10/18 PTL

- DUPLICATE COMPONENTS ON SCHEMATIC, OVERLAPPING WIRES
+ . RST/MAP KNOWLEDGE DECENT, NOT GREAT
- DBG PORT NON FUNCTIONAL
+ +/- WORKS OKAY
- ? ~~SOMETIMES DOESN'T PRINT BUFFER~~ STILL PRINTS OLD FREED BUFFER
- ~~# = WORKS IN FINDE PRINT WHEN BUFFER IS EMPTY~~
- #@ ~~SEEMS TO WORK~~ DOES NOT FREE EXTRA BUFFERS
- ~~SOMETHING WRONG W/ BUFF > 2000~~
- NO HANDLE OVER LONG USER INPUT
- CRASH AFTER INVALID # BUFFER SIZE

10/26/2018 Part 2

(+) Temp in °F correct
(+) PWM works, changes with button
(±) PWM value not correctly displayed in terminal.
(-) No UI to change 8051 PWM, set different modes, need to flash the board again & again.

ECEN 5613 **Lab #3 Signoff Sheet** **Fall 2019**

You will need to obtain the signature of your instructor or TA on the following items in order to receive credit for your lab assignment. This assignment is due by **Friday, October 18, 2019 (Part 1 Required Elements) and Friday, October 25, 2019 (Part 2 Required and Supplemental Elements)**.

Print your name below, sign the honor code pledge, circle your course number, and then demonstrate your working hardware & firmware in order to obtain the necessary signatures.

Student Name: HARSH RATHORE

Honor Code Pledge: "On my honor, as a University of Colorado student, I have neither given nor received unauthorized assistance on this work. I have clearly acknowledged work that is not my own."

Student Signature: Rathore

Signoff Checklist

Part 1 Required Elements

- ☑ Schematic of acceptable quality (all components shown)
- ☑ Pins and signals labeled, decoupling capacitors, and two 28-pin wire wrap sockets present on board
- ☑ Very good knowledge of a terminal emulator
- ☑ Demonstrates all 32KB of XRAM in memory map are functional, including monitor block fill command
- ☑ Using PAULMON2, demonstrates highest baud rate as: 57600
- ☑ Knows how to use SDCC [IDE or make optional]
- ☑ Knows how to analyze output files (.RST, .MEM, .MAP) for correct addresses
- ☑ C serial program and ~~virtual debug port functional~~ and code commented
- ☐ Hex display of buffer contents NO DBG PORT

TA signature and date 10/18/19

Part 2 Required and Supplemental Elements

- ☑ ARM code integration and execution
- ☑ 8051 PWM control works correctly, X2 mode
- ☐ Correctly enters Idle mode and exits via external interrupt 1 Partial
- ☐ Correctly enters Power Down mode
- ☐ All other PCA software menu items function correctly
- ☐ Good understanding of PCA modes
- ☐ Good user interface; program is easy to use

TA signature and date 10/26/2019

Instructor/TA Comments: ☐ ☐ ☐

FOR INSTRUCTOR USE ONLY **Part 1 Elements**	Not Applicable	Below Expectation	Meets Requirements	Exceeds Requirements	Outstanding
Schematics, SPLD code	☐	☐	☑	☐	☐
Hardware physical implementation	☐	☐	☑	☐	☐
Part 1 Required Elements functionality	☐	☐	☑	☐	☐
Sign-off done without excessive retries		☐	☑		
Student understanding and skills	☐	☐	☑	☐	☐
Overall Demo Quality (Part 1 elements)	☐	☐	☑	☐	☐

FOR INSTRUCTOR USE ONLY **Part 2 Elements**	Not Applicable	Below Expectation	Meets Requirements	Exceeds Requirements	Outstanding
Part 2 Required Elements functionality	☐	☐	☑	☐	☐
Supplemental Elements functionality	☐	☐	☑	☐	☐
Student understanding and skills	☐	☐	☑	☐	☐
Overall Demo Quality (Part 2 elements)	☐	☐	☑	☐	☐

Comments:

- ☑ Optional Challenge: PAULMON2 RUN command
- ☐ Optional Challenge: ISP API calls
- ☐ Optional Challenge: C and Assembly interfacing
- ☐ Optional Challenge: Serial ISR
- ☑ Optional Challenge: SDCC heap memory management analysis Partial

- ~~SOMETHING WRONG W/ BUFF > 2000~~ FREE EXTRA BUFFERS
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10/26/2018 Part 2

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