# GPIB Getting Started
# User's Guide
**for**
**LPCI-3488A, PXI-3488, USB-3488A**







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Recycled Paper

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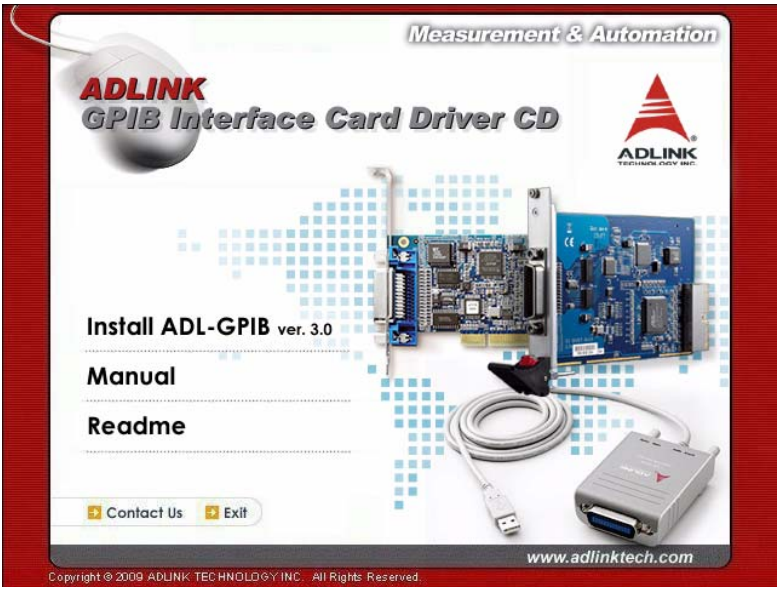
## Getting Started

This GPIB Getting Started User's Guide is for the following ADLINK GPIB products:

- LPCI-3488A
- PXI-3488
- USB-3488A

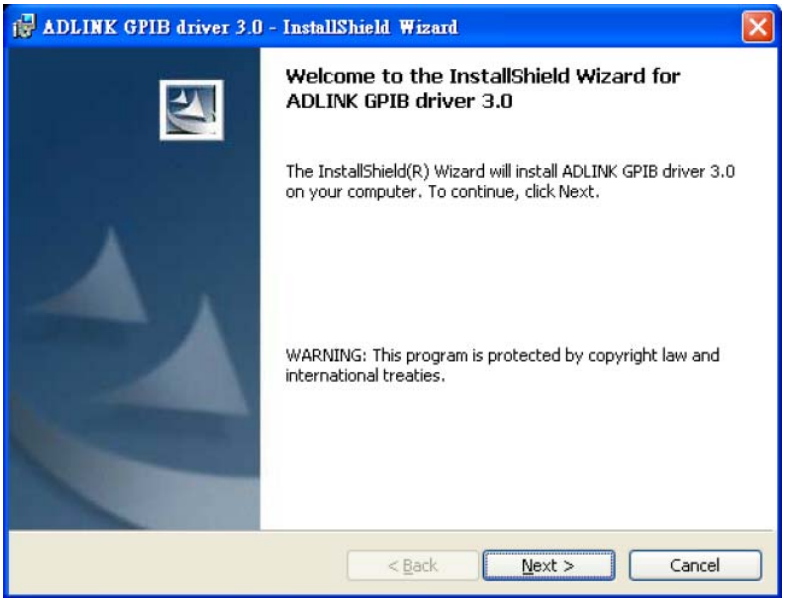
**Step 1.** Install the software and driver

