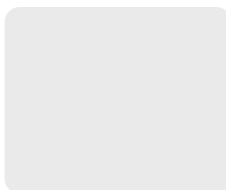
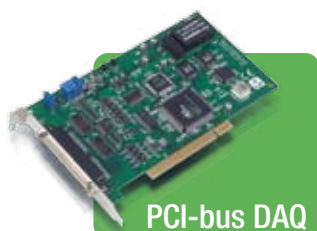
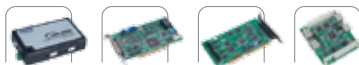


Advantech Data Acquisition Solutions

Versatile Form Factors to Meet
All Your DAQ Needs

- ✓ USB DAQ Modules
- ✓ PCI-bus Multifunction
- ✓ PCI-bus AI/O
- ✓ PCI-bus Non-Isolated DI/O
- ✓ PCI-bus Isolated DI/O
- ✓ ISA & PC/104-bus DAQ



ADVANTECH

eAutomation

www.advantech.com/eA

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USB DAQ Modules



PCI-bus
Multifunction



PCI-bus A/D



Non-Isolated D/I



PCI-bus Isolated
D/I



ISA & PC/104-bus
DAQ



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Industrial I/O Overview

Excellence in PC-based Measurement and Automation

With over 22 years of plug-in I/O card design and manufacturing experience, Advantech has become a global leader, providing a full range of industrial data acquisition and control products. There are 4 major categories - PCI-Bus, ISA-bus, PC/104 bus and USB-bus modules. With rich wiring terminal modules and software support, Advantech provides high-speed, high-quality, yet cost-saving products for industrial requirements. Moreover, bundled with versatile industrial PC chassis, backplane CPU modules, flat panel monitors and embedded controllers, Advantech offers a one-stop shopping solution to serve all your needs.

Aside from hardware, Advantech also provides a versatile and user-friendly software program called ActiveDAQ Pro. With ActiveDAQ pro, users can perform a variety of I/O operations to control a wide range of related Advantech products.

Service

Advantech Industrial I/O offers a one-stop shopping solution to serve all your needs. Our products are made under a quality control process and provide you with a 2-year guarantee, with friendly website tools and FAE support, we believe that our customers benefit from our products as well as services.

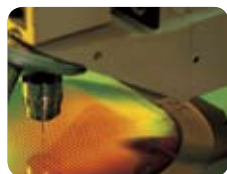
Certifications and RoHS

All of Advantech's Industrial I/O products come with product certifications and feature RoHS compliance.



Applications

There are many successful applications using Advantech Industrial I/O products.



Semiconductor Production



Electronics Assembly



Automated Test Equipment



Machine Automation

ActiveDAQ Pro Introduction



ActiveDAQ Pro is a collection of ActiveX controls for performing I/O operations within any compatible ActiveX control container, such as Visual Basic, Delphi, etc. You can easily perform the I/O operations through properties, events and methods. With ActiveDAQ Pro, you can perform versatile I/O operations to control your Advantech devices.

The ActiveDAQ Pro package contains the following components:

- **Advantech ActiveDAQ Pro Device Control:** Enumerate all Advantech devices, direct I/O operation.
- **Advantech ActiveDAQ Pro AI Control:** Retrieve data from Advantech AI devices.
- **Advantech ActiveDAQ Pro AO Control:** Export data to Advantech AO devices.
- **Advantech ActiveDAQ Pro DI/O Control:** Digital input/output operation.
- **Advantech ActiveDAQ Pro Thermo Control:** Retrieve temperature by thermocouple measurement.
- **Advantech ActiveDAQ Pro Counter Control:** Counter input signal.
- **Advantech ActiveDAQ Pro Pulse Control:** Pulse signal output.

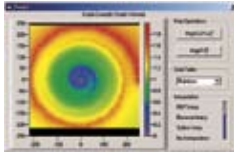
You can use these ActiveX controls in any development tool that supports them, including Microsoft Visual C++, Microsoft Visual Basic, Borland C++ Builder, Borland Delphi and Microsoft Visual Studio.NET.

Features

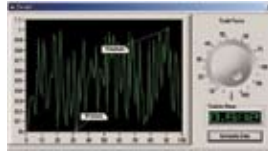
In the latest version of the ActiveDAQ series: ActiveDAQ Pro, efforts have been made to improve on the technical aspects and to provide a clear-cut mode of operation, as explained in the following summary:

■ Graphic User Interface Control Components

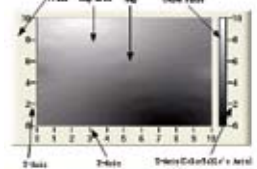
• Intensity control:



• Knob control:



• Slider control:

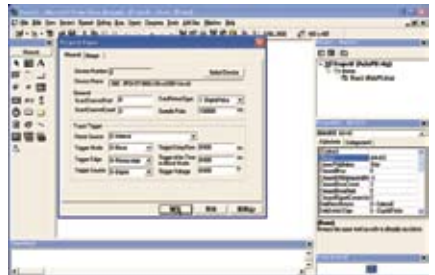
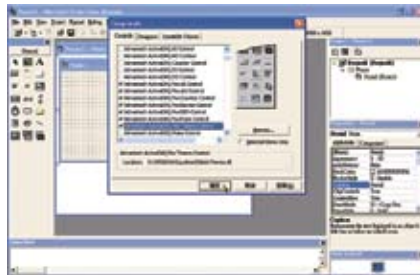


■ Supports all Advantech DAQ devices with high speed functions

■ Easy-to-use property sheet interface for configuring controls

■ Independent operation of controls

■ Uses known physical properties



- Straightforward user interface
- Uses optional lists instead of direct input
- Default settings for immediate execution
- Properties and parameters are chosen automatically
- Parameter check-up and correction
- Better defined error messages and diagnostic guide
- Supports all widely known development platforms

System Requirements

- IBM compatible PC using at least a 266 MHz or higher microprocessor
- Microsoft Windows 2K / XP
- VGA compatible graphics card, supporting at least 256 colors
- Minimum 64 MB of RAM
- 74MB of free local hard disk space
- One CD-ROM driver

Ordering Information

PCLS-ADPSTD ActiveDAQ Pro with GUI components

Industrial Grade USB Data Acquisition Series



Features

- Lockable USB Cable
- DIN-rail Mounting
- Detachable Screw Terminal
- On-Module Pin Assignment Index
- Bus-Powered
- Plug & Play/ Hot Swap
- 480Mbps High Speed Data Transfer
- Palm-Sized

USB DAQ with IPC Application



USB DAQ with Touch Panel PC Application



USB DAQ with Fanless Computer Application



USB Data Acquisition Product Selection Guide

Model	USB-4711A	USB-4716	USB-4718	USB-4750	USB-4751	USB-4751L	USB-4761	USB-4671
Bus	USB 2.0	USB 2.0	USB 2.0	USB 1.1/2.0	USB 1.1/2.0	USB 1.1/2.0	USB 1.1/2.0	USB 2.0
Features	Multifunction	Multifunction	Temperature	DI/O	DI/O	DI/O	DI/Relay	GPIO
Analog Input	Resolution	12-bit	16-bit	16-bit	--	--	--	High-performance USB Module with a GPIO interface. Fully compatible with IEEE 488.1 and 488.2 standards. Supports controller/slave driver control modes, and performs basic the IEEE 488 talker, listener and controller functions required by IEEE 488.2. Connect up to 15 GPIO instruments.
	Channels	16S.E./8Diff.	16S.E./8Diff.	8Diff.	--	--	--	
	Sampling Rate	150kS/s	200kS/s	10S/s	--	--	--	
	Input Voltage	±10, 5, 2.5, 1.25, 0.625V	±10, 5, 2.5, 1.25, 0.625V; 0~10, 5, 2.5, 0.125V	J, K, T, E, R, S, B types. 0~2500, 1000, 500, 100, 50, 15mV	--	--	--	
	Input Current	--	--	0~20, 4~20mA	--	--	--	
Analog Output	Resolution	12-bit	16-bit	--	--	--	--	
	Channels	2	2	--	--	--	--	
	Isolation	--	--	--	--	--	--	
	Output range	±10, 5V; 0~5, 10V	±10, 5V; 0~5, 10V	--	--	--	--	
	Throughput	Static update	Static update	--	--	--	--	
Digital I/O	Channels	8/8	8/8	8/8	16/16	48 (mixed)	24 (mixed)	8/8
	Input Voltage	3.3/5V TTL	3.3/5V TTL	5~30V	5~50V	5V TTL	5V TTL	5~30V
	Output Voltage	3.3V TTL	3.3V TTL	5~30V	5~40V	5V TTL	5V TTL	
	Output Current	Sink: 4mA Source: 4mA	Sink: 2mA Source: 2mA	200mA/ch. 1.1A/total	100mA/ch.	Sink: 8mA@4V Source: 4mA@2.4V	Sink: 8mA@4V Source: 4mA@2.4V	250Vac@3A 24Vdc@1A
Counter	Channel	1	1	--	2	2	2	--
	Input Voltage	3.3/5V TTL	3.3/5V TTL	--	5V TTL	5V TTL	5V TTL	--
	Resolution	32-bit	32-bit	--	32-bit	32-bit	32-bit	--
	Time Base	1KHz	1KHz	--	1KHz	8MHz	8MHz	--
Pulse Output	Channel	1	1	--	--	2 (PWM)	2 (PWM)	--
	Output Voltage	3.3V TTL	3.3V TTL	--	--	--	--	--
	Output Frequency	1KHz	1KHz	--	--	8MHz	8MHz	--

Key Features

Lockable USB Cable

Reliable Connections are critical to automation control and online production. While the standard USB cable is designed for easy plugging and removing, Advantech invests R&D efforts to provide screw-type USB cables which prevent the cable from being unplugged accidentally.



DIN-rail Mounting

DIN-rail is widely used for mounting power supplies, circuit breakers and other industrial control equipment installed within a rack. All Advantech USB Data Acquisition modules come with DIN-rail brackets, making them eligible for standardized 35mm wide DIN-rail mounting.



Detachable Screw Terminal

Saving Money & Space are the main benefits of using detachable screw terminals on Advantech USB Data Acquisition modules. Hundreds of dollars can be saved from not having to buy additional cables and/or wiring boards, while extra space can be spared as well.



On-Module Pin Assignment Index

An Instinctive Sense of Wiring simplifies the users' maintenance efforts and reduces incorrect connections that may damage the device itself or the linking equipment. All of the pin indexes are pre-printed on the casing of Advantech's USB Data Acquisition modules, providing users a more direct way to operate.



Bus-Powered

No Need for External Power allows high mobility for Advantech's USB Data Acquisition modules. Advantech's USB Data Acquisition modules can directly derive power from system USB ports, freeing you from the inconvenience of being unable to find a power source indoors or outdoors.



Plug & Play/ Hot Swap

Set Up Your Devices Within Seconds and you're ready to go. It takes just a few steps to install Advantech's USB Data Acquisition modules without dismantling or shutting down your system. Up to 16 devices can be applied to your PC.



480Mbps High Speed Data Transfer

Advanced Data Acquisition Functions can be accomplished. Up to 200kS/s sampling rate, 16-bit resolution, 16-ch analog input, 48-ch Digital I/O specifications, as well as interrupt, event counter, and pulse width modulation (PWM) functions are available on Advantech's USB Data Acquisition modules.



Palm-Sized

Compact Yet Highly Integrated. Advantech's USB Data Acquisition modules are small enough to make them a great sidekick for notebooks, while still providing the same functionality as full-sized modules. Analog I/O, Digital I/O and Counter functions can be all enclosed into a single module. They are the perfect companions when you travel to exhibitions or a business show.



