Getting Started with Foxonix

Contents

Introduction

This document explains how to install the drivers for the Foxonix hardware. It also explains how to upload programs to the Fox board and how to use the code editor and compiler.
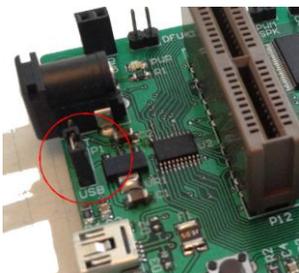
Before using Foxonix, you will need to install the hardware drivers that allow your computer to talk to the hardware. These drivers work for Windows XP, Vista, 7, and 8. When the Fox board is plugged into your computer, the drivers may be found and installed automatically (if they are located by the operating system), or you may need to install them manually.

For reference, the drivers are located in the Foxonix\Fox Programmer\[version]\drivers folder, in the location where you unzipped the software bundle.

In the event that you need to install the drivers manually, the instructions below can be used as a guideline. Instructions are given for Windows Vista and Windows 7, but a similar procedure would be followed for a different Windows version.

Installing the driver for the Fox Board on Windows Vista

1.) On the Foxonix Fox board, make sure the power jumper between the power jack and the USB connector is set to "USB" (not "EXT")
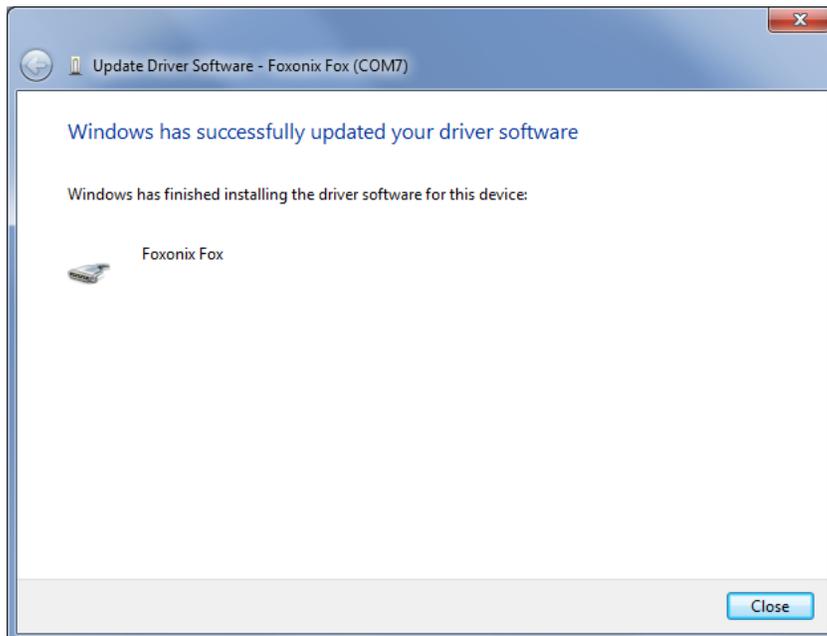
2.) Using a USB cable with a mini USB connector, plug the Fox board into your computer.

3.) Your computer should see the device and display a Found New Hardware window with a message saying, "Windows needs to install driver software for your Foxonix."
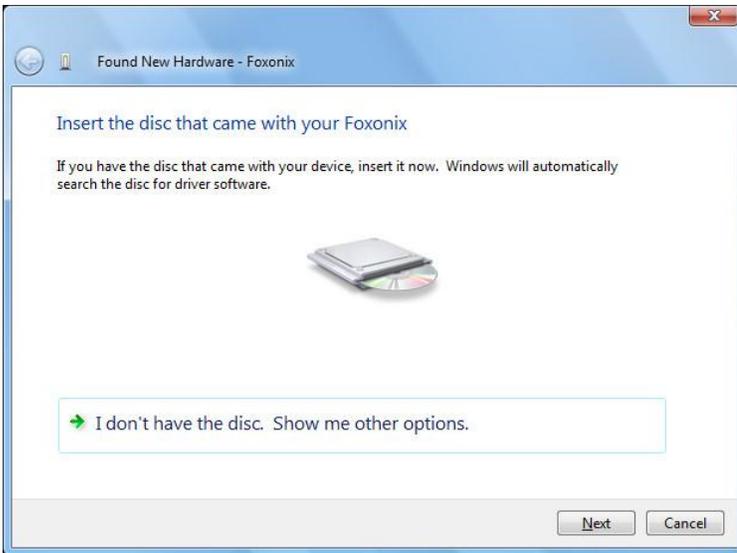