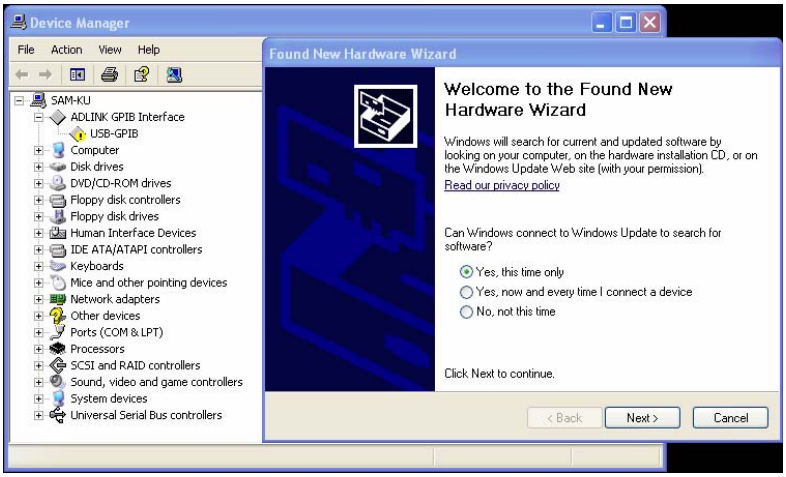
1. Insert the ADLINK GPIB Driver CD (ADLINK provides drivers for LPCI-3488A, PXI-3488 and USB-3488A).
2. Run **x:\Software Package\Setup.exe** to launch the setup program (x: denotes your optical disc drive). A wizard will automatically appear to guide you through the setup procedure.





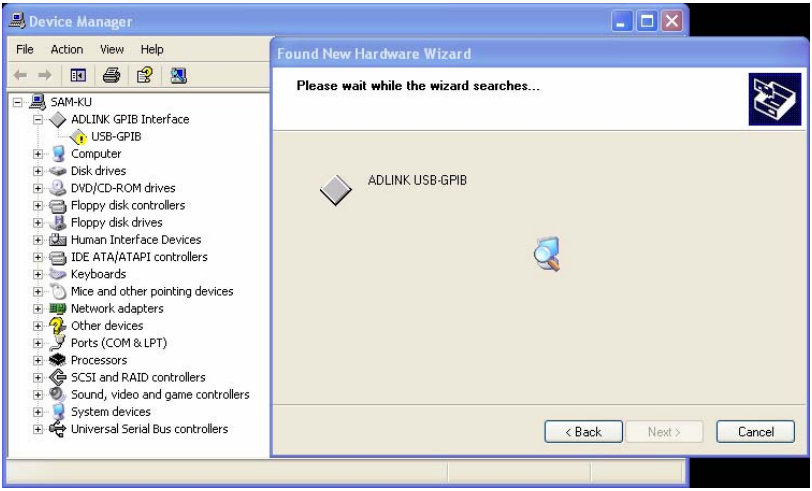
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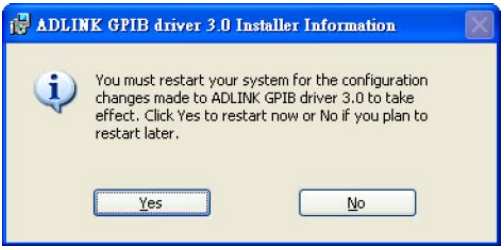




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**Step 2.** Install ADLINK GPIB Products

**LPCI-3488A Installation Procedures**

Please follow the instructions to install the LPCI-3488A into your system.

1. Turn off the computer.
2. Turn off all accessories (printer, modem, monitor, etc.) connected to the computer.
3. Open the computer case.
4. Select a 32-bit PCI slot. PCI slots are shorter than ISA or EISA slots, and are usually white or ivory.
5. Before handling the PCI cards, discharge any static buildup on your body by touching the metal case of the computer. Hold the edge of the board and do not touch the components.
6. Position the board into the selected PCI slot.
7. Secure the card in place at the rear panel of the system.
8. Replace the computer case cover.
9. Restart the computer.





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## PXI-3488 Installation Procedures

Please follow the instructions to install the PXI-3488 into your PXI chassis.

1. Turn off the system.
2. Align the module's edge with the card guide in the PXI chassis.
3. Slide the module into the chassis, until resistance is felt from the PXI connector
4. Push the ejector upwards and fully insert the module into the chassis.
5. Once inserted, a "click" can be heard from the ejector latch.
6. Tighten the screw on the front panel.
7. Restart the computer.





