
Procedure to set up an HPIB 82350B card on an M57. M58 or C20x PC

Parts required

Table 1: Parts required

Part Number	Description	Qty
289000764	Kit, HPIB Card, Inter, PCI	1

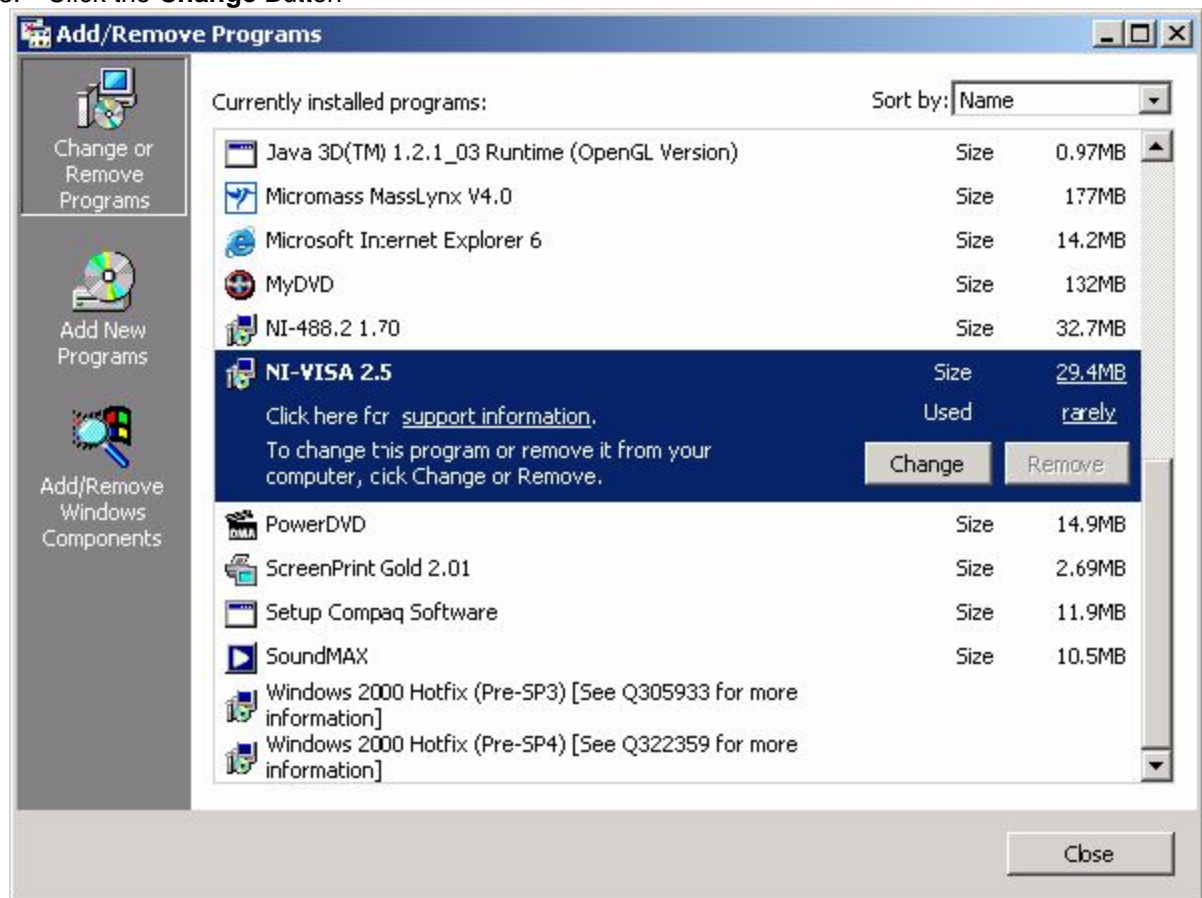
Procedure

The procedure to set up this card consists of four sections:

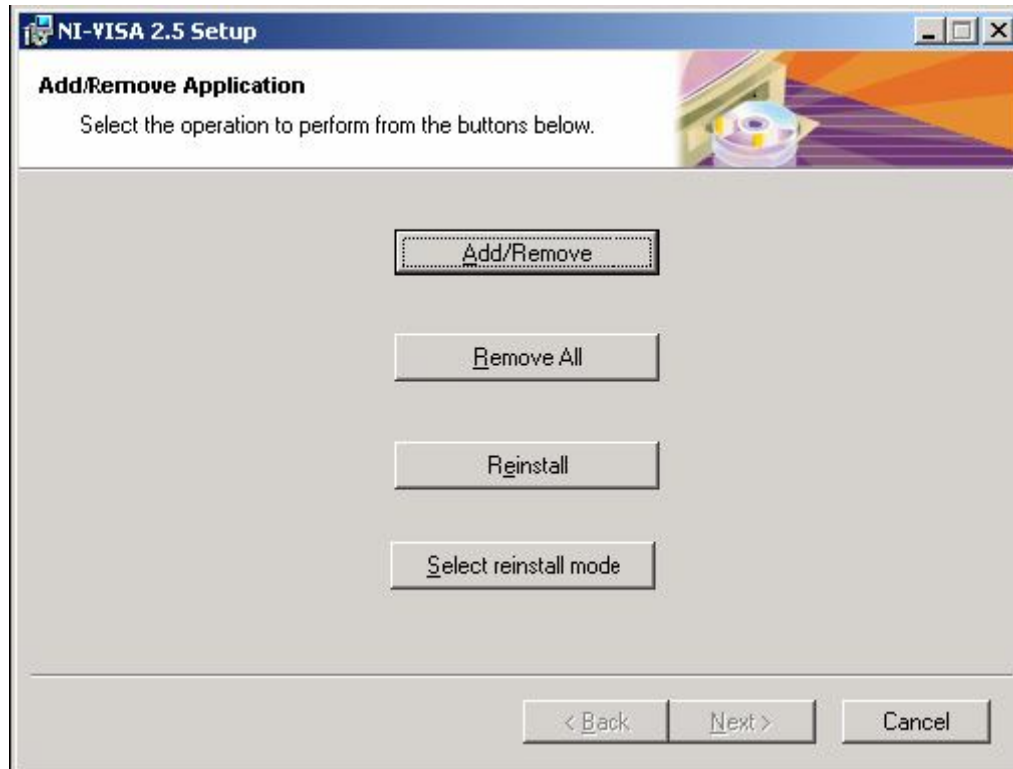
1. Removing the National Instrument Drivers, VISA and NI Explorer Software and installing the 82350B card
2. Installing the drivers
3. Configuring IO interface of the card
4. Configuring GPIB addresses of the A1100/1200 modules

