

Single-Board GPIB Talker/Listener with USB 2.0 Device Port for PCI

NI PCI-8215

- IEEE 488 Talker/Listener and USB 2.0 device port on a single PCI board
- TNT GPIB ASIC
- NetChip NET2280 USB ASIC
- Maximum GPIB transfer rates
 - More than 7.7 Mbytes/s using HS488
 - More than 1.5 Mbytes/s using IEEE 488.1
- Maximum USB transfer rates
 - More than 30 Mbytes/s using USB High-Speed transfers
 - More than 1 Mbytes/s using USB Full-Speed transfers
- Universal PCI connector for operation in 5 V and 3.3 V PCI slots

Operating Systems

- Windows 2000/NT/XP/Me/98

Driver Software (not included)

- NI-Device Plus
- NI-Device Plus DDK
 - For any operating system
 - Examples included for VxWorks and Linux



Overview

The National Instruments PCI-8215 incorporates a GPIB talker/listener and a USB 2.0 high-speed device port in a single PCI board. The PCI-8215 is intended for use by instrument manufacturers

with the National Instruments NI-Device software to develop I/O connectivity solutions for their instruments. The NI PCI-8215 includes an NI TNT GPIB talker/listener ASIC capable of transfer rates of up to 7.7 Mbytes/s using HS488. The NI PCI-8215 also includes the new NetChip NET2280 USB device ASIC capable of transfer rates up to 30 Mbytes/s using the USB 2.0 high-speed transfer protocol. The NI PCI-8215 cannot be used as a GPIB controller with the NI-488.2 driver software.

Ordering Information

Hardware

NI PCI-8215778632-01

Software

NI-Device Plus778489-02

NI-Device Plus DDK778542-02

Specifications

Physical

Dimensions

PCI 11.99 by 10.64 cm (4.72 by 4.19 in.)

Connector

GPIB IEEE 488.1 24-pin connector

USB Type B receptacle

PCI 32-bit, Universal Signaling

Signaling

PCI V_{IO} 3.3/5 V (universal), 33 MHz

USB USB 2.0 High-Speed, Full-Speed

GPIB HS488, 3-wire

Power Requirements

5 VDC 243 mA (1.22 W), typ
475 mA (2.37 W), max

V_{IO} < 1mA (0W)

Transfer Rates

GPIB

HS488 7.7 Mbytes/s

3-Wire 1.5 Mbytes/s

USB

High-Speed 30.0 MBytes/s

Full-Speed 1.0 MByte/s

Environment

Operating

Ambient temperature 0 to 55 °C

Relative humidity 10 to 90%, noncondensing

Storage

Ambient temperature -20 to 70 °C

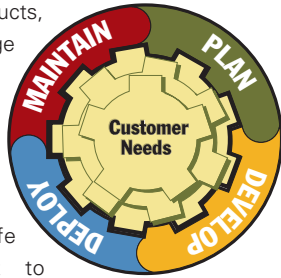
Relative humidity 5 to 95%, noncondensing

Compliance

Online at ni.com/hardref.nsf

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