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## USB-3488A Installation Procedures

Please follow the instructions to install USB-3488A in your system.

1. Connect the USB-3488A to any USB port
2. After several seconds, the "Ready" LED turns green, the USB-3488A is ready.





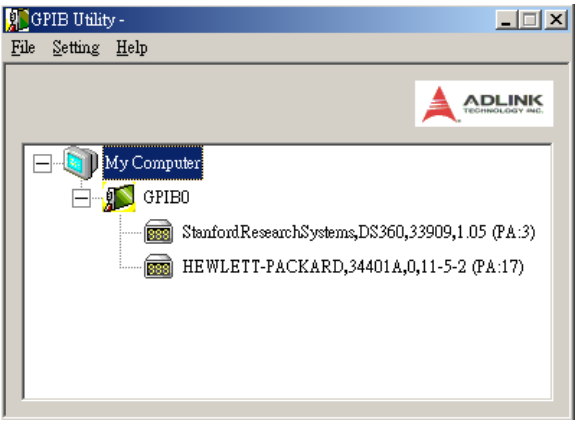


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**Step 3.** Use the GPIB Utility to check basic functionality

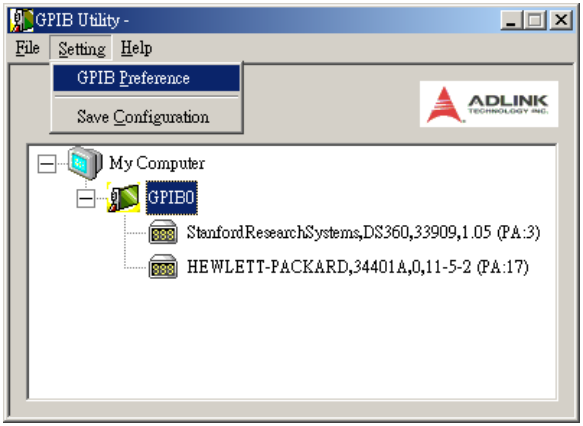
The ADL-GPIB driver package also provides an “ADLINK GPIB Utility” utility program to diagnose and verify GPIB connections. It is located on the ADL-GPIB installation directory: *C:\ADLINK\ADL-GPIB\Utility\GPIB Utility.exe*.

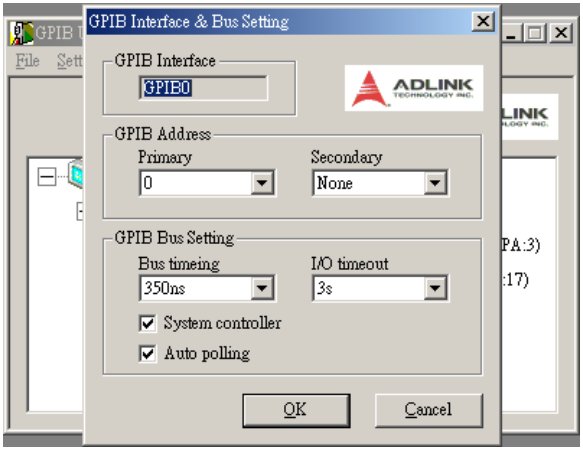
1. Launch the GPIB Utility.exe. A window appears to show all installed GPIB interfaces and instruments




2. Click on a GPIB interface (GPIB0, GPIB1, etc.) and select “**Setting**” > “**GPIB Preference**”. A “*GPIB Interface & Bus Setting*” dialog appears to enable configuration of the GPIB interface.


