

CpE301 - Design Assignment 3B

DUE: See Website

Design Assignment 3B:

The goal of the assignment is to modify the above codes to do the following:

1. Write a C AVR program that will monitor the LM34/35 connected to an Analog pin (PC5) to display the temperature in F on the serial terminal every 1 sec. Use a timer with interrupt for the 1 sec delay. Use a FTDI chip for serial to USB conversion.
2. Use the ATMEL Studio Data Visualizer or any Charting program to display the values in time.

Submission:

The following are required for successful completion of the design assignment:

- a. AVR C code that has been compiled and working.
- b. The C code should be well documented with explanation of every instruction.
- c. A word document that contains the flow chart of the assembly code along with the snapshots of the schematics, components connected on the breadboard and screen shoots.

Points:

Task 1~2: 100%. (Code=60%, Documentation=20%, Verification/Snapshots=20%)

Evaluation Rubrics:

See class website for the DA evaluation rubrics.