Removing the National Instruments Drivers, VISA and NI Explorer Software

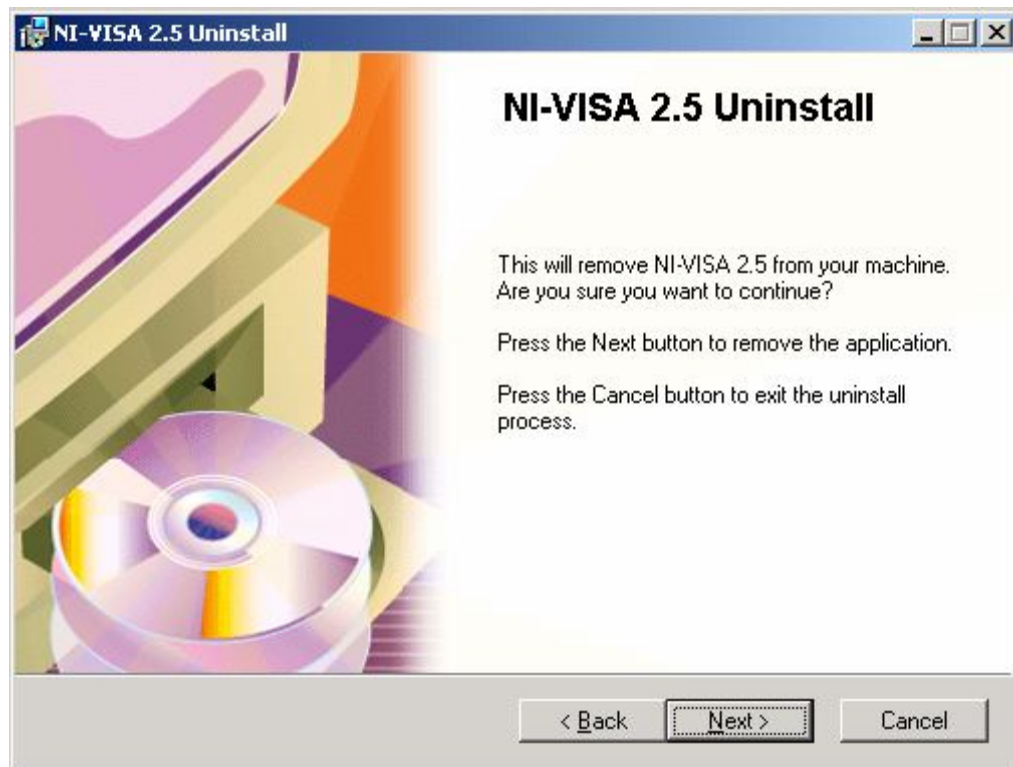
1. Click **Start – Control Panel**. Click **Add or Remove Programs**.
2. Scroll down the list and Select the **NI-VISA** program for removal if it is listed
3. Click the **Change** Button



4. Click **Remove All**.



5. Click **Next**.



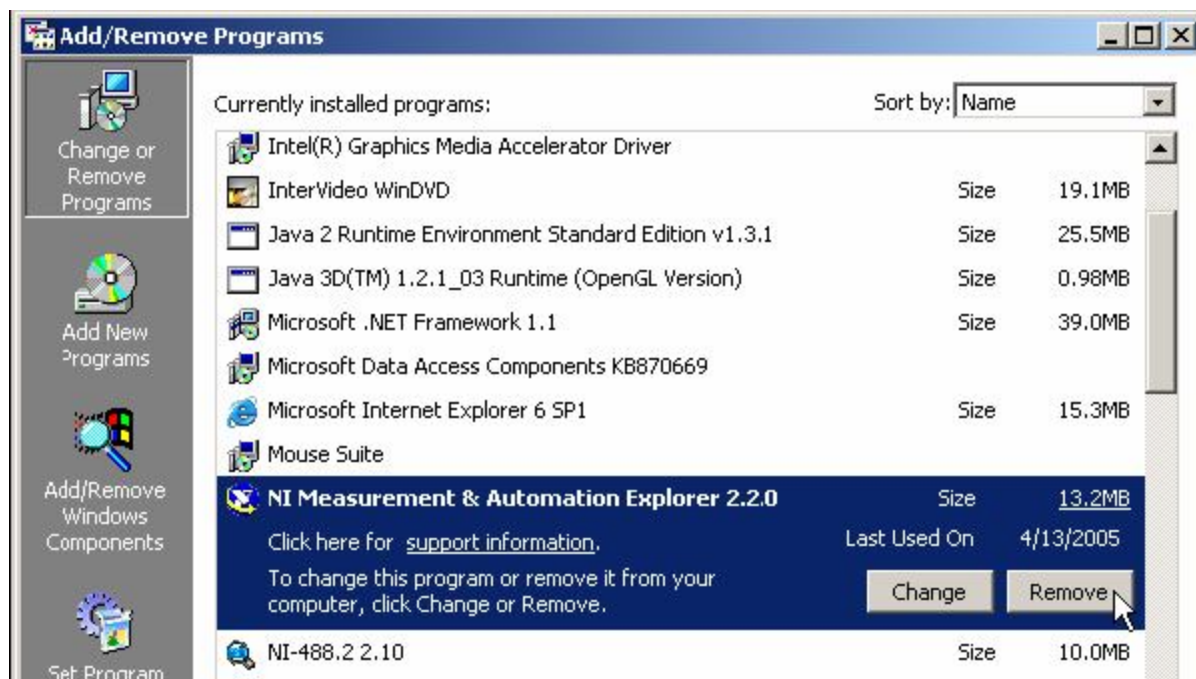
6. Verify that **Remove** is selected and click **OK**.



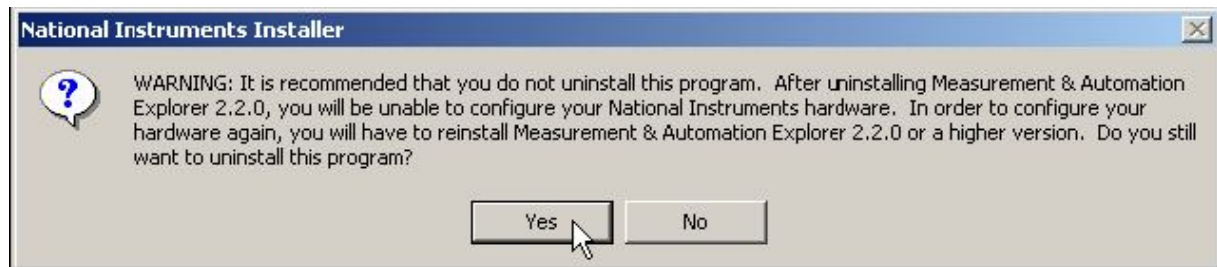
7. Click **Finish**.



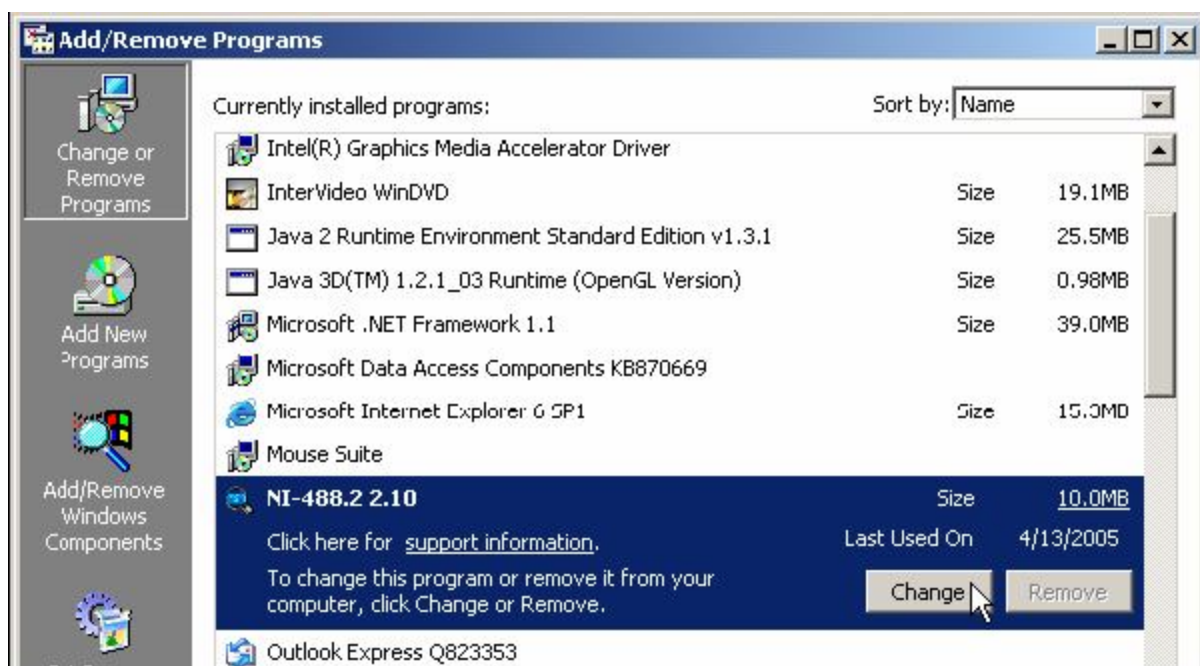
8. If **NI Measurement & Automation Explorer** is listed, select it and click the **Remove** button. If **NI-VISA** it is not listed, go to **Step 10**.



