

12-Bit Isolated Analog to Digital

ADI12-16(PCI)

PCI Isolated Memory on board Gain Amp. CE



API-PAC(W32) included [API Function Library]

FEATURES

- Isolation between PC signal and external analog / digital signals
- 16MB data buffer memory (FIFO or ring buffer) enables sampling to be executed independently of the processing power of the PC.
- Variety of triggers available for starting/stopping data input.
- 16 single-ended or 8 differential inputs (Current input = 8 max)

SPECIFICATIONS

Input channels	16 single-ended, 8 differential
Resolution	12bit
Input specifications	
Range	±10V, 0~+10V, 4~20mA*5
Gain	x1, x2, x4, x8 (selectable by software)
Conversion speed *1	20µsec/ch (Max.)
Conversion Accuracy *6	±2LSB (input gain: x1, x2) at voltage input ±4LSB (input gain: x4, x8) at voltage input ±3LSB (input gain: x1) at current input
Impedance	Voltage input: 1MΩ or more, Current input: 250Ω
Digital trigger	1 opto-isolated input (shares one digital input)
Conversion start trigger	Software command, Analog level, External digital input
Conversion stop trigger	Storage complete/Software/Converted data comparison/Insulated external input digital signal
Isolation	PCI bus signal isolated from External analog and digital signals
Timer	-
Digital I/O	4 opto-isolated input (for high sink current output), 4 Opto-Isolated Open Collector Output (Current sinking type)

Interrupts	
Request Events	13 modes
Request Levels	One interrupt (Can select enable or disable)
I/O address	Any 16-byte boundary
Power Consumption	5VDC 1200mA (max)
PCI Bus / Dimensions (mm)	32bit, 33MHz, 5V / 176.41(L) x 106.68(H)
Connector	CN1(AIO): 37-pin female D-type CN2(DIO): 16-pin Header
Options	
Software	ACX-PAC(W32)BP,
Accessories	DTP-3(PC), DTP-4(PC), EPD-37A *2, EPD-37 *2, ATP-16 *2, FTP-15 *2, ATLF-8 *1*2, ATII-8A *1*2
Cables / Connectors	PCA37P-1.5, PCA37PS-0.5P/1.5P, PCB37PS-0.5P/1.5P, PCA15P-1.5, PCB15P-1.5 *4, PCC16PS, PCD8PS, DT/E1, DT/E2, CN5-D37M

*1: External power supply is required
*2: Requires use of optional cable PCB37P or PCB37PS
*3: Requires use of optional cable DT/E2 and PCB15P
*4: PCB15P is required when using FTP-15 terminal panel.
*5: At 4~20mA current loop mode, x1 input gain can be used.
*6: When using a signal source with a high-speed built-in operational amplifier.

16-Bit Isolated Analog to Digital

ADI16-4C(PCI)

PCI Isolated Hi Precision



API-PAC(W32) Included [API Function Library]

FEATURES

- Isolation between PC signal and external analog / digital signals
- Small FIFO available in Windows® environment for improved sampling speed
- Each channel's input range can be set independently

SPECIFICATIONS

Input channels	4 single-ended
Output channels	-
Resolution	16bit
Input specifications	
Range	±10V, ±5V, 0~+10V, 0~+5V, 4~20mA
Gain	-
Conversion speed *1	20µsec/ch (Max.)
Conversion Accuracy	±10V: ±32LSB, 5V, 0~+10V: ±64LSB, 0~+5V: ±128LSB, 4~20mA: ±160LSB
Impedance	Voltage input: 1MΩ or more, Current input: 1kΩ
Output specifications	
Range	-
Rating	-
Conversion speed	-
Conversion Accuracy	-
Impedance	-
Trigger signal	1 opto-isolated input (for high sink current output)

Isolation	Individual isolation
Timer	0.5µsec-17min (selectable in steps of 250nsec)
Digital I/O	-
Interrupts	
Request Events	9 modes
Request Levels	One interrupt request signal as INTA
I/O address	Any 32-byte boundary
Power Consumption	5VDC 1100mA (max)
PCI Bus / Dimensions (mm)	32bit, 33MHz, 5V / 176.41(L) x 106.68(H)
Connector	37-pin female D-type
Options	
Software	ACX-PAC(W32)BP Ver.2.1 & up
Accessories	DTP-3(PC), DTP-4(PC), EPD-37A *2, EPD-37 *2
Cables / Connectors	PCA37P-1.5, PCA37PS-0.5P/1.5P, PCB37P-1.5, PCB37PS-0.5P/1.5P, CN5-D37M

*1: Actual conversion speed depends upon operating system and drivers
*2: Requires use of optional cable PCB37P or PCB37PS

16-Bit Isolated Analog to Digital (Sensor Input)

ADI16-4L(PCI)

PCI Isolated Hi Precision



API-PAC(W32) Included [API Function Library]

FEATURES

- Independent isolated channels allow different ground levels for individual inputs
- Measures low level voltages with discontinuity detection circuit for thermocouple input
- Onboard temperature sensor can be used for cold-junction reference during thermocouple measurement

SPECIFICATIONS

Input channels	4 single-ended
Output channels	-
Resolution	16bit
Input specifications	
Range	±1.25V, ±0.125V, 0~+2.5V, 0~+0.25V
Gain	-
Conversion speed *1	10msec/ch (Max.)
Conversion Accuracy	±15LSB
Impedance	1MΩ or more
Output specifications	
Range	-
Rating	-
Conversion speed	-
Conversion Accuracy	-
Impedance	-
Trigger signal	1 opto-isolated input (for high sink current output)
Isolation	Individual isolation

Timer	0.5µsec-17min (selectable in steps of 250nsec)
Digital I/O	-
Interrupts	
Request Events	8 modes
Request Levels	One interrupt request signal as INTA
I/O address	Any 32-byte boundary
Power Consumption	5VDC 1200mA (max)
PCI Bus / Dimensions (mm)	32bit, 33MHz, 5V / 176.41(L) x 106.68(H)
Connector	37-pin female D-type
Options	
Software	ACX-PAC(W32)BP Ver.2.1 upper,
Accessories	DTP-3(PC), DTP-4(PC), EPD-37A *2, EPD-37 *2
Cables / Connectors	PCA37P-1.5, PCA37PS-0.5P/1.5P, PCB37P-1.5, PCB37PS-0.5P/1.5P, CN5-D37M

*1: Actual conversion speed depends upon operating system and drivers
*2: Requires use of optional cable PCB37P or PCB37PS