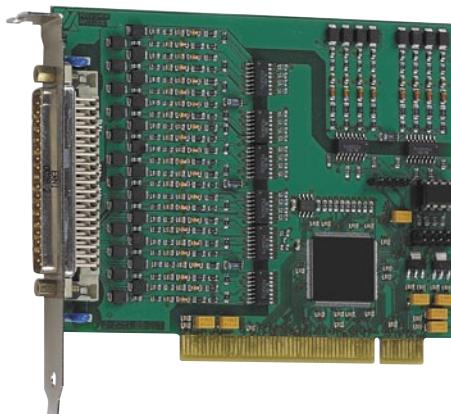


# Digital input board, optically isolated, 32 digital inputs, 5 V



## APCI-1032-5

32 digital inputs, 5 V,  
including 16 interruptible inputs

Optical isolation 1000 V

Input filters

Reverse voltage protection



PCI 32-bit



### Features

- 32 optically isolated digital inputs, 5 V,  
including 16 interruptible inputs

### Safety features

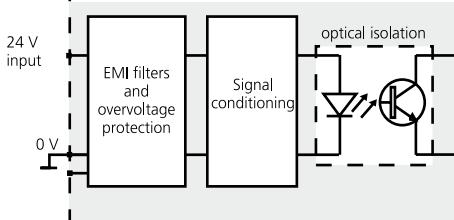
- Optical isolation 1000 V
- Creeping distance IEC 61010-1
- Reverse voltage protection
- All inputs are filtered
- Protection against fast transients (burst),  
overvoltage, electrostatic discharge  
and high-frequency EMI
- Additional noise suppression on the interrupt lines

### Applications

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

### Protective circuit for the input channels

#### Peripherals | Board



### Software drivers

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

#### Standard drivers for:

- Linux
- 32-bit drivers for Windows 8 / 7 / Vista / XP / 2000
- Signed 64-bit drivers for Windows 8 / 7 / XP
- Real-time use with Linux and Windows on request
- RTX drivers (real-time)

#### Drivers and samples for the following compilers and software packages:

- .NET
- Microsoft VC++ • Borland C++
- Visual Basic • Delphi
- LabVIEW • LabWindows/CVI • DIAdem

#### ADDIPACK functions:

Digital input

#### On request:

Further operating systems, compilers and samples.

Driver download: [www.addi-data.com/downloads](http://www.addi-data.com/downloads)

## Specifications

### Digital inputs

Number of inputs:	32
Optical isolation:	through opto-couplers, 1000 V from PC to peripherals
Interruptible inputs:	16 (input 0 to 15)
Interrupt compare logic:	AND and OR mode
Nominal voltage:	5 V
Input current at U nominal:	6 mA typ.
Logic input levels:	U nominal: 5 V UH max.: 6 V/8.4 mA typ. UH min.: 4 V/4 mA typ. UL max.: 2 V/0.7 mA typ. UL min. at nominal voltage: 0 V/current 0 mA typ.
Signal delay:	70 µs
Maximal input frequency:	5 kHz at nominal voltage

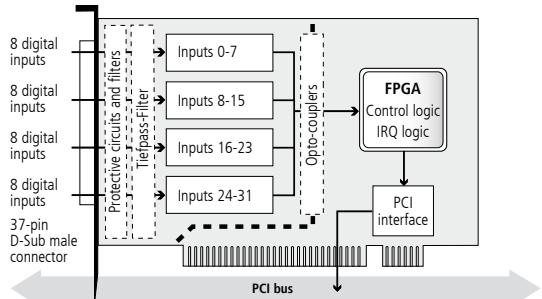
### EMC – Electromagnetic compatibility

The product complies with the European EMC directive. The tests were carried out by a certified EMC laboratory in accordance with the norm from the EN 61326 series (IEC 61326). The limit values as set out by the European EMC directive for an industrial environment are complied with. The respective EMC test report is available on request.

### Physical and environmental conditions

Dimensions:	131 x 99 mm
System bus:	PCI 32-bit 5 V acc. to specification 2.1 (PCISIG)
Space required:	1 PCI slot
Operating voltage:	+5 V, ± 5 % from the PC
Max. current consumption:	(+5 V from the PC) 140 mA ± 10 %
Front connector:	37-pin D-Sub male connector
Temperature range:	0 to 60 °C (with forced cooling)

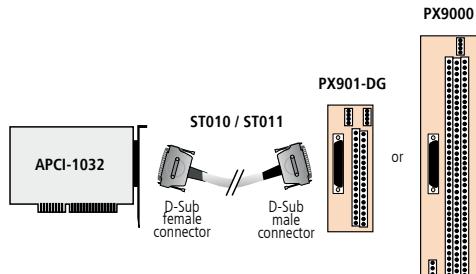
### Simplified block diagram



### Pin assignment – 37-pin D-Sub 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 connected

### ADDI-DATA connection for the APCI-1032



(without illustration: The APCI-1032-5 can only be connected to the PX901-ZG)

### Ordering information

#### APCI-1032-5

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

#### Accessories 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