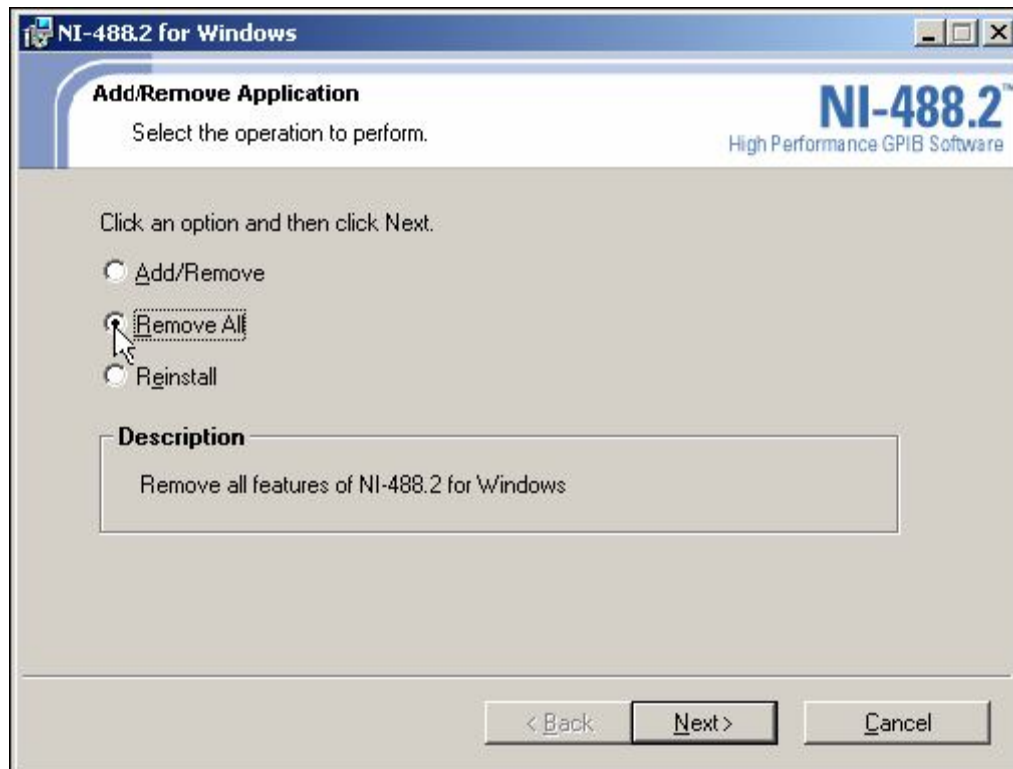
- Click **Yes** at the warning message. The program will be uninstalled.



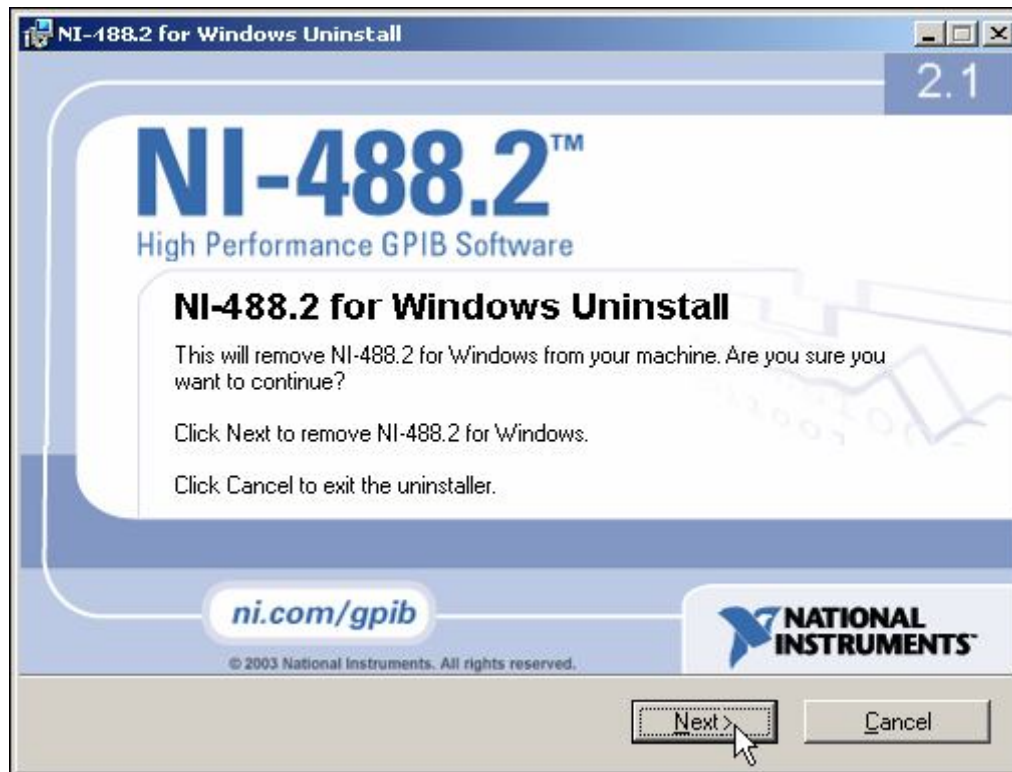
- Back at the Add/Remove screen, select the **NI-488.2** program for removal. Click the **Change** Button.



