WaveVision 5 Software Driver Installation Guide

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1. Introduction

The WaveVision 5 Software relies on a USB hardware driver to communicate with the WaveVision 5 Data Capture Board via the USB connection. Earlier versions of the Software (versions 5.0.6.344 and before) use a Cypress Semiconductor –based driver that is not compatible with Windows 7+. To ensure compatibility with Windows 7+, newer versions of the WaveVision 5 Software now communicate with hardware using the Microsoft WinUSB driver. All computers that are used with the newer versions of the WaveVision 5 Software must have their hardware driver updated. The following sections will assist with the driver update or installation.

2. Updating a Windows XP or Vista PC with a Previous WaveVision 5 Installation

WaveVision 5 Software versions 5.0.6.344 and prior use a USB software driver that is incompatible with newer versions of the software. PCs running Windows XP or Vista with older WaveVision 5 installations (versions 5.0.6.344 and prior) must have the driver uninstalled before the new driver can be installed. Please follow these steps to uninstall the old driver. Once the old driver is uninstalled, the new driver can be installed.

Note: Once the old driver is uninstalled, installations of WaveVision 5 versions 5.0.6.344 and prior will no longer properly identify hardware.

Note: These steps are specific to the Windows XP operating system but are similar in Windows Vista.

1. Apply power to the WaveVision 5 Data Capture board and connect the board to the PC using the supplied USB cable.

2. Open the Device Manager by right-clicking 'My Computer' and selecting 'Properties'. From the Properties screen, select the Hardware tab and open the Device Manager.

3. Locate the National Semiconductor WaveVision 5 device in the USB controllers section of the Device Manager, right-click, and select 'Uninstall' as shown in Figure 1. Proceed with the uninstall process.
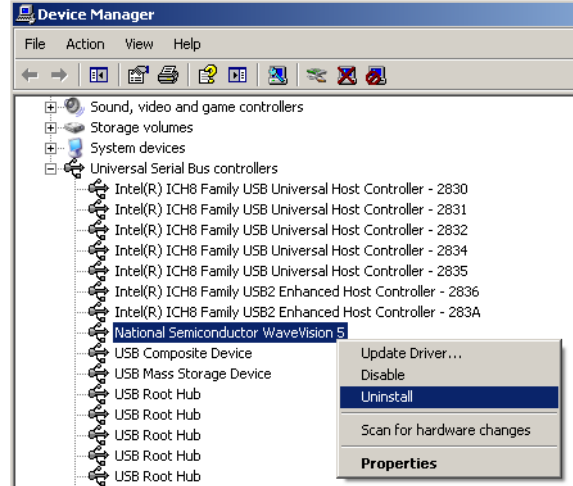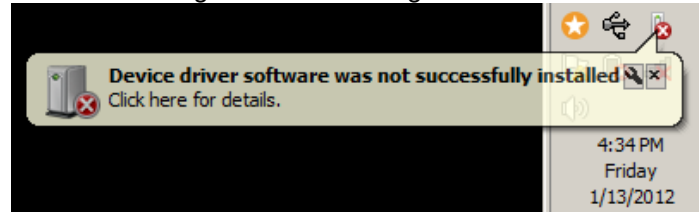

Figure 1: Uninstalling old driver

3. Installing Driver in Windows 7, 8.x, 10

1. Install the WaveVision 5 software and take note of the installation directory.

2. For Windows 8.x and Windows 10, please follow the steps in DisableDriverSigningEnforcement.pdf located at: C:\Program Files (x86)\National Semiconductor\WaveVision5. These steps must be followed to allow the unsigned driver to be installed in those operating systems.

3. Apply power to the WaveVision 5 Data Capture board and connect the board to the PC running Windows 7 using the supplied USB cable. The PC may indicate that drivers are not properly installed as show in Figure 2.

4. Open the Device Manager by right-clicking 'Computer' and selecting 'Properties.' From the Properties screen, a link should be available to open the Device Manager.

5. Locate the Unknown Device in the USB controllers section of the Device Manager, right-click, and select 'Update software
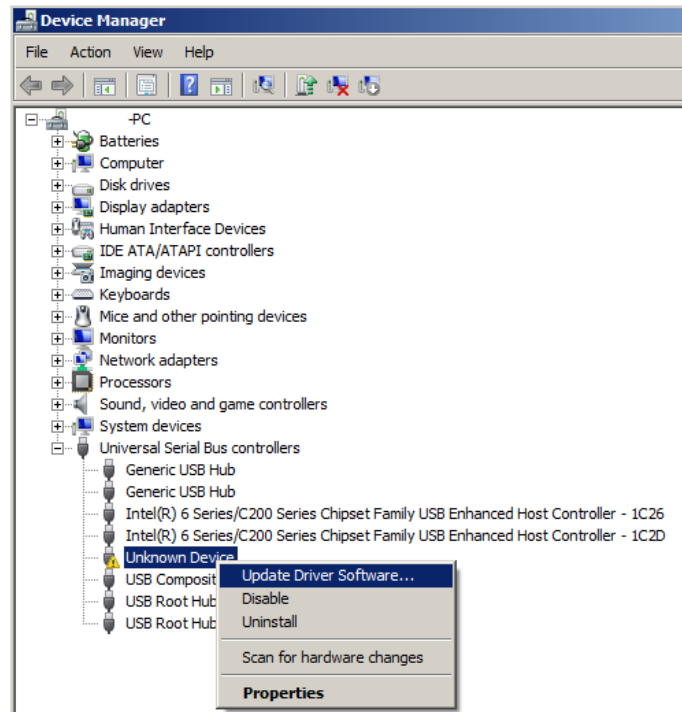
Figure 2: Connecting hardware

