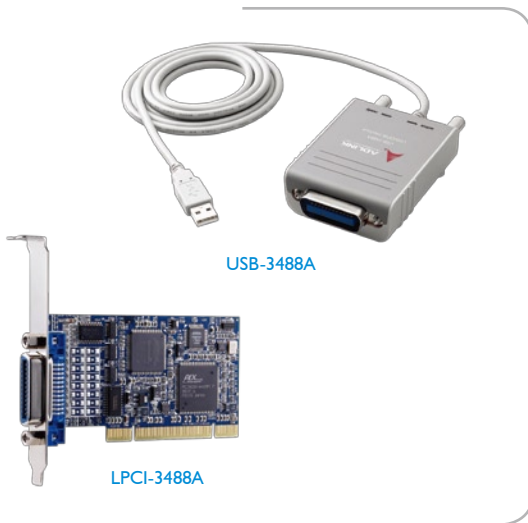


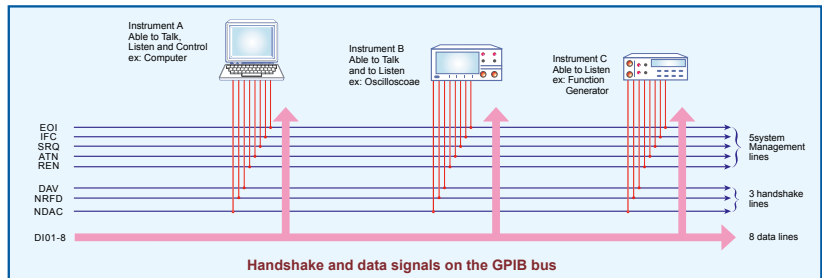
USB/LPCI-3488A

High-Performance IEEE-488 GPIB Interface for USB/PCI



Introduction

The IEEE-488 standard, also known as GPIB, is a bus interface that connects instruments with a computer to form an ATE system. GPIB was initially developed by Hewlett Packard and was recognized as an IEEE standard in 1978. The IEEE-488.1-1978 standard defines the convention for electrical and mechanical bus characteristics, as well as the state diagram for each bus function. In 1987, another standard was derived from the original IEEE-488.1-1978 and known as IEEE-488.2-1978. It was introduced to define data formats, common commands, and control protocols for instruments. In general, IEEE-488.1 defines hardware specifications, and IEEE-488.2 defines software specifications. The IEEE-488 standard has been widely accepted by instrument vendors over the past few decades. Today, GPIB is still the most popular interface between computer and instruments.



Features

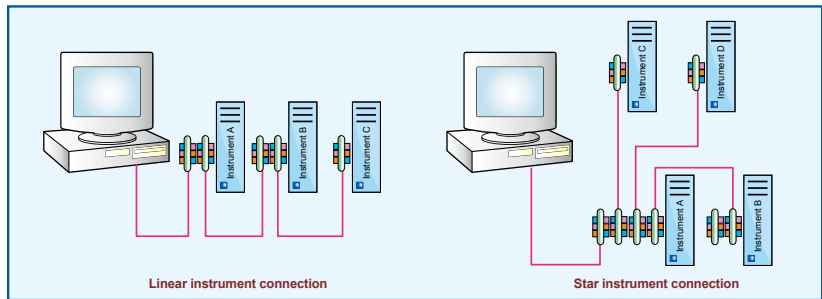
- Fully compatible with the IEEE-488 standard
- Supports a 32-bit 3.3 V or 5 V PCI bus
- Up to 1.5 MB/s data transfer rates
- Built-in FIFO for read/write operations
- Provides APIs compatible with NI-488.2 driver software*
- Supports industrial-standard VISA library
- Interactive utility for testing and diagnostics
- Easy GPIB connectively for laptop computer (USB-3488A)
- Plug and Play interface; No GPIB cable required for instrument connection (USB-3488A)
- 2 M USB cable attached (USB-3488A)
- USB 2.0 compatible (USB-3488A)
- No external power required (USB-3488A)

Operating Systems

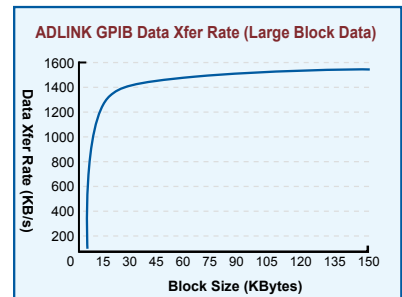
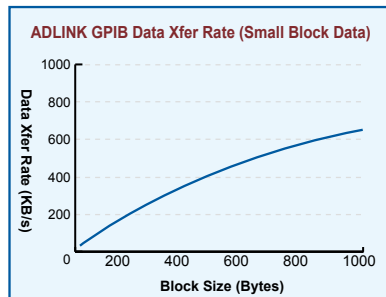
- Supports Windows 7/Vista/2000/XP/Server 2003

Recommended Software

- VB/VC++/BCB
- LabVIEW*
- LabWindow/CVI*



ADLINK's USB-3488A and LPCI-3488A controller interface cards are fully compatible with the IEEE-488.2 instrumentation control and communication standard and are capable of controlling up to 14 stand-alone instruments via IEEE-488 cables. The USB-3488A and LPCI-3488A are designed to meet the requirements for high performance and maximum programming portability. The USB-3488A and LPCI-3488A is developed using ADLINK's intellectual property in FPGAs which incorporates a GPIB controller, provides capability, and supports a transfer rate up to 1.5 MB/s. With APIs that are compatible with NI-488.2* driver software and VISA support, the USB-3488A and LPCI-3488A offer the best compatibility with your existing applications and instrument drivers



Performance

ADLINK's expertise in PCI and PXI interface cards was leveraged when developing these newly designed GPIB interface cards. The LPCI-3488A, which is the low-profile PCI form factor, supports both 3.3 V and 5V PCI buses and can be adapted to most industrial and desktop computers. A built-in FIFO is placed between the GPIB bus and PCI controller to buffer GPIB read/write operations. This FIFO eliminates the gap between the slow GPIB bus (~1.5 MB/s) and the fast PCI bus (132 MB/s), the maximum GPIB transfer rates of LPCI-3488A is 1.5 MB/s, and dramatically increases overall system performance.