UNC Charlotte, Department of Electrical and Computer Engineering
ECGR 4101/5101, Spring 2010, Homework #2
Due: 1/22/10, 5 pm (20 points)

Assignment should be typed, if possible. Upload to Moodle

1. How long did this homework take you? (1 point)
2. I have an wireless sensor node whose current drain is 50mA for 1 minute every one hour and 0.001 mA the rest of the time. I am using a single 5000 mAhr cell as the power supply for this device. How long will my device run (in hours, days, and years)? (3 points)
3. For the QSK62P Plus board, what is the total amount of flash memory that can be used for storing programs and exception table addresses? (1 points)
4. For the QSK62P Plus board, what is the total amount of flash memory that can be used for storing USER programs (not tables or ROM Monitor programs)? (1 points)
5. Can you, the user, store data at memory location 003FEh? Why or why not? (2 points)
6. Read the July 2008 EE Times article "Power trends point to a knowledge of integration." In four lines of correct English, summarize what the authors suggest can be done to reduce power consumption in electronic devices. (5 points)
7. Jim Turley wrote the article "The Two Percent Solution" in 2002.   Mr. Turley believed processors make up only a small percentage of semiconductor volume yet generate most of the revenue. That was six years ago. Has anything changed since then? In up to ten lines of correct English, state why you agree or disagree with him, **and cite one current article or website to justify your points**. (7 points)