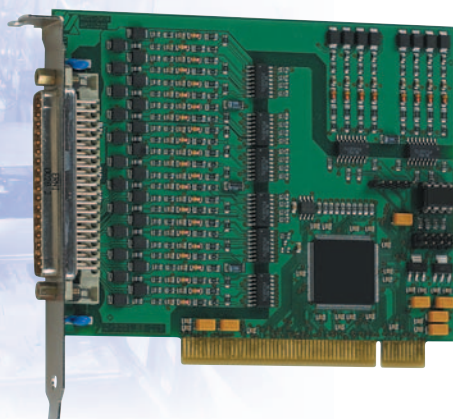


Digital input board, 32 isolated channels, 24 V



APCI-1032

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

Optical isolation 1000 V

Input filters

Protection against pole reversal



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 (see Page 5).

Drivers for the following application software:

LabVIEW 5.01
LabWindows/CVI

Samples for the following compilers:

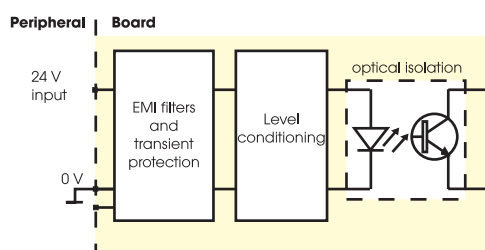
Microsoft VC++ 5.0
Borland C++ 5.01
Visual Basic 5.0
Delphi 4.0

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, 32 isolated channels, 24 V



APCI-1032

Specifications

Digital inputs

Number of inputs:	32
Optical isolation:	through optical 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 9 mA typ. 6 V/8.4 mA typ.
UH min.:	19 V/Current 2 mA typ. 3.3 V/3 mA typ.
UL max.:	17 V/Current 0.7 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

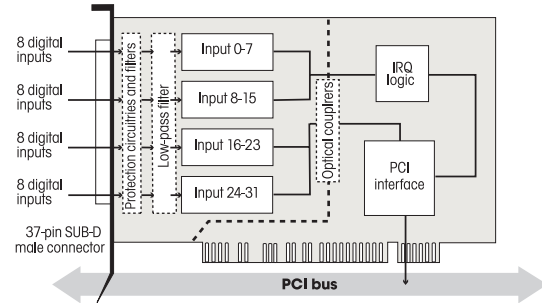
Noise immunity

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) 190 mA ± 10 % typ.
Front connector:	37-pin SUB-D male connector
Temperature range:	0 to 60°C (with forced cooling)

Simplified block diagram



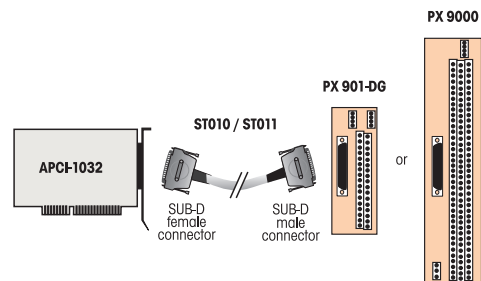
Pin assignment – 37-pin SUB-D male connector

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

Screw terminal boards PX 9000 and PX 901-DG with cable ST010



ADDI-DATA connection



ADDINUM APCI-1032

APCI-1032: Digital input board, 32 isolated channels, 24 V version

APCI-1032-5: Digital input board, 32 isolated channels, 5 V version

Incl. technical description and software drivers

Connection

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

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

PX 9000: 3-row screw terminal board for

DIN rail, LED status display

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

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

ORDERING INFORMATION

www.addi-data.com

Sales: +49(0)7223/9493-120
Fax: +49(0)7223/9493-92