USB-4622

5-port USB 2.0 Hub

Features

- 5 downstream USB 2.0 ports (Type A)
- Compatible with USB 2.0/1.1/1.0
- 480MB/s high-speed data transfer
- LED indicators
- Bus-powered
- Detachable screw terminal on module
- Lockable USB cable for rigid connection
- DIN-rail Mounting

Ordering Information

USB-4622	5-port USB 2.0 Hub (Power adapter included)
----------	---

Microsoft
Windows
2000

Microsoft
Windows
XP

Windows
Vista
(32bit)

USB-4711A

150kS/s, 12-bit Multifunction USB Module

Features

- USB 2.0 high speed data transfer
- 150kS/s sampling rate with 12-bit resolution
- 16-ch S.E./ 8-ch Diff. analog inputs/ 2-ch analog outputs
- 8-ch digital inputs/ 8-ch digital outputs/ 1-ch 32-bit event counter 1-ch pulse out
- Bus-powered
- Detachable screw terminal on module
- Lockable USB cable for rigid connection
- DIN-rail Mounting

Ordering Information

USB-4711	100kS/s, 12-bit USB Multifunction Module
----------	--

Microsoft
Windows
2000

Microsoft
Windows
XP

Windows
Vista
(32bit)

Microsoft
Windows
CE 5.0

ActiveDaq
Pro

USB-4716

200kS/s, 16-bit Multifunction USB Module

Features

- USB 2.0 high speed data transfer
- 200kS/s sampling rate with 16-bit resolution
- 16-ch S.E./ 8 Diff. analog inputs/ 2-ch analog outputs
- 8-ch digital inputs/ 8-ch digital outputs/ 1-ch 32-bit event counter 1-ch pulse out
- Unipolar/ Bipolar analog input range
- Bus-powered
- Detachable screw terminal on module
- Lockable USB cable for rigid connection
- DIN-rail Mounting

Ordering Information

USB-4716	200kS/s, 16-bit USB Multifunction Module
----------	--



USB-4718

8-ch Thermocouple Input USB Module

Features

- USB 2.0 high speed data transfer
- 8-ch thermocouple input (J.K.T.E.R.S.B types)
- 8-ch digital input with 5~30V_{DC} input range
- 8-ch digital output with 5~30V_{DC} output range
- 2,500V_{DC} isolated protection
- Support current input
- Bus-powered
- Detachable screw terminal on module
- Lockable USB cable for rigid connection
- DIN-rail Mounting

Ordering Information

USB-4718	8-ch Thermocouple Input USB Module
----------	------------------------------------



USB-4750



16-ch Isolated Digital Input and 16-ch Isolated Digital Output

Features

- Compatible with USB1.1/2.0
- 16-ch digital input with 5~50V_{DC} input range
- 16-ch digital output with 5~40V_{DC} output range
- 2-ch 32-bit counter
- 2,500V_{DC} isolated protection
- Interrupt handling capability
- Bus-powered
- Detachable screw terminal on module
- Lockable USB cable for rigid connection
- DIN-rail Mounting

Ordering Information

USB-4750	32-ch Isolated DI/O USB Module
----------	--------------------------------

USB-4751/USB-4751L



48/24-ch TTL Digital I/O USB Module

Features

- Compatible with USB1.1/2.0
- 48/24-ch TTL digital I/O (bi-directional)
- 2-ch 32-bit counter with PWM
- Dry/wet contact
- Interrupt handling capability
- Bus-powered
- Opto-22 compatible box header
- Lockable USB cable for rigid connection
- DIN-rail Mounting

Ordering Information

USB-4751	48-ch TTL DI/O USB Module
USB-4751L	24-ch TTL DI/O USB Module

USB-4761



8-ch Relay Output/8-ch Isolated Digital Input USB Module

Features

- Compatible with USB1.1/2.0
- 8-ch digital input with 5~30V_{DC} input range
- 8-ch relay output
- 2,500V_{DC} isolated protection
- Interrupt handling capability
- LED indicators to show activated relays
- Bus-powered
- Detachable screw terminal on module
- Lockable USB cable for rigid connection
- DIN-rail Mounting

Ordering Information

USB-4761 8-ch Relay & 8-ch Isolated DI USB Module

USB-4671



GPIB USB Module

Features

- USB 2.0 high speed data transfer
- Convenient portable design
- Bus-powered
- Complete IEEE 488.2 compatibility
- Full driver, library, and example support, including; Visual C++, C++ Builder, Visual Basic, and Delphi drivers
- Provides powerful and easy-to-use configuration utility
- No GPIB cable required for instrument connection
- Plug & Play installation and configuration

Ordering Information

USB-4671 USB GPIB Interface Module

PCI-bus Multifunction Cards



Up to 16-bit, up to 1 MS/s, 16 Analog Inputs

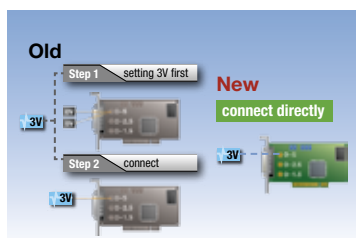
Features

- 16 analog inputs at up to 1 MS/s, 12 or 16-bit resolution
- 1 or 2 analog outputs at up to 1 MS/s, 12 or 16-bit resolution
- 16 TTL digital I/O lines
- 1 or 3 16-bit, 10MHz counter/timers
- 9 or 12 analog Input signal ranges

Key Features

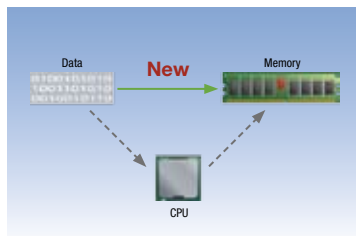
Auto Calibration

The built-in auto-calibration circuitry corrects gain and offset errors in analog input and analog output channels thereby eliminating the need for external equipment and user adjustments.



DMA - Direct Memory Access

A method of transferring data from or to memory at a high rate without involving the CPU. DMA is the hardware/software technique that allows the highest speed transfer of data, to or from RAM. DMA can provide the means to read or write data at precise times without restricting the microprocessor's tasks.



Multifunction Card Selection Guide

Model		PCI-1710/ 1710L	PCI-1710HG/ 1710HGL	PCI-1711/ 1711L	PCI-1712/ 1712L	PCI-1716/ 1716L	PCI-1718HDU/ HGU	PCI-1741U	PCI-1742U
Analog Input	Resolution	12 bits	12 bits	12 bits	12 bits	16 bits	12 bits	16 bits	16 bits
	Channels	16 SE/8 Diff.	16 SE/8 Diff.	16 SE	16 SE/8 Diff.	16 SE/8 Diff.	16 SE/8 Diff.	16 SE/8 Diff.	16 SE/8 Diff.
	Sampling Rate	100 kS/s	100 kS/s	100 kS/s	1 MS/s	250 kS/s	100 kS/s	200 kS/s	1 MS/s
	Unipolar Inputs (V)	0 ~ 10, 0 ~ 5, 0 ~ 2.5, 0 ~ 1.25	0 ~ 10, 0 ~ 1, 0 ~ 0.1, 0 ~ 0.01	-	0 ~ 10, 0 ~ 5, 0 ~ 2.5, 0 ~ 1.25	0 ~ 10, 0 ~ 5, 0 ~ 2.5, 0 ~ 1.25	0 ~ 10, 0 ~ 5, 0 ~ 2.5, 0 ~ 1.25 (PCI-1718HGU) 0 ~ 10, 0 ~ 1, 0 ~ 0.1, 0 ~ 0.01 (PCI-1718HGU)	0 ~ 10, 0 ~ 5, 0 ~ 2.5, 0 ~ 1.25	0 ~ 10, 0 ~ 5, 0 ~ 2.5, 0 ~ 1.25
	Bipolar Inputs (V)	±10, 5, 2.5, 1.25, 0.625	±10, 5, 1, 0.5, 0.1, 0.05, 0.01, 0.005	±10, 5, 2.5, 1.25, 0.625	±10, 5, 2.5, 1.25, 0.625	±10, 5, 2.5, 1.25, 0.625	±10, 5, 2.5, 1.25, 0.625 (PCI-1718HGU) ±10, 5, 1, 0.5, 0.1, 0.05, 0.01, 0.005 (PCI-1718HGU)	±10, 5, 2.5, 1.25, 0.625	±10, 5, 2.5, 1.25, 0.625
Analog Output	Resolution	12 bits	12 bits	12 bits	12 bits	16 bits	12 bits	16 bits	16 bits
	Channels	2 (PCI-1710 only)	2 (PCI-1710HG only)	2 (PCI-1711 only)	2 (PCI-1712 only)	2 (PCI-1716 only)	1	1	2
	Output Range (V)	0 ~ 5, 0 ~ 10	0 ~ 5, 0 ~ 10	0 ~ 5, 0 ~ 10	0 ~ 5, 0 ~ 10, ±5, ±10	0 ~ 5, 0 ~ 10, ±5, ±10	0 ~ 5, 0 ~ 10	±5, ±10	0 ~ 5, 0 ~ 10, ±5, ±10
	Throughput	Static update	Static update	Static update	1 MS/s	Static update	Static update	Static update	Static update
Digital I/O	Input Channels	16	16	16	16 (mixed)	16	16	16	16
	Output Channels	16	16	16	16	16	16	16	16
Timer/Counter	Channels	1	1	1	3	1	1	1	1
	Resolution	16-bit	16-bit	16-bit	16-bit	16-bit	16-bit	16-bit	16-bit
	Time Base	10 MHz	10 MHz	10 MHz	10 MHz	10 MHz	10 MHz	10 MHz	10 MHz
Connector		68-pin SCSI-II	68-pin SCSI-II	68-pin SCSI-II	68-pin SCSI-II	68-pin SCSI-II	DB-37	68-pin SCSI-II	68-pin SCSI-II

Multifunction Card Accessory Table

▼ Product	▼ Cable	▼ Wiring Board
PCI-1710/1710L; PCI-1710HG/1710HGL	PCL-10168-1 PCL-10168-2	ADAM-3968 PCLD-8710 PCLD-8710BNC
PCI-1711/1711L	PCL-10168-1 PCL-10168-2	ADAM-3968 PCLD-8710 PCLD-8710BNC
PCI-1712/1712L	PCL-10168-1 PCL-10168-2	ADAM-3968 PCLD-8712
PCI-1718HDU/1718HGU	PCL-10137-1 PCL-10137-2	ADAM-3937 PCLD-880 PCLD-8115
	PCL-10137-3	PCLD-789D (PCI-1718HGU only)
	PCL-10120-2	ADAM-3920 PCLD-780 PCLD-782
	PCL-10120-1	PCLD-782B PCLD-785 PCLD-785B
	PCL-10120-0.4	PCLD-786 PCLD-788 PCLD-885
		PCLD-7216
PCI-1716/1716L	PCL-10168-1 PCL-10168-2	ADAM-3968 PCLD-8710 PCLD-8710BNC
PCI-1741U	PCL-10168-1 PCL-10168-2	ADAM-3968 PCLD-8710 PCLD-8710BNC
PCI-1742U	PCL-10168-1 PCL-10168-2	ADAM-3968 PCLD-8710 PCLD-8710BNC

PCI-1710/1710L



Win 32
DLL Driver

Win 32
Test Utility

VC++, VB
& Delphi
Examples

ActiveDAQ
Pro

Labview
Driver

Matlab
later than
v2.5

100 kS/s, 12-bit, Multifunction Card

Features

- 16 single-ended, 8 differential or a combination of analog inputs
- 12-bit A/D converter, with up to 100 kHz sampling rate
- Programmable gain
- Automatic channel/gain scanning
- Onboard FIFO memory (4096 samples)
- Two 12-bit analog output channels (PCI-1710 only)
- 16 digital inputs and 16 digital outputs
- Onboard programmable counter
- BoardID switch

Ordering Information

PCI-1710	100 kS/s, 12-bit multifunction card
PCI-1710L	100 kS/s, 12-bit multifunction card without AO
PCLD-8710	SCSI-68 wiring terminal w/CJC, DIN-rail mount
PCLD-8710BNC	SCSI-68 wiring terminal w/CJC and BNC connectors, DIN-rail mount