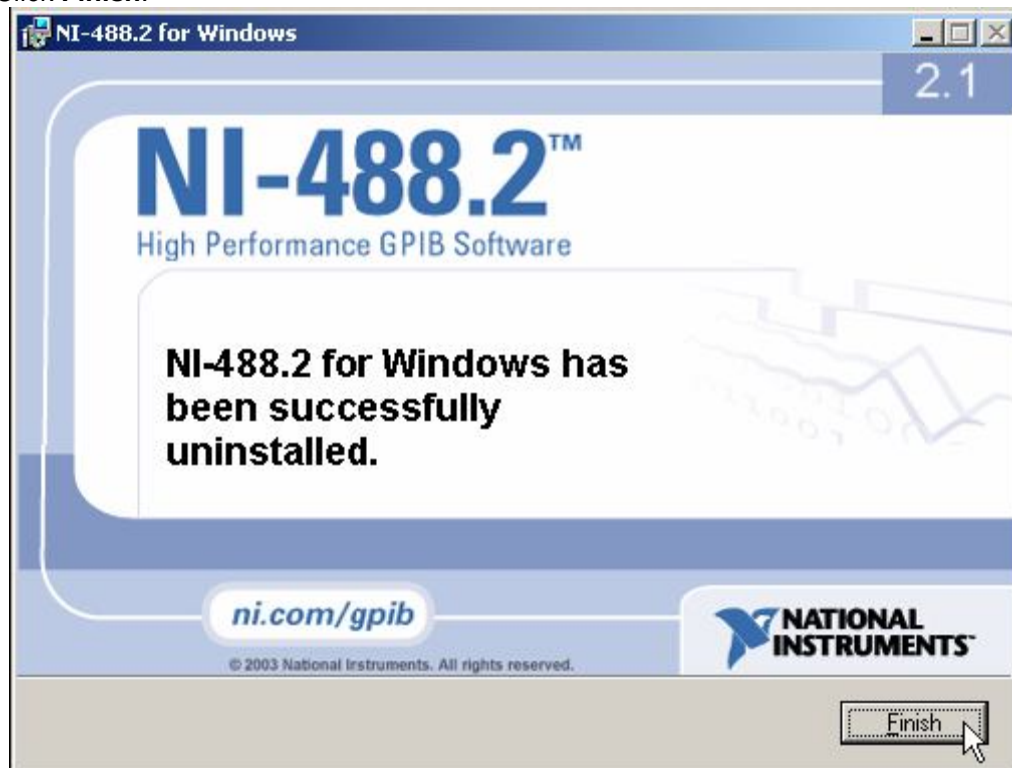
11. Select **Remove All** and click **Next**.



- Click **Next**. Files are removed and ni-488.2 is uninstalled.

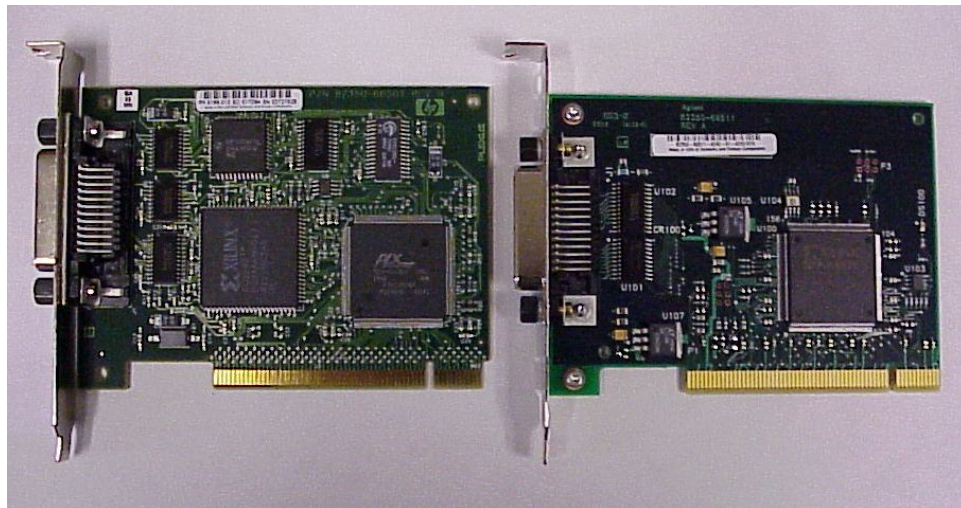


- Click **Finish**.



14. Back at the Add/Remove Programs screen, Click the 'x' to exit. Click the 'x' to close Control Panel.
15. Click **Start – Shutdown**. Select **Shutdown** and click **OK**.
16. **After the system has powered down, unplug** the system Power cord, and remove the side panel of the computer.
17. Remove the **National Instruments GPIB adapter** from its **PCI slot** in the workstation and install the **Agilent (HP) 82350 PCI GPIB** into the same **PCI slot**.

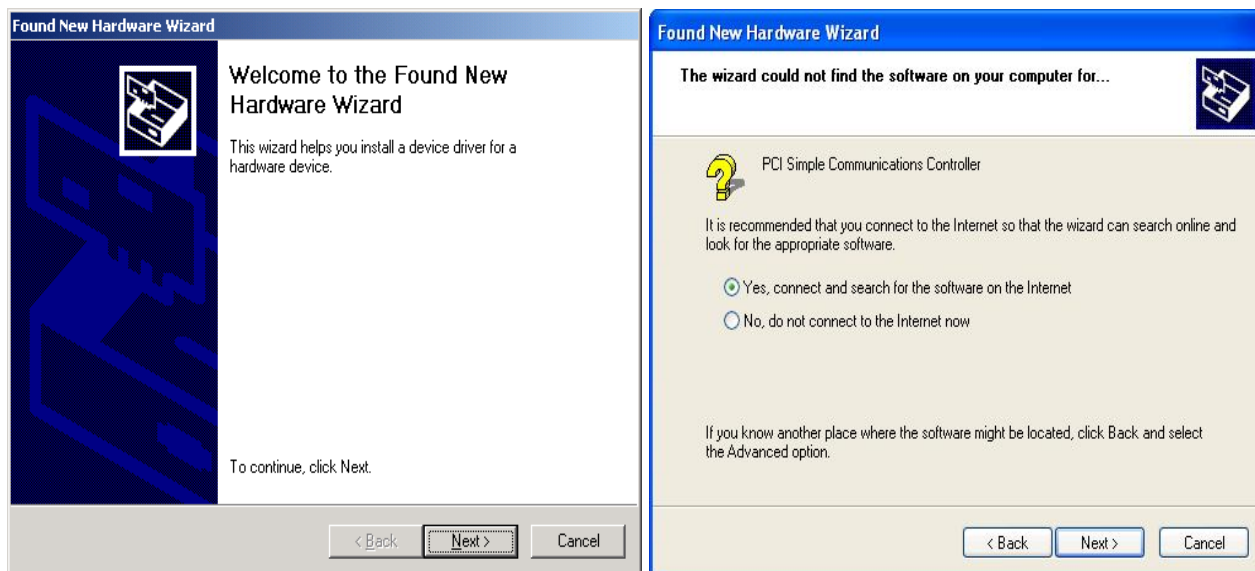
IMPORTANT: Examine the Agilent 82350 card to determine whether it is a **Revision A card (82350A)** or a **Revision B card (82350B)**. The 82350A card is on the left side in the picture below and the 82350B card is on the right side. The **Revision A card (82350A)** will not fit into the PCS slots of the M57 PC. **Only the Revision B card (82350B)** can be installed in this PC.



Install the drivers and software for the Agilent (HP) 82350 PCI GPIB adapter.

1. Replace the computer side panel, plug in the power cord and power on the computer.
2. After the system has booted, logon as Administrator.
3. Wait for the **Welcome to the Found New Hardware Wizard** message to occur and click **Cancel**. This message occurs because the Agilent **82350 PCI GPIB** adapter has been detected and the driver has not been installed yet.

Note: The message below on the right side may also occur. Click **Cancel** in that case as well.

