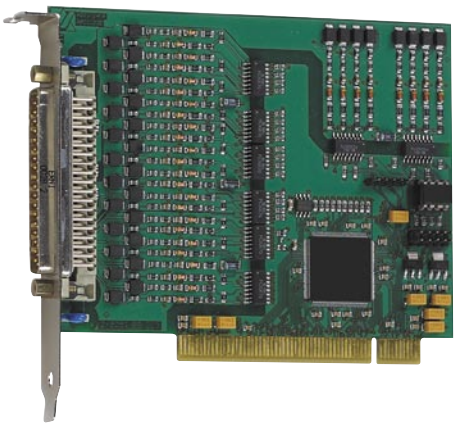
Digital input board, optically isolated, 32 digital inputs, 24 V/5 V



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**.

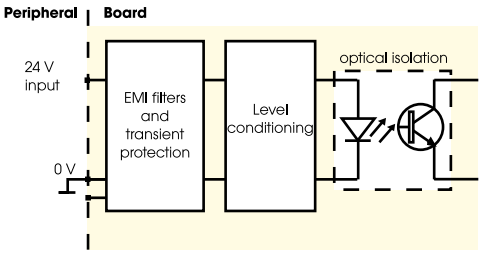
Drivers for the following application software:
LabVIEW 5.01
LabWindows/CVI

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:



www.addi-data.com
Phone: +49(0)7223/9493-0
Fax: +49(0)7223/9493-97

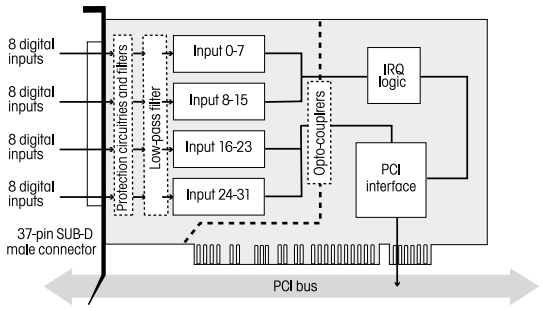
Digital input board, optically isolated, 32 digital inputs, 24 V / 5 V

APCI-1032 / APCI-1032-5

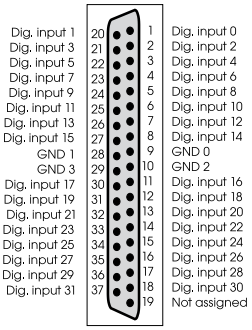
Specifications

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 pricrity	
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

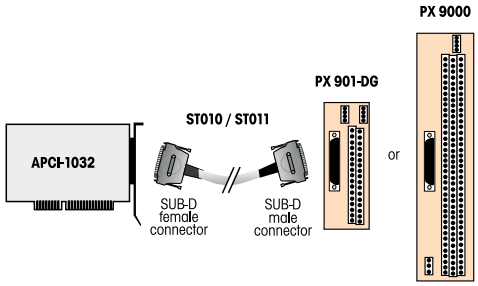


Pin assignment – 37-pin SUB-D male connector



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

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