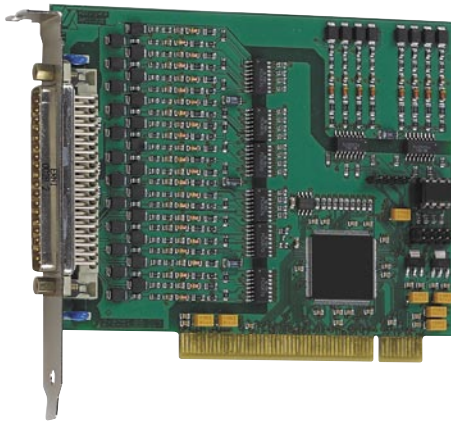


Digital input board, optically isolated, 32 digital inputs, 24 V/5 V



APCI-1032 / APCI-1032-5

32 digital inputs, 24 V or 5 V,
incl. 16 interruptible inputs

Optical isolation 1000 V

Input filters

Protection against pole reversal



RoHS
compliant



LabVIEW™



LabWindows/CVI™

Features

- PCI Interface to the 32-bit data bus
- 32 isolated digital inputs, 24 V (APCI-1032) or 5 V version (APCI-1032-5) incl. 16 interruptible inputs

Safety features

- Optical isolation 1000 V
- Creeping distance IEC 61010-1 (VDE411-1)
- Protection against pole reversal
- All inputs are filtered
- Protection against fast transients (burst) overvoltage, electrostatic discharge and high-frequency EMI
- Additional noise suppression on the interrupt lines

EMC tested acc. to 89/336/EEC

- IEC 61326: electrical equipment for measurement, control and laboratory use

Applications

- Industrial I/O control
- Signal switching
- Interface to electromechanical relays
- Automatic test equipment
- ON/OFF monitoring of motors, lights ...
- Machine interfacing
- ...

Software drivers

A CD-ROM with the following software and programming examples is supplied with the board.

Standard drivers for:

Linux kernel version 2.4.2, Windows XP/2000/NT/98.
Real-time driver for Windows XP/2000/NT/98.

The board is supplied with the universal software **ADDIPACK**.

Drivers for the following application software:

LabVIEW 5.01
LabWindows/CVI

Samples for the following compilers:

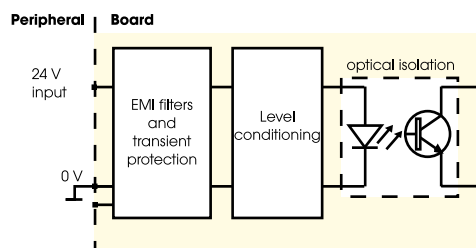
Microsoft VC++ 5.0
Borland C++ 5.01
Visual Basic 5.0
Delphi 4.0

ADDIPACK functions supported:

Digital input
Interrupt

Current driver list on the web: www.addi-data.com

Protection circuitry for the input channels:



Digital input board, optically isolated, 32 digital inputs, 24 V / 5 V



APCI-1032 / APCI-1032-5

Specifications

Digital inputs

Number of inputs:	32	
Optical isolation:	through opto-couplers, 1000 V from the PC to the peripheral	
Interruptible inputs:	16 (input 0 to 15)	
Interrupt compare logic:	AND and OR mode; OR priority	
Nominal voltage:	24 V; or 5 V (APCI-1032-5)	
Input current at U nominal:	6 mA typ.	
Logical input level:	U nominal: 24 V	U nominal: 5 V
UH max.:	30 V/Current 7.3 mA typ.	6 V/8.4 mA typ.
UH min.:	19 V/Current 3.2 mA typ.	3.3 V/3 mA typ.
UL max.:	14 V/Current 1.3 mA typ.	2.7 V/1.9 mA typ.
UL min. at nominal voltage:	0 V/Current 0 mA typ.	
Signal delay:	70 µs	
maximum input frequency:	5 kHz, at nominal voltage	

