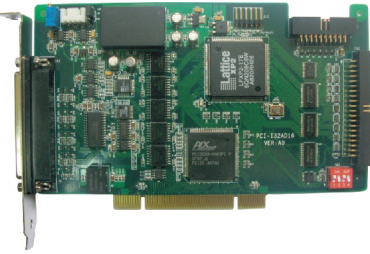# PCI-I32AD16

Isolated 32-channel single-ended/16-channel differential or single-differential mixed input 16-bit AD acquisition channel, with 100Khz sampling rate; 16-channel digital channel,16-channel digital output channel;1-channel programmable timer/counter

Specifications and Features

Analog Input

Channel: 32-channel single-ended/16-channel differential/mixed resolution: 16-bit

FIFO: 4K x 21-bit

Converting Speed: 100ksps (max. value for single channel)

Voltage Input Range:

Unipolar: 0~2.5V, 0~5V, 0~10V

Bipolar: ±2.5V, ±5V, ±10V

Max. Input Overload Voltage: ±15V

Input Protection: 30Vp-p (peak-to-peak value)

ESD Protection: 2000V

Input Impedance: 10 MΩ

Trigger Mode: Software trigger, programmable counter trigger and external trigger.

AD Output Code Type: Source code/complementary code (default as complementary code)

Accuracy: 0.05% FSR

Isolation Voltage: $1000V_{DC}$

Interrupt Mode: Interrupt after AD conversion or interrupt when FIFO is half-full

Sync Signal: The following sync signal connectors are provided

DA_TRIG	DA_WR	AD_TRIG	AD_SCAN	AD_CONV	TIMEBASE
				v	v

TTL Digital Input

Input Channel: 16-channel

TTL Digital Output

Output Channel: 16-channel

Programmable Timer/Counter

It provides one 16-bit timer.

Bit: 16-bit

Compatibility: Compatible with TTL

Max. Input Frequency: 10MHz

Clock Input: $V_{IL(MAX)}$=0.8V, $V_{IH(MIN)}$=2.0V

Gating Input: $V_{IL(MAX)}$=0.8V, $V_{IH(MIN)}$=2.0V

Counter Output: $V_{OH(MIN)}$=2.4V, $V_{OL(MAX)}$=0.5V @ 24mA

General Specifications

I/O Connector Type: it is configured with a DB37 female connector and a IDC40 socket on daughterboard;

4-bit Board ID setup function

Compatible with 3.3V and 5V general board design of PCI2.1 specification

Power Consumption: Typical +5V@550mA; max. +5V@600mA

External Dimensions (L x H): 175mm x 106mm (6.9" x 4.2")

Operating Temperature: 0°C~60°C

Storage Temperature: -20°C~70°C

Relative Humidity: Operating: 5%~85%, non-condensing

Storage: 5%~95%, non-condensing

Ordering Information

Part Number	Model Number	Description
0060-003170	PCI-I32AD16	Isolated 32-channel single-ended/16-channel differential/mixed A/D input, 16-channel digital I/O, 1-channel programmable timer/counter
0060-001900	PCLD-880	DB-37 port industrial terminal board