PCL-10168-1	SCSI-68 Shielded Cable, 1 m
PCL-10168-2	SCSI-68 Shielded Cable, 2 m
ADAM-3968	SCSI-68 wiring terminal, DIN-rail mount

PCI-1710HG/1710HGL



Win 32
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VC++, VB
& Delphi
Examples

ActiveDAQ
Pro

Labview
Driver

Matlab
later than
v2.5

100 kS/s, 12-bit, High Gain, Multifunction Card

Features

- 16 single-ended, 8 differential or a combination of analog inputs
- 12-bit A/D converter, with up to 100 kHz sampling rate
- Programmable gain
- Automatic channel/gain scanning
- Onboard FIFO memory (4096 samples)
- Two 12-bit analog output channels (PCI-1710HG only)
- 16 digital inputs and 16 digital outputs
- Onboard programmable counter
- BoardID switch

Ordering Information

PCI-1710HG	100 kS/s, 12-bit high-gain multifunction card
PCI-1710HGL	100 kS/s, 12-bit high-gain multifunction card without AO
PCLD-8710	SCSI-68 wiring terminal w/CJC, DIN-rail mount
PCLD-8710BNC	SCSI-68 wiring terminal w/CJC and BNC connectors, DIN-rail mount

PCL-10168-1	SCSI-68 Shielded Cable, 1 m
PCL-10168-2	SCSI-68 Shielded Cable, 2 m
ADAM-3968	SCSI-68 wiring terminal, DIN-rail mount

PCI-1711/1711L



Win 32
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& Delphi
Examples

ActiveDAQ
Pro

Labview
Driver

Matlab
later than
v2.5

100 kS/s, 12-bit, 16-ch S.E. Input low-cost Multifunction Card

Features

- 16 single analog inputs
- 12-bit A/D converter, with up to 100 kHz sampling rate
- Programmable gain
- Automatic channel/gain scanning
- Onboard FIFO memory (1024 samples)
- Two 12-bit analog output channels (PCI-1711 only)
- 16 digital inputs and 16 digital outputs
- Onboard programmable counter

Ordering Information

PCI-1711	100 kS/s, 12-bit multifunction card
PCI-1711L	100 kS/s, 12-bit multifunction card without AO
PCLD-8710	SCSI-68 wiring terminal w/CJC, DIN-rail mount
PCLD-8710	BNC SCSI-68 wiring terminal w/CJC and BNC connectors, DIN-rail mount

PCL-10168-1	SCSI-68 Shielded Cable, 1 m
PCL-10168-2	SCSI-68 Shielded Cable, 2 m
ADAM-3968	SCSI-68 wiring terminal, DIN-rail mount

PCI-1712/1712L



Win 32
DLL Driver

Win 32
Test Utility

VC++, VB
& Delphi
Examples

ActiveDAQ
Pro

Labview
Driver

Matlab
later than
v2.5

1MS/s, 12-bit, High-speed, Multifunction Card

Features

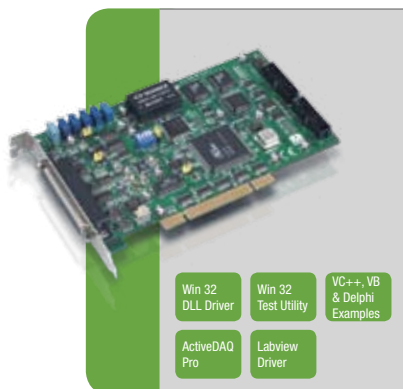
- 16 single-ended, 8 differential or a combination of analog inputs
- 12-bit A/D converter, with up to 100 kHz sampling rate
- Programmable gain
- Automatic channel/gain/SD*/BU* scanning
- Onboard FIFO memory (AI:1024 samples AO:32768 samples)
- Two 12-bit analog output channels with continuous waveform output function (PCI-1712 only)
- 16 digital input and output channels
- Three 16-bit onboard programmable counter
- Auto-calibration (AI/AO)
- PCI-Bus mastering data transfer
- Pre-, post-, about- and delay-trigger data acquisition modes for analog input channels
- Flexible triggering and clocking capabilities

Ordering Information

PCI-1712	1 MS/s, 12-bit high-speed multifunction card
PCI-1712L	1 MS/s, 12-bit high-speed multifunction card without AO
PCLD-8712	Industrial wiring terminal board for DIN-rail mount

PCL-10168-1	SCSI-68 Shielded Cable, 1 m
PCL-10168-2	SCSI-68 Shielded Cable, 2 m
ADAM-3968	SCSI-68 wiring terminal, DIN-rail mount

PCI-1718HDU/1718HGU



100 kS/s, 12-bit, High-Gain Multifunction Card

Features

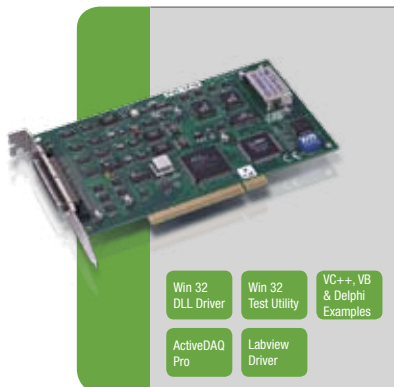
- 16 single-ended, 8 differential or a combination of analog inputs
- 12-bit A/D converter, with up to 100 kHz sampling rate
- Programmable gain
- Automatic channel/gain scanning
- Onboard FIFO memory (1024 samples)
- One 12-bit analog output channels
- 16 digital inputs and 16 digital outputs
- Universal PCI bus (support 3.3V or 5V PCI bus signal)
- BoardID switch

Ordering Information

PCI-1718HDU	12-bit multi-function card
PCI-1718HGU	12-bit high-gain multi-function card
PCL-10120-1	20-pin flat cable, 1 m
PCL-10120-2	20-pin flat cable, 2 m
PCL-10120-0.4	20-pin flat cable, 0.4 m

PCL-10137-1	DB37 cable assembly, 1 m
PCL-10137-2	DB37 cable assembly, 2 m
PCL-10137-3	DB37 cable assembly, 3 m
PCLD-8115	Industrial Wiring Terminal with CJC circuit and DB37 connector
PCLD-880	Industrial Wiring Terminal with DB37 connector

PCI-1716/1716L



250 kS/s, 16-bit, High-Resolution Multifunction Card

Features

- 16 single-ended, 8 differential or a combination of analog inputs
- 16-bit A/D converter, with up to 250 kHz sampling rate
- Onboard FIFO memory (1024 samples)
- Auto-calibration
- PCI-bus mastering data transfer
- Two analog output channels (PCI-1716 only)
- 16 digital inputs and 16 digital outputs
- Onboard programmable counter
- BoardID switch

❖ For new application, Advantech recommends **PCI-1741U and PCI-1742U**.

Ordering Information

PCI-1716	250 kS/s, 16-bit high-resolution multifunction card
PCI-1716L	250 kS/s, 16-bit high-resolution multifunction card without AO
PCLD-8710	SCSI-68 wiring terminal w/CJC, DIN-rail mount
PCLD-8710BNC	SCSI-68 wiring terminal w/CJC and BNC connectors, DIN-rail mount

PCL-10168-1	SCSI-68 Shielded Cable, 1 m
PCL-10168-2	SCSI-68 Shielded Cable, 2 m
ADAM-3968	SCSI-68 wiring terminal, DIN-rail mount

PCI-1741U



Win 32
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& Delphi
Examples

ActiveDAQ
Pro

Labview
Driver

200 kS/s, 16-bit, Low-Cost Multifunction Card w/AO

Features

- 16 single-ended, 8 differential or a combination of analog inputs
- 16-bit A/D converter, with up to 200 kHz sampling rate
- Onboard FIFO memory (1024 samples)
- Auto-calibration
- Universal PCI bus (support 3.3V or 5V PCI bus signal)
- 16 digital inputs and 16 digital outputs
- Onboard programmable counter
- BoardID switch

Ordering Information

PCI-1741U	200 kS/s, 16-bit high-resolution multifunction card
PCI-1741S	PCI-1741U with PCLD-8710 and PCL-10168 cable
PCLD-8710	SCSI-68 wiring terminal w/CJC, DIN-rail mount
PCLD-8710BNC	SCSI-68 wiring terminal w/CJC and BNC connectors, DIN-rail mount

PCL-10168-1	SCSI-68 Shielded Cable, 1 m
PCL-10168-2	SCSI-68 Shielded Cable, 2 m
ADAM-3968	SCSI-68 wiring terminal, DIN-rail mount

PCI-1742U



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Examples

ActiveDAQ
Pro

Labview
Driver

1 MS/s, 16-bit, High-Resolution Multifunction Card

Features

- 16 single-ended, 8 differential or a combination of analog inputs
- 16-bit A/D converter, with up to 1 MHz sampling rate
- Onboard FIFO memory (1024 samples)
- Auto-calibration
- Universal PCI bus (support 3.3V or 5V PCI bus signal)
- 16 digital inputs and 16 digital outputs
- Onboard programmable counter
- BoardID switch

Ordering Information

PCI-1742U	1 MS/s, 16-bit high-resolution multifunction card
PCLD-8710	SCSI-68 wiring terminal w/CJC, DIN-rail mount
PCLD-8710BNC	SCSI-68 wiring terminal w/CJC and BNC connectors, DIN-rail mount

PCL-10168-1	SCSI-68 Shielded Cable, 1 m
PCL-10168-2	SCSI-68 Shielded Cable, 2 m
ADAM-3968	SCSI-68 wiring terminal, DIN-rail mount

PCI-bus Analog Input/Output Cards



Up to 16-bit, up to 30 MS/s, up to 64 Analog Inputs, up to 32 Analog Outputs, Isolation

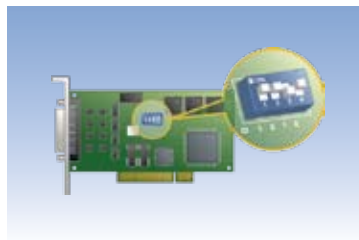
Features

- Up to 64 analog inputs, up to 30 MS/s, 12 or 16-bit resolution
- 4 or 9 analog input signal ranges
- Up to 32 analog outputs, up to 10 MS/s, 12, 14 or 16-bit resolution
- 16 TTL digital I/O lines
- Up to 6 analog output signal ranges
- Isolation protection (2500V_{DC})

Key Features

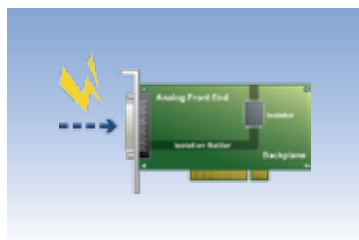
BoardID Switch

BoardID DIP switch helps defines each card's unique identity when multiple identical PCI cards have been installed in the same computer. The BoardID switch is very useful when you build your system with multiple identical PCI cards. With the correct BoardID switch settings, you can easily identify and access each card during hardware configuration and software programming.



Isolation

Isolation circuits are used to protect sensitive measurement circuitry from interference currents or voltages. These circuits are useful when the external voltage (from a transducer) is different than expected by the measurement hardware.