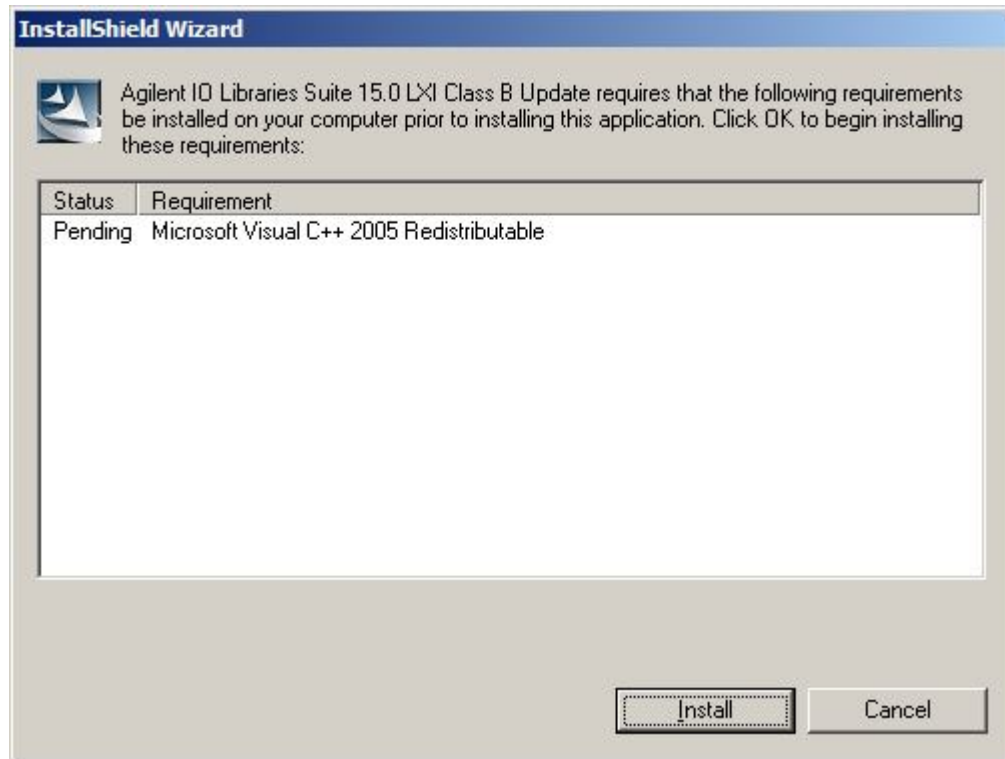


4. For the **Agilent 82350B** adapter, the **Agilent Technologies I/O Libraries for Instrument Control** should be used.
If the Operating system is Windows XP (On the M57/M58 PC from Waters), this is in the **Suite 15** subfolder in the **C:\Drivers\Agilent** directory.

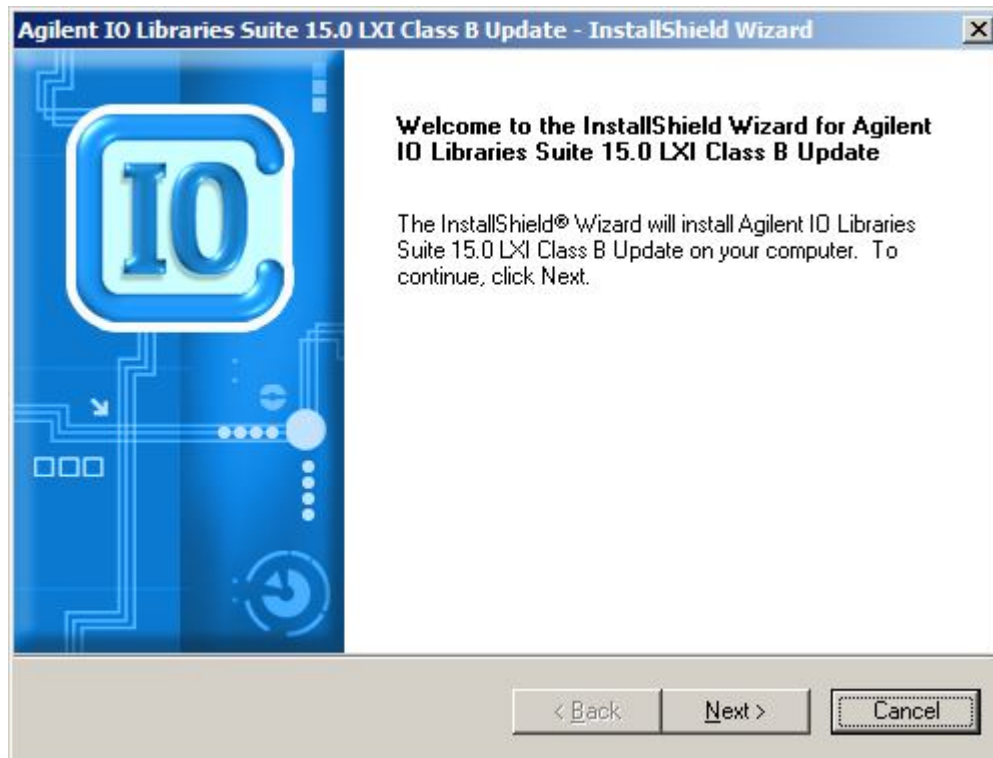
If the Operating system is Windows 7 (On the M58 PC/C20x PC from Waters), this is in the **Suite 16** subfolder in the **C:\Drivers\Agilent** directory.
5. **Note:** All installation screenshots below are taken from those of the Suite 15 libraries. Similar screens will be displayed for the Suite 16 libraries.

To install the version you need, double click setup.exe in the appropriate driver folder in Windows Explorer

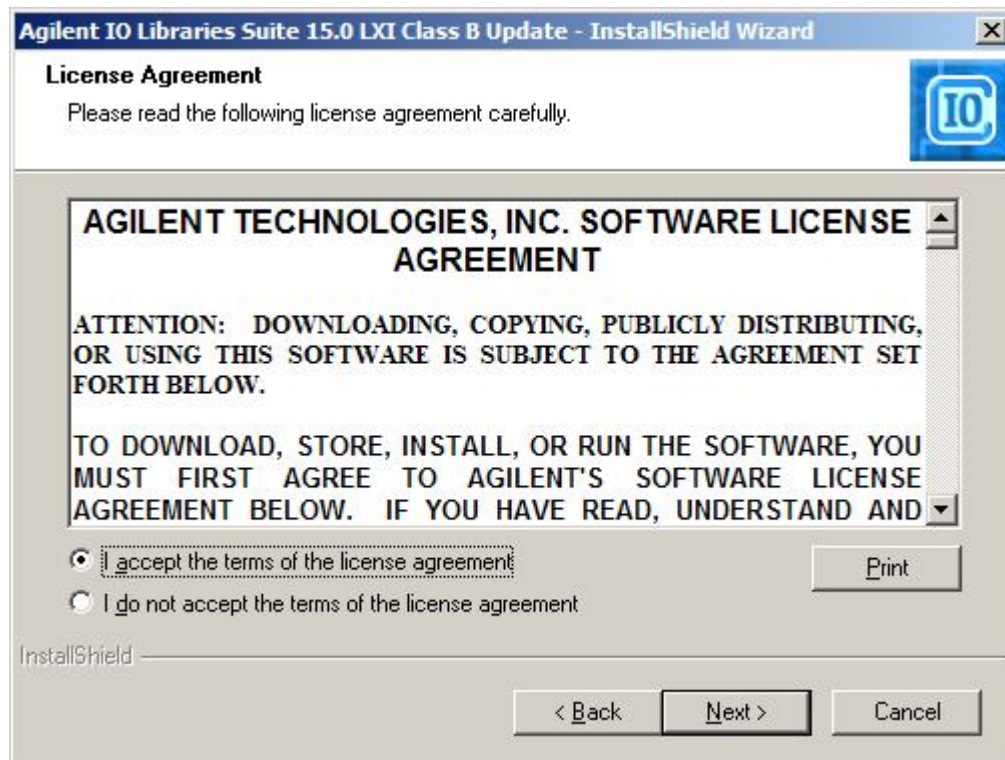
If you receive a dialog box informing you that other software needs to be installed prior to installing the Suite 15 (or Suite 16) libraries then install those first.



