

PCI-AC51 and PCIe-AC51 Pamux Adapter Cards

Features

- ▶ Link Pamux bus to PCI- or PCIe-compatible PCs
- ▶ Access up to 512 I/O points on a 500-foot Pamux bus
- ▶ Software SDK included

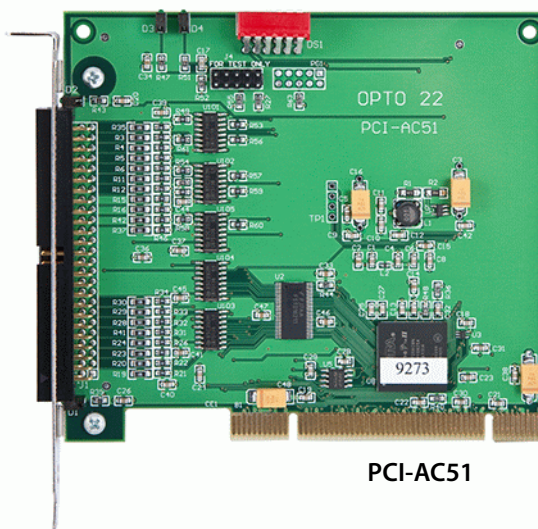
Description

The PCI-AC51 and PCIe-AC51 are high-speed adapter cards designed to link the Pamux® bus to PCI-compatible or PCI Express-compatible computers.

- The PCI-AC51 is compatible with a standard PCI bus.
- The PCIe-AC51 is compatible with PCI Express.

These adapters are suited for new development and can also replace Opto 22's AC28 adapter card in existing systems you are upgrading to a newer PC. (NOTE: the PCI-AC28 adapter card is not recommended for new designs.)

Each PCI-AC51 or PCIe-AC51 can access up to 512 points of I/O along a Pamux bus of up to 500 feet in length. The card includes a 50-pin male header connector and is compatible with HH-series and OD-series flat-ribbon cable. Four LEDs on the card indicate card operation.



PCI-AC51

A software SDK is provided that includes sample applications with full source code and drivers. For details on installing and using the PCI-AC51 and PCIe-AC51 and their SDK, see Opto 22 form #1459, the [PCI-AC51 and PCIe-AC51 User's Guide](#).

Specifications

	PCI-AC51	PCIe-AC51
Power requirements (provided by PC bus)	5 VDC @ 500 mA 3.3 VDC @ 300 mA	12 VDC @ 50 mA 3.3 VDC @ 500 mA
Computer compatibility	32 or 64-bit PCI bus	PCI Express x1 or higher
SDK compatibility	Microsoft Windows 2000/XP (supports Visual Basic 6 and Visual C++ 6) Windows 8, Windows 7, and Vista, 32-bit and 64-bit (supports C#, VB.NET, other .NET languages, VB, Visual C++)	
PCI compliance	PCI Specification Revision 2.2	PCI Express Specification Revision 1.1*
Opto 22 brain compatibility	B4, B5, B6, SNAP-B4, SNAP-B6	B4, B5, B6, SNAP-B4, SNAP-B6
LEDs	Four, indicating board access, reset level, read, and write	Four, indicating board access, reset level, read, and write
Operating temperature	0 to 70 °C	0 to 60 °C
Storage temperature	-30 to 85 °C	-30 to 85 °C

* Since PCI Express is backwards compatible, the card is also compatible with PCIe 2 and 3 slots.

Part Numbers

Part	Description
PCI-AC51	PCI adapter card for PAMUX
PCIe-AC51	PCI Express adapter card for PAMUX
PC-PAMUX-SDK	PAMUX Systems SDK

More About Opto 22

Products

Opto 22 develops and manufactures reliable, flexible, easy-to-use hardware and software products for industrial automation, energy management, remote monitoring, and data acquisition applications.

OptoEMU Energy Management System

The easy-to-use OptoEMU Sensor monitors electrical energy use in your facility and delivers detailed, real-time data you can see, analyze, and use in building and control systems. The Sensor can monitor energy data from pulsing meters, electrical panels or subpanels, and equipment. View energy data online using a software service or incorporate the data into your control system for complete energy management.

SNAP PAC System

Designed to simplify the typically complex process of selecting and applying an automation system, the SNAP PAC System consists of four integrated components:

- SNAP PAC controllers
- PAC Project™ Software Suite
- SNAP PAC brains
- SNAP I/O™

SNAP PAC Controllers

Programmable automation controllers (PACs) are multifunctional, modular controllers based on open standards.

Opto 22 has been manufacturing PACs for over two decades. The standalone SNAP PAC S-series, the rack-mounted SNAP PAC R-series, and the software-based SoftPAC™ all handle a wide range of digital, analog, and serial functions for data collection, remote monitoring, process control, and discrete and hybrid manufacturing.

SNAP PACs are based on open Ethernet and Internet Protocol (IP) standards, so you can build or extend a system easily, without the expense and limitations of proprietary networks and protocols. Wired+Wireless™ models are also available.

PAC Project Software Suite

Opto 22's PAC Project Software Suite provides full-featured, cost-effective control programming, HMI (human machine interface) development and runtime, OPC server, and database connectivity software for your SNAP PAC System.

Control programming includes both easy-to-learn flowcharts and optional scripting. Commands are in plain English; variables and I/O point names are fully descriptive.

PAC Project Basic offers control and HMI tools and is free for download on our website, www.opto22.com. PAC Project Professional, available for separate purchase, adds one

SoftPAC, OptoOPCServer, OptoDataLink, options for controller redundancy or segmented networking, and support for legacy Opto 22 serial *mistic*™ I/O units.

SNAP PAC Brains

While SNAP PAC controllers provide central control and data distribution, SNAP PAC brains provide distributed intelligence for I/O processing and communications. Brains offer analog, digital, and serial functions, including thermocouple linearization; PID loop control; and optional high-speed digital counting (up to 20 kHz), quadrature counting, TPO, and pulse generation and measurement.

SNAP I/O

I/O provides the local connection to sensors and equipment. Opto 22 SNAP I/O offers 1 to 32 points of reliable I/O per module, depending on the type of module and your needs.

Analog, digital, and serial modules are all mixed on the same mounting rack and controlled by the same processor (SNAP PAC brain or rack-mounted controller).

Quality

Founded in 1974, Opto 22 has established a worldwide reputation for high-quality products. All are made in the U.S.A. at our manufacturing facility in Temecula, California. Because we test each product twice before it leaves our factory, rather than only testing a sample of each batch, we can guarantee most solid-state relays and optically isolated I/O modules for life.

Free Product Support

Opto 22's California-based Product Support Group offers free, comprehensive technical support for Opto 22 products. Our staff of support engineers represents decades of training and experience. Support is available in English and Spanish by phone or email, Monday–Friday, 7 a.m. to 5 p.m. PST.

Additional support is always available on our website: how-to videos, OptoKnowledgeBase, self-training guide, troubleshooting and user's guides, and OptoForums.

In addition, hands-on training is available for free at our Temecula, California headquarters, and you can [register online](#).

Purchasing Opto 22 Products

Opto 22 products are sold directly and through a worldwide network of distributors, partners, and system integrators. For more information, contact Opto 22 headquarters at 800-321-6786 or 951-695-3000, or visit our website at www.opto22.com.

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