488-PXI

HI-SPEED GPIB CONTROLLER CARD for PXI CHASSIS

- Adds GPIB Controller capability to any PXI chassis.
  Control GPIB devices from your PXI or cPCI chassis.

- High 1 MHz data transfer rate.
  Reduces test time.

- 32-bit WIN 2K/XP/Vista/7 Compatible Drivers with NI 488.2 style commands.
  Runs LabVIEW, VEE, LabWindows/CVI and all major test programs.

- Multi-controller capable driver.
  Run any mix of PCI, PXI or USB GPIB Controllers.

- Includes ICS's new Explorer program.
  Find, configure and control instruments without writing a program.

- Includes GPIB AnyWhere
  Lets you control your GPIB devices from a remote computer or over the Internet.

CE *Approved*

☑ *RoHS Compliant*

DESCRIPTION

ICS's 488-PXI is a PXI and Compact PCI compatible card that adds a full-function IEEE 488.2 Bus Controller to any PXI or Compact PCI chassis. The 488-PXI performs all of the basic IEEE 488.1 functions such as talker, listener and system controller. Its IEEE-488.2 controller routines make it fully compliant with the IEEE 488.2 specification. The 488-PXI card includes ICS's new 488.2V3 Driver which supports up to sixteen GPIB controllers and runs on all Windows 32-bit operating systems. ICS's 488-PXI card is the easy and economical way to add GPIB control to a PXI chassis and to run automated test programs.
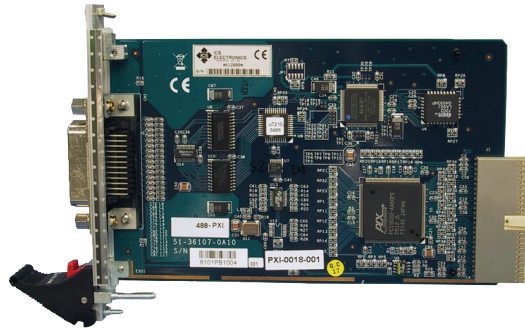

488-PXI GPIB Controller Card

Hardware

The 488-PXI GPIB Controller Card plugs into any PXI or Compact PCI chassis which meets the PXI revision 2.2 specification. Its PCI interface supports both 3.3 volt and 5 volt PCI buses. An on-card FIFO enables the 488-PXI to transfer data over the GPIB bus at rates up to 1 megabytes per second. The cards' data transceiver risetimes do not cause lockup in older GPIB devices and are filtered to reduce PC-GPIB bus noise problems. The 488-PXI cards are Plug & Play compatible and do not require the user to set any switches or jumpers during installation.

Software

ICS's new 488.2V3 multi-controller Driver supports the National Instruments' style 488.1 'ib' and 488.2 command sets with its own GPIB-32.DLL. It is command compatible with GPIB Controllers from National Instruments, Measurement Computing, CEC, and others. ICS'S 488.2V3 Driver supports C, Visual Basic 6, and Visual Basic.NET (2005 and 2008) programs that make GPIB-32.DLL calls.

ICS's 488.2V3 Driver is also compatible with National Instruments' VISA and Agilent's VISA/SICL libraries. This industry standard compatibility lets the 488-PXI card run LabVIEW and LabWindow/CVI, VEE, MATLAB, TestPoint and other programs that make VISA or SICL calls.

ICS Explorer Program

The 488-PXI also includes ICS's new Explorer program which locates and displays all compatible GPIB Controllers and Devices in your system. The Explorer links to Configuration and Communicate forms. The Configure form lets you quickly change the Controller settings from the default values. The Communicate with Instrument form provides interactive control of GPIB devices from the computer keyboard without having to write a program. The Communicate form is ideal for testing the 488-PXI Card, for exercising GPIB devices or for trying out device commands before using them in a program.

GPIB AnyWhere™ Software

The 488-PXI also includes a license for ICS's GPIB AnyWhere™ software that lets you control your GPIB instruments from anywhere over the Internet or over an in-house network. GPIB AnyWhere™ adds a service to the PC with the GPIB Controller and a client to your desktop so that you can run remote tests from your desktop.

