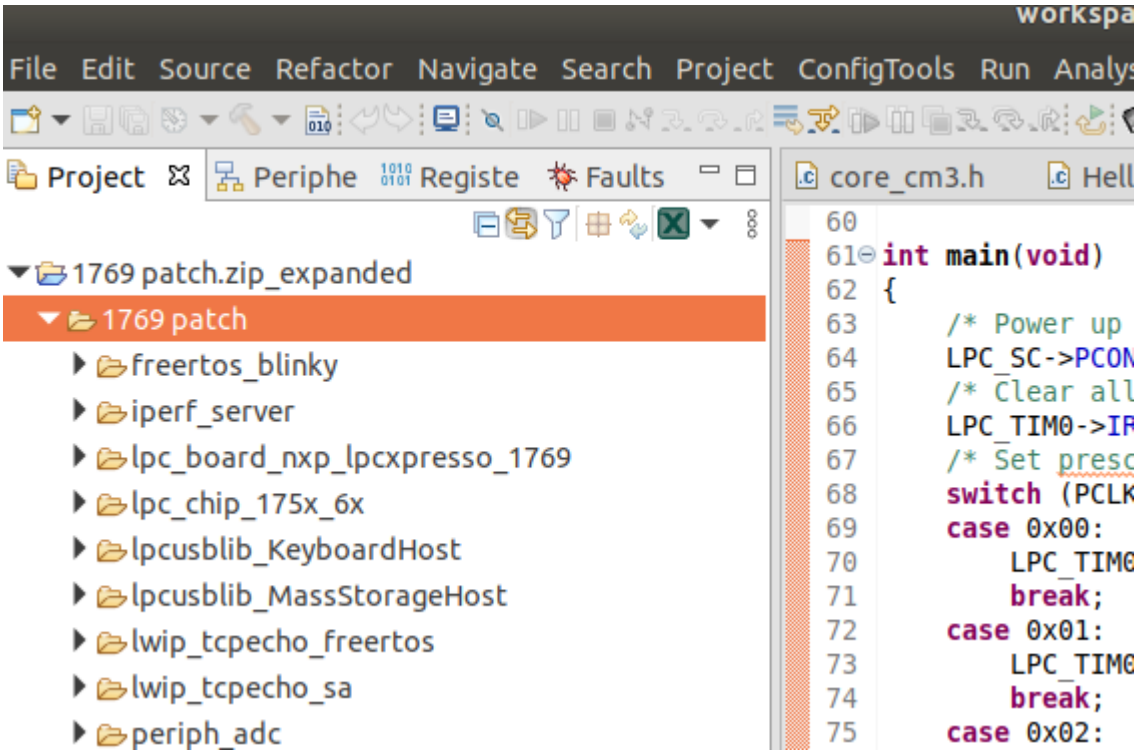
CMPE 244
Homework CPU Architecture and Sample IDE

1. Use LPC1769 CPU datasheet as an example to create a CPU block diagram based on the discussion in the class, e.g.,
1.1. Find CPU or SOC (System on Chip) block diagram of you chosen platform (Jetson NANO, Nvidia Jetson Tx2, or Pie) and copy it into word document.
1.2. Identify the GPP port controller (general purpose port block, e.g., GPIO block) in the block diagram;
1.3. Find the target board connector diagram and place this diagram in your word document. Then choose 2 GPIO pins, one for output and one for input, for the coming GPIO hello-the-world assignment.

2. Install NXP MCU Expresso and import LPC1769 patch. You can find the LPC1769 patch download from here
https://github.com/hualili/CMPE240-Adv-Microprocessors/blob/master/1769%20patch.zip

Note: this IDE will allow us to analyze special purpose registers and their init & config, as well as mapping CPU architecture to memory map, and then making the connection to IDE cross compiler.

3. Submission:
3.1. Canvas submission;
3.2. pdf format of your homework;
3.3 provide screen capture photo of your installed NXP MCU Expresso which shows the imported LPC 1769 patch (see Figure below).



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