Analog Input Card Selection Guide

Model		PCI-1713	PCI-1714U/ 1714UL	PCI-1715U	PCI-1747U
Analog Input	Resolution	12 bits	12 bits	12 bits	16 bits
	Channels	32 SE/16 Diff. (Isolation)	4 SE	32 SE/16 Diff.	64 SE/32 Diff.
	Sampling Rate	100 kS/s	30 MS/s (PCI-1714U) 10 MS/s (PCI-1714UL)	500 kS/s	250 kS/s
	Unipolar Inputs (V)	0 ~ 10, 0 ~ 5, 0 ~ 2.5, 0 ~ 1.25	-	0 ~ 10, 0 ~ 5, 0 ~ 2.5, 0 ~ 1.25	0 ~ 10, 0 ~ 5, 0 ~ 2.5, 0 ~ 1.25
	Bipolar Inputs (V)	±10, 5, 2.5, 1.25, 0.625	±5, 2.5, 1, 0.5	±10, 5, 2.5, 1.25, 0.625	±10, 5, 2.5, 1.25, 0.625
Connector		DB-37	4 BNC	DB-37	68-pin SCSI-II

Analog Output Card Selection Guide

Model		PCI-1720U	PCI-1721	PCI-1723	PCI-1724U
Analog Output	Resolution	12 bits	12 bits	16 bits	14 bits
	Channels	4 (Isolation)	4 (Waveform Output)	8	32
	Output range (V)	0 ~ 5, 0 ~ 10, ±5, ±10, 0 ~ 20 mA, 4 ~ 20 mA	0 ~ 5, 0 ~ 10, ±5, ±10, 0 ~ 20 mA, 4 ~ 20 mA	-10 ~ 100 ~ 20 mA, 4 ~ 20 mA	±10, 0 ~ 20 mA
	Throughput	Static update	10M	Static update	Static update
Digital I/O	Input Channels	-	16	16	-
	Output Channels	-	-	-	-
Timer/Counter	Channels	-	1	-	-
	Resolution	-	16-bit	-	-
	Time Base	-	10 MHz	-	-
Connector		DB-37	68-pin SCSI-II	68-pin SCSI-II	DB-62

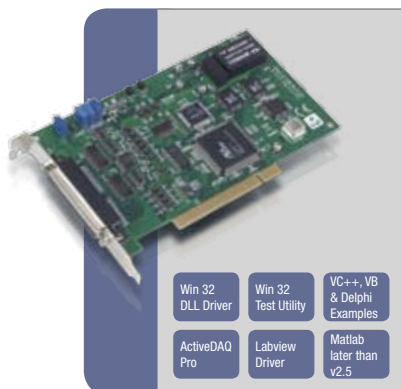
Analog Input Card Accessory Table

▼ Product	▼ Cable	▼ Wiring Board
PCI-1713	PCL-10137-1 PCL-10137-2 PCL-10137-3	ADAM-3937 PCLD-880 PCLD-881B
PCI-1714U/1714UL	PCL-1010B-1	ADAM-3909
PCI-1715U	PCL-10137-1 PCL-10137-2 PCL-10137-3	ADAM-3937 PCLD-880 PCLD-881B
PCI-1747U	PCL-10168-1 PCL-10168-2	ADAM-3968

Analog Output Card Accessory Table

▼ Product	▼ Cable	▼ Wiring Board
PCI-1720U	PCL-10137-1 PCL-10137-2 PCL-10137-3	ADAM-3937 PCLD-880
PCI-1721	PCL-10168-1 PCL-10168-2	ADAM-3968
PCI-1723	PCL-10162-1 PCL-10162-3	ADAM-3962
PCI-1724U	PCL-10162-1 PCL-10162-3	ADAM-3962

PCI-1713



100 kS/s, 12-bit, 32-ch, Isolated Analog Input Card

Features

- 32 single-ended, 16 differential or a combination of analog inputs
- 12-bit A/D converter, with up to 100 kHz sampling rate
- Programmable gain
- Onboard FIFO memory (4096 samples)
- Isolation protection (2500V_{DC})
- S/W, internal or external pacer sampling modes supported

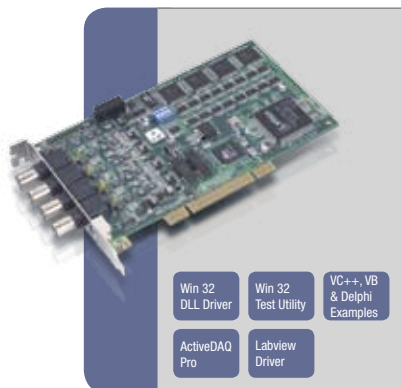
❖ For new application, Advantech recommends PCI-1715U.

Ordering Information

PCI-1713	100 kS/s, 12-bit, 32-channel Isolated Analog Input Card
PCLD-881B	Industrial Wiring Terminal Board (cable not included)
ADAM-3937	Wiring Terminal Board
PCLD-880	Industrial Wiring Terminal Board w/Adapter

PCL-10137-1	DB37 cable assembly, 1 m
PCL-10137-2	DB37 cable assembly, 2 m
PCL-10137-3	DB37 cable assembly, 3 m

PCI-1714U/1714UL



30 MS/s, Simultaneous 4-ch Analog Input Card

Features

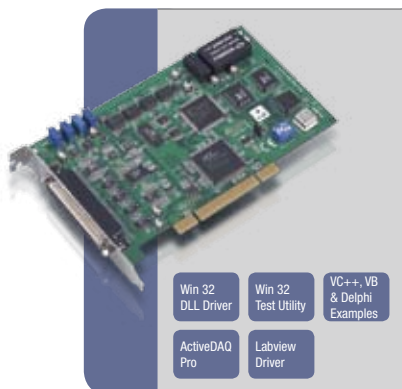
- 4 single-ended analog input channels
- 12-bit A/D converter, with up to 30 MHz sampling rate
- Programmable gain Onboard FIFO memory
- (PCI-1714U: 32,768 samples PCI-1714UL: 8,192 samples, each channel)
- 4 A/D converters simultaneously sampling
- Multiple A/D triggering modes
- Programmable pacer/counter
- BoardID switch

Ordering Information

PCI-1714U	30 MHz Simultaneous 4-ch Analog Input card
PCI-1714UL	10 MHz Simultaneous 4-ch Analog Input card

ADAM-3909	DB-9 Wiring Terminal for DIN-rail Mounting
PCL-1010B-1	BNC to BNC Wiring Cable, 1 m

PCI-1715U



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Examples

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Labview
Driver

500 kS/s, 12-bit, 32-ch, Isolated Analog Input Card

Features

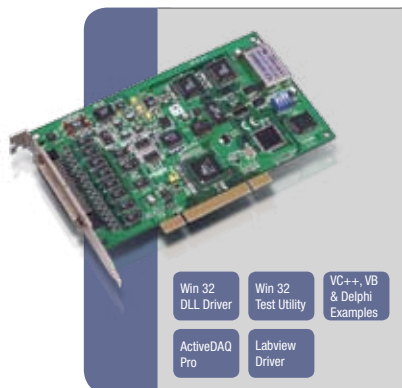
- 32 single-ended, 16 differential or a combination of analog inputs
- 12-bit A/D converter, with up to 500 kHz sampling rate
- Programmable gain
- Onboard FIFO memory (1024 samples)
- Isolation protection (2500V_{DC})
- S/W, internal or external pacer sampling modes supported

Ordering Information

PCI-1715U	500 kS/s, 12-bit, 32-channel Isolated Analog Input Card
PCLD-881B	Industrial Wiring Terminal Board (cable not included)
ADAM-3937	Wiring Terminal Board
PCLD-880	Industrial Wiring Terminal Board w/Adapter

PCL-10137-1	DB37 cable assembly, 1 m
PCL-10137-2	DB37 cable assembly, 1 m
PCL-10137-3	DB37 cable assembly, 3 m

PCI-1747U



Win 32
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Driver

250 kS/s, 16-bit, 64-ch, Analog Input Card

Features

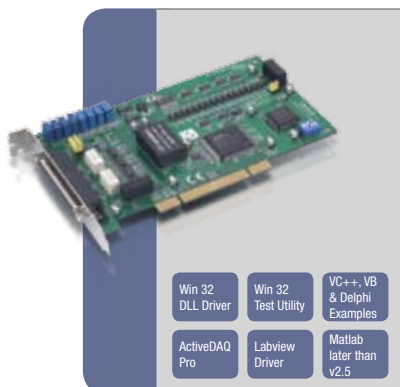
- 64 single-ended, 32 differential or a combination of analog inputs
- 16-bit A/D converter, with up to 250 kHz sampling rate
- Auto Calibration
- Onboard FIFO memory (1024 samples)
- PCI-bus mastering data transfer
- Universal PCI Bus (support 3.3V or 5V PCI bus signal)
- BoardID switch

Ordering Information

PCI-1747U	250 kS/s, 16-bit, 64-ch, analog input universal PCI bus card
ADAM-3968	SCSI-68 wiring terminal, DIN-rail mount

PCL-10168-1	SCSI-68 shielded cable, 1 m
PCL-10168-2	SCSI-68 shielded cable, 2 m

PCI-1720U



4-ch, Universal Isolated Analog Output Card

Features

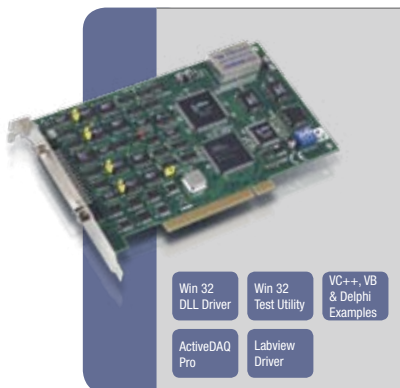
- 4 12-bit D/A output channels
- Multiple output ranges
- 2,500 V_{DC} isolation between the outputs and the PCI bus
- Keeps the output settings and values after system reset
- One DB37 connector for easy wiring
- Universal PCI and BoardID switch

Ordering Information

PCI-1720U	4-ch, 12-bit isolated Universal PCI analog output card
PCL-10137-1	DB37 cable assembly, 1 m
PCL-10137-2	DB37 cable assembly, 2 m
PCLD-880	Industrial Wiring Terminal Board w/Adapter

PCL-10137-3	DB37 cable assembly, 3 m
ADAM-3937	DB37 Wiring terminal for DIN-rail mounting PCLD-880 Screw terminal board

PCI-1721



12-bit 4-ch, Advanced Analog Output Card

Features

- 10 MHz maximum digital update rate
- PCI-bus mastering for data transfer
- Auto calibration function
- Four analog output channels with 1024 samples FIFO buffer
- A 12-bit DAC is equipped for each of analog output channels
- Real-time waveform output function with internal/external pacer
- Synchronized output function
- Flexible output types and range settings
- Keeps the output settings and values after system hot reset
- 16-ch DI/O and one 10 MHz 16-bit resolution counter
- BoardID switch

Ordering Information

PCI-1721	4-ch, 12-bit advanced PCI analog output card
PCL-10168-1	SCSI-68 shielded cable, 1 m

PCL-10168-2	SCSI-68 shielded cable, 2 m
ADAM-3968	SCSI-68 wiring terminal, DIN-rail mount

PCI-1723

16-bit 8-ch, Non-Isolated Analog Output Card

Features

- Auto calibration function
- A 16-bit DAC is equipped for each analog output channel
- Synchronized output function
- Output values retained after system hot reset
- 2-port (16-channel) user-defined digital input/output
- BoardID switch


Win 32
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ActiveDAQ
Pro

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Driver

Ordering Information

PCI-1723 16-bit, 8-ch Non-isolated Analog Output Card

PCL-10168-1 SCSI-68 shielded cable, 1 m

PCL-10168-2 SCSI-68 shielded cable, 2 m

ADAM-3968 SCSI-68 wiring terminal, DIN-rail mount

PCI-1724U

14-bit 32-ch, Isolated Analog Output Card

Features

- 32 high-density analog output channels
- Flexible Output Range: ± 10 V, 0 ~ 20 mA and 4 ~ 20 mA
- Synchronized output function
- Keeps output values after system hot reset
- BoardID switch


Win 32
DLL Driver

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Examples

ActiveDAQ
Pro

Labview
Driver

Ordering Information

PCI-1724U 14-bit, 32-ch isolated analog output Card

PCI-10162 DB62 cable assembly (1 m, 3 m)

ADAM-3962 DB62 cable wiring terminal for DIN-rail mounting

PCI-bus Non-Isolated Digital I/O Cards



Up to 96 Digital Inputs/Outputs, 5V TTL/CMOS

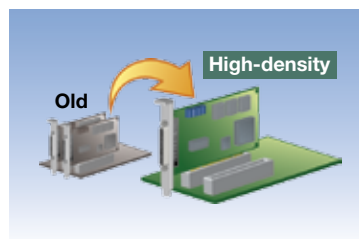
Features

- Up to 96 digital input/output lines
- 5V TTL/CMOS
- 3 x 16-bit, 10MHz counter/timers

Key Features

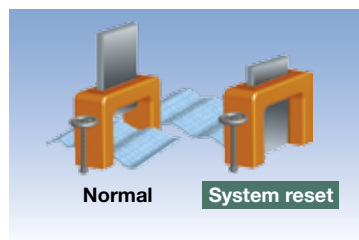
High-density

High density means there are many input/output functions in one PCI card. Before, customers were forced to buy more than one card to fulfill their application, but now just one card can achieve their goals. The biggest advantage of this feature is that it saves space, allowing more efficient installation.



