APPENDIX A USB FIRMWARE FILES

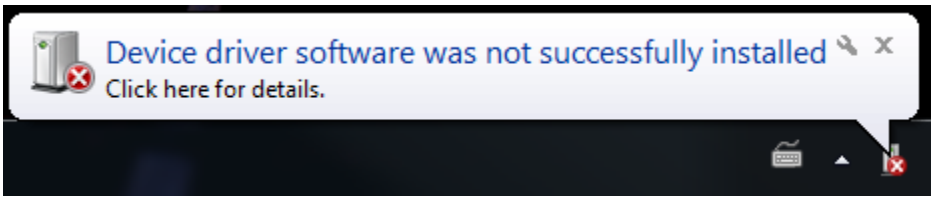
The table below shows which set of firmware files must be used to program this EVM.

USB Firmware

Firmware Image to be Programmed
☒ USB-AudioEVMxxxx_48KHZ.BIN

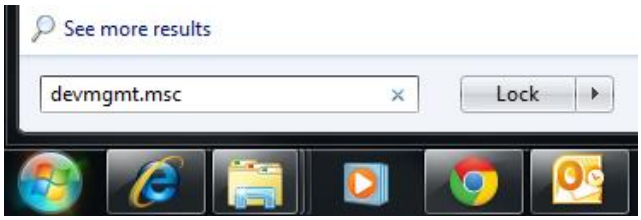
APPENDIX B DFU DRIVER INSTALLATION

When a TAS1020B-based EVM is connected to a USB port in Device Firmware Upgrade (DFU) mode for the first time, the message below may appear.

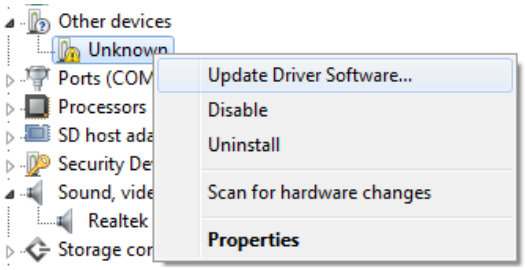


Follow these steps to install the DFUUSB driver:

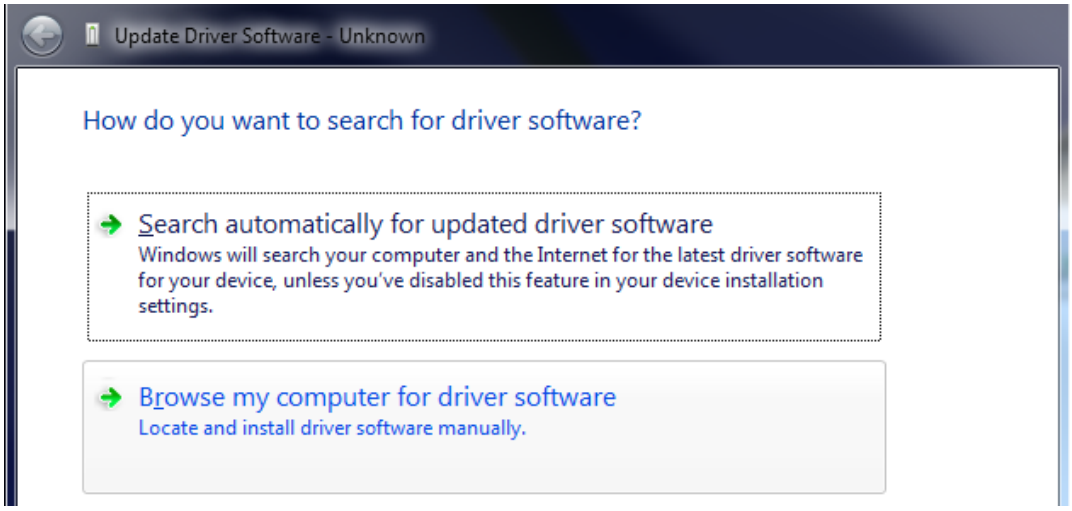
1.1 Run devmgmt.msc from the Windows Start Menu to open the Device Manager, as shown to the right.