On this menu, select "Locate and install driver software."

4.) Your computer will search for the drivers, and this might take a minute or two. If it finds them, they should be installed automatically and you will see a window confirming that they were installed (or updated) successfully.
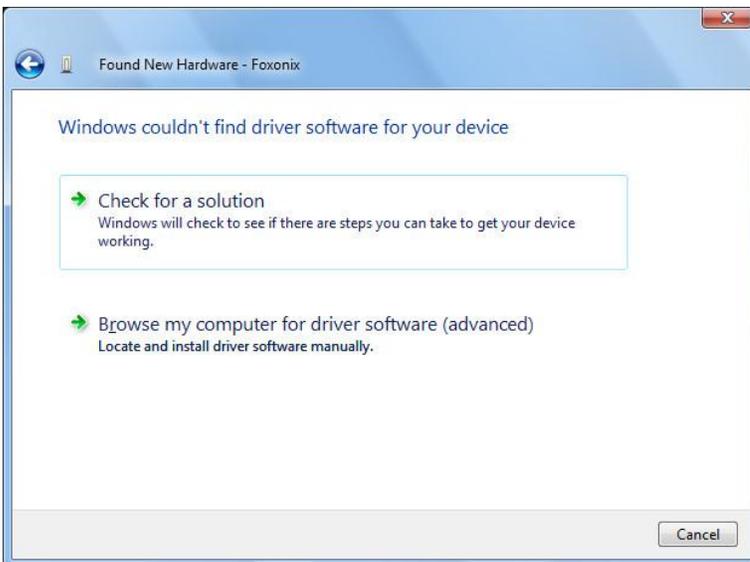

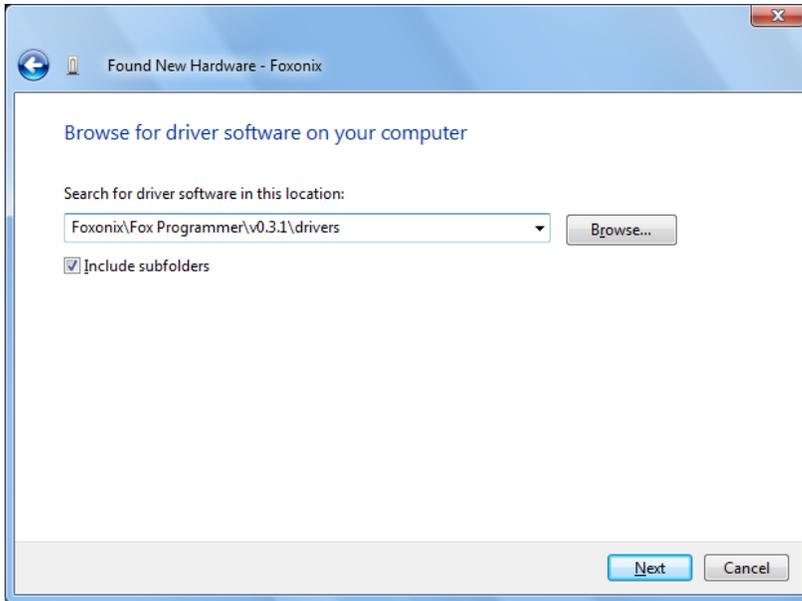5.) If the drivers are not found you will get this window:

On this menu, select "I don't have the disk. Show me other options."
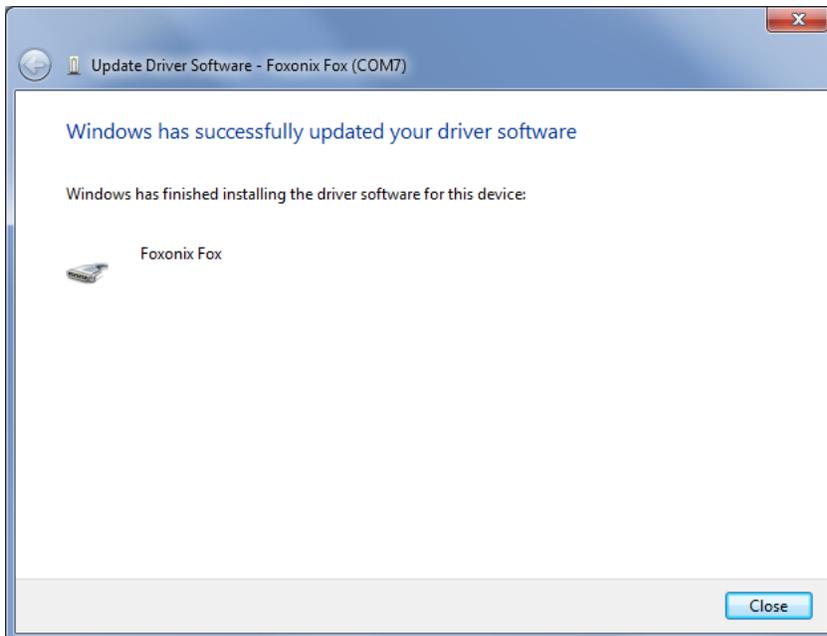
6.) This window will pop up:

On this menu, select "Browse my computer for driver software."

7.) On the next window use the Browse... button to navigate to the folder where you saved the software bundle. This will be where you placed the files, under Foxonix\Fox Programmer\[version]\drivers.
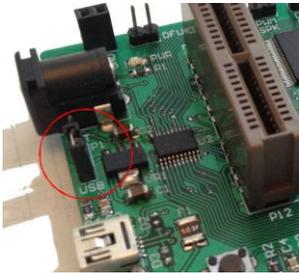
After selecting the folder location, click on the Next button.

8.) Windows should now install the driver for the Fox board. If successful, you will get a message saying "Windows has successfully updated your driver software." It also identifies the COM port on which the device is installed. In the example below, the COM port is COM7.
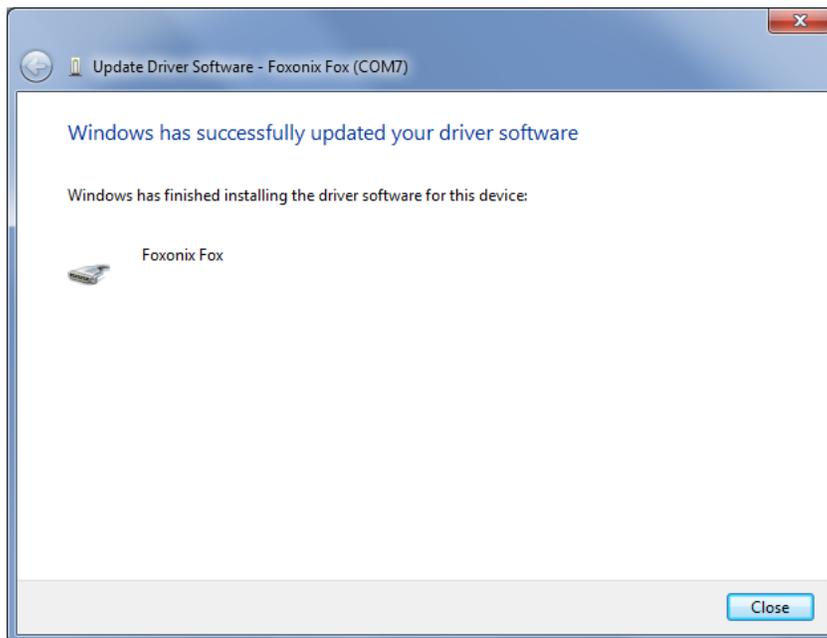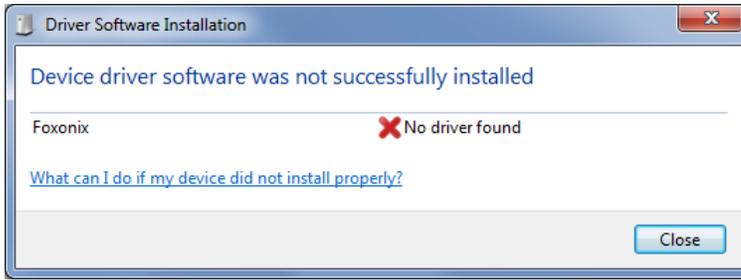
Installing the driver for the Fox Board on Windows 7

