

GPIB (IEEE 488) Interfaces

GPIB Interfaces

PXI-GPIB, PXI-8212

- TNT4882C ASIC
 - Completely IEEE 488.2-compatible
 - FIFO buffers to decouple GPIB transfers from PCI transfers
 - GPIB monitor port for board and bus-level diagnostics
 - Complete in-system functional testing with loop-back mode
 - Reduced software overhead
- Maximum GPIB transfer rates
 - 1.5 Mbytes/s using IEEE 488.1
 - 7.7 Mbytes/s using HS488
- MITE ASIC
 - Bus-master DMA controller
 - Completely software configurable
- Plug and Play for easy hardware installation
- Fast Ethernet interface (PXI-8212 only) 100BaseTX and 10BaseT protocols

Driver Software

- NI-488.2 for
 - Windows 2000/NT/Me/9x
 - Solaris
- NI-488DDK for any operating system
 - DOS
 - Digital UNIX
 - HP-UX
 - IRIX
 - VxWorks

Application Software

- LabVIEW
- Measurement Studio



Overview

The National Instruments PXI-GPIB and PXI-8212 are low-cost, high-performance IEEE 488 interfaces for PXI and CompactPCI. The PXI-8212 adds a standard Fast Ethernet interface in a single-slot PXI module, saving slots in your PXI system.

The National Instruments TNT4882C 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 Mbytes/s using our patented high-speed GPIB protocol (HS488).

The PXI-GPIB is available with NI-488.2 for Windows 2000/NT/Me/9x and Solaris. Alternatively, you can use NI-488DDK, a comprehensive source code package for developing applications for operating systems other than Windows 2000/NT/Me/9x or Solaris. 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 NI-488.2, uses the same syntax so that migration of applications between NI-488DDK and NI-488.2 is straightforward.

INFO CODES

For more information, or to order products online visit ni.com/info and enter:

pxigpib
pxi8212

BUY ONLINE!

Specifications

PXI-GPIB and PXI-8212 GPIB IEEE 488 Interface

- Comply with PXI Specification and CompactPCI, PICMG 2.0
- Comply with IEEE 488.1 and 488.2

PXI-8212 Ethernet Interface

- Complies with IEEE 803.2u Fast Ethernet Specification
- Compatible with 10BaseT and 100BaseTX Ethernet standards

Performance

PXI-GPIB and PXI-8212 GPIB Interface

- HS488 7.7 Mbytes/s
- IEEE 488 1.5 Mbytes/s

PXI-8212 Ethernet Interface

- 10BaseT 10 Mb/s
- 100BaseTX 100 Mb/s

Power Requirements

Module	+5 VDC	Total Power
PXI-GPIB	600 mA, typical	3 W, typical
PXI-8212	2 A, maximum	10 W, typical

Physical

- Dimensions 16.0 by 10.0 cm (6.3 by 3.9 in.), 3U
- Weight 140 g (5 oz)
- I/O Connectors
 - IEEE 488 Standard 24-pin
 - External Ethernet RJ-45 (PXI-8212 only) with integrated LEDs

For environmental, safety, and EMC/EMI compliance specifications, please refer to page 19.

Ordering Information

PXI-GPIB and NI-488.2 for

- Windows 2000 778039-01
- Windows NT 777398-01
- Windows Me/9x 777399-01
- Solaris 778247-01
- PXI-GPIB and NI-488DDK 777431-02

PXI-8212 and NI-488.2 for

- Windows 2000/NT/Me/9x 778226-01
- See page 59 for cable options.

Bus Interfaces