

Notepad++/Makefile Toolchain for Windows: Readme

EE 451, Fall 2012, Matthew Landavazo

Introduction

The purpose of this document is to explain the usage of the Notepad++ code editor and included makefile and batch files for Windows as an alternative to Code Composer Studio v3.1 when programming for the Texas Instruments TMS320C6713 DSK digital signal processing board.

The usage of Notepad++, makefile and batch file is intended to reduce project setup time by allowing students to simply copy a template with an existing and working configuration.

You will not be able to do everything without Code Composer v3.1. Features only available in Code Composer will be discussed in a later section.

How it Works

Provided to you is a zip file called “EE451_template.zip”. It includes a template project file with all the configuration settings properly configured as per instructions given in Lab 1. Notepad++ is also contained within each directory. Here are the steps to get started:

- Extract and copy the “template” folder to a directory of your choosing. Your EE network storage is a good place that way you can always find it when you need it.
- When starting a new lab, make a copy of the template folder and rename it to “Lab_X” or to your liking.
- Open your newly copied project and navigate to the folder called “unicode” and double click “notepad++.exe”.
- From Notepad++, go to File>Open and select main.c from your folder, you should see the provided code from Lab 1. You can use this as a starting point for your new project.
- To compile simply press “Ctrl + F7”. A shell window will come up and display a debug window for the compiler. Any errors in compilation will be displayed here.

Limitations

First and foremost, you will still need Code Composer Studio to load your program onto your DSP board. You can do this by opening Code Composer, connecting your device and using the “Load Program” and navigating to the debug folder to find the “.out” file as usual.

Secondly, if you wish to use the “Watch Window” you will have to open the project up in Code Composer as well.

Lastly, if you need to change configuration settings you will have to start a new project and configure it with the settings you want and then migrate “make.bat” “makefile” and “unicode” to your new project folder and it will serve as a new template for your new settings.

To setup hardware and software interrupts, simply create a new BIOS file in Code Composer Studio, setup your interrupts and save it over the old BIOS file in your template folder.

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