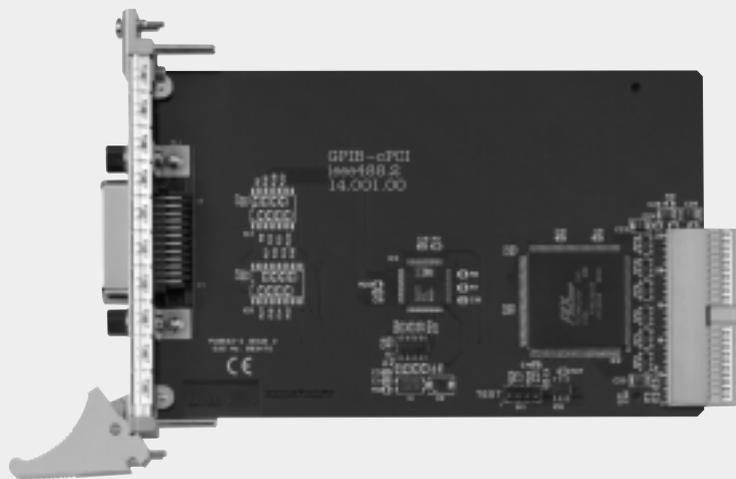


cPCI-GPIB

IEEE-488.2 interface for PXI and CompactPCI

Features

- GPIB (IEEE-488.2) interfaces for ISA, PCMCIA (PC-Card), PCI, PXI®, cPCI
- ESD board - 25 KV (5s) and 40 A (20µs) available for PCI, CompactPCI and PXI® Special data sheets on request
- Windows®95/98 plug & play compatible
- > 1 MByte/sec in programmed I/O
- Synchronized GPIB controller with IEEE-488.2 hardware Trigger Disable
- HP-IB driver (SICL/TULIP) for HP-VEE, HP-Basic and HP-BenchLink
- Compatible with HP-VEE, HT-Basic TestPoint, DIAdem®, Visual Designer, DASyLab®, LabView®, Visual-C++®, Visual-Basic®, Delphi etc.
- Options: GPIB driver for Windows CE®
- IEEE-488.2 Device Driver (C-Source) for NT, CE, Linux, QNX, VxWorks, OS9, psos, LynxOS etc.



Introduction

cPCI-GPIB interface system for MS-Windows® 95/98/NT/2000 completely support the IEEE-488.2, SCPI, SICL/TULIP (HP) and VISA standard and may be operated as system controller or as device in CompactPCI and PXI computer systems.

The main goal during the development of the interface series was to create a system that is almost fully automatic with a single system nucleus IEEE488.2-BIOS and a standard user interface. It also should have a well-known command syntax for all high level languages. This led to the decision to use the HP syntax (Hewlett Packard / HP-Basic) for the command structure, and also to the development of the ines command interpreter.

Automatic software installation and hardware test

A short command install the GPIB driver software and tests the functioning of the interface card.

The GPIB driver for the Windows® operating system exclusively consists of DLLs, which can be subdivided in three groups: Command Interpreter, Function-Library and C-Library, Runtime Help and Error Messages, ines IEEE488.2-BIOS (IEEE-Basic Input/Output System). This has the advantage that IEEE488.2 applications do not use up any hard disk memory unnecessarily by multiple

allocation with identical codes. This would be the case using conventional libraries.

HP-Basic syntax

The HP syntax (HP-Basic) has been chosen as the IEEE-488 command language, because many users are already familiar with it. Forty-seven ines commands are available to the user. The ines command interpreter was developed to allow HP-compatible programming (HP syntax) in any high level language.

IEEE488.2 Device Driver Software

For instrument applications or embedded operating systems ines decided to ease the upgrading of the IEEE488.1 to 488.2 standard definitions with SCPI by offering the ines-IEEE488.2 device driver software in a package together with the developer kit of the chip. The licence for the driver is free of charge and provides the user with the latest features of the IEEE488.2. This software provides routines to the iGPIB chip in IEEE488.2 devices. It may also be used for systems which do not use the IEEE488.2 protocol, but require a GPIB stream-like interface. The software is written in ANSI compatible C and may be compiled for any microprocessor. The iGPIB developer kit includes the ines-IEEE488.2 device driver software (for instruments only). This software may be adapted to any hardware platform

easily. For demonstration reasons ines provides a demo package for PC's.

The demo shows how to use the device driver software and reduces any programming effort for the engineer.

Software compatibility

The ines GPIB boards are compatible with the most major programs in test and measurement such as HP-VEE, HP Instruments Basic for Windows, HP-BenchLink, HP-Basic for Windows, HT-BASIC, DaDisp488, DASyLab®, DIAdem®, DIA/DAGO-PC®, FRAME/FAMOS®, TestPoint, Viewdac, ASYST®, Labtech Notebook, Visual Designer, LabWindows®, LabView® etc.

Ordering Information

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