Introduction

The PCI-1671UP 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 PCL-10488-2, 2 meter IEEE-488 interface cable. The PCI-1671UP transfers data over the GPIB at rates in excess of 1.5 million bytes per second using the maximum IEEE-488 specification cable length (2 meters times the # of devices). A 1,024-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.

The PCI-1671UP 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 PCI-1671UP, a personal computer can control GPIB instruments, gather data from GPIB test equipment, or become a data acquisition station in a GPIB system.

Specifications

- **GPIB**
  - Compatibility: IEEE 488.1, 488.2
  - GPIB Transfer Rate: 1.5 MB/s
  - OS Support: Windows 2000/XP/Vista/7/10
  - Max. GPIB Connections: 15 (14 Listener)

- **General**
  - Bus Type: Universal PCI V2.2
  - I/O Connectors: 1 x 24-pin IEEE 488
  - Dimensions (L x H): 120 x 64 mm (Low profile MD1)
  - Power Consumption: 5 Vcc @ 375 mA
  - Operating Temperature: 0 – 60°C (32 – 158°F) @ 0-90% RH
  - Storage Temperature: -40 – 100°C (-40 – 212°F) @ 5-90% RH
  - Operating Humidity: 0 – 90% RH, non-condensing

Ordering Information

- **PCI-1671UP**
  - High-perform. IEEE-488.2 Interface PCI Card

- **Accessories**
  - **PCL-10488-2E**
    - IEEE-488 Cable, 2 m