Overview: PC measurement for the PCI bus
Digital input and output boards and counter boards

The isolated digital boards of the ADDINUM range by ADDI-DATA are perfectly suited for the use in the industrial automation and process control engineering.

They are used in the industrial I/O control, signal switching, as interface to automatic test installations or machines, for on-off monitoring of electric consumers. This allows the connection of devices such as ventilators, valves, pumps, electromechanical relays, ...

All input channels of ADDI-DATA digital boards correspond to the industrial standard +24V for "logic" 1. A direct connection to PLC controlling is therefore possible.

The input and output channels have been equipped with numerous protecting measures in order to ensure the noise immunity of the boards.

All input and output channels are isolated from the system side through optical couplers.

Routine monitoring and interpretation tasks are relieved through interrupt routines. Interrupts are generated through a change in the state of the digital input channels.

Timers and counters are also available with the possibility to use a timer as a programmable watchdog to reset the output channels. On some boards, a readable status register allows to detect if a short circuit occurred or if there is no external 24 V.

On boards with digital output channels, all output channels are set to status "0" after power-on/reset.

	Digital input, 24 V		Digital input and output, 24 V			Relay board	Digital output, 24 V		TTL I/O		Digital input 42 V (0-60 V)
	APCI-1016	APCI-1032	APCI-1516	APCI-1500	APCI-1564	APCI-2200	APCI-2016	APCI-2032	APCI-1648	APCI-1696	APCI-1024
Bus	PCI	PCI	PCI	PCI	PCI	PCI	PCI	PCI	PCI	PCI	PCI
Filter/Protection circuitry	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Digital inputs	16	32	8	16	32	8			48	96	24
Optical isolation 1000 V	yes	yes	yes	yes	yes	yes					yes
Interruptible inputs		16		14	16						
Nominal voltage (V) DC (V)	24 (19-30)	24 (19-30) 5 V opt.	24 (19-30)	24 (19-30)	24 (19-30) 5 V optional	12 - 24 DC			TTL	TTL	42 (0-60) 2 swit. thresholds per channel
Input current at 24 VDC (mA)	6	6	6	6	4	6					< 1 mA highly resistive
Digital outputs			8	16	32		16	32	48	96	
Relay outputs						8/16 relays					
Optical isolation 1000 V			yes	yes	yes	yes	yes	yes			
Nominal voltage (V)			24 DC (10-36)	24 DC (10-36)	24 DC (10-36) 5 V optional	60 DC/ 48 AC	24 DC (10-36)	24 DC (10-36) 5 V opt	TTL	TTL	
Output current (A) for one channel			0.5 [1]	0.5 [1]	0.5 [1]	1	0.5 [2]	0.5 [2]	15 LS TTL	15 LS TTL	
Watchdog			yes	yes	yes	yes	yes	yes			
Timer/counter				3	1 timer/3 counters						
Page	16	18	20	22	24	30	26	28	32	32	33
Software	Drivers for Linux, Windows XP/2000/NT/98 + Samples Current driver list see im Internet www.addi-data.com										

[1] limited to 3 A, for all output channels, self resetting fuse against short circuits
[2] limited to 2x3 A, for all output channels, self resetting fuse against short circuits

Incremental encoder/SSI/Pulse counting board/Timer PCI

Board	Bus	Channels	Connection	Counter frequency	Optical isolation	Programmable functions
APCI-1710 \n\n Page 34	PCI	28 inputs \n 8 inputs/outputs \n 8 inputs \n 12 inputs \n 4 outputs	TTL \n 24 V (opt.) \n RS422/TTL, opt. 24 V \n 24 V, opt. 5V \n 24 V, opt. 5V	5 MHz	1000 V	• 8 incremental counters, TTL, 24 V, RS422 \n • 12 x timer/counter (82x54) \n • 12 x SSI interface \n • 16 x pulse and frequency measurement \n • 4 x pediod duration measurement \n • Digital I/O \n • PWM \n • ETM \n other functions on request ...