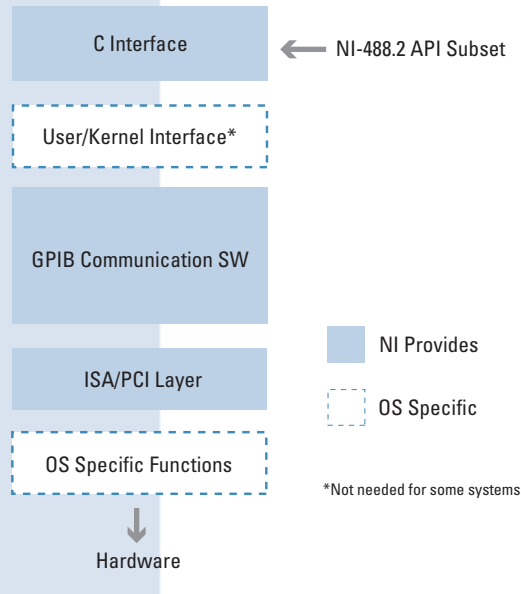


# GPIB Source Code Software

## NI-488DDK

- Source code package for developing GPIB drivers
  - Same API as NI-488.2
  - Transparent migration to NI-488.2
  - Includes all necessary GPIB functionality
  - Designed for the following GPIB controllers:
    - PCI-GPIB
    - PXI-GPIB
    - PMC-GPIB
    - AT-GPIB/TNT
    - PC/104-GPIB
    - PCI-8232/PXI-8232\*
    - PCI-GPIB/LP
- Examples included for:
    - DOS
    - Tru64 UNIX (Digital UNIX)
    - HP-UX
    - IRIX
    - VxWorks

\*NI-488DDK provides only GPIB controller functionality



## Overview

NI-488DDK is a comprehensive source code package for developing GPIB controller applications for operating systems other than those for which we offer a standard NI-488.2 driver. NI-488DDK consists of more than 20 board-level functions provided in source code to give you a head start when you must design your own GPIB driver. The NI-488DDK, a subset of our NI-488.2, uses the same syntax so that migration of applications from the NI-488DDK to NI-488.2 is straightforward.

## Functionality

NI-488DDK includes all necessary IEEE 488.1 board-level synchronous functions to implement a GPIB driver successfully. This group of functions is an exact subset of NI-488.2. NI-488DDK functions keep the same syntax as the NI-488.2 API to ease migration from the driver you implement to a full NI-488.2 driver in the future.

To get your application up and running quickly, you need to add only the specific operating system features necessary to implement a driver in your particular OS. You do not need to modify the GPIB code. The diagram above shows a breakdown of the driver. Each block is classified as implemented by NI-488DDK or as needing the user to implement it. As you can see, you do not need to implement any GPIB-specific functionality, only OS specific functionality, such as:

- Routing hardware interrupts to interrupt service routines already written in NI-488DDK
- Handling the board resources assignment
- Mapping memory and process/thread management routines

## Code

For even faster implementation of the GPIB driver, NI-488DDK includes example OS implementations for:

- DOS (for full driver availability, see page 654)
- Tru64 UNIX (Digital UNIX) (for full driver availability, see page 645)
- HP-UX (for full driver availability, see page 658)
- IRIX
- VxWorks

We have full NI-488.2 drivers for DOS, Tru64 UNIX, and HP-UX for some of our GPIB controllers. NI-488DDK is recommended only if there is no NI-488.2 driver available for the GPIB interface and OS that you need.

Because you need to add only specific OS functionality to implement the driver, if the OS that you need is among the examples included, you have an almost final version of the driver. If the OS that you're looking for is not included, you can study the different examples and implement your driver following the examples of the OS that most closely resembles yours.

## Ordering Information

NI-488DDK.....777430-01

### BUY ONLINE!

Visit [ni.com/info](http://ni.com/info) and enter `ni488ddk`.