Keeping the Output Values after System Reset

When the system is hot reset (power is not shut off), Advantech's DA&C cards with this function can either retain the last digital (or analog) output values, or return to its default configuration, depending on jumper setting. This practical function eliminates danger caused by misoperation during unexpected system reset.



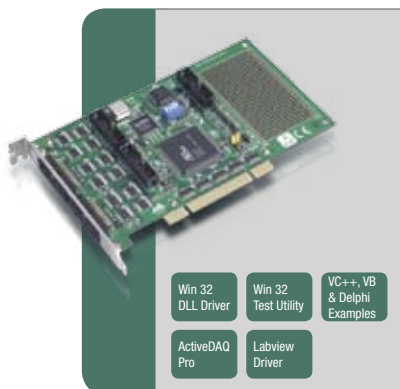
Non-Isolated Digital I/O Card Selection Guide

Model		PCI-1735U	PCI-1737U	PCI-1739U	PCI-1751U	PCI-1753/ 1753E	PCI-1755	PCI-1757UP
TTL DI/O	Input Channels	32	24	48	48	96	32	24
	Output Channel	32						
	Output Sink Current	0.5 V @ 24 mA	0.5 V @ 24 mA	0.5 V @ 24 mA	24 mA @ 0.4 V	24 mA @ 0.44 V	48 mA @ 0.5 V	0.5 V @ 24 mA
	Source Current	2.0 V @ 15 mA	2.0 V @ 15mA	2.0 V @ 15 mA	15 mA @ 2.4 V	24 mA @ 3.76 V	15 mA @ 2.4 V	2.0 V @ 15 mA
Timer/Counter	Channels	3	-	-	3	-	3	-
	Resolution	16-bit	-	-	16-bit	-	16-bit	-
	Time Base	10 MHz	-	-	10 MHz	-	10 MHz	-
Connector		5 x 20-pin	1 x DB-44	1 x 50-pin	68-pin SCSI-II	100-pin SCSI-II	100-pin SCSI-II	1 x DB-25

Non-Isolated Digital I/O Accessory Table

▼ Product	▼ Cable	▼ Wiring Board
PCI-1735U	PCL-10120-2 PCL-10120-1 PCL-10120-0.4	ADAM-3920 PCLD-780 PCLD-782 PCLD-785 PCLD-785B PCLD-786 PCLD-788 PCLD-885 PCLD-7216
PCI-1737U	PCL-10150-1.2	ADAM-3950 PCLD-782B PCLD-785B PCLD-885 PCLD-7216
PCI-1739U	PCL-10150-1.2	ADAM-3950 PCLD-782B PCLD-785B PCLD-885 PCLD-7216
PCI-1751	PCL-10168-1 PCL-10168-2	ADAM-3968 ADAM-3968/20 ADAM-3968/50 PCLD-8751 PCLD-8761 PCLD-8762
PCI-1753/1753E	PCL-10268-1 PCL-10268-2	ADAM-3968 ADAM-3968/20 ADAM-3968/50 PCLD-8751 PCLD-8761
PCI-1755	PCL-101100-1	ADAM-39100
PCI-1757UP	PCL-10125-3 PCL-12125-1	ADAM-3925 ADAM-3950 PCLD-782B PCLD-785B PCLD-885 PCLD-7216

PCI-1735U



32-ch Digital Input and 32-ch Digital Output and Counter Card

Features

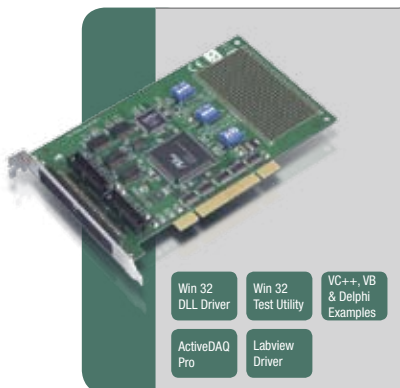
- 32 TTL-level digital input channels
- 32 TTL-level digital output channels
- High-output driving capacity
- Low-input loading
- 3 programmable counter/timer channels
- User configurable clock source
- Breadboard area for custom circuits

Ordering Information

PCI-1735U	32-ch Digital Input and 32-ch Digital Output and Counter Card
PCL-10120-1	IDC-20 Flat Cable, 1 m
PCL-10120-2	IDC-20 Flat Cable, 2 m
PCLD-780	2*IDC-20 Wiring Terminal
PCLD-782	Opto-Isolated D/I Board

PCLD-785	16-ch Relay Output Terminal
PCLD-786	SSR and Relay Driver Board
PCLD-885	16-ch Power Relay Output Terminal
ADAM-3920	20-Pin Flat Cable Terminal, DIN-rail Mount

PCI-1737U



24-ch Digital I/O Card

Features

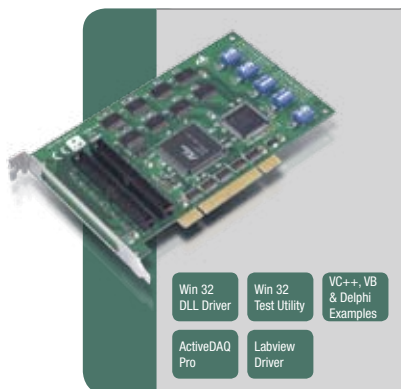
- 24 TTL digital I/O channels
- Emulates mode 0 of 8255 PPI
- Interrupt handling
- Opto-22 compatible 50-pin connectors
- Output status readback
- PCI universal card

Ordering Information

PCI-1737U	24-ch TTL Digital I/O Card
PCL-10150-1.2	IDC-50 Flat Cable, 1.2 m
PCLD-782B	16/24-ch Opto-isolated DI Board
PCLD-785B	24/16-ch. Relay Output Board

PCLD-7216	16-ch SSR Carrier Module Board
PCLD-885	16-ch Power Relay Output Terminal
ADAM-3950	50-Pin Flat Cable Terminal, DIN-rail Mount

PCI-1739U



48-ch Digital I/O Card

Features

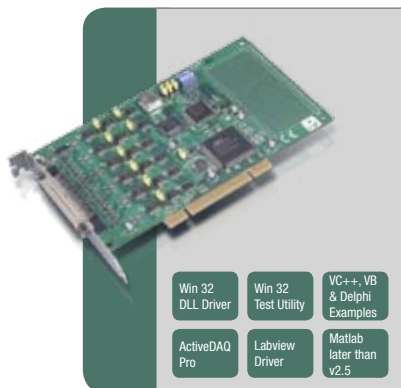
- 48 TTL digital I/O channels
- Emulates mode 0 of 8255 PPI
- Interrupt handling
- Opto-22 compatible 50-pin connectors
- Output status readback
- PCI universal card

Ordering Information

PCI-1739U	48-ch TTL Digital I/O Card
PCL-10150-1.2	IDC-50 Flat Cable, 1.2 m
PCLD-782B	16/24-ch Opto-Isolated DI Board
PCLD-785B	24/16-ch. Relay Output Board

PCLD-7216	16-ch SSR Carrier Module Board
PCLD-885	16-ch Power Relay Output Terminal
ADAM-3950	50-Pin Flat Cable Terminal, DIN-rail Mount

PCI-1751



48-ch Digital I/O and Counter Card

Features

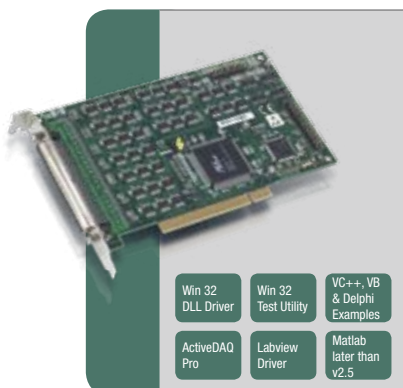
- 48 TTL digital I/O lines
- Emulates mode 0 of 8255 PPI
- Buffered circuits for higher driving capacity than 8255
- Interrupt handling
- Timer/Counter interrupt capability
- Supports both dry and wet contact
- Keeps the I/O port setting and DO state after system reset
- Universal PCI & BoardID switch

Ordering Information

PCI-1751	48-bit universal digital I/O card and Counter Card
PCL-10168	68-pin SCSI cable, 1 and 2 m
ADAM-3968	68-pin SCSI cable wiring terminal for DIN-rail mounting
ADAM-3968/20	68-pin SCSI-II to three 20-pin Wiring Terminal Module for DIN-rail Mounting

ADAM-3968/50	68-pin SCSI to 2 x 50-pin box headers converter module
PCLD-8751	48-ch Isolated DI Board
PCLD-8761	24-ch Replay and 24-IDI Board

PCI-1753



96-ch Digital I/O Card

Features

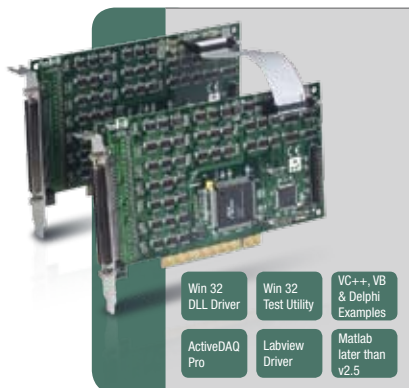
- Up to 192 (96 + 96) TTL digital I/O lines
- Emulates mode 0 of 8255 PPI
- Buffered circuits for higher driving capacity than 8255
- Multiple-source interrupt handling
- Interrupt output pin for simultaneously triggering external devices with the interrupt
- Output status read-back
- "Pattern match" and "Change of state" interrupt functions for critical I/O monitoring
- Keeps I/O setting and digital output values when hot system reset
- Supports dry contact and wet contact
- High-density 100-pin SCSI connector

Ordering Information

PCI-1753	96-ch. Digital I/O Card
PCI-1753E	Extension Board for PCI-1753
PCL-10268	100-pin to 2x68-pin SCSI cable, 1 and 2m
ADAM-3968	SCSI-68 wiring terminal, DIN-rail mount

ADAM-3968/20	68-pin SCSI-II to Three 20-pin Wiring Terminal Module for DIN-rail Mounting
ADAM-3968/50	68-pin SCSI wiring terminal for DIN-rail mounting
PCLD-8751	48-ch Isolated DI Board
PCLD-8761	24-ch Relay and 24-IDI Board

PCI-1753E



Extension Board for PCI-1753

Features

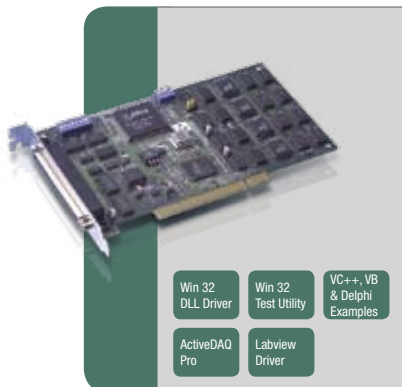
- Up to 192 (96 + 96) TTL digital I/O lines
- Emulates mode 0 of 8255 PPI
- Buffered circuits for higher driving capacity than 8255
- Multiple-source interrupt handling
- Interrupt output pin for simultaneously triggering external devices with the interrupt
- Output status read-back
- "Pattern match" and "Change of state" interrupt functions for critical I/O monitoring
- Keeps I/O setting and digital output values when hot system reset
- Supports dry contact and wet contact
- High-density 100-pin SCSI connector