1.) On the Foxonix Fox board, make sure the power jumper between the power jack and the USB connector is set to "USB" (not "EXT")

2.) Using a USB cable with a mini USB connector, plug the Fox board into your computer.

3.) Your computer should see the device and display a message saying, "Installing device driver software."

4.) Your computer will search for the drivers, and this might take a minute or two. If it finds them, they should be installed automatically and you will see a window confirming that they were installed (or updated) successfully.
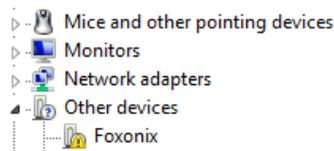

5.) If the computer does not recognize the board and find the drivers, you will get a message saying, "Device driver software was not successfully installed."

Driver Software Installation

Device driver software was not successfully installed

Foxonix   ✖ No driver found

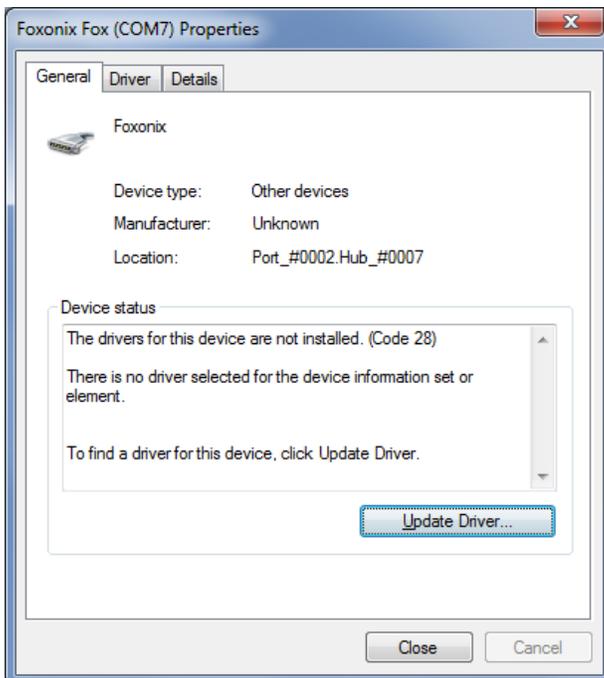What can I do if my device did not install properly?