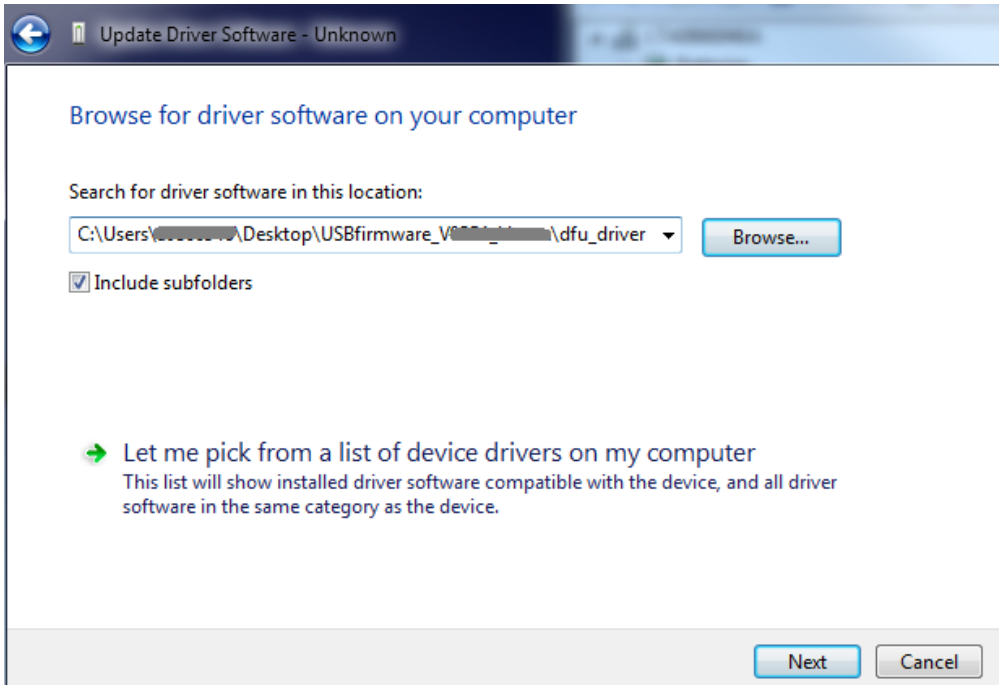
1.2 Click *Update Driver Software* for the new *Unknown* device.



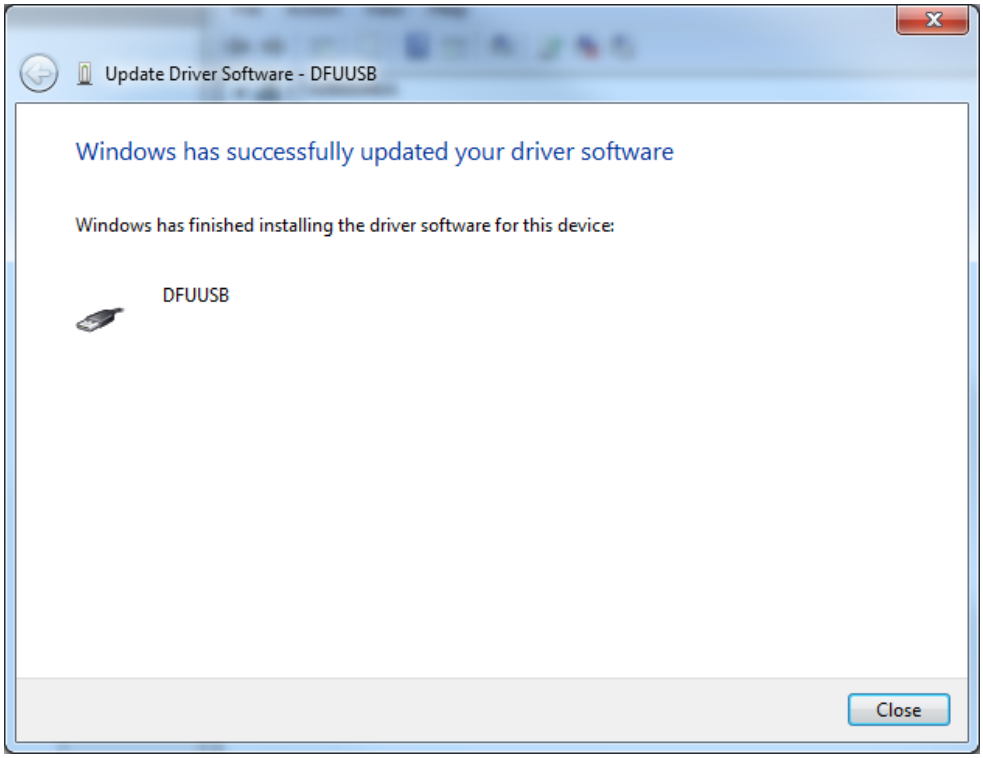
1.3 Click Browse my computer for driver software, as shown below.



