Lab8 - FreeRTOS

Build an application, running on top of FreeRTOS. The yellow and the green LED must flash at intervals of 2 and 3 seconds, respectively. Each LED must be driven from its own independent task. The red LED must flash with a frequency of 1-10 Hz, controlled by the potentiometer through an analogue input. Flashing of the red LED and the input from the analogue input, may exceptionally be done in one common task.

FreeRTOS

Read about FreeRTOS at: http://www.freertos.org/

Get the e-book: FreeRTOS Reference Manual API Functions and Configuration Options.

It can be downloaded from: http://www.freertos.org/Documentation/RTOS book.html

Follow the instructions in itslearning / resources / notes / CreateFreeRTOSProject.pdf to start a new FreeRTOS project in CCS.

Download itslearning / resources / code / FreeRTOS_example.zip for a template on how to start writing your code.

The FreeRTOS™ Reference Manual API Functions and Configuration Options Richard Barry

A/D converter setup

Take a look at the example code on how to use the ADC module: itslearning / resources / code.



Insert a jumper to the lower position of J4 to enable the on-board pot-meter.