[Close]

6.) You will need to install the driver manually through Windows Control Panel. Go to Device Manager under Windows Control Panel. If you don't know how to get to the Device Manager through Control Panel, you can get there by going to the Windows Start Menu and searching for Device Manager.
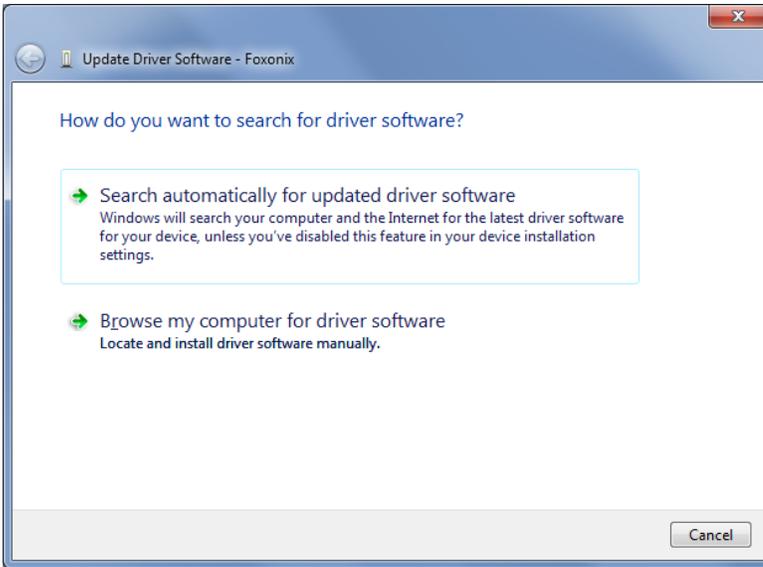
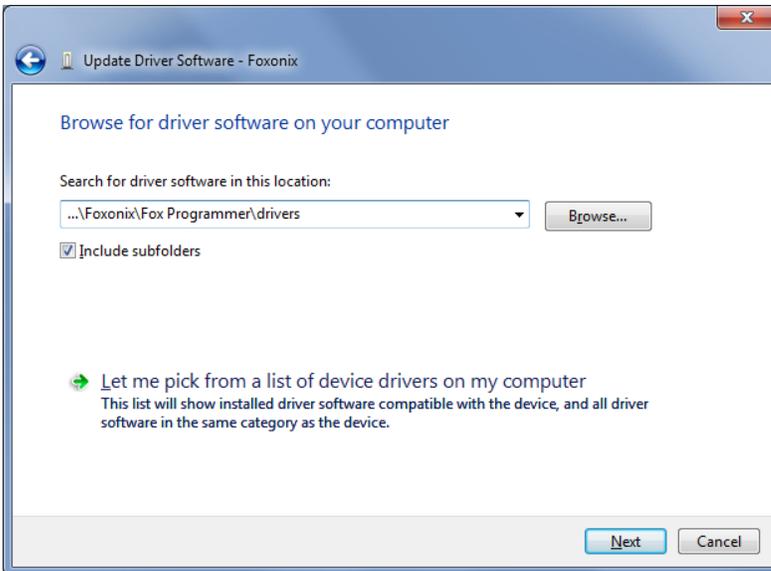7.) In the Device Manager, you should see Foxonix listed, probably under Other Devices.

▷ 🖳 Mice and other pointing devices
▷ 🖥 Monitors
▷ 🖳 Network adapters
▲ 🖳 Other devices
        🖳 Foxonix

8.) Open up the Foxonix device from this menu and in the Foxonix Properties window select Update Driver...

Foxonix Fox (COM7) Properties

General | Driver | Details

Foxonix

Device type: Other devices
Manufacturer: Unknown
Location: Port_#0002.Hub_#0007

Device status

The drivers for this device are not installed. (Code 28)

There is no driver selected for the device information set or element.

