

AT-GPIB and LynxOS Compatibility

The built-in GPIB Talker/Listener/Controller port on your VXIpc-486 module is application compatible with the National Instruments AT-GPIB plug-in board, the industry-standard GPIB interface for ISA (PC AT) computers. Your VXIpc-486 port uses the same GPIB hardware circuitry as the AT-GPIB, including the NAT4882 and Turbo488 custom ASICs. These custom ASICs give your VXIpc-486, like the AT-GPIB, high GPIB performance capable of achieving a GPIB data transfer rate of 1.3 MB/s for both reads and writes. In addition, your VXIpc-486 is compatible with IEEE 488.2 and SCPI (Standard Commands for Programmable Instruments).

Because the GPIB port on your VXIpc-486 is similar to the AT-GPIB, your kit includes the manual *Getting Started with Your AT-GPIB/TNT and the NI-488.2M Software for LynxOS* along with the NI-488.2M software. The GPIB port is built into your VXIpc-486; however, not all of the information in the AT-GPIB getting started manual is relevant to your VXIpc-486. For example, the hardware installation procedure for the AT-GPIB given in Chapter 2, *Hardware Configuration and Installation*, does not apply to your VXIpc-486.

Chapter 3, *Software Installation and Configuration*, of the AT-GPIB getting started manual contains step-by-step instructions for changing the configuration settings for an AT-GPIB board. This information is not relevant to your kit, however, because the settings for your VXIpc-486 are fixed in hardware and cannot be changed. On your VXIpc-486, the base I/O address is fixed at 180 (hex), the DMA channel is fixed at 5, and the interrupt line (IRQ) is fixed at 11. The base I/O address is different from the default setting for an AT-GPIB, as shown in Table 2-1 in Chapter 2 of the AT-GPIB getting started manual. The NI-488.2M software uses the proper default settings for the VXIpc-486. Keep in mind that if you install any plug-in boards into a VXIpc-486 expansion kit, these boards must not conflict with the settings of your VXIpc-486 GPIB port.

Note: *While the VXIpc-486 GPIB port is similar to the AT-GPIB, it is slightly different in design. As a result, the NI-488.2M Software for the AT-GPIB and LynxOS does not support the function calls `iblines`, `ibln`, and `FindLstn` on the VXIpc-486.*