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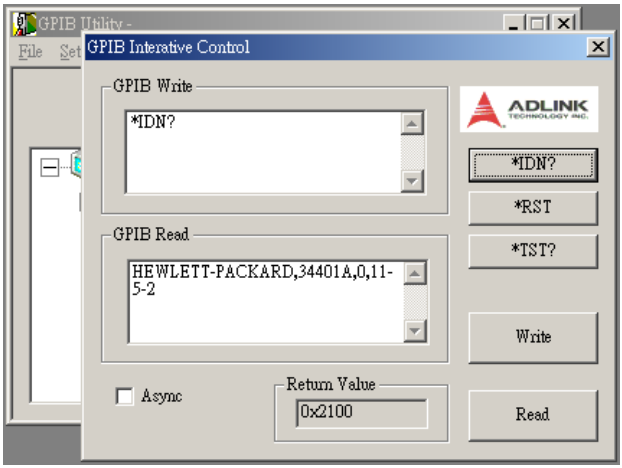





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3. Double click on a connected GPIB instrument. A '"*GPIB Interactive control*" dialog appears to allow write command strings to be inputted into the GPIB instrument and read the result.



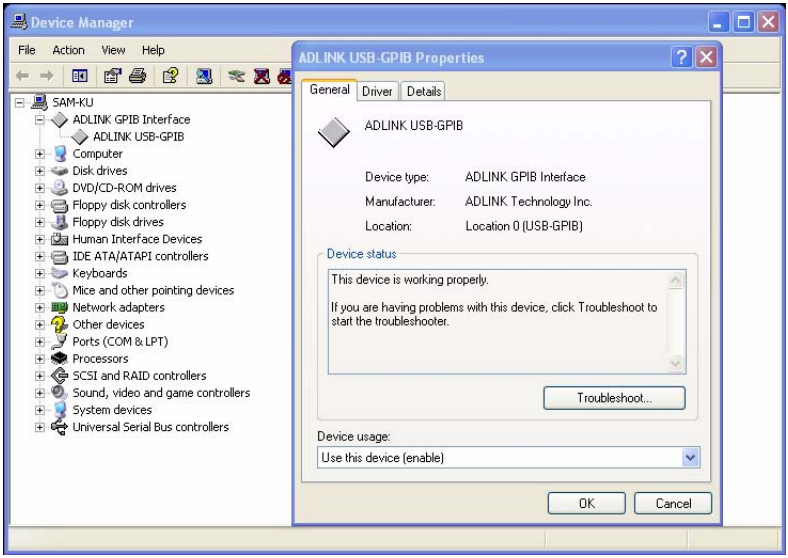



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**Step 4.** Troubleshooting

If any problems occur when testing your ADLINK GPIB product, please check the following two things:

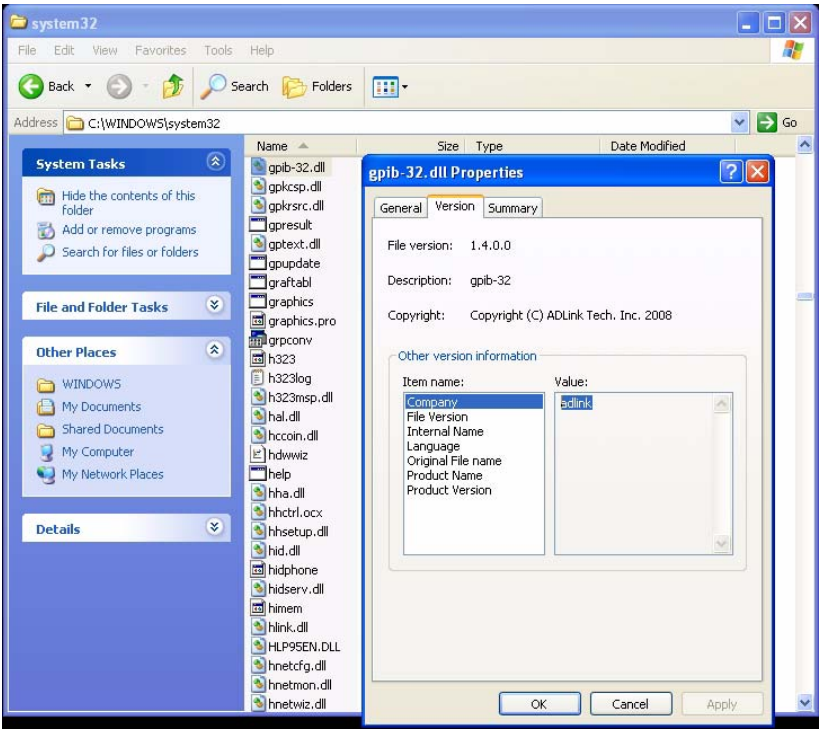
1. To check if ADLINK GPIB is displayed in the Windows Device Manager.