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488-PXI Specifications

GPIB Capabilities

IEEE 488.1 Capabilities:
The 488-PXI meets IEEE-STD-488.1 with the following capabilities:
    AH1, SH1, C1, C2, C3, C4, and C9
    E2 Drivers incorporate power up/down protection and signal filtering.

IEEE 488.2 Capabilities:
Includes all required 488.2 controller protocols and the ability to monitor the bus signal lines.

GPIB Handshake Rate
    488-PXI   1 Mbytes/sec

Test Programs Compatibility

488-PXI and 488.2V3 driver support:
  Aligent Vee (3.1 thru 6.0)
  CEC Testpoint*
  Labview (4.0 thru 8.2)
  MCC SoftWire
  MathWorks MATLAB*
  Tektronix WaveStar

Notes: *with optional mfgr drivers

ICS Explorer Program

488.2V3 Driver Capabilities

ICS's new 488.2V3 Driver provides the following capabilities:

Supported Operating Systems
Windows 2K, XP and Vista 32-bit

Commands
Full NI 488.1 and 488.2 command sets except for Parallel Poll and Pass Control.

Number of Controllers
16, any mix of the following ICS Controllers: 488-USB, 488-USB2, 488-PXI and 488-PXI.

Windows Supported Languages:
Microsoft Visual C/C++
Microsoft Visual Basic
Microsoft Visual Studio 2005
    Visual Basic.NET and C/C++
Microsoft Visual Studio 2008
    Visual Basic.NET

Included Utility Programs
ICS Explorer - Performs automatic Controller configuration after driver installation and finds all GPIB devices. Provides Configure, Communicate with Instrument and Installation Verification capabilities.
GPIBkybd - Find and controls GPIB devices.
Configure - Manual Controller configuration.

System Requirements

PXI revision 2.2 compatible chassis.
Windows 2K/XP/Vista/7 32-bit systems with the latest upgrades.
20 Mbytes of free Hard Disk space.
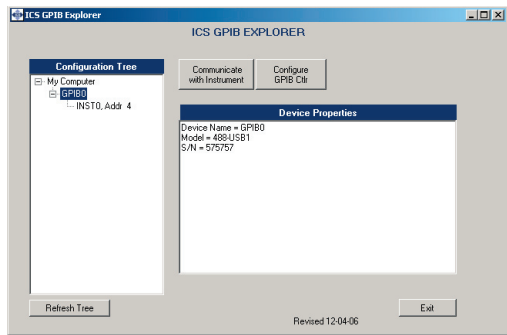.NET Framework 2.0 or later for ICS Explorer.

Physical

Size	5.3 in L x 4.2 in H excluding connectors (13.4 cm L x 10.7 cm H)
Construction	RoHS Compliant
Temperature	
Operating	0 °C to +55 °C
Storage	-20 °C to + 80 °C
Humidity	5-95% RH non-condensing
Shock/Vibration	Normal handling
Connectors	
GPIB	GPIB 24 pin ribbon with metric studs.
Power	400 mA typical 750 mA maximum
RFI/EMI	CE, FCC Class A ED89/336/EEC EN55022, EN55024
Safety	ED 73/23/EEC, EN60950

Included Accessories

Instruction Manual with complete programming instructions and command definitions.
Support CD with ICS 488.2V3 Driver, command libraries, example programs, ICS Explorer and GPIB AnyWhere™ program.

**For more information call
1-800-952-4499**

LabView, LabWindows are trademarks of National Instruments, Austin, TX.
VEE is a trademark of Agilent Technologies, Palo Alto, CA.
GPIB AnyWhere is a trademark of ICS Electronics, Pleasanton, CA.

ORDERING INFORMATION

	Part Number
PXI/compact PCI Controller Card, complete Instrction Manual, 488.2V3 Driver Libraries and ICS Explorer Program	488-PXI
IEEE 488 Bus Cables from 0.5 to 20 meters long	See separate data sheet