

ECGR 4101/5101, Fall 2008, Quiz 17 - 12/8/2008

Name:

Which of the following is not a requirement for Lab 7? (Circle all incorrect ones)

- Req. 1. The code generated is written in C for the SKP16C62P.
- Req. 2. The code is well commented and easy to follow.
- Req. 3. Board 1 must run with Round Robin Scheduling – you should determine the best priority for the tasks.
- Req. 4. If the data received is not valid the program should return the not-acknowledgement string “Bad input”.
- Req. 5. Board 1: Toggle the Green LED every 0.1 seconds (0.1 seconds on, 0.1 seconds off).
- Req. 6. Board 1: Toggle the Yellow LED every 0.25 seconds (0.25 seconds on, 0.25 seconds off).
- Req. 7. Board 1: Toggle the Red LED every 0.5 seconds (0.5 seconds on, 0.5 seconds off).
- Req. 8. Board 1: Configure the board to continually update the thermistor ADC value.
- Req. 9. Board 1: Every 1.0 seconds, read the temperature value, convert it to ASCII, and send the ASCII values to Board 2.
- Req. 10. Board 1: With the value read from the thermistor, convert it into a temperature as an ASCII string with the format “xxx.x”, which is the temperature in Fahrenheit.
- Req. 11. Board 1 & 2: Serial communications must be handled with interrupts and queues.
- Req. 12. Board 2: When ASCII data is received, display it on the LCD.
- Req. 13. Communicate at 112,000 baud, odd parity, two stop bits
- Req. 14. Connect two data lines and one ground line between the two boards using RS232-level signals.
- Req. 15. The code should be as compact as possible. Lab scores will be based on the size of the compiled object file. Smaller compiled code will result in a better score.
- Req. 16. Your final report should show a one-second Mixed Signal Oscilloscope trace showing all LEDs and one serial communication.
- Req. 17. Your larger file must be submitted to Blackboard.