UNCC, Department of Electrical and Computer Engineering
ECGR4101/5101, Fall 2006, Homework #2, Due: 9/5/06, at the beginning of class (20 points)

0. How long did this homework take you? (1 point)

1. Read the Jim Turley article "The Two Percent Solution." Mr. Turley believes processors make up only a small percentage of semiconductor volume yet generate most of the revenue. In four lines of correct English, state why you agree or disagree with him. (4 points)

2. Read the Jim Turley article "The Death of ASICs." Mr. Turley believes the days of custom logic are numbered. In four lines of correct English, state why you agree or disagree with him. (4 points)

3. I have an LED whose average current drain is 2mA at 4.5v. I am using 250 mAH 1.5v cells as the power supply for this LED. If I want my LED to powered on for 3 weeks continuously, how many cells do I need and in what configuration (i.e. how do I connect them)? (3 points)

4. For the SKP board, what is the total number of memory that can be used by a ***user*** for storing programs or data? Can you, the user, store a value at memory location 2FFF5h? Why or why not? (3 points)

5. Write a small piece of C code for loading the array *array[100]* with the value of *i*temp*, where *i* is the nth element of *array* and *temp* is an unsigned integer. Assume all of these variables are defined elsewhere. (2 points)

6. Convert the small piece of code from problem 5 into Renesas Assembly Language. (3 points)