IEEE-488.2 GPIB Interface Board
for PCI

GP-IB(PCI)L

This board is PCI-compliant expansion card to control GPIB devices. You can use it installing in PCI-compliant slot of your computer.

Using the bundled API function library package [API-PAC(W32)], you can create Windows application software for this board in your favorite programming language supporting Win32 API functions, such as Visual Basic or Visual C/C++.

* Specifications, color and design of the products are subject to change without notice.

Features

Conforming to the IEEE 488.2 standard, this board can control a variety of compliant external devices.

The product is available over an extended period of time as it uses a uPD7210-compatible GPIB controller developed by CONTEC.

All of GPIB features can be configured by software.

The IFC/SRQ line read feature (with IFC latch capability) is available to application programs.

The timer function is available on application programs, capable of monitoring the time accurately in the Windows environment.

Packing List

Board [GP-IB(PCI)L] …1
User's Guide…1
CD-ROM[API-PAC(W32)] …1

Specification

Item	Specifications
Number of channel	1 channel Conforms to IEEE-488.1, 488.2(GPIB)standards
Transfer format	8-bit parallel, 3-wire handshake system
Transfer rate	1.2Mbyte/sec (Max.)
Capacity of transmission/receiving data	1Mbyte
Signal logic	Negative logic
	L level : 0.8V or less
	H level : 2.0V or more
Interrupt	1 level use
Total cable length	20m or less
Cable length between device	4m or less
Connectable number of device	15 devices (Max.)
I/O address	Any 16-byte boundary
Consumed current	+5VDC 970mA (Max.)
Operating conditions	0 to 50°C, 10 to 90%RH(No condensation)
PCI bus specification	32-bit, 33MHz, 5V
Physical dimensions (mm)	121.69(L) × 106.68(H)
Weight	130g

Board Dimensions

121.69

106.68
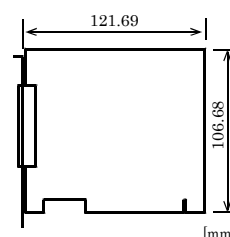
[mm]
The standard outside dimension (L) is the distance from the end of the board to the outer surface of the slot cover.

Support Software

Driver Software Package API-PAC(W32) (Bundled)

API-PAC(W32) is the library software that provides the commands for CONTEC hardware products in the form of Windows standard Win32 API functions (DLL). It makes it easy to create high-speed application software taking advantage of the CONTEC hardware using various programming languages that support Win32 API functions, such as Visual Basic and Visual C++.
It can also be used by the installed diagnosis program to check hardware operations.
See http://www.contec.com/apipac/ for details and download of API-PAC(W32).

< Operating environment >
OS   Windows XP, Server 2003, 2000
Adaptation language Visual C++ .NET, Visual C# .NET, Visual Basic .NET, Visual C++, Visual Basic, Delphi, C++Builder, etc..

**API-GPLV(W32) library supporting LabVIEW
(Supplied: Stored on the API-PAC(W32) CD-ROM)**

API-GPLV(W32) is a driver created according to the National Instruments Corporation's GPIB function style. The driver is software to control the CONTEC GPIB board (PC Cards) using a LabVIEW-based GPIB system or existing application program. It can also be used by the installed diagnosis program to check hardware operations.
CONTEC provides download services
(at http://www.contec.com/gplv/) to supply the updated drivers and differential files.
For details, read Help on the bundled CD-ROM or visit the CONTEC's Web site.

< Operating environment >
OS   Windows XP, Server 2003, 2000
Adaptation language LabVIEW, Visual C++ .NET, Visual C# .NET, Visual Basic .NET, Visual C++, Visual Basic, Delphi, C++Builder, etc..

Cable & Connector

Cable (Option)

GPIB Cable   : PCN-02   (2m)
                            : PCN-04   (4m)

Connector (Option)

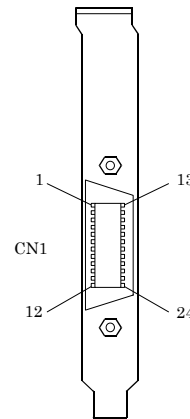GPIB Connector   : CN-GP/C
                            Effective when the cable being plugged into the board interferes with the PC's main unit.

Check the CONTEC's Web site for more information on these options.

Using the On-board Connectors

Connecting a Device to a Connector

To connect an external device to this board, plug the cable from the device into the interface connector (CN1) shown below.

On-board connector   : 555139-1(AMP)
Applicable connector(cable): GPIB cable(IEEE-488 rated)

Connector Pin Assignment

Data bus DIO1	1	13	DIO5 Data bus
Data bus DIO2	2	14	DIO6 Data bus
Data bus DIO3	3	15	DIO7 Data bus
Data bus DIO4	4	16	DIO8 Data bus
Management bus(End or Identify) EOI	5	17	REN(Remote Enable)Management bus
(Data Valid) DAV	6	18	GND (Ground)
Handshake bus (Not Ready for Data) NRFD	7	19	GND (Ground)
(Not Data Accepted) NDAC	8	20	GND (Ground)
(Interface Clear) IFC	9	21	GND (Ground)
Management bus (Service Request) SRQ	10	22	GND (Ground)
(Attention) ATN	11	23	GND (Ground)
(Ground) GND	12	24	Logic GND

CN1