ISA-GPIB

High-Performance IEEE-488.2 Interface for ISA-Bus Computers

Features

- IEEE 488.2 Standard interface
- Complete Talker/Listener/Controller
- Uses powerful CB7210.2 chip
- Data transfer rates over 1 Megabytes/sec
- REP-INSW block transfer
- 1024-word FIFO buffer
- High Speed State Machine Bus Manager
- 7 Interrupt lines, shared interrupt capability
- Transparent interrupt enabling/disabling

Includes GPIB-Library software

Functional Description

The ISA-GPIB IEEE-488 interface converts any ISA bus personal computer into an instrumentation control and data acquisition system. Connect up to 14 instruments using standard IEEE-488 cables such as the C488-2M, 2 meter IEEE-488 interface cable. The PCI-GPIB is based on ComputerBoards' powerful CB7210.2 GPIB chip.

Greater than 1MB/s Transfer Rates

The ISA-GPIB transfers data over the GPIB at rates in excess of 1 million bytes per second using the maximum IEEE-488 specification cable length (2 meters times the # of devices).

ComputerBoards' advanced high speed, State Machine Bus Manager and the powerful CB7210.2 chip assure the board is able to maintain its high data transfer rate over the GPIB bus. A 1024 Word FIFO buffer and the advanced REP-INSW ISR data transfer method provide the horsepower required to then transfer the data between the GPIB board and the host computer. The high speed state machine also provides byte-to-word packing and unpacking and since words carry twice the information bytes do, packed data requires fewer bus cycles to transfer the same GPIB information.

IEEE-488.2 (GPIB) Compatibility

The ISA-GPIB adheres to ANSI/IEEE Standard 488-1978. Often referred to as the IEEE-488.2 bus, GPIB bus or HP-IB bus, the GPIB (General Purpose Interface Bus) is a standard for instrumentation communication and control for instruments from manufacturers the world over. The GPIB provides handshaking and interface communications over an 8 bit data bus employing 5 control and 3 handshake signals.

Equipped with a PCI-GPIB, a personal computer can:
> Control GPIB instruments.
> Gather data from GPIB test equipment.
> Become a data acquisition station in a GPIB system.

One switch, no jumpers

The ISA-GPIB is so easy to install. Select a base address, plug in the ISA-GPIB and run the installation software then start communicating. The installation software automatically configures the interrupt level and DMA level of the ISA-GPIB.

Software

The ISA-GPIB includes ComputerBoards' powerful GPIB-Library. The library greatly simplifies your programming effort. The PCI-GPIB is also supported by a wide variety of application software packages including SoftWIRE, LabVIEW and many others.

Windows 95/98/2000/NT/3.x and DOS Compatibility

The ISA-GPIB supports virtually all popular operating systems and languages. From legacy applications in DOS to the most modern applications in the newest version of Windows, ComputerBoards is dedicated to providing the support you need.

Specifications

IEEE compatibility	IEEE-488.1 and IEEE-488.2
Transfer Rate	>1 Mbyte/sec
Power	5 Vdc @ 375 mA Typical
I/O Connector	IEEE-488 Standard 24 pin
Operating Temp. & Hum.	0-60 degrees C @ 0-90%
Storage Temp. & Hum.	-40 to 100 degrees C @ 5-90%

Ordering Guide

ISA-GPIB	GPIB Interface board for ISA-bus compatible computers.
C488-2M	2 meter GPIB cable