1.4 Browse for *USBfirmware_Vxxxxx\dfu_driver*, as shown below. Click Next.



1.5 If successful, the message below should appear.



1.6 The DFU driver installation is now complete.

APPENDIX C EASY FIRMWARE UPDATE PROCEDURE

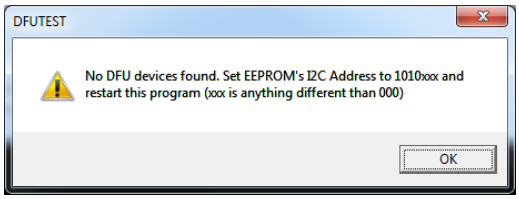
Follow this procedure for a new EVM with a blank EEPROM. If the EEPROM has already been previously programmed, follow APPENDIX D instead.

1.1 Connect a USB cable from the PC to the EVM. If prompted to install a DFU driver, follow APPENDIX B.

1.2 Browse to *USBfirmware_Vxxxxx*.

1.3 Double click “DFUTEST.exe”.

1.4 If the following message is shown:



Close DFUTEST.exe,

Ensure that the DFU driver is installed correctly per APPENDIX B,

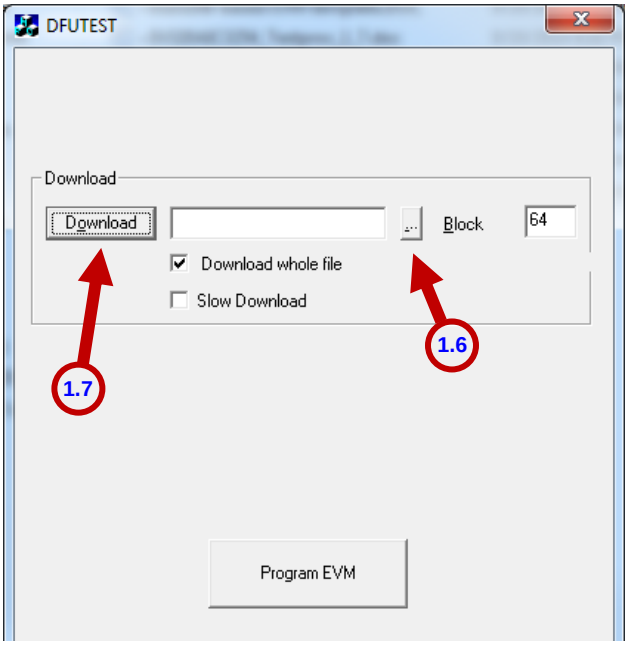
Ensure jumpers are set to their default positions,

Go to Step 1.1 above.

1.5 A window similar to the one shown to the right should appear.

1.6 Click the “…” button as shown to the right and browse to the *USBfirmware_Vxxxxx\image* folder. Use the checked ☒ image specified in APPENDIX A. Once selected, click Open.

1.7 Click the *Download* button, as shown to the right.



1.8 A *Download Completed* message should appear. Click *OK*.

1.9 Disconnect the USB cable.

1.10 Close the DFUTEST.exe program.

APPENDIX D ALTERNATE FIRMWARE UPDATE PROCEDURE

Follow this procedure if the EVM EEPROM has been previously written. This procedure will also work with blank EEPROMs as well, but requires more steps.

