

PEC-3710

**AMD LX800 500 MHz Controller
with 16-ch AI, 4-ch AO
and 32-ch Isolated DI/O**



Features

- Onboard AMD LX800 500 MHz CPU
- 2 x RS-232 ports
- Two 10/100Base-T RJ45 ports
- 2 x USB ports (one with lockable cable mechanism)
- 16-ch single-ended or 8-ch differential or a combination of Analog Input
- 12-bit A/D converter, with up to 100 kHz sampling rate
- Programmable gain
- Onboard FIFO memory (4,096 samples)
- 4-ch 12-bit Analog Output
- 16-ch Isolated Digital Input
- 16-ch Isolated Digital Output
- 1-ch Isolated Counter

Introduction

PEC-3710 is a standalone automation controller that provides 16-ch analog input, 4-ch analog output, 16-ch isolated digital input and 16-ch isolated digital output. This controller also supports serial communication ports and several other networking interfaces. You can seamlessly integrate your applications into PEC-3710 and speed up your system development with this application ready controller.

Specifications

General

- 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 CE, Windows XP

System Hardware

- CPU** AMD LX800 500 MHz
- Memory** 512 MB DDR SDRAM
- Indicators** LEDs for Power, IDE and LAN (Active, Status)
- Keyboard/Mouse** 1 x PS/2
- Storage** 2 x type I/II CompactFlash® slot (one internal)

Environment

- Humidity** 5 ~ 95% RH, non-condensing (IEC 68-2-3)
- Operating Temperature** -10 ~ 60°C (14 ~ 140°F) @ 5 ~ 85% RH
- Storage Temperature** -20 ~ 80°C (-4 ~ 176°F)

I/O Interface

- Serial Ports** 2 x RS-232 with DB9 connectors
- LAN** 2 x 10/100Base-T RJ45 ports
- USB Ports** 2 x USB, EHCl, Rev. 2.0 compliant

Analog Input

- Channels** 16 single-ended/ 8 differential
- Resolution** 12 bits
- Max. Sampling Rate** 100 kS/s
- FIFO Size** 4,096 samples
- Overvoltage Protection** 30 Vp-p
- Input Impedance** 1 GΩ
- Input Range** (V, software programmable)

Unipolar	N/A	0 ~ 10	0 ~ 5	0 ~ 2.5	0 ~ 1.25
Bipolar	±10	±5	±2.5	±1.25	±0.625
Accuracy (% of FSR ±1LSB)	0.1	0.1	0.2	0.2	0.4

Analog Output

- Channels** 4
- Resolution** 12 bits
- Output Range** (Software programmable)
Unipolar (V) 0 ~ 5, 0 ~ 10
Bipolar (V) ±5, ±10
Current Loop (mA) 0 ~ 20, 4 ~ 20
- Driving Capability** 5 mA
- Accuracy** Relative: ±1 LSB; Differential Non-Linearity: ±1 LSB (monotonic)
- Excitation Voltage** 48 V (max.)

Isolated Digital Input

- Channels** 16
- Input Voltage** Logic 0: 2 V max.
Logic 1: 5 V min. (30V max.)
- Isolation Protection** 1,000 V_{DC}

Isolated Digital Output

- Channels** 16
- Output Type** Sink Type (NPN)
- Output Voltage** 5~40 V_{DC}
- Sink Current** 300 mA max. per channel
- Isolation Protection** 1,000 V_{DC}

Isolated Counter

- Channels** 1
- Resolution** 16 bits
- Input Voltage:** Logic 0: 2 V max.
Logic 1: 5 V min. (30 V max.)
- Isolation Protection:** 1,000 V_{DC}
- Max. Input Frequency** 1 MHz

Ordering Information

- PEC-3710-AE** AMD LX800 500 MHz Controller w/ AI/O and DI/O

Accessories

- PCL-10137-1E** DB37 Cable, 1m
- PCL-10125-1E** DB25 Cable, 1m
- ADAM-3925-AE** DB25 DIN-rail Wiring Board
- ADAM-3937-BE** DB37 DIN-rail Wiring Board