To find a driver for this device, click Update Driver.
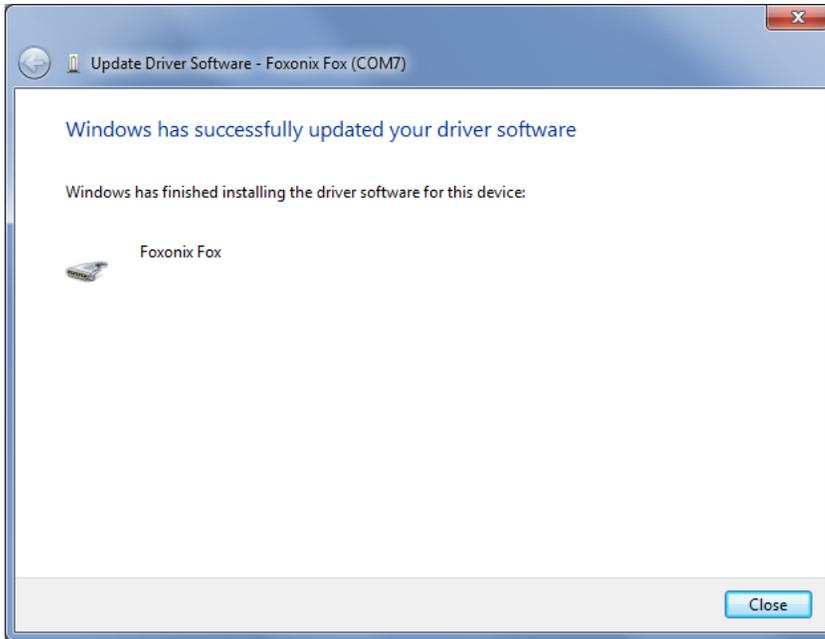
[Update Driver...]

[Close] [Cancel]

9.) In the Update Driver Sofware window, select "Browse my computer for driver software."

10.) Browse to the folder where the drivers are located. This will be where you placed the files, under Foxonix\Fox Programmer\[version]\drivers.
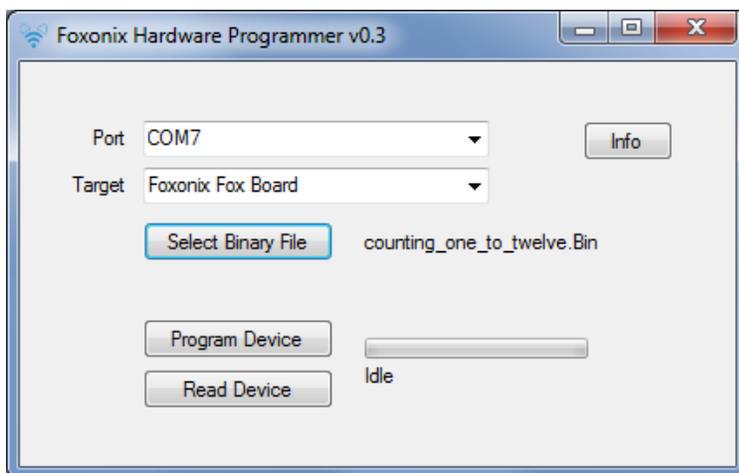

11.) Windows should now install the driver for the Fox board. If successful, you will get a message saying, Windows has successfully updated your driver software. It also identifies the COM port on which the device is installed. In the example below, the COM port is COM7.

Uploading A File to the Fox Board

Once the Fox board is installed, you can upload code to it using the Fox Programmer application. Run the fox_programmer_v*.exe application (located in the Foxonix\Fox Programmer folder).
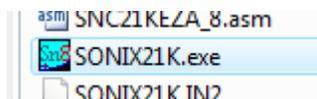

1.) Select the port that the Fox board is connected to. Selecting the drop down Port menu will show you the list of available COM ports.

2.) To program the Fox board, set the Target to "Foxonix Fox Board".

3.) Select the binary file that you want to load onto the board by clicking on the Select Binary File button. For your first test you can select one of the binary files included with the sample programs found in the Foxonix\Sample Programs folder.

a. If you have a speaker attached to the Fox Board, we recommend starting with the "simple_SFX_trigger.bin" program.

b. If you do not have a speaker attached to the Fox Board, we recommend starting with the "blink_LED.bin" program.

4.) Once a binary file is selected, click on Program Device.