1.1 Short SCL and SDA pins of the EEPROM that is connected to the TAS1020B.

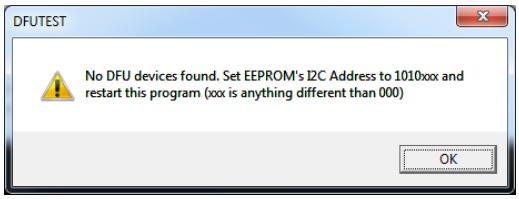
1.2 Connect a USB cable from the PC to the EVM. If prompted to install a DFU driver, follow APPENDIX B.

1.3 After 5 seconds, remove the short between SCL and SDA pins of the EEPROM that is connected to the TAS1020B.

1.4 Browse to *USBfirmware_Vxxxxx*.

1.5 Double click “DFUTEST.exe”.

1.6 If the following message is shown:



Close DFUTEST.exe,

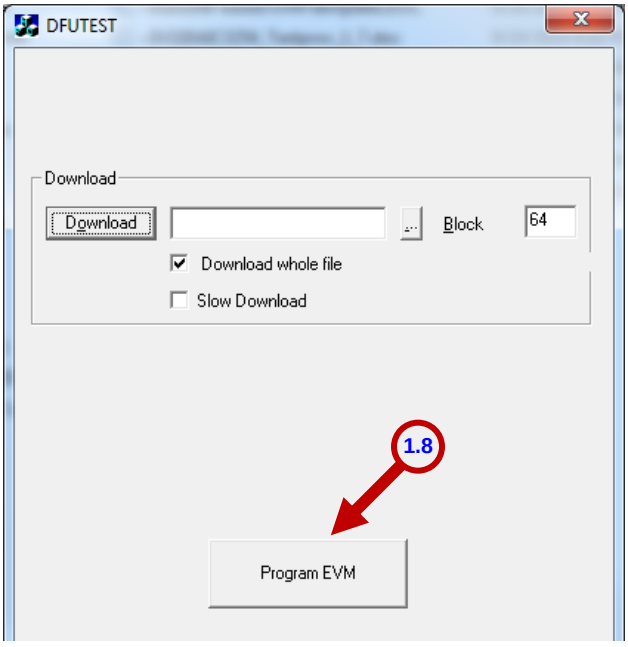
Ensure that the DFU driver is installed correctly per APPENDIX B,

Ensure jumpers are set to their default positions,

Go to Step 1.1 above.

1.7 A window similar to the one shown to the right should appear.

1.8 Click the *Program EVM* button as shown to the right.



1.9 Browse to the *USBfirmware_Vxxxxx\image* folder.

1.10 Select *DFUEE.bin*. Once selected, click Open.

1.11 A *Download Completed* message should appear. Click *OK*.

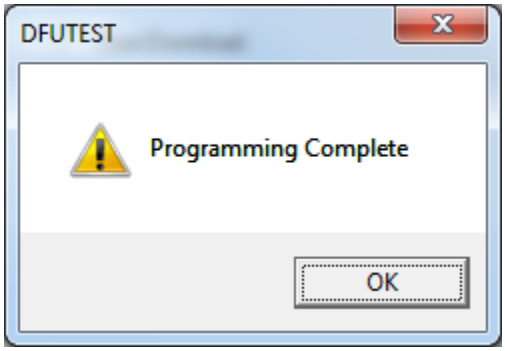
1.12 A *Device was successfully reset* message should appear. **Wait about 3 seconds until Windows recognizes the device, failure to do so will show an error message**. If an error message appears, close DFUTEST.exe and restart the programming procedure. Click *OK*.

1.13 A *Device Detach call succeeded* message should appear. **Wait about 3 seconds until Windows recognizes the device, failure to do so will show an error message**. If an error message appears, close DFUTEST.exe and restart the programming procedure. Click *OK*.

1.14 If prompted to install a DFU driver, follow APPENDIX B.

1.15 Browse to the *\USBfirmware_Vxxxxx\image* folder. Use the checked ☒ image specified in APPENDIX A. Once selected, click Open.

1.16 Click OK two times. The third window should look like this:



1.17 Close the DFUTEST.exe program.