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2. Check the file information of the gpib-32.dll. It should be from ADLINK



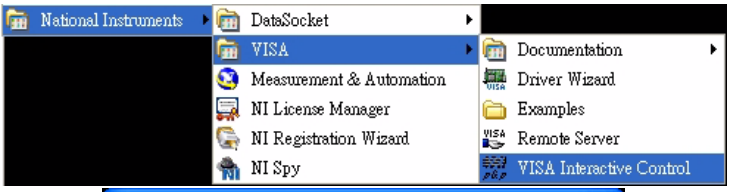

Note: If the gpib-32.dll version is correct and LPCI-3488A/PXI-3488/USB-3488A is properly displayed in the Device Manager, please contact our technical support to get debug tool.

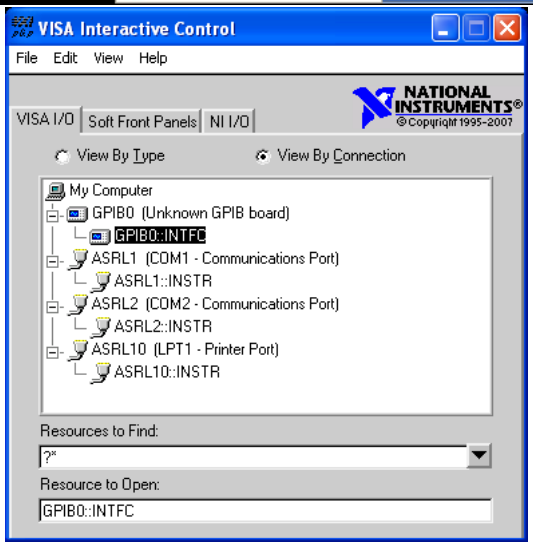

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## Using ADLINK GPIB Products in LabVIEW® for NI-VISA® Application Development

ADLINK GPIB products are full compatible with NI-VISA. Existing NI-VISA programs can be used with ADLINK hardware with the following steps:

1. Install NI VISA. The ADLINK-GPIB driver is compatible with NI-VISA 2.6.1 up to 4.5 (NI VISA can be freely downloaded from the NI website).
2. Install the ADLINK GPIB driver (ADL-GPIB)
   - ▷ Obtain from the ADLINK GPIB CD
   - ▷ Download from the ADLINK website: http://www.adlinktech.com/GPIB/index.html
3. Directly use the NI VISA Interactive Control to check if the tool can detect ADLINK GPIB in the VISA I/O tab-sheet.

