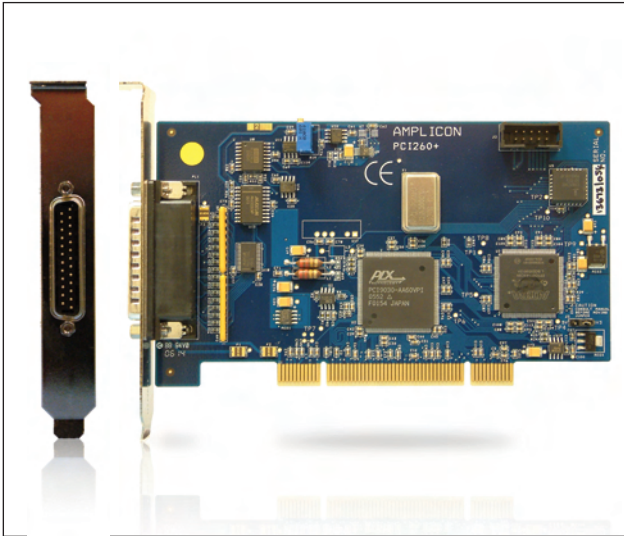


AMPLICON PCI260+



Features

- 500kS/s with 16-bit resolution
- Universal PCI compatible, 3.3V or 5V
- 16 single-ended or 8 differential inputs
- 4096 sample FIFO buffer
- Flexible analog triggering three 16-bit counter/timers
- High speed data transfer
- Windows 95, 98, NT, 2000, XP, 2003, Vista and Linux support
- Drivers for C/C++, VB/VB.NET, C#, Delphi, VEE & LabVIEW

Description

General

The PCI260+ is a high performance data acquisition board with 16 single-ended or eight true differential analog inputs and three counter/timers. The board offers high speed and high-accuracy, combined without compromise.

Architecture

Analog input channels are connected through a multiplexer to the 16-bit A/D converter. Single-ended inputs are referenced to a common ground, whereas differential inputs use two input channels to make a measurement. A software selectable gain controller allows the user to set the input voltage range to three ranges for unipolar signals, or four ranges for bipolar signals. A 4096 sample FIFO buffer coupled to advanced acquisition control logic, allows seamless acquisition of analog signals.

Sampling modes

The PCI260+ provides several acquisition modes to suit a variety of applications. These include software controlled single or multiple sampling, and triggered sampling from digital inputs.

Software control - For single channel data acquisition, simply select the desired channel and initialise a sample. When you select multiple channels, the card automatically samples each channel in ascending number order and places the sample in the FIFO.

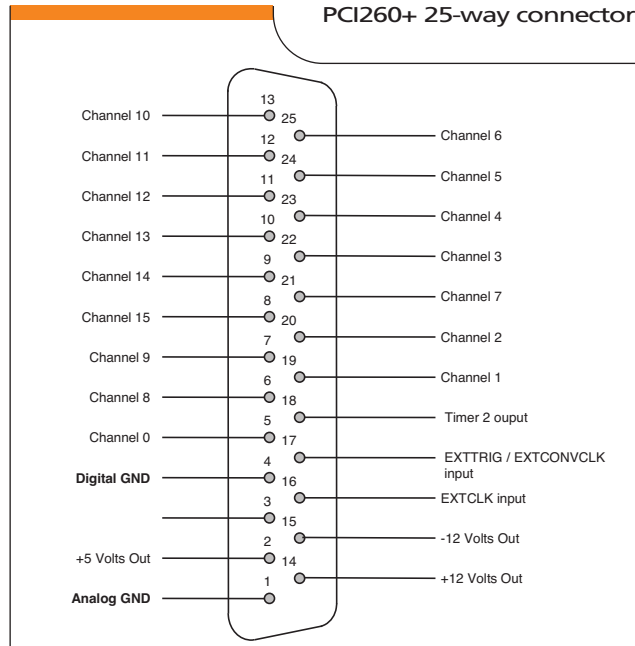
Analog triggering - In this mode the PCI260+ will monitor all selected analog input channels, and start placing samples in the FIFO when an input signal crosses a pre-programmed threshold. It can be used as a level trigger or an edge trigger, as found on many oscilloscopes. A pre-trigger function is also available that uses the FIFO to store a number of samples before an identified trigger.

Software support

The PCI260+ may be used in 32-bit Windows or Linux operating systems. Drivers are available for all popular high-level programming languages. The Amplicon programming library, AMPDIO32, provides example programs with source code which can be modified as required.

DAX software allows non-programmers to set up and control the input channels in an Excel environment

PCI260+ 25-way connector



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AMPLICON PCI260+

Specifications

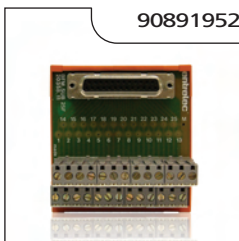
Analog input		General	
A/D channels	16 single-ended or 8 differential	Connector	25-way male D-sub
A/D resolution	16-bit	PC interface	Universal PCI, 3.3V or 5V
Sampling speed	500kS/s (maximum)	Dimensions	153 x 91mm (length x height)
Multiple channel sampling	Two channels @ 125kS/s/channel 16 channels @ 15.6kS/s/channel	Operating temp.	0 to +60°C
Input ranges	Bipolar $\pm 1.25V$, $\pm 2.5V$, $\pm 5.0V$, $\pm 10.0V$ Unipolar 0 to +2.5V, 0 to +5.0V, 0 to +10.0V	Storage temp.	-20 to +70°C
Maximum input voltage	$\pm 20Vdc$	Humidity	5 to 95% RH, non-condensing
Input impedance	1.0Mohm/ $<100pF$ each channel	Power consumption	3.3V @ 500mA or 5V @ 300mA $\pm 12V$ @ 50 to 150mA
Sampling modes	Software polled, interrupt controlled, external trigger	MTBF	598 khours
External triggers	Analog level threshold	Compliance	CE, EMC EN55022, EN550242
Input FIFO	4096 samples (user programmable threshold)		
Input slew rate	2.5V/ μs for all gain ranges		
Reference temp. coefficient	3ppm/°C		
Counter/Timer			
Number of counters	Three 16-bit counter/timers (82C54)		
Clock source	Internal 10MHz clock with dividers to 1MHz, 100kHz, 10kHz, 1kHz External up to 10MHz square wave		
Counter input	Low: -0.3 to 0.8V High: 2.2 to 5.3V		
Counter output	Low: 0.3V max. at 2.0mA High: 3.8V min. at -2.0mA		
Counter timer intervals	2.0 μs to 10 minutes		

Accessories and Ordering information

96052513 PCI260+ Low cost 16-bit PCI analog input board with counter timers

90956179 25 way screened cable male D to female D 1m long

90891952 25 way screw terminal panel, DIN rail mounting



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