

Overview: PC measurement for the PCI bus

Analog I/O, multifunction and watchdog



	Analog input			Multifunction		Analog output		Sensor acquisition		
	APCI-3001	APCI-3002	APCI-3003	APCI-3120	APCI-3122	APCI-3501	APCI-3504	APCI-3200 Temperature	APCI-3300 Strain gauges	APCI-3701 Displacement
Bus	PCI	PCI	PCI	PCI	PCI	PCI	PCI	PCI	PCI	PCI
Analog inputs	16 SE/8 diff. 8 SE/4 diff. 4 SE	16, 8, 4 diff.	4 diff. isolated from each other	16 SE/8 diff. 8 SE/4 diff.				16 thermo/8 RTDs 8 thermo/4 RTDs 4 thermo/2 RTDs	8/4 inputs for DMS	16/8 channels for inductive transducers
Simultaneous acquisition			yes							
Optical isolation	yes	yes	yes	yes				yes	yes	
Resolution (bits)	12	16	16	16				18	18	16
Throughput	100 kHz	200 kHz	400 kHz /channel	100 kHz				20-160 Hz	20-160 Hz	2 - 20 kHz or 50 kHz
0-10 V ± 10 V	yes	yes	yes	yes						
Other ranges	0-5V; ± 5V 0-2V; ± 2V 0-1V; ± 1V 0-20 mA (opt.)	0-5V; ± 5V 0-2V; ± 2V 0-1V; ± 1V 0-20 mA (opt.)	0-5V; ± 5V 0-2V; ± 2V 0-1V; ± 1V 0-20 mA (opt.)	0-5V; ± 5V 0-2V; ± 2V 0-1V; ± 1V 0-20 mA (opt.)				± 2.5 V		
Thermocouples Pt100, Pt1000								J,K,T,E,R,S,B,N yes		
Strain gauges									yes	
Inductive transducers										Half Bridge, LVDT
Protection circuitry	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Gain	Software PGA*	Software PGA*	Software PGA*	Software PGA*				Software PGA*	Software PGA*	dep. on transd.
Analog outputs				4 or 8	4	4/8	4			
Optical isolation				yes	yes	yes	yes			
0-10 V, ± 10 V				yes	yes	yes	yes			
Resolution (Bit)				14	12	14	12			
Setup time				15 µs	15 µs	15 µs	15 µs			
Digital inputs/outputs	yes	yes	yes	yes	yes	yes		yes	yes	yes
Inputs 24 V, isolated	4	4	4	4	10	2		4	4	8
Outputs 24 V, isolated	4 (OC**)	4 (125 mA; OC**)	4 (125 mA; OC**)	4 (OC**)	12 (0.5 A) HS***	2		3 (125 mA; OC**)	3 (125 mA; OC**)	8 (50 mA)
Functions										
Timer	1	1	1	1	1	1	1			1
Interrupt	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
DMA	yes	yes	yes	yes						yes
FIFO	yes	yes	yes	yes						yes
Sequence RAM	yes	yes	yes	yes						yes
Watchdog				yes	yes	yes	yes			
Page	44	46	48	50	52	56	54	58	60	62
Software	Drivers for Linux, Windows XP/2000/NT/98 + Samples					Current driver list see on the web www.addi-data.com				

*PGA: Programmable amplifier

**OC: Open Collector

***HS: High Side

Watchdog PCI						
Board	Watchdog function	Reference clock	Sensor	Interrupts	Available signals	General
APCI-035 Watchdog board Page 64	4 x 8-bit monitoring timer, programmable through software	4 different programmable clocks	Temperature- measuring function	Generated through watchdog	<ul style="list-style-type: none"> • 2 relays, alarm, reset • 1 dig. input, 24V 	For monitoring of multitasking, of applications under Windows NT/XP/2000/98.