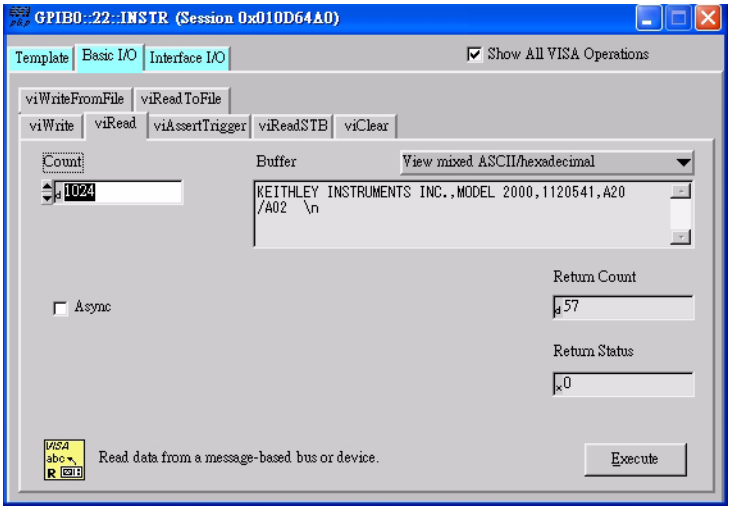




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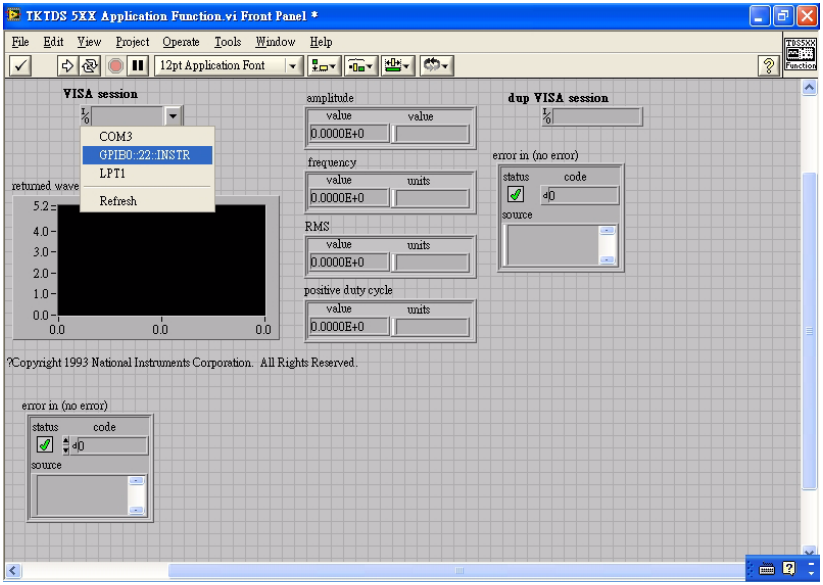
4. Double click the ADLINK GPIB device to launch its advanced I/O control panel. Execute *IDN? SCPI command in the viWrite panel and run viRead to retrieve the result. Below is an example showing a Keithley DMM Model 2000 detected by the ADLINK GPIB through NI-VISA:





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5. After performing basic tests, you can run a premade sample program provided by instrument vendor. Below is an example to control a Tektronic 540A digital scope through a VISA session.
   Existing applications under NI-VISA can also be executed through the ADLINK GPIB without needing to rewrite the program.



