

Overview: PC measurement for the ISA bus

Analog I/O, Multifunction and Watchdog

	Analog input		Multifunction			Analog output		Displacement transducer
	PA 3000	PA 302	PA 3110	PA 3100	PA 311	PA 3500	PA 358	PA 370
Bus	ISA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
Analog inputs Single-ended (SE)/ Differential (diff.)	4/8/16 differential	16 SE/8 diff. 8 SE/4 diff.	16 SE/8 diff. 8 SE/4 diff.	16 SE/8 diff.	16 SE/8 diff. 8 SE/4 diff.			8/16 channels for inductive transducers
Optical isolation	yes		yes					
Resolution (bits)	12	12	16	12	16			14
Data transfer rate	142 kHz	125 kHz	100 kHz	100 kHz	100 kHz			50 kHz
0-10 V ± 10 V	yes	yes	yes	yes	yes			
Other ranges	0-5V; ± 5V 0-2V; ± 2V 0-1V; ± 1V 0-20 mA (opt.)	±5V; 0-20 mA (option)	0-5V; ± 5V 0-2V; ± 2V 0-1V; ± 1V 0-20 mA (opt.)	0-20 mA (option)	0-20 mA (option)			±10V half-bridge LVDT
Protection circuitry	yes	yes	yes	yes	yes			
Gain	Software PGA*	set through jumper	Software PGA*	Soft. PGA* Hard. INA*	Soft. PGA* Hard. INA*			
Analog outputs			4 or 8	2, 4, 8	2, 4, 8	4 or 8	4, 6 or 8	
Optical isolation			yes			yes		
0-10 V ± 10 V			yes	yes	yes	yes	yes	
0-5 V ± 5 V							yes	
0(4)-20 mA						yes	yes	
Resolution (Bit)			12	16	16	14	12	
Setting time (typ)			3,5 µs	6 µs	6 µs	30 µs	4 µs	
Digital, isolated	yes					yes		
Inputs 24 V	4					2		
Outputs 24 V	4					2		
TTL Port		2 Open Coll.		24 I/O	24 I/O			
Functions								
Timer	3	3	3	3	3			
Interrupt	yes	yes	yes	yes	yes	yes		yes
DMA	x 2		yes	16-bit	16-bit			
FIFO			yes					
Sequence RAM	yes		yes					
Watchdog			yes			yes	yes	
Options ¹								
SF/DF/SC/DC		SF/DF/SC/DC	SF/DF/PC	SF/DF/SC/DC	SF/DF/PC			
D2C/D2F	D2C/D2F							
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Software	Drivers for Windows XP/2000/NT/98, Win 3.11/Dos + Samples Current driver list see on the web www.addi-data.com							

SF: Filter, 1 single-ended input

DF: Filter, 1 diff. input

SC: 0-20 mA (4-20 mA), 1 single-ended input

DC: 0-20 mA (4-20 mA), 1 differential input

D2C: 0(4)-20 mA, 1 differential input

D2F: Precision filter, 1 differential input

PC: 0(4)-20 mA with precision resistance, 1 input

PC-SE: 1 single-ended channel, PC-Diff: 1 differential channel

*PGA: Programmable gain amplifier

*INA: Instrumentation amplifier

Watchdog ISA

Board	Watchdog function	Reference clock	Sensoren	Interrupts	Available signals	Remarks
APCI-030 Watchdog board Page 79	16-bit timer, programmable through software	2 x 16-bit timers programmable through software Quartz oscillator, 2 MHz	Temperature- measurement A/D converter	- Watchdog, timer - Temp. measurement - Temp. limit - IRQ 3, 4, 10-15	- Timer watchdog - TTL signal, - Open collector - Relay contact, reset	drivers are delivered (driver for Windows NT on request)