Ordering Information

PCI-1753	96-ch. Digital I/O Card
PCI-1753E	Extension Board for PCI-1753
PCL-10268	100-pin to 2x68-pin SCSI cable, 1 and 2m
ADAM-3968	SCSI-68 wiring terminal, DIN-rail mount

ADAM-3968/20	68-pin SCSI-II to Three 20-pin Wiring Terminal Module for DIN-rail Mounting
ADAM-3968/50	68-pin SCSI wiring terminal for DIN-rail mounting
PCLD-8751	48-ch Isolated DI Board
PCLD-8761	24-ch Relay and 24-IDI Board

PCI-1755



Win 32
DLL Driver

Win 32
Test Utility

VC++, VB
& Delphi
Examples

ActiveDAQ
Pro

Labview
Driver

Ultra-Speed 32-ch Digital I/O Card

Features

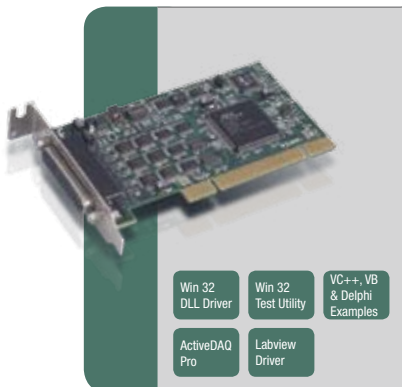
- Bus-mastering DMA data transfer with scatter gather technology
- 32/16/8-bit Pattern I/O with start and stop trigger function
- 2 modes Handshaking I/O Interrupt handling capability
- Onboard active terminators for high speed and long distance transfer
- Pattern match and Change state detection interrupt function
- General-purpose 8-ch DI/O
- Maximum transfer rate: 80 M bytes/sec, 32-bit @ 20 MHz

Ordering Information

PCI-1755	Ultra-speed 32-ch Digital I/O Card
ADAM-39100	PCI-1755 Wiring Terminal for DIN-rail Mounting

PCL-101100-1	100-pin SCSI-II cable with male connectors on bothends and special shielding for noise reduction, 1 m
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PCI-1757UP



Win 32
DLL Driver

Win 32
Test Utility

VC++, VB
& Delphi
Examples

ActiveDAQ
Pro

Labview
Driver

Low Profile 24-ch Digital I/O Card

Features

- Low profile PCI form factor
- Universal PCI bus
- 24 TTL level digital I/O channels
- Emulates mode 0 of 8255 PPI
- Buffered circuits provide higher driving capability
- Output status read-back
- I/O configurable by software or on board DIP switch
- Keeps port I/O settings and digital output states after hot reset
- BoardID switch
- Convenient DB-25 connector
- Dry/wet contact support

Ordering Information

PCI-1757UP	Low Profile 24-ch Digital I/O Card
ADAM-3925	DB25 Wiring terminal for DIN-rail mounting
PCL-10125-1	DB25 cable assembly, 1 m

PCLD-782B	24/16-ch. opto-isolated digital input board
PCLD-785B	24/16-ch. relay output board
PCL-12125-1	DB25 to IDC50 flat cable for PCI-1757UP, 1 m

PCI-bus Isolated Digital I/O Cards



Up to 128 Digital Inputs or Outputs, up to 16 Relay Outputs, Isolation

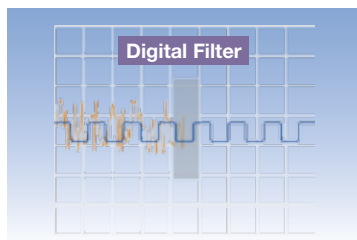
Features

- Up to 128 digital input or output lines
- Up to 64 digital input/output lines
- 8 or 16 relay output lines
- Isolation protection (2500V_{oc})

Key Features

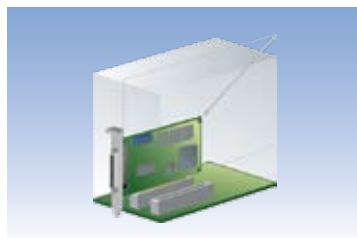
Digital Filter

The digital filter function is used to eliminate glitches on input data and reduce the number of changes to examine and process. The filter blocks pulses that are shorter than the specified timing interval and passes pulses that are twice as long as the specified interval. Intermediate-length pulses that are longer than half of the interval, but less than the interval, may or may not pass the filter depending on your settings.



Low Profile

For some critical applications, small chassis is needed. The low profile PCI card is designed to solve the issue that standard PCI card can't be plugged into the slot.



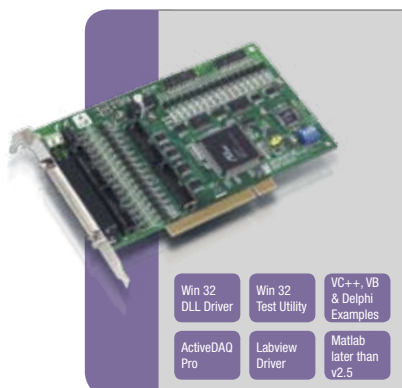
Isolated Digital I/O Card Selection Guide

Model	PCI-1730	PCI-1750	PCI-1756	PCI-1758UDIO	PCI-1760U	PCI-1761	PCI-1762	PCI-1763UP
Input	Channels	16 (Sink)	16 (Sink)	32 (Sink)	64	8 (Sink)	8 (Sink)	8
	Isolation Voltage	2,500 V _{DC}	2,500 V _{DC}	2,500 V _{DC}	2,500 V _{DC}	2,500 V _{DC}	2,500 V _{DC}	2,500 V _{DC}
	Input Range	5 ~ 30 V _{DC}	5 ~ 50 V _{DC}	10 ~ 50 V _{DC}	5 ~ 25 V _{DC}	5 ~ 12 V _{DC}	10 ~ 50 V _{DC}	10 ~ 50 V _{DC}
Output	Channels	16 (Sink)	16 (Sink)	32 (Sink)	64	8 x Form C	4 x Form A 4 x Form C	16 x Form C
	Isolation Voltage	2,500 V _{DC}	2,500 V _{DC}	2,500 V _{DC}	2,500 V _{DC}	2,500 V _{DC}	2,500 V _{DC}	2,500 V _{DC}
	Output Range	5 ~ 40 V _{DC}	5 ~ 40 V _{DC}	5 ~ 40 V _{DC}	5 ~ 40 V _{DC}	120 V _{AC} @ 0.5A 30 V _{DC} @ 1A	250 V _{AC} @ 3A 24 V _{DC} @ 3A	120 V _{AC} @ 0.5A 30 V _{DC} @ 3A
	Max. Sink Current	200 mA	200 mA	200 mA	90 mA		250 V _{AC} @ 3A 24 V _{DC} @ 3A	250 V _{AC} @ 3A 24 V _{DC} @ 3A
Connector	1 x DB-37 4 x 20-pin	1 x DB-37	100-pin SCSI-II	dual 100-pin mini-SCSI	1 x DB-37	1 x DB-37	1 x DB-62	1 x DB-44

Isolated Digital I/O Card Accessory Table

▼ Product	▼ Cable	▼ Wiring Board
PCI-1730/1733/1734	PCL-10137-1 PCL-10137-2 PCL-10137-3 PCL-10120-2 PCL-10120-1 PCL-10120-0.4	ADAM-3937 PCLD-880 ADAM-3920 PCLD-780 PCLD-782 PCLD-782B PCLD-785 PCLD-785B PCLD-786 PCLD-788 PCLD-885 PCLD-7216
PCI-1750	PCL-10137-1 PCL-10137-2 PCL-10137-3	ADAM-3937 PCLD-880
PCI-1752U/1752US0	PCL-10250-1 PCL-10250-2	ADAM-3951
PCI-1754	PCL-10250-1 PCL-10250-2	ADAM-3951
PCI-1756	PCL-10250-1 PCL-10250-2	ADAM-3951
PCI-1758UDI/UDO/UDIO	PCL-101100S	ADAM-39100
PCI-1760U	PCL-10137-1 PCL-10137-2 PCL-10137-3	ADAM-3937 PCLD-880
PCI-1761	PCL-10137-1 PCL-10137-2 PCL-10137-3	ADAM-3937 PCLD-880
PCI-1762	PCL-10162-3	ADAM-3962
PCI-1763UP	PCL-10144	ADAM-3944

PCI-1730



16-ch Isolated Digital Input and 16-ch Isolated Digital Output Card

Features

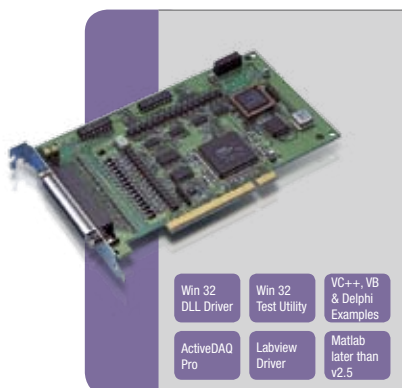
- 32-ch Isolated DI/O (16 inputs and 16 outputs)
- 32-ch TTL Isolated DI/O (16 inputs and 16 outputs)
- High output driving capacity
- Interrupt capability
- Two 20-pin connectors for isolated digital I/O channels and two for TTL digital I/O channels
- D-type connector for isolated input and output channels
- High-voltage isolation on output channels

Ordering Information

PCI-1730	16-ch Isolated Digital Input and 16-ch Isolated Digital Output Card
PCL-10120	20-pin flat cable, (2m, 1m, 0.4m)
PCLD-782	16-ch opto-isolated DI board
ADAM-3920	20-pin flat cable wiring terminal for DIN-rail mounting

PCLD-780	Universal screw terminal board
PCLD-880	Universal screw terminal board
ADAM-3937	DB37 wiring terminal for DIN-rail mounting
PCL-10137	DB37 cable, (1m, 2m, 3m)

PCI-1750



16-ch Isolated Digital Input and 16-ch Isolated Digital Output and Counter Card

Features

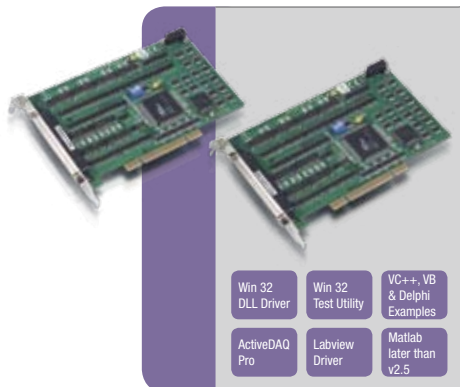
- 16 isolated DI and 16 isolated DO channels
- High voltage isolation on all isolated channels (2,500 V_{DC})
- High sink current on isolated output channels (200 mA/channel)
- Supports dry contact or 5 ~ 50 V_{DC} isolated inputs
- Interrupt handling
- Timer/counter interrupt capability

Ordering Information

PCI-1750	16-ch Isolated Digital Input and 16-ch Isolated Digital Output and Counter Card
PCL-10137-1	DB37 cable assembly, 1 m

PCL-10137-2	DB37 cable assembly, 2 m
PCL-10137-3	DB37 cable assembly, 3 m
ADAM-3937	37-pin D-type cable wiring terminal for DIN-rail mounting

