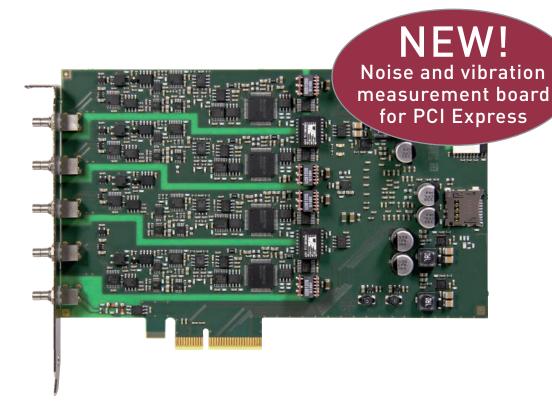
# INTERFERENCE-FREE PC BOARDS



- Boards for PCI Express, PCI, CompactPCI serial, CompactPCI, PC/104-PLUS
- Numerous protective circuits
- Dedicated accessories



Link to the PC boards



# INTERFERENCE-FREE PC BOARDS

# For harsh industrial environments

PC-based solutions are indispensable in the world of measurement and automation. They can acquire and process a high amount of data in a short time. But to be able to work reliably in the industrial field with many interferences and to acquire precise data, PC boards and accessories must be specially protected and adapted to each other.



Hardware

Bus systems

▶ Signal types

Features

#### Bus systems

- PCI Express
- PCI
- CompactPCI Serial
- CompactPCI
- PC/104-Plus

#### Signal types

Thanks to the wide range of available signal types, nearly all types of applications can be realized with our PC boards.

#### Digital boards, 30 V / 24 V / 12 V / 5 V

- Digital inputs
- Digital outputs
- Digital I/O
- Relay boards

#### Counter

■ Multifunction counter board with FPGA

#### Analog boards

- Analog inputs, 12 or 16-bit
- Analog outputs, 12 or 14-bit
- Temperature measurement
- Pressure measurement
- Length measurement with transducer
- Noise and vibration measurement

## Serial interfaces

■ 1 to 8-port serial interfaces, RS232, RS422, RS485, 20 mA CL

#### Motion control

- Intelligent boards
- For servo or stepper motors

#### Features

 More performance for your applications through FPGA technology

With the reprogrammable FPGA logic, the functionalities of the PC board can be adapted to your requirements through algorithms. These algorithms reduce cycle times of signal acquisition and of regulation tasks.

■ Fast data transfer through DMA (Direct Memory Access)
The DMA takes load of the resources of the PC's CPU as the acquired measurement results are directly written into the memory of the PC by the board. Thus the PC can execute other more important tasks at the same time.

#### ■ Customized PC boards

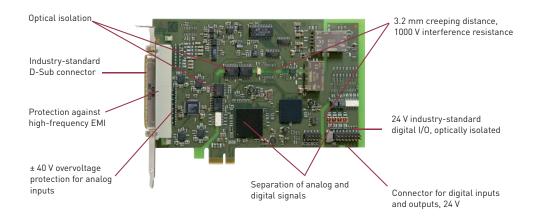
Standard PC boards are sufficient for most applications. In case of special demands just ask us: Our development team will be pleased to help you, from minor adaptations to a completely new product development.

■ Safe signal transmission - dedicated accessories
In the industrial environment, signal interferences are frequent. In order to transfer signals precisely and reliably from a sensor or actuator to the PC board, the accessories are significant. That is why we offer industry-standard accessories specially adapted to our PC boards.



#### Protective circuits

For safe and reliable use within your application, ADDI-DATA PC boards are equipped with numerous protective circuits such as optical isolation, filters, short-circuit protection etc.



#### ▶ Safe equipment start

During the starting phase, before the nominal voltage is supplied, the logic components on electrical devices run through different undefined states. Without special measures, the states of the digital output channels cannot be defined exactly. Thus the I/O and output boards set all outputs to "0" after Power-on or reset.

Software



Real time

ADDIPACK

#### Drivers / Samples

- Windows<sup>™</sup> 8/7/XP
- Programming samples for C, Visual Basic, Delphi, etc.
- VIs and samples for LabVIEW<sup>™</sup> / LabWindows/CVI<sup>™</sup>
- Drivers for DasyLab<sup>®</sup> / DIAdem<sup>®</sup>
- Real-time extension: RTX<sup>®</sup>, RTAI, VxWorks<sup>®</sup> ...
- Linux

















## Real-time applications

#### NEW! for 64-bit Windows

ADDI-DATA offers RTX64 $^{\rm TM}$  drivers for real-time applications with 64-bit Windows. The multi core architecture x86 of Windows allows to assign several processors to RTX in order to realize several real-time applications with one PC.

The drivers are available on request for all boards in our product range. **Please ask us!** 

### ▶ ADDIPACK driver concept

## Easy board administration

#### - now available for 64-bit drivers

For an easy administration of all boards inside the PC ADDI-DATA offers a convenient driver model that lists all functionalities of the integrated boards in one virtual board. This means that not boards but board functions are administrated – basically as a resource.

New boards can be easily integrated or exchanged.

Changes of the functions caused by board exchange are directly visible. Thus PC boards can be exchanged for example by PCI-Express boards without a new driver installation.



# **Product overview**

	PCI-Express	PCI	PC/104- PLUS	CompactPCI	CompactPCI serial
Digital					
Digital inputs, 24 V / 5 V	APCIe-1016 APCIe-1032	APCI-1016 APCI-1032/-5			
Digital outputs, 24 V / 5 V	APCIe-2016 APCIe-2032	APCI-2016 APCI-2032/-5			
Digital inputs and outputs, 24 V	APCIe-1500, APCIe-1516, APCIe-1532, APCIe-1564	APCI-1500, APCI-1516 APCI-1564	PC104- PLUS1500	CPCI-1500 CPCI-1564	CPCIs-1532 CPCIs-1564
Digital inputs and outputs, 12 V	APCIe-1500-12V APCIe-1532-12V	APCI-1500-12V			CPCIs-1532
Digital inputs and outputs, 5 V	APCIe-1564-5V APCIe-1564-5V-HS	APCI-1564-5V APCIe-1564-5V-HS			CPCIs-1532
Relays	APCIe-2200	APCI-2200			
TTL		APCI-1648, APCI-1696			
Counter (Incremental counter, PWM, SSI, EnDat2.2, etc.)	APCIe-1711	APCI-1710		CPCI-3009 CPCI-1710	CPCIs-1711
Analog					
Multifunction, Analog inputs/outputs	APCIe-3121 APCIe-3123	APCI-3120, APCI-3116, APCI-3110		CPCI-3120 CPCI-3009	CPCIs-3121 CPCIs-3131
Analog inputs, 12-bit		APCI-3001, APCI-3010		CPCI-3001	
Analog inputs, 16-bit	APCIe-3021	APCI-3002, APCI-3003, APCI-3016			
Analog outputs, 12-bit		APCI-3122			
Analog outputs, 14-bit		APCI-3501			
Analog outputs, 16-bit	APCIe-3521				
Temperature measurement		APCI-3200			
Pressure measurement		APCI-3300			
Noise / vibration measurement	APCIe-3660-4	APCI-3600			
Length measurement	APCIe-3701	APCI-3701, APCI-3702			
Watchdog	APCIe-040				
1- to 8-port serial interfaces	APCIe-7xxx	APCI-7xxx-3		CPCI-7500 (4-port)	
Motion Control		APCI-8008		CPCI-8004	



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Expertise in the industry



Customized solutions

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