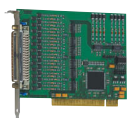
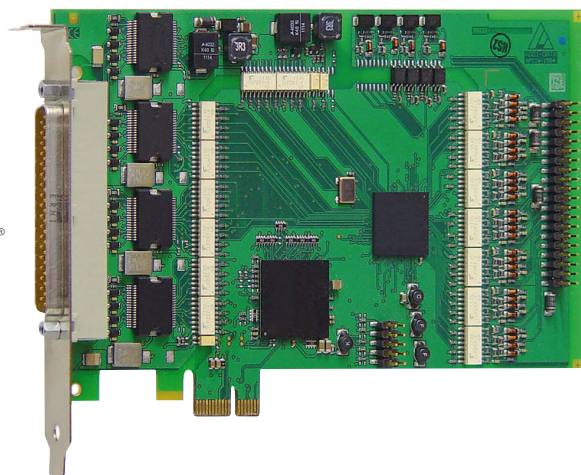


Digital input board, optically isolated, 32 digital inputs, 24 V, for PCI Express

New!*

PCI
EXPRESS®



Also for **PCI**
See APCle-1032, page 166



Windows
64/32-bit drivers



LabVIEW™



LabWindows/CVI™
DASYLab10
Data Acquisition System Laboratory



* Preliminary
product information

Features

- Connector and software compatible to the digital input board APCle-1032 for the PCI bus
- Monitoring program for testing and setting the board functions

Inputs

- 32 optically isolated digital inputs, 24 V, including 16 interruptible inputs
- Reverse voltage protection
- All inputs are filtered

Safety features

- Optical isolation 1000 V
- Creeping distance IEC 61010-1
- Protection against fast transients (burst), overvoltage, electrostatic discharge and high-frequency EMI

Applications

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

APCle-1032

PCI Express interface

32 digital inputs, 24 V,
including 16 interruptible inputs

Optical isolation 1000 V

Input filters

Reverse voltage protection

Connection through industry-standard
D-Sub connector

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

Drivers and samples for the following compilers and software packages:

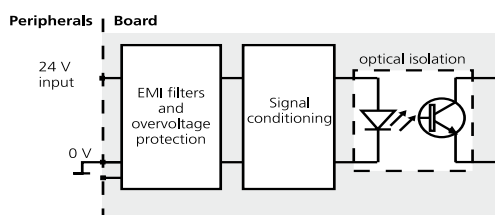
- .NET
- Microsoft VC++ • Borland C++
- Visual Basic • Delphi
- LabVIEW • LabWindows/CVI • DIAdem

On request:

Further operating systems, compilers and samples.

Driver download: www.addi-data.com/downloads

Protective circuit for the input channels



Specifications*

Digital inputs

Number of inputs:	32 (common ground acc. to IEC 1131-2)
Including interruptible inputs:	16 (input 0 to 15)
Optical isolation:	Through opto-couplers, 1000 V from PC to peripheral
Compare logic:	AND and OR mode
Nominal voltage:	24 V
Input current at 24 V:	6 mA typ.
Maximum input frequency:	5 kHz (at nominal voltage)
Signal delay:	70 µs (at nominal voltage)
Logic input levels:	U nominal: 24 V UH (max.): 30 V UH (min.): 19 V UL (max.): 14 V UL (min.): 0 V
Filters/protective circuits	Input filters, transil diodes, RC filters, Z diodes, opto-couplers

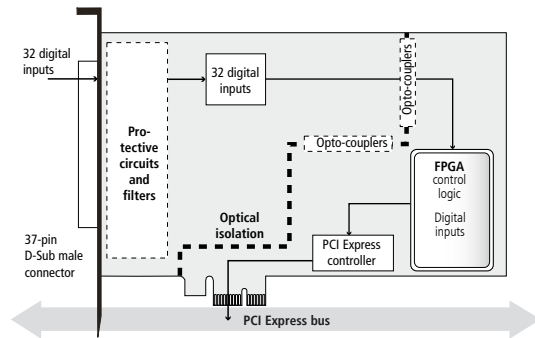
EMC – Electromagnetic compatibility

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:	149 x 99 mm
System bus:	Acc. to PCI Express base specification, Revision 1.0a (PCI Express 1.0a)
Space required:	1-/4-/8-/16-lane PCI Express slot
Operating voltage:	+ 3.3 V from PC
Current consumption:	Inactive inputs 320 mA ± 10 %, typical 8 active inputs 400 mA ± 10 %, typical
Front connector:	37-pin D-Sub male connector
Temperature range:	0 to 60 °C (with forced cooling)

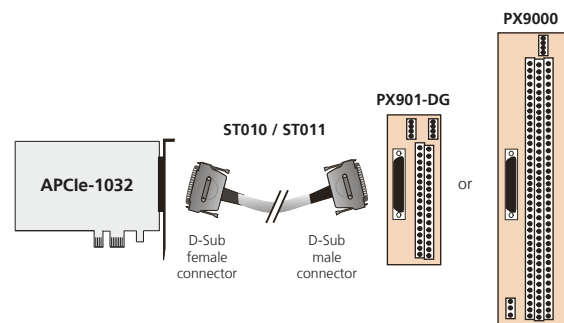
Simplified block diagram



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



Ordering information

APCle-1032

Digital Input board, optically isolated, 32 digital inputs, 24 V, for PCI Express. Incl. technical description and software drivers.

Accessories

PX901-D:	Screw terminal panel, LED status display
PX901-DG:	Screw terminal panel, LED status display, for DIN rail
PX9000:	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

* Preliminary product information