**PCI-GPIB**

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

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**Description**

The PCI-GPIB IEEE-488 interface converts any PCI 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 PCI-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 because words carry twice the information that bytes do, packed data requires fewer bus cycles to transfer the same GPIB information.

**IEEE-488.2 (GPIB) Compatibility**

The PCI-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.

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**Features**

- IEEE 488.2 Standard interface
- Complete Talker/Listener/Controller
- Uses powerful CB7210.2 chip
- Industry Standard 32-bit PCI bus
- 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

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**Plug & Play - No switches or jumpers**

The PCI-GPIB is true Plug and Play. Plug in the PCI-GPIB, run the installation software, then start communicating. The Plug and Play specification is a standard for system configuration of boards and software which automatically configures the PCI-GPIB.

**Software**

The PCI-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 PCI-GPIB hardware supports all popular operating systems and languages regardless of the operating systems support for Plug and Play. The installation software will manage resources for you on non-Plug and Play systems.

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**Specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td>IEEE compatibility</td>
<td>IEEE-488.1 and IEEE-488.2</td>
</tr>
<tr>
<td>Maximum Transfer Rate</td>
<td>PCI-GPIB-1M  &gt;1 Mbyte/s</td>
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<tr>
<td></td>
<td>PCI-GPIB-300K  300 Kbyte/s</td>
</tr>
<tr>
<td>Power</td>
<td>5 Vdc @ 375 mA Typical</td>
</tr>
<tr>
<td>I/O Connector</td>
<td>IEEE-488 Standard 24 pin</td>
</tr>
<tr>
<td>Operating Temp. &amp; Hum.</td>
<td>0-60 degrees C @ 0-90%</td>
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<td>Storage Temp. &amp; Hum.</td>
<td>-40 to 100 degrees C @ 5-90%</td>
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**Ordering Guide**

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<th>Model</th>
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<tr>
<td>PCI-GPIB-1M</td>
<td>1 MHz, PCI bus GPIB Interface board</td>
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<tr>
<td>PCI-GPIB-300K</td>
<td>300 kHz, PCI bus GPIB Interface board</td>
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<tr>
<td>C488-2M</td>
<td>2 meter GPIB cable</td>
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