PCI-1752U/1752US0



64-ch Isolated Digital Output Card

Features

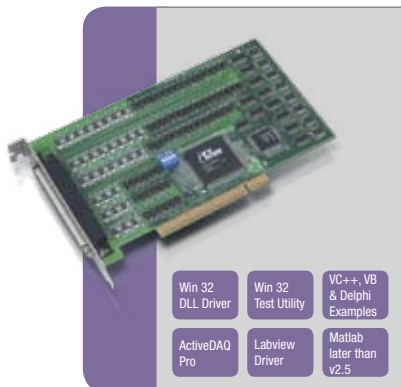
- 64 isolated digital output channels
- High-voltage isolation on output channels (2500 V_{DC})
- 2000 V_{DC} ESD protection
- Wide output range (5 ~ 40 V_{DC})
- High-sink current on isolated output channels(200 mA max./channel)
- Output status read-back
- Keeps digital output values when hot system reset
- Channel-freeze function
- High-density 100-pin SCSI connector
- Support sink (1752U) & Source (1752US0) DO type

Ordering Information

PCI-1752U	PCI-1752U 64-ch isolated PCI card (Sink type)
PCI-1752US0	64-ch isolated PCI card (Source type)

PCL-10250	1w-pin to two 50-pin SCSI Cable (1m, 2m)
ADAM-3951	Wiring terminal module with LED-indicators for DIN-rail Mounting

PCI-1754



64-ch Isolated Digital Input Card

Features

- 64 isolated digital input channels
- Either +/- voltage input for DI by group
- High-voltage isolation on input channels (2500 V_{DC})
- High over-voltage protection (70 V_{DC})
- Wide input range (10 ~ 50 V_{DC})
- Interrupt handling capability
- High-density 100-pin SCSI connector

Ordering Information

PCI-1754	64-ch isolated digital input card
PCL-10250	1w-pin to two 50-pin SCSI Casle, (1m, 2m)

ADAM-3951	Wiring terminal module with LED-indicators for DIN-rail Mounting
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PCI-1756



Win 32
DLL Driver

Win 32
Test Utility

VC++, VB
& Delphi
Examples

ActiveDAQ
Pro

Labview
Driver

Matlab
later than
v2.5

32-ch Isolated Digital Input and 32-ch Isolated Digital Output Card

Features

- Either +/- voltage input for DI by group
- Output status read-back for output channels
- Keeps digital output values after hot system reset

Ordering Information

PCI-1756	32-ch Isolated Digital Input and 32-ch Isolated Digital Output Card
PCL-10250	1w-pin to two 50-pin SCSI Cables, (1m, 2m)

ADAM-3951	Wiring terminal module with LED-indicators for DIN-rail Mounting
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PCI-1758UDI



Win 32
DLL Driver

Win 32
Test Utility

VC++, VB
& Delphi
Examples

ActiveDAQ
Pro

Labview
Driver

128-ch Isolated Digital Input Card

Features

- 128 isolated digital input channels (64 for PCI-1758UDIO)
- Wide input range (5 ~ 25 V_{oc})
- High ESD protection (2,000 V_{oc})
- Digital Filter function
- BoardID switch
- Interrupt handling capability for each channel

Ordering Information

PCI-1758UDI	128-ch Isolated Digital Input Card
PCL-101100S-1	100-pin SCSI Cable, 1 m

ADAM-39100	100-pin SCSI wiring terminal, DIN-rail mounting
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PCI-1758UDO



Win 32
DLL Driver

Win 32
Test Utility

VC++, VB
& Delphi
Examples

ActiveDAQ
Pro

Labview
Driver

128-ch Isolated Digital Output Card

Features

- 128 isolated digital output channels (64 for PCI-1758UDIO)
- High-voltage isolation on output channels (2,500 V_{DC})
- Wide output range (5 ~ 40 V_{DC})
- High-sink current for isolated output channels (90 mA max./Channel)
- Current protection for each port
- BoardID switch
- Output status read-back
- Digital output value retained after hot system reset
- Programmable Power-Up States
- Watchdog timer

Ordering Information

PCI-1758UDO 128-ch Isolated Digital Output Card

PCL-101100S-1 100-pin SCSI Cable, 1 m

ADAM-39100 100-pin SCSI wiring terminal, DIN-rail mounting

PCI-1758UDIO



Win 32
DLL Driver

Win 32
Test Utility

VC++, VB
& Delphi
Examples

ActiveDAQ
Pro

Labview
Driver

64-ch Isolated Digital Input and 64-ch Isolated Digital Output Card

Features

- 128 isolated digital output channels (64 for PCI-1758UDIO)
- High-voltage isolation on output channels (2,500 V_{DC})
- Wide output range (5 ~ 40 V_{DC})
- High-sink current for isolated output channels (90 mA max./Channel)
- Current protection for each port
- BoardID switch
- Output status read-back
- Digital output value retained after hot system reset
- Programmable Power-Up States
- Watchdog timer
- 128 isolated digital input channels (64 for PCI-1758UDIO)
- Wide input range (5 ~ 25 V_{DC})
- High ESD protection (2,000 V_{DC})
- Digital Filter function
- Interrupt handling capability for each channel

Ordering Information

PCI-1758UDIO 128-ch Isolated Digital Input Card

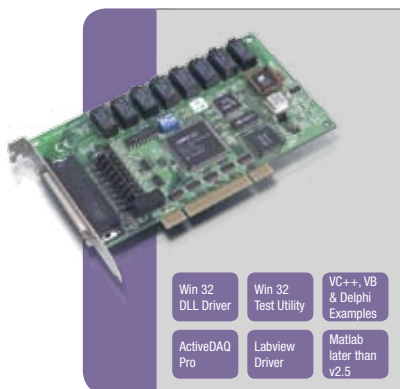
PCI-1758UDO 128-ch Isolated Digital Output Card

PCI-1758UDIO 64-ch Isolated Digital Input and 64-ch Isolated Digital Output Card

PCL-101100S-1 100-pin SCSI Cable, 1 m

ADAM-39100 100-pin SCSI wiring terminal, DIN-rail mounting

PCI-1760U



8-ch Relay Actuator and 8-ch Isolated Digital Input Card

Features

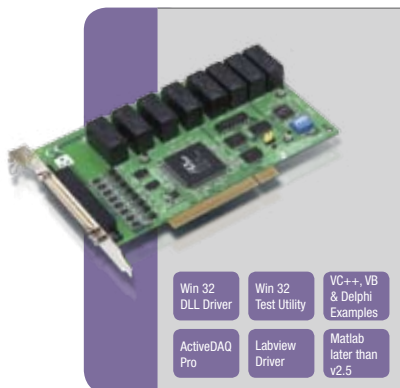
- Universal PCI card, for 3.3 V and 5 V PCI slot
- 8 opto-isolated digital input channels
- 8 relay actuator output channels
- 2 opto-isolated PWM outputs
- LED indicators to show activated relays
- Jumper selectable dry contact/wet contact input signals
- Up event counters for DI
- Programmable digital filter function for DI
- Pattern match interrupt function for DI
- "Change of State" interrupt function for DI
- Universal PCI and BoardID switch

Ordering Information

PCI-1760U	8-ch Relay Actuator and 8-ch Isolated Digital Input Card
PCL-10137-1	DB37 cable assembly, 1 m
PCL-10137-2	DB37 cable assembly, 2 m

PCL-10137-3	DB37 cable assembly, 3 m
ADAM-3937	DB37 wiring terminal for DIN-rail mounting

PCI-1761



8-ch Relay Actuator and 8-ch Isolated Digital Input Card

Features

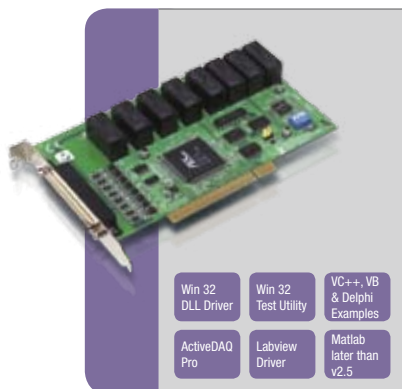
- 8 relay output channels and 8 isolated digital input channels
- LED indicators to show activated relays
- 4 Form C and 4 Form A type relay output channels
- Male DB37 matching connector included
- Output status read-back
- Retained relay output values when hot system reset
- High-voltage isolation on input channels (3,750 V_{DC})
- High ESD protection (2,000 V_{DC})
- High over-voltage protection (70 V_{DC})
- Wide input range (10 ~ 50 V_{DC})
- Interrupt handling capability
- BoardID switch

Ordering Information

PCI-1761	8-ch Relay Actuator and 8-ch Isolated DI Card
PCL-10137-1	DB37 cable assembly, 1 m
PCL-10137-2	DB37 cable assembly, 2 m

PCL-10137-3	DB37 cable assembly, 3 m
ADAM-3937	DB37 Wiring Terminal for Din-rail Mounting
PCLD-880	Universal screw terminal board

PCI-1762



Win 32
DLL Driver

Win 32
Test Utility

VC++, VB
& Delphi
Examples

ActiveDAQ
Pro

Labview
Driver

Matlab
later than
v2.5

16-ch Isolated Digital Input and 16-ch Relay Output Card

Features

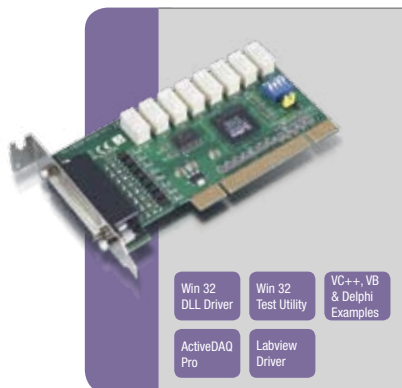
- 16 relay output channels and 16 isolated digital input channels
- LED indicators to show activated relays
- Jumper selectable Form A/Form B-type relay output channel
- Output status read-back
- Retain relay output values when hot system reset
- High-voltage isolation on input channels (2,500 V_{DC})
- High ESD protection (2,000 V_{DC})
- High over-voltage protection (70 V_{DC})
- Wide input range (10 ~ 50 V_{DC})
- Interrupt handling capability
- High-density DB-62 connector
- BoardID switch

Ordering Information

PCI-1762	16-ch Isolated Digital Input and 16-ch Relay Output Card
PCL-10162-1	PCL-10162-1 DB-62 cable assembly, 1 m

PCL-10162-3	PCL-10162-3 DB-62 cable assembly, 3 m
ADAM-3962	DB62 Wiring Terminal for Din-rail Mounting

PCI-1763UP



Win 32
DLL Driver

Win 32
Test Utility

VC++, VB
& Delphi
Examples

ActiveDAQ
Pro

Labview
Driver

Low-Profile 8-ch Relay and 8-ch Isolated Digital Input Card

Features

- 8 relay output channels and 8 isolated digital input channels
- LED indicators to show activated relays
- 8 Form C type relay output channels
- Output status read-back
- Retained relay output values when hot system reset
- High-voltage isolation on input channels (2,500 V_{DC})
- High ESD protection (2,000 V_{DC})
- High over-voltage protection (70 V_{DC})
- Wide input range (10 ~ 50 V_{DC})
- Interrupt handling capability
- Support Universal PCI Bus
- Low Profile PCI card
- BoardID switch

Ordering Information

PCI-1763UP	8-ch Relay and 8-ch Isolated DI card
PCL-10144-1	DB 44-pin cable, 1 m

ADAM-3944	DB-44 Wiring Terminal for DIN-rail mounting
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ISA & PC/104-bus DAQ Selection Guide

