# High-speed IEEE-488.2 GPIB communication board for PCI

## GP-IB(PCI)F, GP-IB(PCI)FL



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

Model	Name	Bus analyzer function
GP-IB(PCI)F	P-IB(PCI)F High-performance & High-speed IEEE-488.2 GPIB Interface Board	
GP-IB(PCI)FL	Low Price & High-speed IEEE-488.2 GPIB Interface Board	None

## **Features**

## Complies with the IEEE-488.2 standard

As the card complies with the IEEE-488.2 standard, you can control any external device that supports this standard.

## Data transfer speed 1.5Mbyte/sec max.

The maximum data transfer speed for communications is 1.5Mbyte/sec.

## Supports bus master operation

The bus master data transfer function enables large quantities of data to be transferred between the board and PC without loading the CPU.

## Internal 2Kbyte FIFO buffers for send and receive

The board has separate 2Kbyte FIFO buffers for sending and receiving data, allowing both small and large volumes of data to be transferred at high speed. Interface messages also use a FIFO to enable high-speed transmission.

## Built-in GPIB bus analyzer function [only GP-IB(PCI)F]

The board features a bus analyzer function. This not only allows the signals on the GPIB bus to analyzed, but also permits signal analysis to be performed while the board is performing GPIB communications

## Built-in SPAS event function

In addition to the functions of the earlier GPIB controller (µPD7210), the board also supports the SPAS event generated when a serial poll occurs. This gives you a high level of flexibility in constructing your system.

#### Internal high-precision timer

The board includes a high-precision application timer to allow accurate time monitoring to be performed under Windows.

## Long term availability

As the board uses a high-speed GPIB controller developed by CONTEC (upwardly compatible with the  $\mu$ PD7210), reliable long term availability is ensured.

#### Diagnostic program

A diagnostic program is supplied to support system development. The diagnostic program can be used to check hardware operation (interrupts and I/O addresses) and to perform simple communication tests with connected devices.

This product is a PCI bus-compatible interface card and which complies with IEEE-488.1 and IEEE-488.2. This product can be used in a PC to control devices that support the GPIB inter-face. The card has separate 2Kbyte FIFO buffers for sending and receiving data, allowing large volumes of data to be transferred at high speed. The card features a bus analyzer function [GP-IB(PCI)F].

Using the provided driver, you can create application software for Windows using various programming languages that support Win32API functions, such as Visual Basic and Visual C++, as well as LabVIEW.

- \* The contents in this document are subject to change without notice.
- \* Visit the CONTEC website to check the latest details in the document.
- \* The information in the data sheets is as of April 2022.

## **Specifications**

Item	GP-IB(PCI)F	GP-IB(PCI)FL	
GPIB_			
Number of channel	1ch, Conforms to IEEE-488.1, 488.2(GPIB)standards		
Transfer format	8-bit parallel, 3-wire handshake system		
Transfer rate	1.5Mbyte/sec		
Data buffer size	2Kbyte send, 2Kbyte receive		
Signal logic	Negative logic L level : 0.8V or less, H level : 2.0V or more		
Cable length between device	4m or less		
Total cable length	20m or less		
Connectable number of device	15 devices (Max.)		
Analyzer buffer size	64K data points (1 data point Control signals + DIO1 to 8)	None	
Bus master section	•		
DMA channels	2ch		
Transfer bus width	32-bit		
Transfer data length	8 PCI Words length (Max.)		
Transfer rate	80Mbyte/sec		
Scatter/Gather function	64Mbyte/ch		
Common section			
I/O address	address Any 128-byte boundary		
Interrupt	1 level use		
Consumed current	5VDC 400mA (Max.)		
Operating conditions	0 - 50°C, 10 - 90%RH (No condensation)		
PCI bus specification	32-bit, 33MHz, Universal key shapes supported *1		
Physical dimensions(mm)	121.69(L) x 63.41(H)		
Weight	110g		
Standard	VCCI Class A, CE Marking (EMC Dire	ective Class A, RoHS Directive)	

<sup>11</sup> This board requires power supply at +5 V from an expansion slot (it does not work on a machine with a +3.3 V power supply alone).

# **Board Dimensions**





The standard outside dimension (L) is the distance from the end of the board to the outer surface of the slot cover

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# **Support Software**

#### NOTE:

This hardware does not support Windows 95, Windows 98 and Windows NT 4.0/3.51.

#### Windows version GPIB Communication Driver API-GPIB(98/PC)

API-GPIB(98/PC) is a Windows version GPIB communication driver. I offer the command to hardware in a standard Win32 API function (DLL) form for Windows. By various programming languages, such as Visual Basic and Visual C++, the highly efficient application software which harnessed the special feature of hardware can be created.

For more details on the supported OS, applicable language and new information, please visit the CONTEC's Web site.

## API-GPLV(W32) library supporting LabVIEW

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

For more details on the supported OS, applicable language and new information, please visit the CONTEC's Web site.

# **Cable & Connector**

#### Cable (Option)

GPIB cable (2m) : PCN-T02
GPIB cable (4m) : PCN-T04

GPIB Connector : CN-GP/C \*1\*2

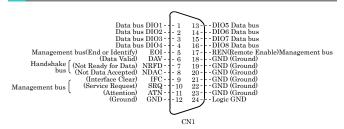
- \*1 Effective when the cable being plugged into the board interfere with the PC's main unit.
- The GPIB connector adapter [CN-GP/C] is bundled with this product as a standard feature
- \* Check the CONTEC's Web site for more information on these options.

# **Packing List**

Board [GP-IB(PCI)F, or GP-IB(PCI)FL] ...1
Setup Guide ... 1
Warranty Certificate ...1

Warranty Certificate ...1
Serial Number Label ...1

## **Connector Pin Assignment**



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