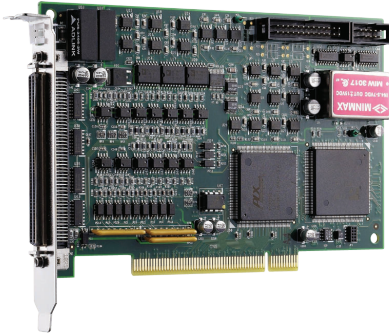


PCI-8136

6-CH Quadrature Encoder and Multi-Function I/O Card



Features

- 32-bit PCI bus, plug & play
- 6-CH 32-bit industrial counter for 3 kinds of differential pulse trains:
 - A/B phase
 - CW/CCW
 - Pulse/Direction
- 6-CH differential pulse generators up to 500 kHz
- 6-CH 32-bit position compare with interrupt function
- 6-CH 16-bit ± 10 V analog output
- 6-CH 12-bit 133 kHz analog single-ended input
- 19-CH opto-isolated DI, 7-CH open collector DO
- Digital I/Os and counters are 2500 Vdc opto-isolated
- One 24-bit programmable timer with interrupt
- Auto-calibration for analog I/O
- More than 50 thread safe API functions

Software Support

- OS Information
 - Windows® 8/7/XP
 - Linux
- Software Compatibility
 - VB/VC++/BCB/Delphi
 - Various sample programs with source codes

Ordering Information

- **PCI-8136**
6-CH quadrature encoder and multi-function I/O card

Accessories

For more information on terminal boards & cables, please refer to page 6-31.

Terminal Board

- **DIN-100S-01**
Terminal board with one 100-pin SCSI-II connector and DIN-rail mounting

Cabling

- **ACL-102100-1**
100-pin SCSI-II cable
(mating with AMP-787082-9), 1 M

Specifications

General Specifications

| | |
|-------------------------|--|
| ■ Connectors | 100-pin SCSI-type connector DB25 female connector DB9 male connector |
| ■ Operating Temperature | 0°C to +50°C (32°F to 122°F) |
| ■ Storage Temperature | -20°C to +80°C (-4°F to 176°F) |
| ■ Humidity | 5% to 85%, non-condensing |
| ■ Power Consumption | Slot power supply (input): to $\pm 5\%$, 900 mA (max.) External power supply (input): +5 Vdc $\pm 5\%$, 500 mA (max.) External power supply (output): +5 Vdc $\pm 5\%$, 500 mA (max.) |
| ■ Dimension | 164 x 98.4 mm (L x H) (6.39" x 3.83") |

Pulse Input (Industrial Counter)

| | |
|---------------------------|--|
| ■ Number of Input Channel | 6, differential type |
| ■ Pulse Command Type | 32-bit counter for AB-phase, CW/CCW, Pulse/Direction |
| ■ Max. Counter Speed | 3 MHz, 2500 VDC optical isolation |

Pulse Output (Industrial Generator)

| | |
|----------------------------|------------------------------------|
| ■ Number of Output Channel | 6, differential type |
| ■ Pulse Command Type | CW/CCW, Puls /Direction, A/B Phase |
| ■ Max. Pulse Rate | 500 kHz |

Analog Input

| | |
|---------------------------|--|
| ■ Number of Channels | 6 differential/single-end input channels |
| ■ Input Range | Voltage: ± 10 V |
| ■ Sink Current Capability | 0 to 20 mA |
| ■ Resolution | 12-bit ADC with 1-bit non-linearity |
| ■ Input Impedance | Approximately 440 K Ω (Voltage), 120 Ω (Current) |
| ■ Sampling Rate | 133 kHz multiplexing |

Analog Output

| | |
|---------------------------|--|
| ■ Number of Channels | 6 output channels |
| ■ Output Range | ± 10 V; bipolar |
| ■ Sink Current Capability | 0 to 20 mA |
| ■ Resolution | 16-bit DAC resolution, 14-bit accuracy guarantee |
| ■ Setting Time | 2 μ s |

Digital Output

| | |
|----------------------|---|
| ■ Number of Channels | 7 output channels |
| ■ Output Type | Open collector |
| ■ Sink Current | 100 mA/CH (typical); 268 mA/CH (max.); 500 mA/total |
| ■ Isolated Voltage | 2500 V _{RMS} |
| ■ Throughput | 10 kHz (0.1 ms) |

Timer

| | |
|------------------------------------|-------------------|
| ■ One programmable timer interrupt | |
| ■ Base Clock | 33 MHz by PCI bus |
| ■ Timer Range | 24-bit |