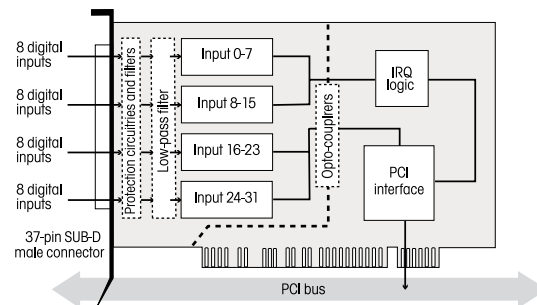
Noise immunity

Test level:	- ESD: 4 kV
	- Fields: 10 V/m
	- Burst: 4 kV
	- Conducted radio interferences: 10 V

Physical and environmental conditions

Dimensions:	131 x 99 mm (PCI short)
System bus:	PCI 32-bit 5 V acc. to specification 2.1 (PCISIG)
Space required:	1 PCI slot
Operating voltage:	+5 V, ± 5 % from PC
Max. current consumption:	(+5 V from PC) 180 mA ± 15 mA typ.
Front connector:	37-pin SUB-D male connector
Temperature range:	0 to 60°C (with forced cooling)

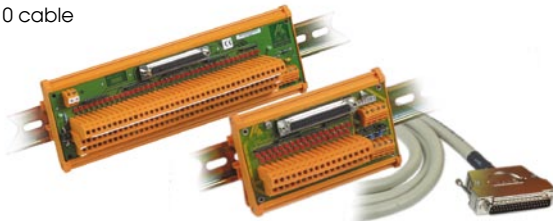
Simplified block diagram



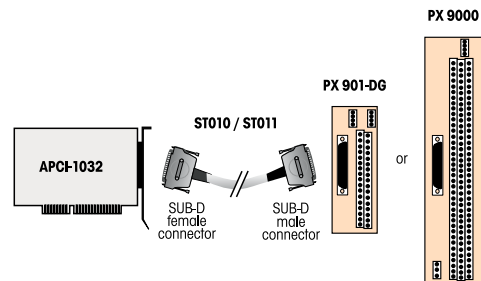
Pin assignment – 37-pin SUB-D male connector

Dig. input 1	20	1	Dig. input 0
Dig. input 3	21	2	Dig. input 2
Dig. input 5	22	3	Dig. input 4
Dig. input 7	23	4	Dig. input 6
Dig. input 9	24	5	Dig. input 8
Dig. input 11	25	6	Dig. input 10
Dig. input 13	26	7	Dig. input 12
Dig. input 15	27	8	Dig. input 14
GND 1	28	9	GND 0
GND 3	29	10	GND 2
Dig. input 17	30	11	Dig. input 16
Dig. input 19	31	12	Dig. input 18
Dig. input 21	32	13	Dig. input 20
Dig. input 23	33	14	Dig. input 22
Dig. input 25	34	15	Dig. input 24
Dig. input 27	35	16	Dig. input 26
Dig. input 29	36	17	Dig. input 28
Dig. input 31	37	18	Dig. input 30
		19	Not assigned

PX 9000 and PX 901-DG terminal panels with ST010 cable



ADDI-DATA connection APCI-1032



(No illustration: the APCI-1032-5 can only be connected to the PX 901-ZG terminal panel)

ORDERING INFORMATION

APCI-1032

APCI-1032: Digital input board, optically isolated, 32 digital inputs, 24 V. Incl. technical description and software driver

APCI-1032-5: Digital input board, optically isolated, 32 digital inputs, 5 V. Incl. technical description and software driver

Connection for the APCI-1032

PX 901-D: Screw terminal panel, LED status display

PX 901-DG: Screw terminal panel, LED status display, for DIN rail

PX 9000: 3-row screw terminal panel for DIN rail, LED status display

ST010: Standard round cable, shielded, twisted pairs, 2 m

ST011: Standard round cable, shielded, twisted pairs, 5 m

Connection for the APCI-1032-5

PX 901-ZG: Screw terminal panel, for DIN rail

ST010: Standard round cable, shielded, twisted pairs, 2 m

ST011: Standard round cable, shielded, twisted pairs, 5 m