

GPIB Interfaces for PC/104 Systems

NI PC/104-GPIB

- Completely IEEE 488.2 compatible
- FIFO buffers to decouple GPIB transfers from ISA bus transfers
- 16-bit ISA bus interface with byte to-word packing and unpacking
- Maximum GPIB transfer rates
 - More than 1.5 Mbytes/s (IEEE 488.1)
 - More than 1.6 Mbytes/s (HS488)
- Software and register compatible with AT-GPIB/TNT
- 8-bit stack compatible with DMA disabled
- Jumper-selectable hardware features
 - 11 interrupt lines
- Three 16-bit DMA channels
- Industrial-grade GPIB controller

Operating Systems

- Windows 2000/NT/XP/Me/9x/3.1
- DOS
- Any operating system (NI-488DDK)

Recommended Software

- LabVIEW
- LabWindows/CVI
- Measurement Studio

Driver Software (included)

- NI-488.2
- NI-488DDK



Overview

The National Instruments PC/104-GPIB is a low-cost, high-performance IEEE 488 interface in a PC/104 module. A National Instruments TNT family ASIC makes the NI PC/104-GPIB a maximum-performance IEEE 488.2 interface board for industrial environments. The TNT ASIC performs the basic IEEE 488 Talker, Listener, and Controller functions required by the IEEE 488.2 standard. The standard PC/104-GPIB is a 16-bit PC/104 interface. An 8-bit version is also available.

Hardware

The PC/104-GPIB is functionally identical to the legacy AT-GPIB/TNT. Refer to the AT-GPIB/TNT on page 672 for detailed hardware information.

Ordering Information

Hardware and Software

PC/104-GPIB 16-bit, 20 in. ribbon/GPIB cable, and NI-488.2 for

Windows 2000/XP	778041-01
Windows NT	777414-01
Windows Me/9x	777415-01
Windows 3.1/DOS	776946-01

PC/104-GPIB 8-bit, 20 in. ribbon/GPIB cable, and NI-488.2 for

Windows 2000/XP	778041-02
Windows NT	777414-02
Windows Me/9x	777415-02
Windows 3.1/DOS	776946-02

Software

NI-488DDK	777430-01
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BUY ONLINE!

Visit ni.com/info and enter *pc104gpi*.

Specifications

IEEE 488 Compatibility

IEEE 488.1 and IEEE 488.2 compatible

Maximum IEEE 488 Bus Transfer Rates

IEEE 488 interlocked handshake	More than 1.5 Mbytes/s
IEEE 488 non-interlocked (HS488) handshake ...	More than 1.6 Mbytes/s

(Actual rates depend on system configuration and instrument capabilities.)

Power Requirement from PC/104 Connector

+5 VDC	50 mA typical, 100 mA maximum
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Physical

Dimensions	9.7 by 9.1 cm (3.8 by 3.6 in.)
I/O connector	Chassis-mount IEEE 488 standard 24 pin terminated to 20 in. ribbon cable that connects to the board

Operating Environment

Ambient temperature	0 to 55 °C
Relative humidity	10 to 90%, noncondensing

Storage Environment

Ambient temperature	-40 to 85 °C
Relative humidity	5 to 95%, noncondensing

Compliance

Online at ni.com/hardref.nsf