Figure 3: Updating driver
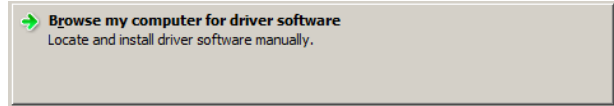
driver…' as shown in Figure 3.

Figure 4: Browse for driver

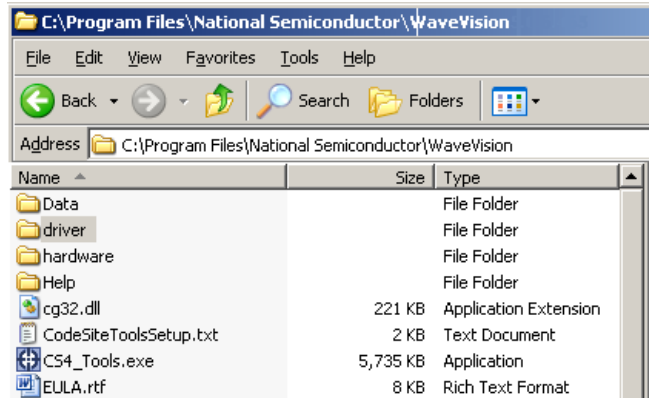6. Choose 'Browse my computer for driver software' as shown in Figure 4.

Figure 5: Driver folder in installation directory

7. Browse the file system to find and select the \driver folder in the installation directory of the WaveVision 5 software. Figure 5 shows an example location of the \driver directory.
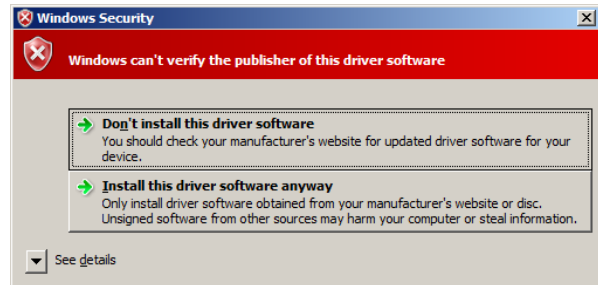

Figure 6: Accept security warning

8. If Windows raises a security flag similar to that in Figure 6, select 'Install this driver software anyway'.
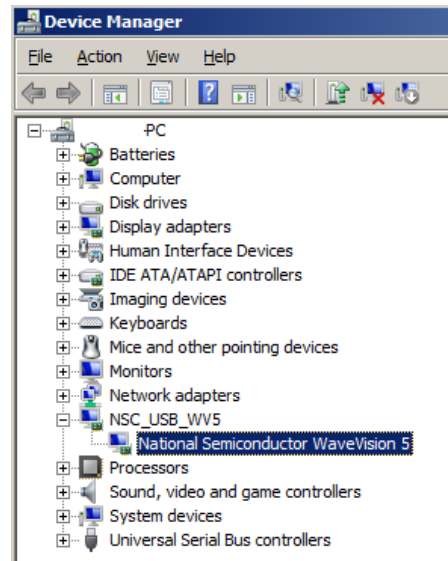

9. After installation is confirmed, verify that the driver is correctly installed using the Device Manager. The device should be register under the NSC_USB_WV5 class as indicated in Figure 7.

Figure 7: Verify driver installation

4. Installing Driver in Windows Vista

Please follow the instructions in the 'Updating Drivers in Windows 7' section.

5. Installing Driver in Windows XP

1. Install the WaveVision 5 software and take note of the installation directory.

2. Apply power to the WaveVision 5 Data Capture board and connect the board to the PC running Windows XP using the supplied USB cable. The PC may indicate that device is not recognized.

3. After the Data Capture board is connected, the computer should recognize that a USB device has been connected and automatically start the Found New Hardware Wizard. If the wizard does not automatically start, then open the Device Manager by right-clicking 'My Computer' and selecting 'Properties.' From the Properties screen, select the Hardware tab and open the Device Manager as shown in Figure 8. Locate the Unknown Device in the Device Manager, right-click, and select 'Update driver…' as shown in Figure 9 to start the Hardware Update Wizard.
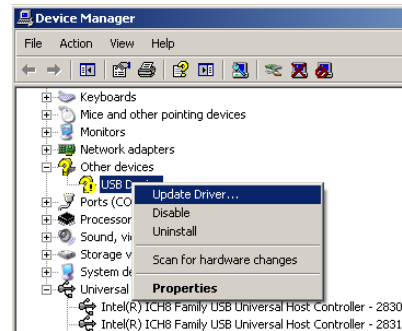
4. If prompted to select if Windows can connect to Windows Update to search for software, select 'Not at this time'.

