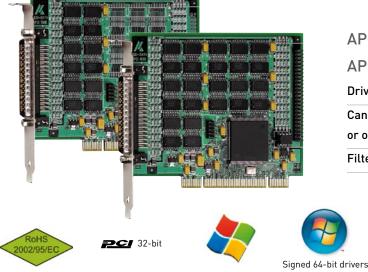# TTL I/O board,
48 or 96 digital TTL inputs and outputs

APCI-1696 – 96 digital TTL I/O

APCI-1648 – 48 digital TTL I/O

Driver capacity up to 15 TTL loads

Can be configured as inputs

or outputs in groups of 8 channels

Filters on each I/O line

RoHS 2002/95/EC   PCI 32-bit   Signed 64-bit drivers for Windows 7/XP   LabVIEW™   LabWindows/CVI™

Features

- PCI 3.3 V or 5 V
- 48 digital TTL inputs/outputs (APCI-1648)
- 96 digital TTL inputs/outputs (APCI-1696)
- Each group of 8 lines (1 port) can be configured as input or output.
- All I/Os are driven through pull-up resistors to 5 V
- Easy programming through I/O read/write commands

Connection

- APCI-1648: 50-pin D-Sub male connector
- APCI-1696: 50-pin D-Sub male connector and
            I/O 49 - 96 to 50-pin male connector

Software drivers

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

ADDIPACK functions:

Digital input • Digital output

On request:

Further operating systems, compilers and samples.

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

Specifications

48 TTL I/O channels - 96 TTL I/O channels

Inputs and outputs:	48 digital TTL I/O (APCI-1648)
	96 digital TTL I/O (APCI-1696)
I/O address range:	128 byte
Addressing:	32-bit
Programming:	Through write/read commands
Driver type:	74 HC 574
Max. input and output voltage:	TTL Level
Output current:	DC ± 35 mA

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:	universal PCI 32-bit 3.3/5V acc. to spec. 2.2 (PCISIG)
Space required:	1 PCI slot + 1 slot opening for bracket (APCI-1696)
Operating voltage:	+5 V ± 5 % from the PC
Current consumption:	124 mA ± 10 % (APCI-1696, all channels as output without load)
Connectors:	APCI-1648: 50-pin D-Sub male connector
	APCI-1696: 50-pin D-Sub male connector
	50-pin D-Sub male connector and I/O 49 - 96 to 50-pin male connector
Temperature range:	0 to 60 °C (with forced cooling)

Ordering information

APCI-1648: TTL I/O board, 48 digital TTL inputs and outputs. Incl. technical description and software drivers.
APCI-1696: TTL I/O board, 96 digital TTL inputs and outputs.
          Incl. ribbon cable FB1696, technical description and software drivers.

Accessories

PX8001: 3-row screw terminal panel, 50-pin, for DIN-rail mounting
ST370-16: Shielded round cable, 2 m
Accessories for the APCI-1696: Please order 2 x PX8001 and 2 x ST370-16

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