ECE4703 REAL-TIME DSP LAB SOFTWARE OVERVIEW
Code Composer Studio IDE

Note that we will be using CCS v5.

CCS v4/v5 is based on the Eclipse IDE
Code Composer Studio IDE

- Connect USB cable from PC to DSK
- Connect power supply to DSK
- Wait for POST to complete
  - If this is the first time connecting the DSK, Windows may install a driver. This should happen automatically.
- Launch Code Composer Studio v5

- CCS will load and wait for your input
Code Composer Studio IDE

```c
#include <stdio.h>

int main(void) {
    printf("Hello World!
");
    return 0;
}
```
CCS Workspace

- You should probably not keep your CCS files on the local computer
- Recommended workspace path: M:\ECE4703\labN
  where N is the current lab number
- Each part of the project will then be in a subpath like
  M:\ECE4703\lab1\part1
- Note: CCS may not work with long drive names, e.g. \ece-homes.ece.wpi.edu. You should use M:.
CCS v5 Initial Configuration

- If this is the first time CCS v5 is run, you will need to set up target configuration for C6713DSK
- Window -> Show View -> Target Configurations
- Create new target configuration (right click):

Details for setting up a DSK6713 target here:
http://spinlab.wpi.edu/courses/ece4703_2013/configureccsv5.html
Launching Target Configuration

- Window -> Show View -> Target Configurations
- Right click on your DSK6713.ccxml target configuration
- Launch selected configuration
Connecting to the C6713 DSK

- Run -> Connect Target (or Ctrl+Alt+C)

- If successful, you should see this in the console

```
DPS6713.cxml
```
Goals for Today

- Get familiar with DSK and lab hardware
- Get familiar with CCS v5
- Get Helloworld project working (Lab 1, part1)
  [http://spinlab.wpi.edu/courses/ece4703_2013/helloworld.html](http://spinlab.wpi.edu/courses/ece4703_2013/helloworld.html)
- Get Stereoloop project working (Lab 1, part2)
  [http://spinlab.wpi.edu/courses/ece4703_2013/stereoloop.html](http://spinlab.wpi.edu/courses/ece4703_2013/stereoloop.html)
- Start part 3 of the lab 1 assignment
Does your Stereoloop project work?

- Try playing some music into the line input of the DSK.
- Plug headphones in the headphone output of the DSK.
- If your code is running correctly, you should hear the music in the headphones.
- Suspend your code. The music should stop.
- This code simply reads in samples from the line input jack and outputs them (unmodified) to the line output and headphone jacks.
- This code doesn’t actually do any signal processing, but it will serve as a template for most of the DSP programs you will write in ECE4703.