

GPIB Interface for PCI Mezzanine Bus

NI PMC-GPIB

- Completely IEEE 488.2 compatible
- FIFO buffers to decouple GPIB transfers from PCI transfers
- Maximum GPIB transfer rates
- More than 1.5 MB/s (IEEE 488.1)
- More than 7.7 MB/s (HS488)
- Complete compatibility with most recent PMC specifications
- Bus-master DMA controller
- Plug-and-play design for easy hardware installation

Operating Systems

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

Recommended Software

- LabVIEW
- LabWindows™/CVI
- Measurement Studio

Driver Software (included)

- NI-488.2
- NI-488DDK



Overview

The NI PMC-GPIB is a low-cost, high-performance IEEE 488 interface for the PMC bus – the PCI Mezzanine Card standard (IEEE P1386.1). It is a standard for mezzanine interfaces for VME motherboards.

PMC is electrically a superset of desktop PCI with a different physical configuration. An NI TNT family ASIC performs the basic IEEE 488 talker, listener, and controller functions required by the IEEE 488.2 standard and increases the maximum data transfer rate of ANSI/IEEE 488.1-1987 to 8 MB/s using the high-speed GPIB protocol (HS488).

The PMC-GPIB is available with NI-488.2 for Windows XP/2000/Me/9x/NT. Alternatively, you can use the NI-488DDK, a comprehensive source-code package for developing applications for other operating systems. NI-488DDK consists of more than 20 board-level functions provided in source code to give you a head start when you must design your own GPIB driver. NI-488DDK, a subset of the NI-488.2, uses the same syntax for straightforward migration of applications from NI-488DDK to NI-488.2.

Ordering Information

PMC-GPIB, NI-488.2, and 2 m GPIB cable for

Windows XP/2000/Me/98.....	778040-01
Windows NT	777485-01
Windows 95	777486-01
Solaris (SPARC)	778928-01

PMC-GPIB, NI-488DDK, and 2 m GPIB cable..... 777431-01

BUY NOW

For complete product specifications, pricing, and accessory information, call 800 813 3693 (U.S.) or go to ni.com/gpib.

GPIB Interface for PCI Mezzanine Bus

Specifications

IEEE 488 Compatibility

IEEE 488.1 and IEEE 488.2 compatible

Maximum IEEE 488 Bus Transfer Rate

IEEE 488 interlocked handshake	1.5 MB/s
IEEE 488 noninterlocked (HS488) handshake	7.7 MB/s
(Actual rates depend on system configuration and instrument capabilities.)	

Power Requirement

+5 VDC.....	600 mA typical
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Physical

Dimensions	
PMC	7.4 by 14.9 cm (2.9 by 5.9 in.)
Connector	
GPIB	Micro D-Sub 25-pin
PMC	32-bit, Universal Signaling

Signaling

PMC VIO	3.3 V/5 V (Universal), 33 MHz
GPIB	HS488, 3-wire

Power Consumption

Typical	100 mA @ 5 V = 500 mW, 3 mA @ $V_{io} \leq 15$ mW
Theoretical maximum.....	129 mA @ 5 V = 645 mW, 10 mA @ $V_{io} \leq 50$ mW

Performance

GPIB	
HS488	7.7 MB/s
3-wire.....	1.5 MB/s

Environment

Operating	
Ambient temperature	0 to 55 °C
Relative humidity	10 to 90%, noncondensing
Storage	
Ambient temperature	-20 to 70 °C
Relative humidity	5 to 95%, noncondensing

Compliance

Refer to the Declaration of Conformity (DoC) for this product for any additional regulatory compliance information. To obtain the DoC for this product, click Declarations of Conformity Information at ni.com/certification.

NI Services and Support



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