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 transfer rate. *Reduces test time.*

- 488.2V4 Driver supports 32 and 64-bit Windows XP, Vista, Windows 7,8 and 10 with a true 64-bit DLL. *Use the full 64-bit address space. No thunk DLLs.*

- NI 'ib' and '488.2' command compatible. *Runs LabVIEW, MATLAB and other programs with NI calls without changes.*

- Works with Agilent, NI and Kikisui VISA libraries. *Supports all major VISA libraries and test programs.*

- ICS's Explorer auto configures your controller. *Find, configure and control instruments in one program.*

- WIN 2K and WIN 2003 support with 488.2V3 Driver. *Full legacy support.*

CE *Approved*

☑ *RoHS Compliant*
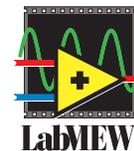
DESCRIPTION

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 488.2V4 Driver which supports up to sixteen GPIB controllers and runs on Windows XP, Vista, Windows 7,8 and 10 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.

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.

Driver Library

ICS's 488.2V4 multi-controller Driver Library provides real 32bit and 64bit support for ICS GPIB Controllers on all Windows XP, Vista, Windows 7,8 and 10 operating systems. ICS's 488.2V4 supports the National Instruments' style 488.1 'ib' and 488.2 command sets with its own GPIB-32.DLL. ICS's GPIB-32.DLL is command compatible with GPIB Controllers from National Instruments, Measurement Computing, CEC, and others.
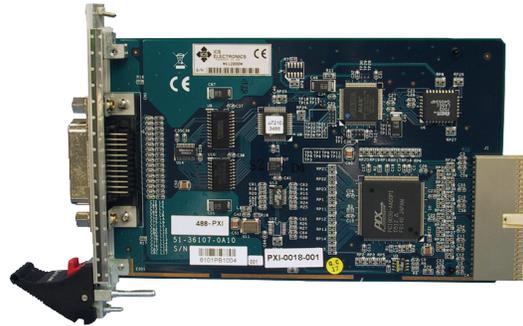
488-PXI GPIB Controller Card

ICS's 488.2V4 Driver supports C, C++, C#, Visual Basic 6, Visual Basic.NET and Delphi 2007 programs that make GPIB-32. DLL calls.

ICS's 488.2V4 Driver is also compatible with National Instruments' VISA and Agilent's VISA and SICL libraries. This industry standard compatibility lets the 488-PXI run LabVIEW and LabWindows/CVI, VEE, MATLAB, TestPoint and other programs that make VISA calls.

ICS Explorer Program

The 488-PXI includes ICS's Explorer program which automatically configures your Controllers then locates and displays all compatible GPIB Controllers and Devices in your system. ICS's Explorer can display up to 16 GPIB Controllers and their instruments.

From the main window you can examine every device, link to the Configuration and Communicate windows or verify the software installation. The Configure window lets you quickly view and change the Controller's settings. The Communicate window lets you interactively control any GPIB device from the computer keyboard without having to write a program. Communicate is ideal for testing the 488-PXI Module, for exercising GPIB devices or for trying out device commands before using them in a program.

LabVIEW

VEE Pro *"Better Tests Faster"*

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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 C12
   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 488.2V4 driver support:
  Agilent IO Library (14.2-16.3) 32-bit only
  Aligent Vee (3.1 thru 8.0)
  CEC Testpoint* with VISA
  Codegear Borland Delphi 2007
  Labview (8.6.1, 2009 and 2010)
  MathWorks MATLAB# with VISA
  Tektronix WaveStar

Notes: *with optional mfgr drivers
        #with MATLAB Instrument Toolkit

488.2V4 Driver Capabilities

ICS's new 488.2V4 Driver provides the following Controller capabilities: C1-C4 and C12.

Supported Windows Operating Systems
32 and 64-bit XP, Vista, Windows 7,8 and Windows 10 with true 32 and 64-bit DLLs that support the full 32/64 bit address ranges.

Commands
All NI 488.1 and 488.2 commands except for the following obsolete commands: ibevent, ibist, ibloc for a board, ibtct, parallel poll, pass control and device mode.

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

Windows Supported Languages:
Microsoft Studio 6 Visual Basic and C/C++/C#
Microsoft Visual Studio 2005, 2008 and 2010
   Visual Basic.NET and C/C++/C#

Supplied Headers and Library Files
C/C++/C# and Visual Basic files for Visual Studio 6 and Visual Studio.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.
VISAkybd - Find and control GPIB devices with a VISA library

488.2V3 Driver

Similar support for Windows 2K and WIN 2003.

System Requirements

PXI revision 2.2 compatible chassis.
Windows XP/Vista/7/8/10 with the latest Service Packs.
50 Mbytes of free Hard Disk space.
.NET Framework 2.0 or later for ICS Explorer.

Physical

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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 Storage	0 °C to +55 °C -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 488.2V4 Driver, command libraries, example programs, ICS Explorer, and VISAkybd programs.

ICS Explorer Program

For more information call
1-800-952-4499

ORDERING INFORMATION

	Part Number
PXI/compact PCI Controller Card, complete Instrction Manual, 488.2V4 Driver Libraries and ICS Explorer Program	488-PXI
IEEE 488 Bus Cables from 0.5 to 20 meters long	See separate data sheet