5.) The flash memory on the board will be erased and then programmed. You will see a progress indicator as the flash memory is programmed.
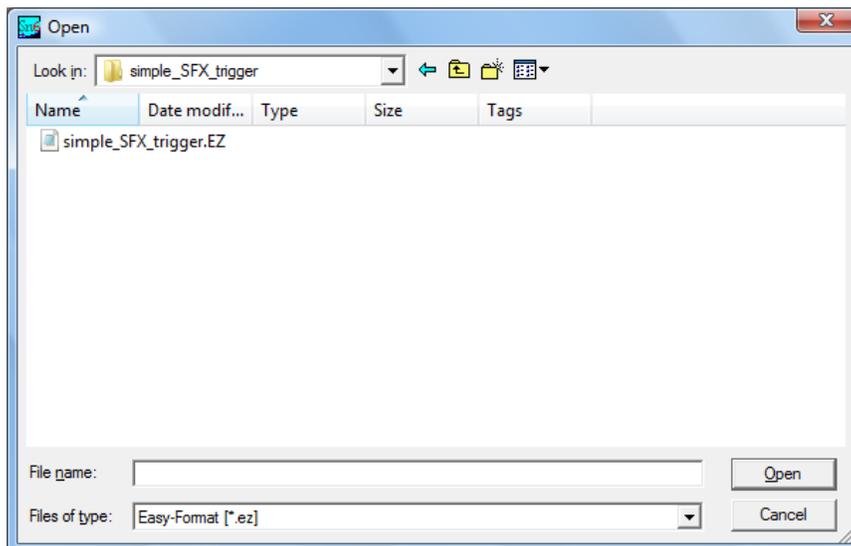
Using the Code Editor and Compiler

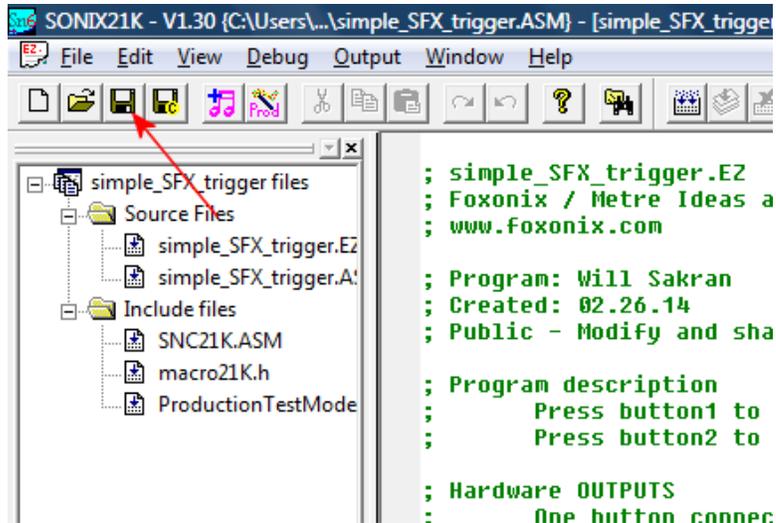If you want to write programs or modify existing programs, you will need to use the Code Editor.

1.) Navigate to where you saved the software bundle and go into the \Sonix folder. Run the SONIX21K.exe executable.

2.) This will open the code editor and compiler

3.) Begin by checking out one of the sample programs in the Foxonix\Sample Programs folder. From the upper left-hand corner of the menu bar, select File->Open to open the file open dialog box.

4.) Under "Files of type:" select Easy-Format [*.ez]. (Normally, we do not program in assembly language, but use the script-style EZ language instead.)

5.) Navigate to one of the sample program folders and select the EZ file for that program. This will open the source code in the editor.

6.) To save a program, click on the Save icon. This saves the program file without compiling it.

7.) To Save and Compile a program, click on the Save icon with the "c" in the little yellow circle. This will compile the program and check it for errors. If the compile is successful, a binary file will be generated in the same directly as the source file. This file can then be loaded onto the Fox board or onto a Project Board.