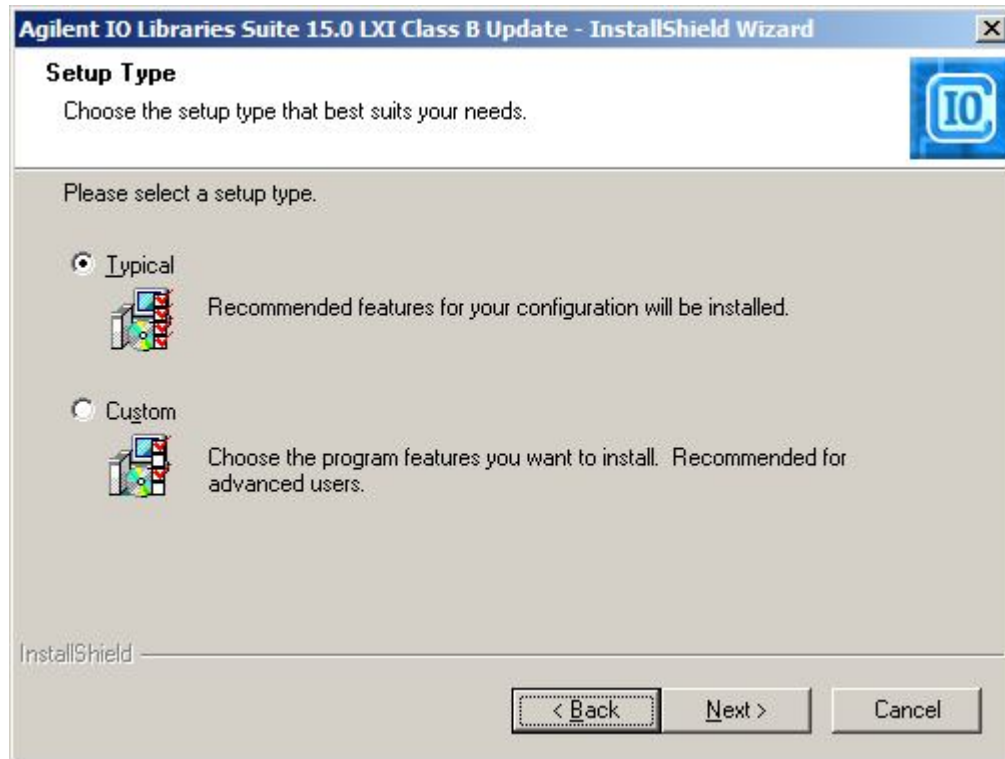
6. The InstallShield Wizard begins the I/O Libraries installation. Click **Next** at the first install screen.



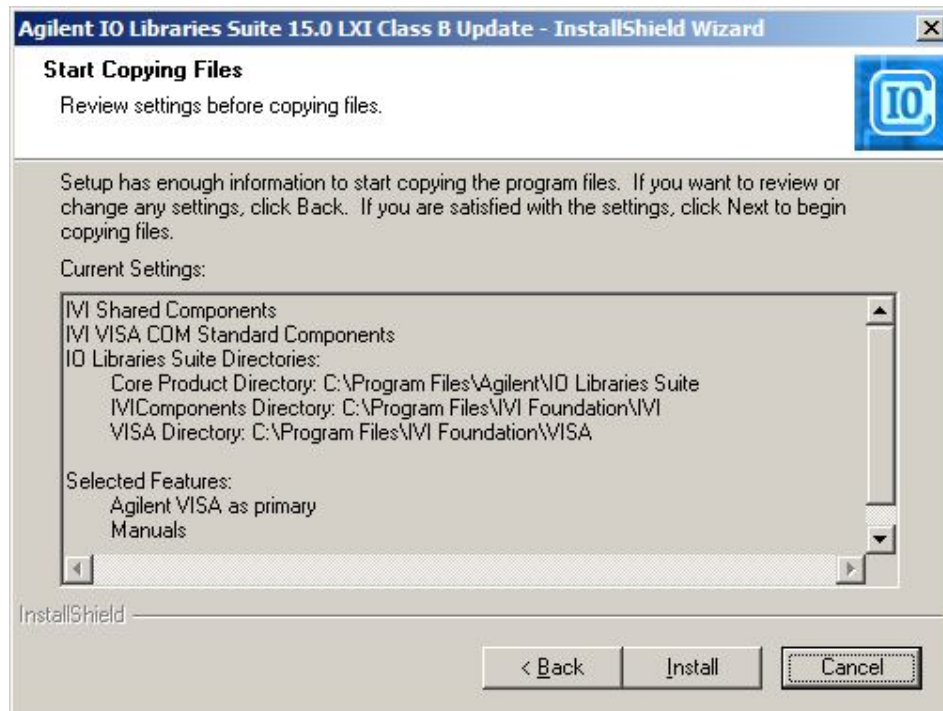
7. Accept the Agilent License agreement on the next screen and click **Next**.



8. Select **Typical** as the setup type and click **Next**.



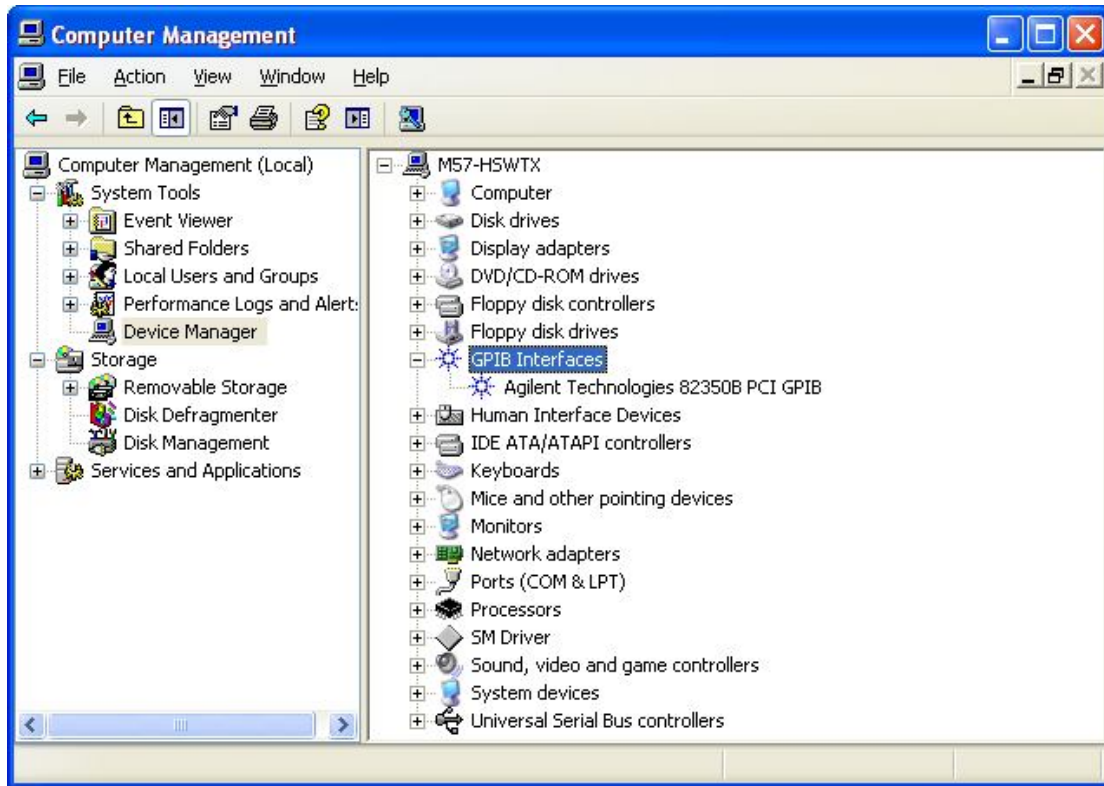
9. Click **Install** at the final screen.