Category		Multifunction					
Bus		ISA					
Model		PCL-711B	PCL-812PG	PCL-818L	PCL-818HD	PCL-818HG	PCM-3718H
Analog Input	Resolution	12 bits	12 bits	12 bits	12 bits	12 bits	12 bits
	Channels	8 SE	16 SE	16 SE/8 Diff.	16 SE/8 Diff.	16 SE/8 Diff.	16 SE/8 Diff.
	Sampling Rate	40 kS/s	30 kS/s	40 kS/s	100 kS/s	100 kS/s	100 kS/s
	Unipolar Inputs (V)	-	-	-	0 ~ 10, 0 ~ 5, 0 ~ 2.5, 0 ~ 1.25	0 ~ 10, 0 ~ 5, 0 ~ 2.5, 0 ~ 1.25	0 ~ 10, 0 ~ 5, 0 ~ 2.5, 0 ~ 1.25
	Bipolar Inputs (V)	±5, 2.5, 1.25, 0.625, 0.3125	±10, 5, 2.5, 1.25, 0.625, 0.3125	±10, 5, 2.5, 1.25, 0.625	±10, 5, 2.5, 1.25, 0.625	±10, 5, 2.5, 1.25, 0.625	±10, 5, 2.5, 1.25, 0.625
Analog Output	Resolution	12 bits	12 bits	12 bits	12 bits	12 bits	-
	Channels	1	2	1	1	1	-
	Output range (V)	0 ~ 5, 0 ~ 10	0 ~ 5, 0 ~ 10	0 ~ 5, 0 ~ 10	0 ~ 5, 0 ~ 10, ±10	0 ~ 5, 0 ~ 10, ±10	-
	Throughput	Static update	Static update	Static update	Static update	Static update	-
	Throughput	Static update	Static update	Static update	Static update	Static update	-
Digital I/O	Input Channels	16	16	16	16	16	16
	Output Channels	16	16	16	16	16	16
Timer/Counter	Channels	-	1	1	1	1	1
	Resolution	-	16-bit	16-bit	16-bit	16-bit	16-bit
	Time Base	-	2 MHz	10 MHz	10 MHz	10 MHz	10 MHz
Connector		3 x 20-pin	5 x 20-pin	DB-37	DB-37	DB-37	2 x 20-pin
Windows 98/2000/XP DLL Driver		V	V	V	V	V	V
Windows 98/2000/XP Test Utility		V	V	V	V	V	V
VC++, VB & delphi Examples		V	V	V	V	V	V
Advantech ActiveDAQ/ActiveDAQ Pro		V	V	V	V	V	V
Labview I/O Drivers (Ver. 6i and 7.0)		V	V	V	V	V	V
MATLAB Data Acquisition Tool Box 2.5.1		V	V	V	V	V	-

ISA & PC/104-bus DAQ Accessory Table

▼ Product 	▼ Cable 	▼ Wiring Board 
PCL-711B	PCL-10120-0.4/1/2	ADAM-3920
	PCL-10121-0.4/2	PCLD-780
		PCLD-782
		PCLD-785
		PCLD-786
PCL-812PG	PCL-10120-0.4/1/2	PCLD-788
	PCL-10121-0.4/2	PCLD-885
		PCLD-7216
		ADAM-3920
		PCLD-780
PCL-818L/818HD/818HG	PCL-10120-0.4/1/2	PCLD-782B
	PCL-10121-0.4/2	PCLD-785B
		PCLD-786
		PCLD-788
		PCLD-885
		PCLD-7216
		ADAM-3937
		PCLD-880
		PCLD-8115
		PCLD-789D (PCL-818L/818HD only)
		ADAM-3920
		PCLD-780
		PCLD-782
		PCLD-785B
		PCLD-786
		PCLD-788
		PCLD-885
		PCLD-7216

PC/104		AI	AO			
		ISA	ISA			
PCM-3718HG	PCM-3718HGO	PCL-813B	PCL-726	PCL-727	PCL-728	PCM-3712
12 bits	12 bits	12 bits	-	-	-	-
16 SE/8 Diff.	16 SE/8 Diff.	32 SE	-	-	-	-
100 kS/s	100 kS/s	25 kS/s	-	-	-	-
0 ~ 10, 0 ~ 1, 0 ~ 0.1, 0 ~ 0.01	0 ~ 10, 0 ~ 5, 0 ~ 2.5, 0 ~ 1.25	0 ~ 10, 0 ~ 5, 0 ~ 2.5, 0 ~ 1.25	-	-	-	-
±10, 5, 1, 0.5, 0.1, 0.05, 0.01, 0.005	±10, 5, 2.5, 1.25, 0.625	±10, 5, 2.5, 1.25, 0.625	-	-	-	-
-	12 bits	-	12 bits	12 bits	12 bits	12 bits
-	1	-	6	12	2 (Isolation)	2
-	0 ~ 5, 0 ~ 10	-	0 ~ 5, 0 ~ 10, ±5, ±10, 4 ~ 20 mA	0 ~ 5, 0 ~ 10, ±5, 4 ~ 20 mA	0 ~ 5, 0 ~ 10, ±5, ±10, 0 ~ 20 mA, 4 ~ 20 mA	0 ~ 5, 0 ~ 10, ±5, ±10, 4 ~ 20 mA
-	Static update	-	Static update	Static update	Static update	Static update
16	16	-	16	16	-	-
16	16	-	16	16	-	-
1	1	-	-	-	-	-
16-bit	16-bit	-	-	-	-	-
10 MHz	10 MHz	-	-	-	-	-
2 x 20-pin	2 x 20-pin	DB-37	4 x 20-pin	2 x 20-pin; DB-37	2 x DB-9	1 x 10-pin box header
V	V	V	V	V	V	V
V	V	V	V	V	V	V
V	V	V	V	V	V	V
V	V	V	V	V	V	V
V	V	V	V	V	V	V
-	-	V	V	V	V	-

▼ Product 	▼ Cable 	▼ Wiring Board 
PCM-3718H/3718HG/3718HO	PCL-10120-0.4/1/2 PCL-10121-0.4/2	ADAM-3920 PCLD-780 PCLD-782 PCLD-782B PCLD-785 PCLD-785B PCLD-786 PCLD-788 PCLD-885 PCLD-7216
PCL-813B	PCL-10137-1/2/3	ADAM-3937 PCLD-880 PCLD-881B
PCL-726	PCL-10120-0.4/1/2 PCL-10121-0.4/2	ADAM-3920 PCLD-780 PCLD-782 PCLD-782B PCLD-785 PCLD-785B PCLD-786 PCLD-788 PCLD-885 PCLD-7216
PCL-818L/818HD/818HG	PCL-10120-0.4/1/2 PCL-10121-0.4/2	ADAM-3920 PCLD-780 PCLD-782 PCLD-782B PCLD-785 PCLD-785B PCLD-786 PCLD-788 PCLD-885 PCLD-7216
PCL-728	PCL-10901-1/3	ADAM-3909
PCM-3712	PCL-10901-1/3	ADAM-3909

ISA & PC/104-bus DAQ Selection Guide

Category		Non-Isolated DI/O				
Bus		ISA				PC/104
Model		PCL-720+	PCL-722	PCL-724	PCL-731	PCM-3724
TTL DI/O	Input Channels	32	144	24	48	48
	Output Channel	32				
	Sink Current	0.5 V @ 24 mA	0.5 V @ 24 mA	0.4 V @ 24 mA	24 mA @ 0.4 V	24 mA @ 0.5 V
	Source Current	2.4 V @ 3 mA	2.4 V @ 15mA	2.4 V @ 15 mA	15 mA @ 2.4 V	15 mA @ 2 V
Isolated DI/O	Input	Channels	-	-	-	-
		Isolation Voltage	-	-	-	-
		Input Range	-	-	-	-
	Output	Channels	-	-	-	-
		Isolation Voltage	-	-	-	-
		Output Range	-	-	-	-
Timer/Counter	Max. Sink Current	-	-	-	-	-
	Channels	3	-	-	-	-
	Resolution	16-bit	-	-	-	-
	Time Base	10 MHz	-	-	-	-
Connector		5 x 20-pin	6 x 50-pin	1 x 50-pin	2 x 50-pin	2 x 50-pin
Windows 98/2000/XP DLL Driver		V	V	V	V	V
Windows 98/2000/XP Test Utility		V	V	V	V	V
VC++, VB & delphi Examples		V	V	V	V	V
Advantech ActiveDAQ/ActiveDAQ Pro		V	V	V	V	V
Labview I/O Drivers (Ver. 6i and 7.0)		V	V	V	V	V
MATLAB Data Acquisition Tool Box 2.5.1		V	V	V	V	-

ISA & PC/104-bus DAQ Accessory Table

▼ Product 	▼ Cable 	▼ Wiring Board 		
PCL-720+	PCL-10120-0.4/1/2	ADAM-3920	PCLD-780	PCLD-782
	PCL-10121-0.4/2	PCLD-782B	PCLD-785	PCLD-785B
PCL-722	PCL-10150-1.2	PCLD-786	PCLD-788	PCLD-885
		PCLD-7216		
PCL-724	PCL-10150-1.2	ADAM-3950	PCLD-782B	PCLD-785B
		PCLD-885	PCLD-7216	
PCL-731	PCL-10150-1.2	ADAM-3950	PCLD-782B	PCLD-785B
		PCLD-885	PCLD-7216	
PCM-3724	PCL-10150-1.2	ADAM-3950	PCLD-782B	PCLD-785B
		PCLD-885	PCLD-7216	
PCL-725	PCL-10137-1/2/3	ADAM-3937	PCLD-880	
PCL-730	PCL-10137-1/2/3	ADAM-3937	PCLD-880	

Isolated DI/O						
ISA					PC/104	
PCL-725	PCL-730	PCL-733	PCL-734	PCL-735	PCM-3725	PCM-3730
-	16	-	-	-	8	16
-	16	-	-	-	8	16
-	0.5 V @ 8 mA	-	-	-	-	0.5 V @ 8 mA
-	2.4 V @ 0.4 mA	-	-	-	-	2.4 V @ 0.4 mA
8 (Sink)	16 (Sink)	32 (Sink)	-	-	8	8
1,500 V _{DC}	2,500 V _{DC}	2,500 V _{DC}	-	-	2,500 V _{DC}	2,500 V _{DC}
5 ~ 24 V _{DC}	5 ~ 24 V _{DC}	5 ~ 24 V _{DC}	-	-	10 ~ 50 V _{DC}	5 ~ 24 V _{DC}
4 x Form A; 4 x Form C	16	-	32 (Sink)	12 x Form C	8 x Form C	8
1,000 V _{DC}	1,000 V _{DC}	-	1,000 V _{DC}	1,000 V _{DC}	2,000 V _{DC}	1,000 V _{DC}
120 V _{AC} @ 0.5 A	5 ~ 40 V _{DC}	-	5 ~ 40 V _{DC}	-	240 V _{AC} @ 0.25 A	5 ~ 40 V _{DC}
30 V _{DC} @ 1 A	200 mA	-	200 mA	100 V _{AC} @ 0.6 A	30 V _{DC} @ 1 A	200 mA
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
DB-37	DB-37; 4 x 20-pin	DB-37	DB-37	DB-37	1 x 20-pin; 1 x 50-pin	3 x 20-pin
V	V	V	V	V	V	V
V	V	V	V	V	V	V
V	V	V	V	V	V	V
V	V	V	V	V	V	V
V	V	V	V	V	V	V
V	V	V	V	V	-	-

▼ Product	▼ Cable	▼ Wiring Board
PCL-730	PCL-10120-0.4/1/2 PCL-10121-0.4/2	ADAM-3920 PCLD-780 PCLD-782 PCLD-782B PCLD-785 PCLD-785B PCLD-786 PCLD-788 PCLD-885 PCLD-7216
PCL-734	PCL-10137-1/2/3	ADAM-3937 PCLD-880
PCL-735	PCL-10137-1/2/3	ADAM-3937 PCLD-880
PCM-3725	PCL-10120-0.4/1/2 PCL-10121-0.4/2	ADAM-3920 PCLD-780 PCLD-7216
PCM-3725	PCL-10150-1.2	ADAM-3950
PCM-3725	PCL-10120-0.4/1/2	ADAM-3920 PCLD-780 PCLD-782 PCLD-782B PCLD-785 PCLD-785B PCLD-786 PCLD-788 PCLD-885 PCLD-7216
PCM-3730	PCL-10120-0.4/1/2 PCL-10121-0.4/2	

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