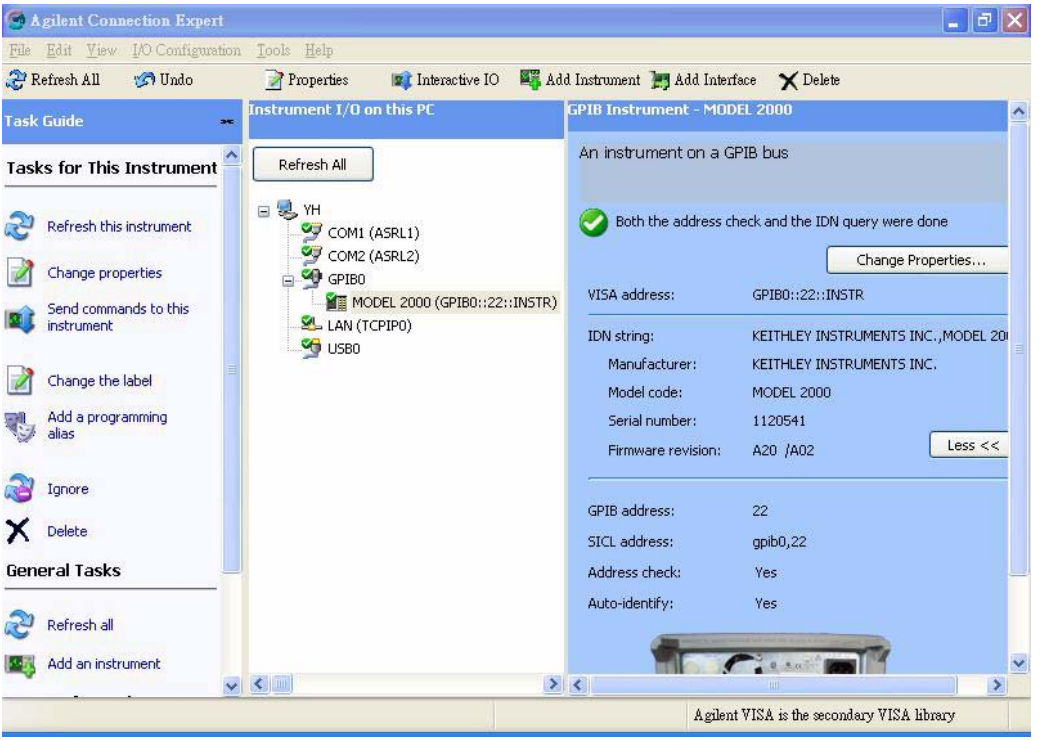


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## Using ADLINK GPIB Products in HP VEE Pro for Agilent-VISA Application Development

ADLINK GPIB products are full compatible with Agilent-VISA. Existing applications under Agilent-VISA can be used with ADLINK hardware with the following steps::

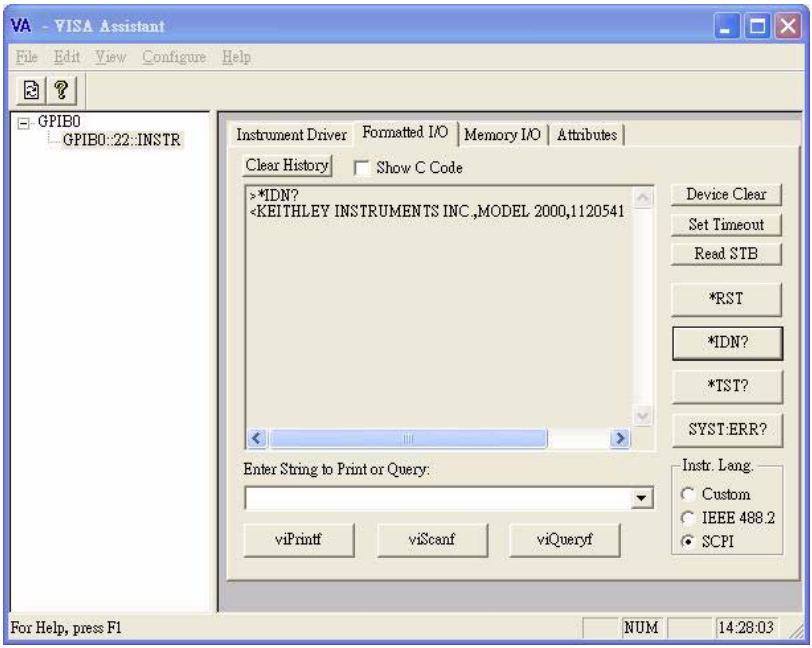
1. Install Agilent VISA. The ADLINK-GPIB driver is compatible with Agilent VISA.
2. Install the ADLINK GPIB driver (ADL-GPIB)
   - ▷ Obtain from ADLINK GPIB CD
   - ▷ Download from the ADLINK website http://www.adlinktech.com/GPIB/index.html
3. Use the Agilent Connection Expert to directly check if the tool can detect the ADLINK GPIB in the Treeview.





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4. Select the device detected by the GPIB and launch the advanced VISA Assistant utility from the "Tools" menu. Execute *IDN? SCPI command in the Formatted I/O tab-sheet to retrieve the result. Below is an example showing a Keithley DMM Model 2000 detected by the ADLINK GPIB through Agilent-VISA.





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