10. The Agilent SICL and VISA IO Libraries files are installed. When the file install is complete, Click the blue **Finish** button.



11. Verify that the drivers have been installed correctly by checking "Agilent Technologies 82350B PCI GPIB" is listed under "GPIB Interfaces" in Device Manager (Right click My Computer >Manage).



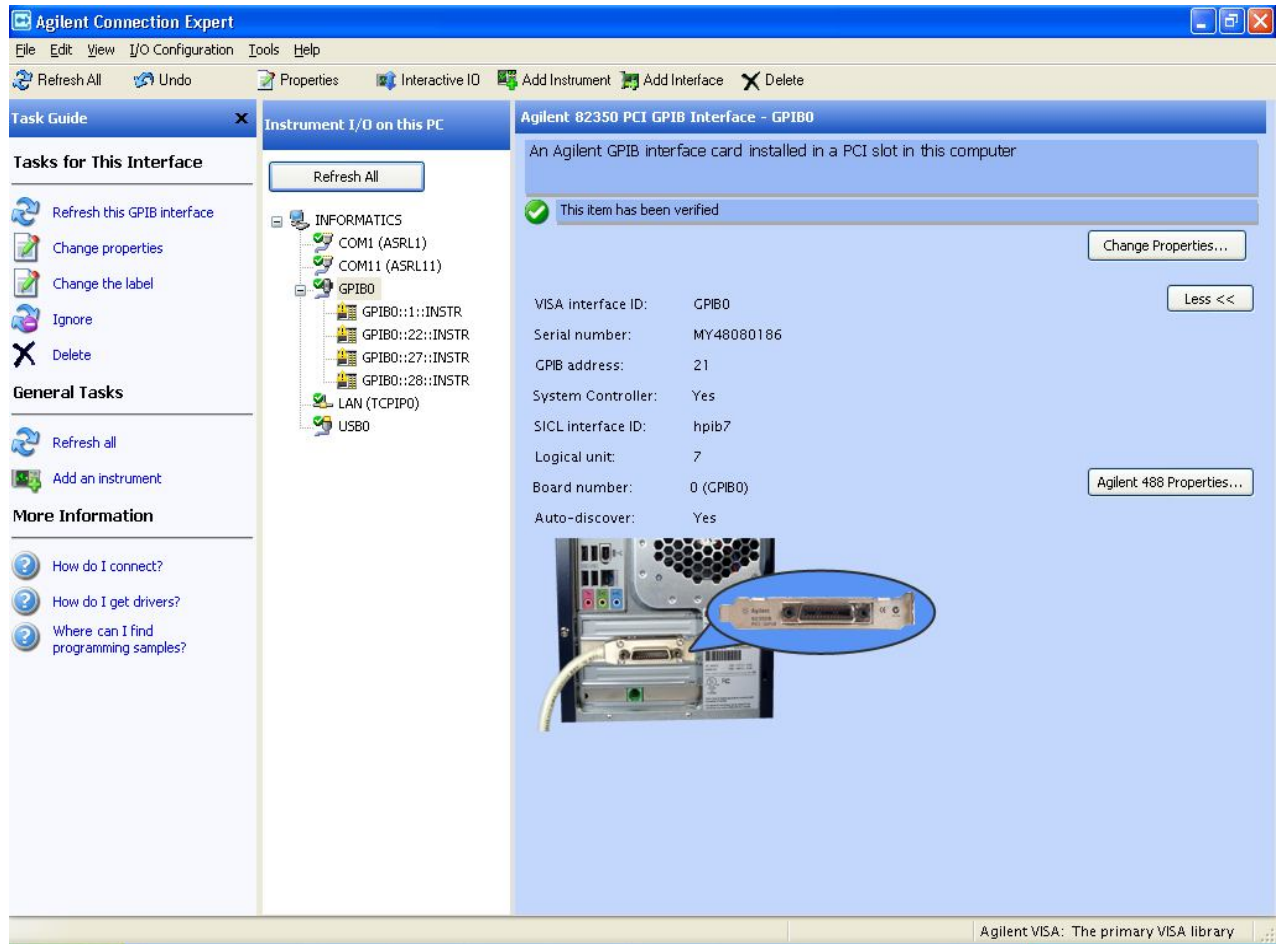
12. Close the Computer Management window.