5. From the Found New Hardware Wizard or Hardware Update Wizard, select to 'Install from a list of specific location' as shown in Figure 10.

6. In the search and installation options, select 'Don't search, I will choose the driver to install' as shown in Figure 11.

Figure 8: Accessing the Device Manager

Figure 9: Update Driver
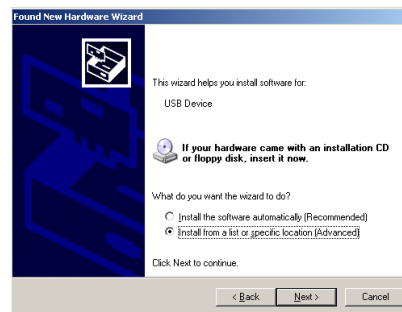
Figure 10: Install driver from specific location

Figure 11: Choose the driver to install

7. When prompted to select the device driver to install, press the 'Have Disk' button

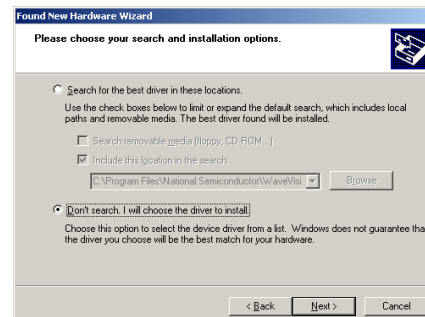   **NOTE**: If 'Have Disk' is not selected or the driver is installed by another method, then the WinUSB Co-installer must be specified at a point in the driver installation. The co-installer is located in a subfolder of the \driver folder, depending on the PC specific hardware.
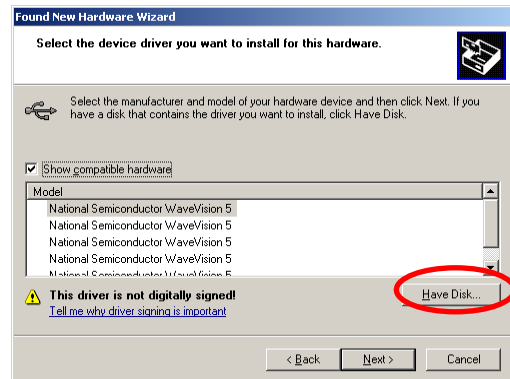
Figure 12: Select 'Have Disk'

8. Browse to the \driver folder in the WaveVision 5 installation directory and select the .inf file in the \driver folder as shown in Figure 13. Continue with the installation of this driver.
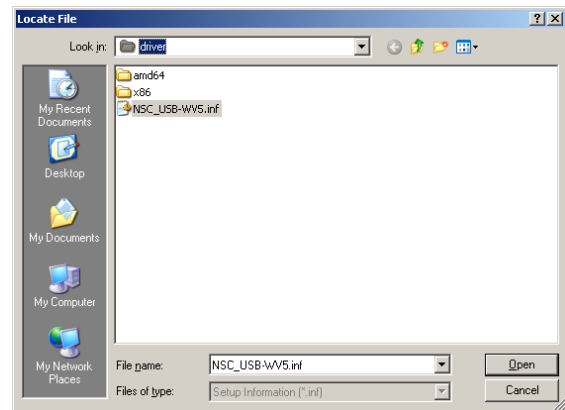
Figure 13: Select .inf file in \driver folder

9. After installation is confirmed, verify that the driver is correctly installed using the Device Manager. The device should be register under the NSC_USB_WV5 class as indicated in Figure 14.

Figure 14: Verifying driver installation

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This evaluation board/kit is intended for use for **ENGINEERING DEVELOPMENT, DEMONSTRATION, OR EVALUATION PURPOSES ONLY** and is not considered by TI to be a finished end-product fit for general customer use. It generates, uses, and can radiate radio frequency energy and has not been tested for compliance with the limits of computing devices pursuant to part 15 of FCC rules, which are designed to provide rea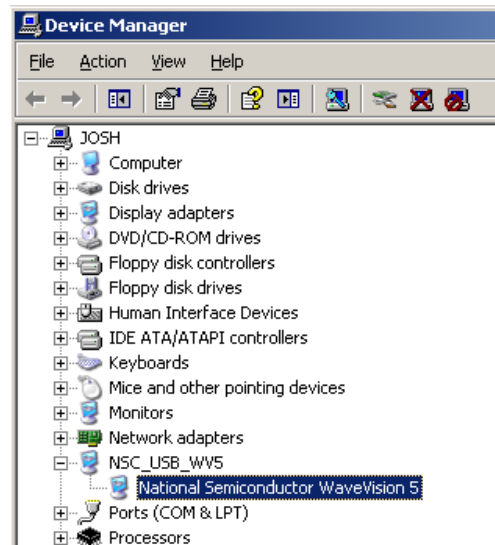sonable protection against radio frequency interference. Operation of this equipment in other environments may cause interference with radio communications, in which case the user at his own expense will be required to take whatever measures may be required to correct this interference.

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