev. 2.0 compliant

Pulse Type Motion Control

- **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** CW/CCW or pulse/direction
- **Velocity Profiles** T-Curve, S-Curve
- **Local I/O** PEL x 4, MEL x 4, ORG x 4, ALM x 4, INP x 4, CMP x 4
- **General Inputs** 12 (INO ~ 2 of each axis)
- **General Outputs** 16 (OUT4 ~ 7 of each axis)

Encoder Interface

- **Input Type** Quadrature (x1, x2, x4 A/B phase) or CW/CCW
- **Input Range** 5 ~ 25 V
- **Isolation Protection** 1,000 V_{DC}
- **Max. Input Frequency** 1 MHz

Isolated Digital Input

- **Channels** 16
- **Input Voltage** Logic 0: 2 V max.; Logic 1: 5 V min. (24 V max.)
- **Isolation Protection** 1,000 V_{DC}

Isolated Digital Output

- **Channels** 16
- **Output Type** Sink Type (NPN)
- **Output Voltage** 5~40 V max.
- **Sink Current** 200 mA max. per channel
- **Isolation Protection** 1,000 V_{DC}

Environment

- **Humidity** 5 ~ 95% RH, non-condensing (IEC 68-2-3)
- **Operating Temperature** -10 ~ 65° C (14 ~ 149° F) @ 5 ~ 85% RH
- **Storage Temperature** -20 ~ 80° C (-4 ~ 176° F)
- **Shock Protection** IEC 68 2-27
- **Vibration Protection** CompactFlash: 50 G @ wall mount, half sine, 11 ms
IEC 68 2-64 (Random 1 Oct./min, 1hr/axis.)
CompactFlash: 2 Grms @ 5 ~ 500 Hz

Ordering Information

- **PEC-3240** Celeron M 1 GHz 4-axis Motion Controller w/ DIO

Accessories

- **PCL-10251-1** 100-pin SCSI to Two 50-pin SCSI Cable, 1m
- **PCL-10251-2** 100-pin SCSI to Two 50-pin SCSI Cable, 2m
- **PCL-10251-3** 100-pin SCSI to Two 50-pin SCSI Cable, 3m
- **PCL-10125-1** DB25 Cable, 1m
- **PCL-10125-3** DB25 Cable, 3m
- **ADAM-3952** 50-pin DIN-rail SCSI and Box Header Board
- **ADAM-3925** DB25 DIN-rail Wiring Board