

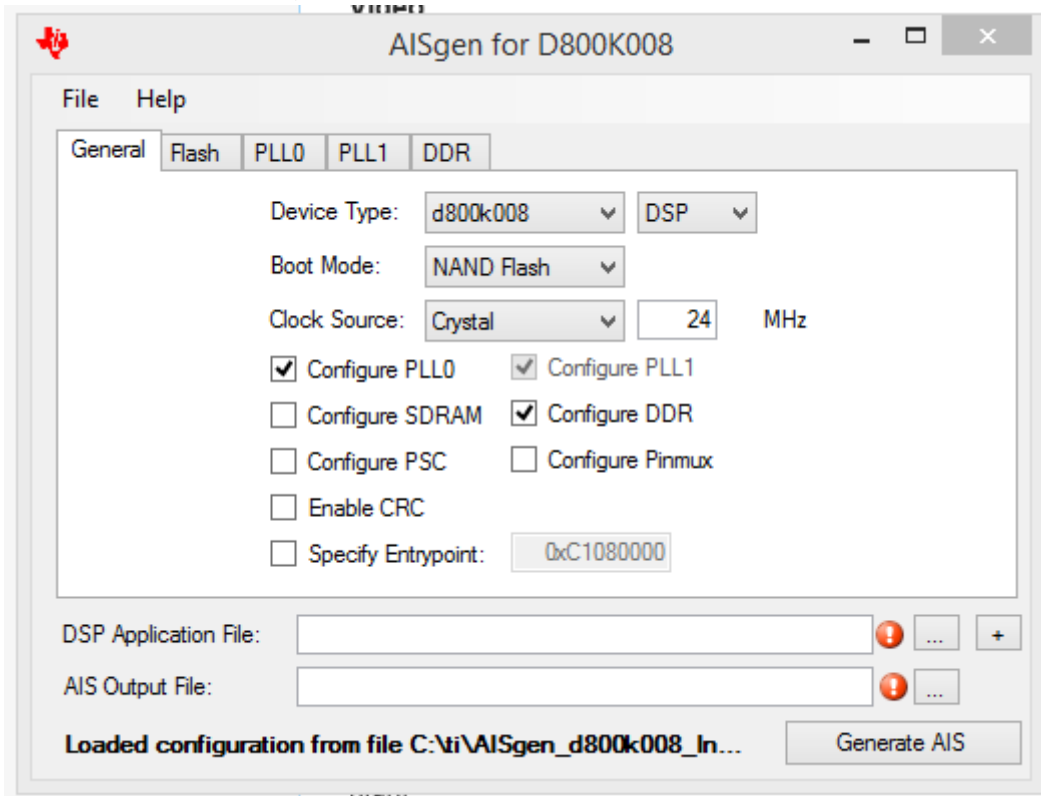
LCDKC6748 Booting And Flashing

Here is my procedure what – I guess – everybody should execute to boot the application on every power on.

- I supposed that you already have a precompiled Release version of your app, called “app.out”

Using AISgen to Create the Bootloader AIS File

1. Start AISGEN app.
2. Click File/Load Configuration menu and navigate to the AISGen for D888K008 folder.
3. Open the “cfg_files” folder.
4. Open the “LCDK_AISGen_Config.cfg” file. (If you do not find it then you can download it from the LCDKC6748 home page)
5. Make sure you see this. (Make sure that the Boot mode is NAND flash and on the Flash tab the Data width is 16 bits)



Note: It is not sure that the device should be DSP and not ARM. This is not clear from any documentations but it seems to me the DSP is the logical choice.

6. Click on the “...” button beside the DSP Application File.
7. Find your “boot.out”. This is not an easy job. The documentation says the prebuilt boot.out can be found in this folder:

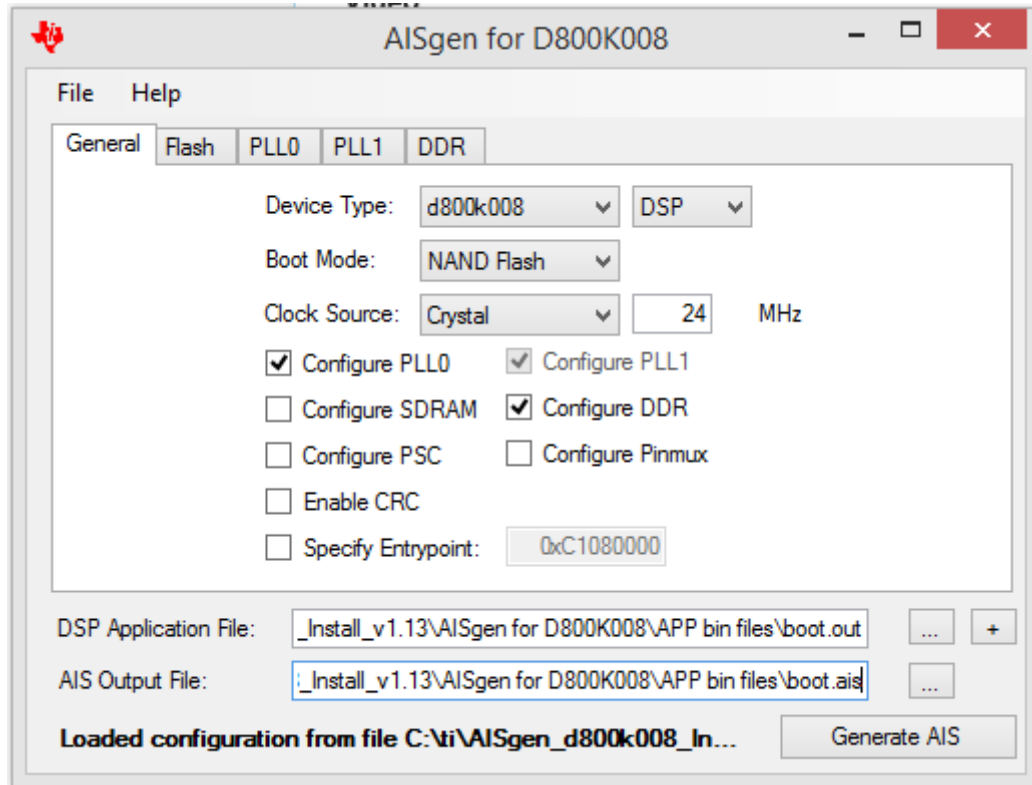
<StarterWarePath>/binary/armv5/<toolchain>/c6748/evmC6748/bootloader/Release/boot.out