Configuring the IO Interface of the card

1. Click the blue and white "IO" icon in the task bar to run the Agilent Connection Expert

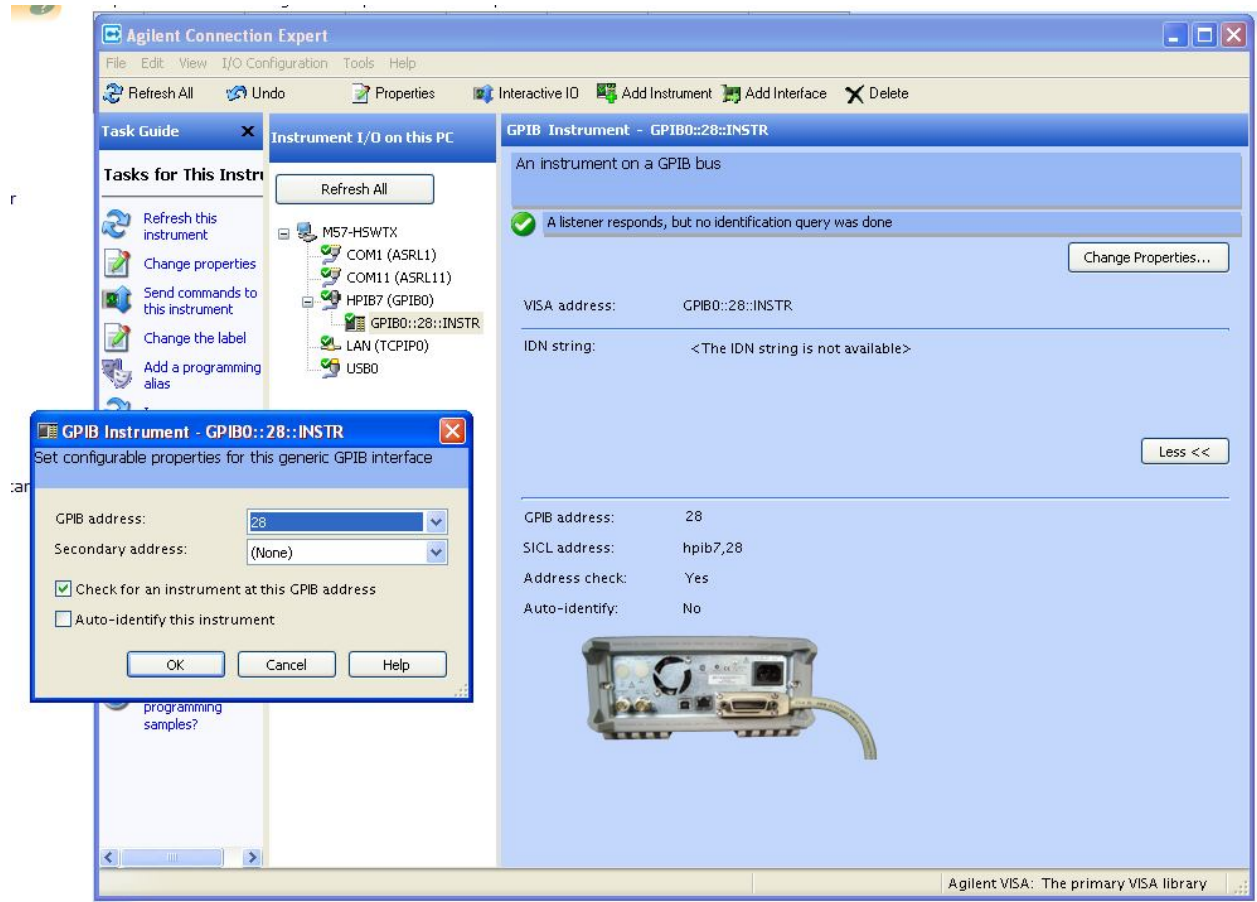


2. Close the welcome screen
3. For the **82350B** card, the **SICL Interface ID** must be changed to **hpib7**.
To do this click the "Change Properties" button, click in the **SICL Interface ID** and remove the **gpib0** name and replace it with **hpib7** so the screen appears as below. Click **OK**.



Configuring GPIB addresses of the A1100/1200 modules

1. Attach IEEE cables from the 82350B card to the all A1100/1200 System modules. Cycle power on all the HP modules.
2. Confirm that the module that the IEEE connection is going through (detector, autosampler or pump) can be seen on the bus in the Connection Expert window. If the device cannot be seen on the bus it may indicate that the module requires powering down and then powering back up again.



Note: In the screenshot above the cable from the 82350B card is going to the pump and the pump has an address of 28. This is just for illustrative purposes. Normally the connection should be made through the detector.

3. Set the IEEE addresses of the module (obtained through the “game boy” controller on the stack) by double clicking on the specific module listed under the “HPIB7” interface.
4. Launch **MassLynx**. In the MassLynx **Inlet Editor**, select **Tools - Instrument Configuration** and select the appropriate Agilent 1100/1200 modules communication.
5. On the Configure HPIB page, set the IEEE addresses for the modules at the Configure **HPIB communication** tab, set the appropriate addresses for each module and the corresponding PC connection.

Inlet Configuration Wizard

Configure HPIB
Configure HPIB communications.

Configure HPIB communications, and then press Next to continue.

Device Addresses

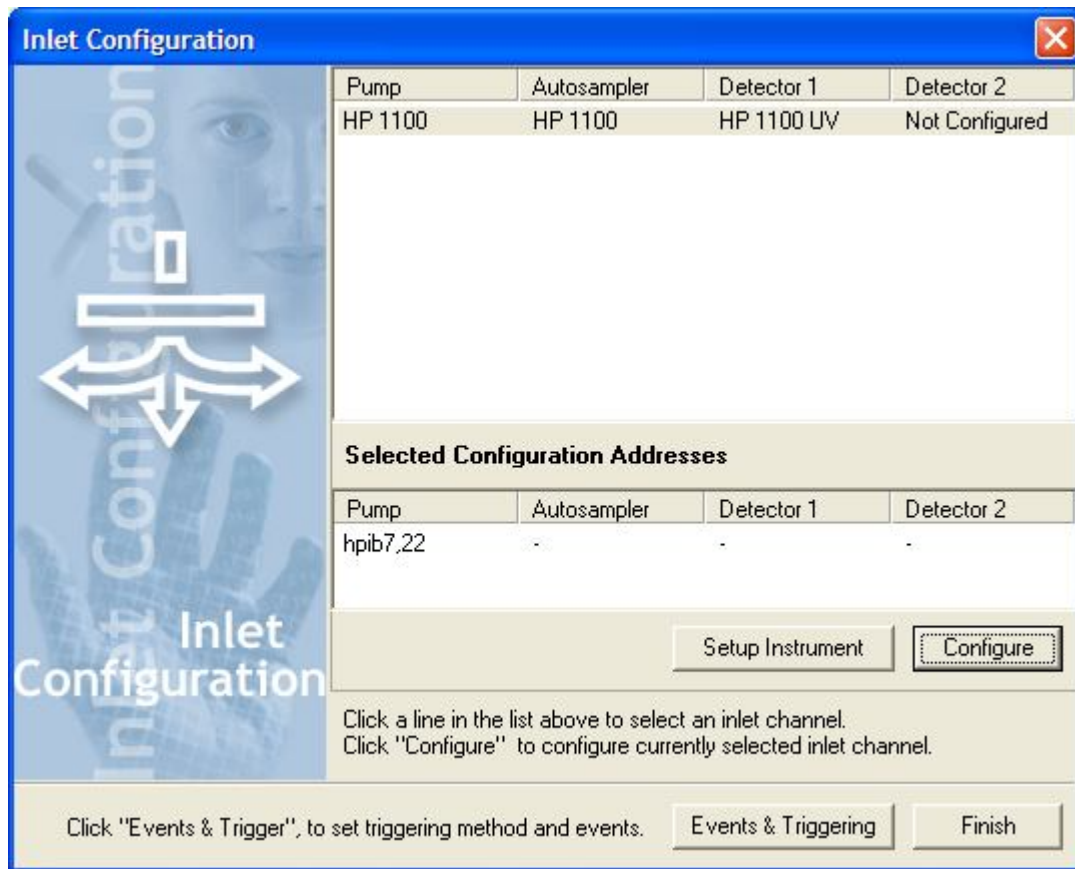
HP 1100	Inlet	22	PC Connection
HP 1100	AutoSampler	22	
HP 1100 UV	Detector	24	

Use HP-IO libraries for communications.

< Back Next > Cancel Help

Note: As stated earlier, normally the PC connection should be made through the detector using either the UV or the DAD. The IEEE addresses can be obtained through the “game boy” controller on the stack.

6. On this same page, click the checkbox next to **Use HP-IO libraries for communications** to select it (the default state is **non-selected**), click **Next**
7. Click **Finish** to complete inlet configuration



Note: In the "Select Configuration Addresses box you may see that only one of the modules has an address which may be displayed as something similar to "hpib7,22".

This is a bug related to displaying the addresses and can be ignored.

7. You should now have successful communications with your system