

# GPIB-PCI-104

## ► PCI-104 IEEE-488.2 GPIB Interface

### Features

- GPIB interface for PCI-104 (PC/104-Plus) embedded systems
- 512 Byte transfer FIFO for optimum performance
- GPIB-32.DLL compatible, runs VEE, LabVIEW etc.
- Windows (7, Vista, XP, 2000), Linux, QNX

### Overview

The GPIB-PCI-104 is a PCI-104 GPIB controller card that converts any PCI-104 (PC/104-Plus) based embedded system into a GPIB controller.

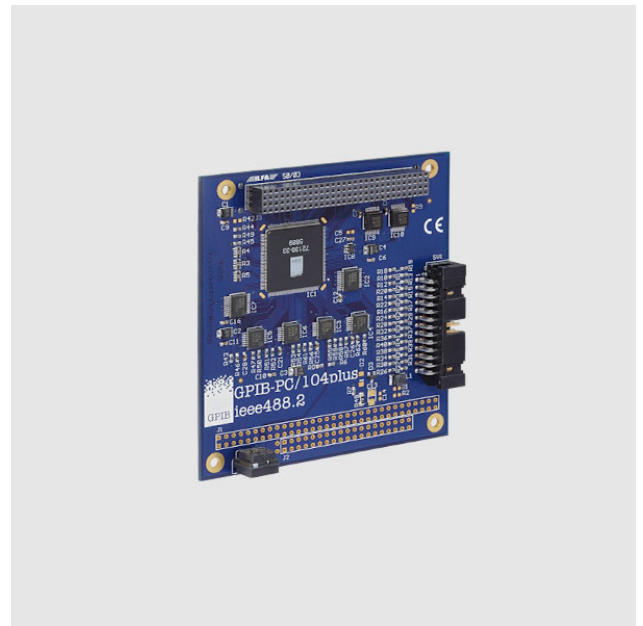
It performs all the basic IEEE-488.1 functions such as talker, listener and system controller. The IEEE-488.2 compatible functions make it fully compliant with the IEEE-488.2 specification. In controller applications, you can control typically up to 15 devices (instruments). If operated as a talker/listener (device) interface it does exchange data and state information with the current controller-in-charge of the GPIB bus. The GPIB-PC104 lets Windows and Linux programs control GPIB devices.

### Hardware

The GPIB-PCI-104 is a PCI based card that plugs into any PCI-104 compatible card stack. For PC/104-Plus Systems, the model GPIB-PCP-104 is available, which also have AT and XT connector for the ISA bus. An optional flat ribbon cable of 30 cm length connects the card and the 24 pin STD IEEE488 connector.

### Software

**Windows** The Windows software set is included with the GPIB-PCI-104. It is a WDM driver and supports Windows (7, Vista, XP, 2000) on all PC compatible platforms. Libraries and header files are included for the Visual C++, Visual Basic, MINGW and Delphi development systems. An industry standard compatible GPIB-32.DLL supports nearly



all applications designed for that interface, including applications developed for LabVIEW 6+, LabWindows, Agilent VEE, TransEra HT-Basic, Agilent Intumlink, and more.

**Linux** The Linux software set is included with the GPIB-PCI-104. It supports the Intel (x86) platform Linux kernel versions 2.4 and 2.6. Thus it is compatible with all Linux distributions based on that kernels, e.g. Ubuntu, RedHat, SuSE etc. Application development using the GNU Compiler Collection (GCC) is supported. The ig++ class library provides all interfaces required to control instruments. In addition, IEEE488.2/SCPI compatible instruments can be implemented using Linux based embedded systems.

## Specifications

### GPIB Capabilities

**IEEE 488.1 Capabilities:** AH1, SH1, T/TE5, L/LE3, SR1, RL1, PP1/PP2, DC1, DT1, C1, C2, C3, C4, C5

**IEEE 488.2 Capabilities:** includes the capability to read the following bus lines: EOI, ATN, SRQ, REN, IFC, NRFD, NDAC, DAV

**GPIB Handshake Rate:** > 1Mbytes/sec

### Environmental and Physical

**Size:** PC/104 form factor, 96 mm H x 90 mm W (3.78 in x 3.55 in)

**Weight (net):** 65 g

**Operating ambient temperature:** 0 to 50°C

**Storage temperature:** -20 to 80°C

**Relative humidity:** 5 to 95%, noncondensing

**Supply Voltage:** 3.3 V  $\pm$ 5%

**Supply Current (max):** 250 mA

### Ordering Information

**GPIB-PCI-104** - Card, Software CDROM

**GPIB-PCP-104** - Card with additional XT and AT connectors for the ISA bus, Software CDROM

**CAB-GPPA** - 30 cm flat ribbon cable with IEEE-488 female connector

## On the Web

Click [www.inesinc.com](http://www.inesinc.com) for more information and resources.



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