

# Procedure: Upgrading Arm/Dsp Code Mozart

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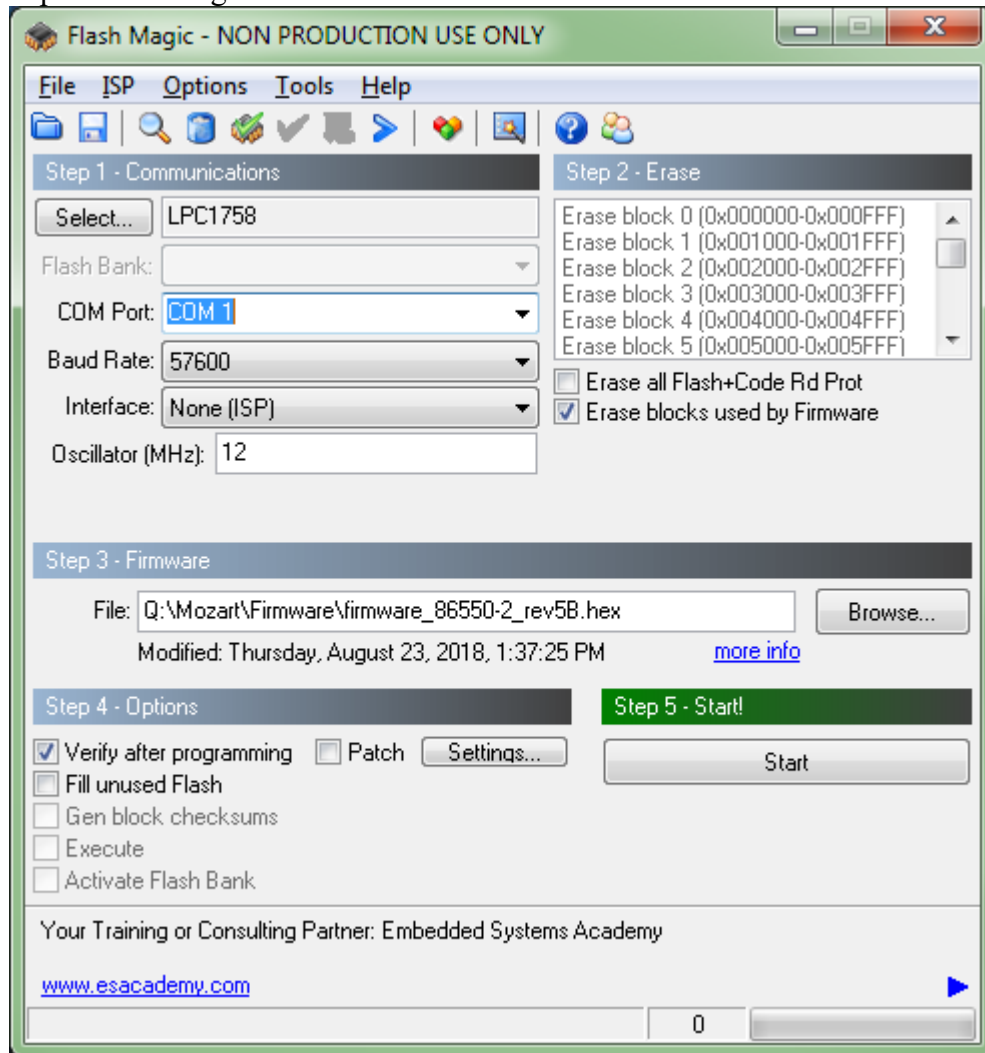
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## ARM FIRMWARE

1. You will need to download the Flash magic program (Classic Version 11.20) from the website <http://www.flashmagictool.com/>.
2. Connect a DB9 Serial cable from your computer's Com port to the UPS's DB9 "RS232" Com port.
3. Open Flash magic.



4. Set the following.

### **Step 1 – Communications**

Select Device to LPC1758...located under the ARM CORTEX tab.

Select your Com port being used.

Set Baud Rate to 115200

Interface – None

Oscillator – 12 Mhz

### **Step 2 – Erase**

Check Box "Erase blocks used by Hex File"

### **Step 3 – Hex File**

Choose location of the new file you are updating.

#### **Step 4 – Options**

Check Box “Verify after programming”

5. Press and hold the Enter and UP arrow (Right top and middle) Front Panel pushbuttons while simultaneously powering ON the UPS.
6. Press the start button on the flash magic program.
7. You will see at the bottom of the Flash magic window the status of the upload. It will take approx. 45 seconds to complete.

### **DSP FIRMWARE**

#### **SOFTWARE SETUP**

1. Create a convenient directory on the computer to be used for downloading the new code and place the following files into it:

- The "sRecLoad.exe" downloader utility.
- The "nican.dll" library file.
- The new UPS application code "S-record" file (ex., UPS\_CODE.elf.S).
- The "bootload.bat" command line batch file.

2. Edit the "bootload.bat" file if necessary (usually not required).

This will only need to be done either if the computer's COM1 port is being used by some other application and another COM port needs to be used or if the above "S-record" filename does not match the one which is specified in the "bootload.bat" file.

3. Open up a "DOS" command line window and change to the specified directory.

#### **HARDWARE SETUP**

1. Power down the UPS.
2. Connect serial cable from the SIGNAL DB9 on the UPS to the serial port of the computer to be used for downloading the code.
3. Press and hold the Enter and Down Arrow (Right top and Right bottom) Front Panel pushbuttons while simultaneously powering ON the UPS. Release after 2 seconds.

Front panel display will be off.

The UPS system should now be in serial BOOTLOAD mode and waiting for some communication on its serial cable.

4. Press the Load (Top left) button located on the front panel one time.

5. From the computers command line, type "bootload" and then press“enter” to begin the download process. A string of "."s should scroll across the computers screen to indicate that the DSP chip is BOOTLOADING the new operational code.

The UPS will begin normal operation at the conclusion of the download operation which may take several minutes to complete.

If no communication with the serial port is seen after 10 minutes has elapsed, the previous operational code will then be executed.