Of course there is no such a folder. The right location is:

<StarterWare>\binary\c674x\cgt_ccs\c6748\lcdkC6748\bootloader\Release\boot.out.

Note: It is not sure that this is the right “boot.out” for LCDK6748. In the <StarterWare Installation Path>\binary\c674x folder there is a “cgt” and a “cgt_css” folder. I guess the right one is the “cgt_css” because the CSS is probably stands for Code Composer Studio. But I am not sure about this.

8. Use the same folder (where the boot out is located) and specify the boot.ais file name. Note that this is also not clear. Half the Wikis and PDF files uses boot.bin and boot.ais.



9. Click on Generate AIS button.
10. REMEMBER the PATH where the AIS file was saved. You will need the AIS file later.

Using out2rprc to Create the Application Binary

1. Find the “out2rprc.exe folder” in your StarterWare or if you installed the AISGen utility the in AISGen install folder. I have it in C:\ti\AISgen_d800k008_Install_v1.13\AISgen for D800K008\flash_writer folder.
2. Copy the out file of your application into this folder. (Remember I supposed that file name of your application is “app.out”)
3. Now open a CMD window in this folder.
4. Copy the following command into the CMD window:
out2rprc.exe app.out app.bin
5. This creates a binary file which can be flashed into the NAND flash chip.

Flashing the Application

1. To do this you will need the “sfh_OMAP-L138.exe”. This can be found in install path of “StarterWare”.
2. In File Manager navigate to the folder the the “sfh_OMAP-L138.exe”
3. Copy the “app.bin” (your application) into the folder of “sfh_OMAP-L138.exe”.
4. Copy the “boot.ais” into the same folder.
5. Open a CMD window for the folder the “sfh_OMAP-L138.exe file

6. Set the DIP Switch 2 and 4 to ON (turn off all the other switches) of the LCDKC6748 dev. kit. You just set the dev. kit to boot from UART.
7. Connect an USB cable to J3 mini-USB plug and a free USB port of your PC.
8. Turn OFF the dev. kit. This should be done only once:
Open Device Manager of Windows. Open the COM ports node. Turn ON the dev. kit.
Remember the new COM Port name.

9. You'd better to erase the flash first. Copy this command into the CMD prompt and press enter:

```
sfh_OMAP-L138.exe -erase -targetType C6748_LCDK -flashType NAND -p COMxx
```

Where COMxx is the com port name you found in Device Manager. You need to press the reset button when it show Waiting for BOOTME...

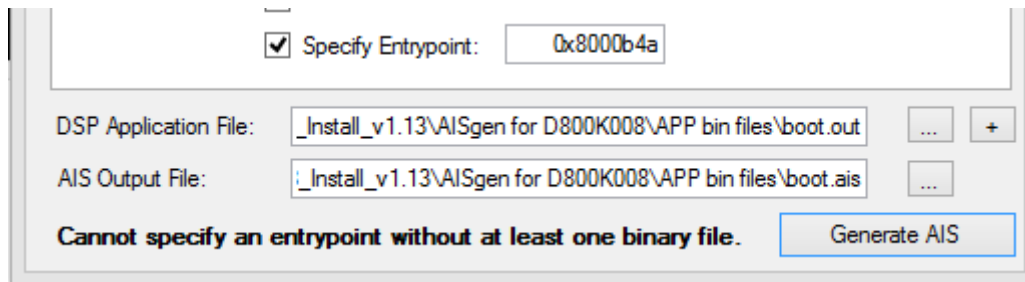
11. Now you should flash both the boot.ais and app.bin. Copy the following command into the CMD window:

```
sfh_OMAP-L138.exe -flash -targetType C6748 -p COM7 boot.ais app.bin
```

Press the reset button when you see the Waiting for BOOTME...

12. When it is complete then close the CMD prompt
13. Turn off the dev. kit.
14. Set the DIP switches 2, 3 and 4 (boot from NAND flash)
15. Turn on the power.

If you are lucky – after these very easy, mid-20th century style – procedure your app will run automatically after every power on. Except mine, because it does not run from the DDR memory but from SHRAM. So back to the original question. How can I specify the Entry point of the APP? My MAP file shows that the Entry point of my APP is 0x 8000b4a0. If I enter this address into the only logical textbox in AISGen then I get this error message:



Many thanks for your help?

PS: Something tells me I have to write own bootloader APP...