



Follow these instructions in order to quickly test the working of the LCDK

1. Make sure all the Boot mode DIP switches (SW1) are OFF, except for DIP switches #1 and #4. These should be ON.
2. Connect the audio source to LINE IN (TOP SOCKET). Make sure the output level from the source is low enough that it will not damage the input circuits on the AIC 3106 codec.
3. Connect headphones to LINE OUT (BOTTOM SOCKET).
4. Connect the XDS100 v2 Emulator (J-Tag) to the LCDK board. Then connect the Emulator to the USB port of the PC.
5. Connect the power supply to the LCDK board.
6. Launch Code Composer Studio (CCS) Software
  - a. Start
  - b. All Programs
  - c. Texas Instruments
  - d. Code Composer Studio 6.0.1
7. Select "FREE LICENSE" if prompted to do so, and click 'Finish'.

8. Setting the Workspace
  - a. Make sure that there is a folder called LCDK on the C drive.
  - b. In CCS, File
  - c. Switch Workspace
  - d. Other
  - e. Set the workspace as 'C:\LCDK\'.  - f. CCS will restart once the workspace is changed
9. Copy the target configuration file 'L138\_eXperimenter\_v2.ccxml' and 'L138\_LCDK.gel' from 'C:\...\LCDK\L138\_Support' to 'C:\User\Your\_ID\ti\CCSTargetConfigurations'.
  - a. Start
  - b. Computer
  - c. Copy and Paste in the C drive
  - d. The GEL file will run every time you connect to target in the debugger and carries out a number of important initialization procedures on the LCDK
10. In CCS, select
  - a. View
  - b. Target Configurations (will appear on right side of screen)
  - c. Open User Defined folder
  - d. Right-click on 'L138\_eXperimenter\_v2.ccxml' and set as Default.
11. Create a new project by selecting
  - a. File
  - b. New
  - c. CCS Project
12. Name the project
13. Under Target
  - a. Family - C6000
  - b. Variant can be 'Generic Devices'
14. Advanced Settings
  - a. Device endianness – little
  - b. Compiler version – TI v7.4.8
  - c. Output format – legacy COFF
  - d. For the Linker Command file select  
'C:\...\LCDK\L138\_support\linker\_dsp.cmd'
15. Under Project templates and examples, select 'Empty Project' and click Finish
16. Adding Source Files
  - a. Right-click the project name
  - b. Select Add Files
  - c. Add the following files from 'C:\...\LCDK\L138\_support'
    - i. L138\_aic3016\_init.c
    - ii. L138\_aic3016\_init.h
    - iii. Vectors\_intr.asm
  - d. Add a blank source file called 'stereo.c' to the project and copy in the code, 'OMAP Stereo Output' from Blackboard.

#### 17. Set build options

- a. Right-click on the project name and select Properties
- b. Build Settings
  - i. C6000 Compiler
  - ii. Include Options
  - iii. Click Add next to Add dir and add the following
    1. 'C:\...\omap138\bsl\inc'
    2. 'C:\...\LCDK\L138\_support'
  - iv. Use the browse feature to add those files
- c. Click C6000 Linker
- d. File Search Path
- e. Add the following library
  - i. 'C:\...\omap138\bsl\lib\enmomapl138\_bsl.lib'
- f. Click OK at the bottom of the window

#### 18. Running the Project

- a. Select Project
  - i. Build All
- b. Run
  - i. Debug
- c. This will launch the Debugger and load the program onto the board
- d. If you get a message saying that the device is held in reset mode, push the reset button on the LCDK and hit RETRY.

#### 19. In the Debugger perspective, Select

- a. Run -> Resume
- b. Or click the Run button on the toolbar

#### 20. Play your audio. You should hear the song in the left and right channels