

Week 1, 2, & 3 (8-Jan to 21-Jan) - Zac Carico

| Goal/Task | % Done | Hours (Act.) |
|--|--------|--------------|
| Everyone Complete Leadership Foundation: Clarify Purpose (p. 32-33), Team Purpose Statement (p. 34), Voice Finder (p. 64-67), Your Contribution Statement (p. 68), Win-Win Performance Agreement (p. 76) | 100 | 2 |
| Team Complete: Project Objective / Mission Statement (clear and concise, <25 words, see example below) | 100 | 1 |
| Team Complete: Project Task Temple (Conditions or tasks that must be completed, work that needs to be done) | 100 | 2 |
| | | |

Create a TMR-ed system with various configurations of the RISC-V instruction set on an FPGA to test the possibility of its use in space.

| | |
|--|----|
| Hours on task during the week (On track $\geq (8+13+10) / \text{wk}$) | 18 |
| Total hours on task so far this semester (On track $\geq 31 \text{ hrs}$) | 18 |

Progress made during the week (Log)

(What I did)

- Researched different voting circuits to possibly implement into the TMR
- Created and assigned tasks to team members and created a schedule for when the tasks need to be completed
- Worked on project proposal to define what exactly the project will entail and how it will get done

Difficulties encountered during the week

(What I did not do and why)

- Unable to start research into what radiation and temperature/humidity sensors to use on the PCB due to difficulties in a few classes.

Goals for this coming week

(Ones that move the project forward the most)

| | Stop Date (Est.) | Hours (Est.) |
|---|------------------|--------------|
| Start research into the sensors, finding at least 3 different sources for each sensor | 2/2/20 | 5 |
| Research into a software-configurable PWM | 2/2/20 | 5 |
| Class assignments | 2/2/20 | 3 |
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|---|----|
| Estimated time needed to work on goals for this coming week (typ. 13 hrs) | 13 |
|---|----|

How can we help you achieve your goals?

- N/A, I dropped calculus to make time for other classes

Week 1, 2, & 3 (8-Jan to 21-Jan) - James Thomas

| Goal/Task | % Done | Hours (Act.) |
|--|--------|--------------|
| Everyone Complete Leadership Foundation: Clarify Purpose (p. 32-33), Team Purpose Statement (p. 34), Voice Finder (p. 64-67), Your Contribution Statement (p. 68), Win-Win Performance Agreement (p. 76) | 100 | 2 |
| Team Complete: Project Objective / Mission Statement (clear and concise, <25 words, see example below) | 100 | 1 |
| Team Complete: Project Task Temple (Conditions or tasks that must be completed, work that needs to be done) | 100 | 2 |
| Research on new technologies and languages that will be used for this project | 50 | 16 |

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| | |
|--|----|
| Hours on task during the week (On track $\geq (8+13+10) / \text{wk}$) | 20 |
| Total hours on task so far this semester (On track $\geq 31 \text{ hrs}$) | 20 |

Progress made during the week (Log)

(What I did)

- Helped with creating schedule and other project decisions
- Attempted learning VHDL
- Workbook
- Team Proposal
- UART and LVDS research

Difficulties encountered during the week

(What I did not do and why)

- Unable to start schematic for my section of the PCB. Needed some clarifications and was working on learning VHDL while the schedule was being decided

Goals for this coming week

(Ones that move the project forward the most)

| Goal/Task | Stop Date (Est.) | Hours (Est.) |
|---------------------|------------------|--------------|
| Schematic for PCB | 2/8 | 5 |
| UART Implementation | 3/1 | 10 |
| | | |
| | | |

| | |
|---|----|
| Estimated time needed to work on goals for this coming week (typ. 13 hrs) | 15 |
|---|----|

How can we help you achieve your goals?

- Clarification on PCB
- Pray for me

Week 1, 2, & 3 (8-Jan to 21-Jan) - Max Bakes

| Goal/Task | % Done | Hours (Act.) |
|--|--------|--------------|
| Everyone Complete Leadership Foundation: Clarify Purpose (p. 32-33), Team Purpose Statement (p. 34), Voice Finder (p. 64-67), Your Contribution Statement (p. 68), Win-Win Performance Agreement (p. 76) | 100 | 2 |
| Team Complete: Project Objective / Mission Statement (clear and concise, <25 words, see example below) | 100 | 1 |
| Team Complete: Project Task Temple (Conditions or tasks that must be completed, work that needs to be done) | 100 | 2 |
| Researched ADC and VHDL | 10 | 16 |

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|--|----|
| Hours on task during the week (On track $\geq (8+13+10) / \text{wk}$) | 21 |
| Total hours on task so far this semester (On track $\geq 31 \text{ hrs}$) | 21 |

Progress made during the week (Log)

(What I did)

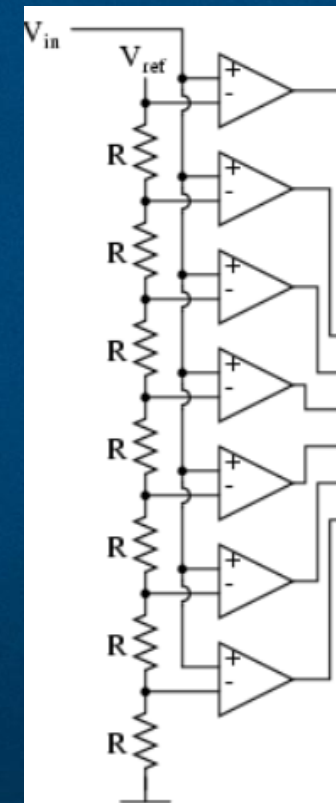
Did Research on the Multi-channel ADC:

Flash ADC : faster but lower resolution

(What resolution requirements are needed?)

Began learning VHDL

Began research on SPI protocols.



Difficulties encountered during the week

(What I did not do and why)

- Need more info on ADC to begin design and finding components.
-input voltages, resolution...

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Goals for this coming week

(Ones that move the project forward the most)

| Goal/Task | Stop (Est.) | Date | Hours (Est.) |
|------------------------------------|-------------|------|--------------|
| Complete the schematic for the ADC | 2/8 | | 10 |
| SPI communication | 2/16 | | 10 |
| Implement ADC into Altium | 2/10 | | 10 |
| | | | |

| | |
|---|----|
| Estimated time needed to work on goals for this coming week (typ. 13 hrs) | 15 |
|---|----|

How can we help you achieve your goals?

- Getting the specs for the ADC

Week 1, 2, & 3 (8-Jan to 21-Jan) - Michael Ashford

| Goal/Task | % Done | Hours (Act.) |
|--|--------|--------------|
| Everyone Complete Leadership Foundation: Clarify Purpose (p. 32-33), Team Purpose Statement (p. 34), Voice Finder (p. 64-67), Your Contribution Statement (p. 68), Win-Win Performance Agreement (p. 76) | 40 | 2 |
| Team Complete: Project Objective / Mission Statement (clear and concise, <25 words, see example below) | 100 | 1 |
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| Research VHDL and TMR, practiced VHDL, researched LCD screen | 70 | 12 |

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Progress made during the week (Log)

(What I did)

- Researched Triple Modular Redundancy to find best practices
- Researched and practiced VHDL to understand the differences between that and Verilog
- Researched different LCD screens to be used as a display on our PCB

Difficulties encountered during the week

(What I did not do and why)

- Getting Vivado setup took a lot longer than normal.
- I had no home internet for the first 2 weeks of school.

Goals for this coming week

(Ones that move the project forward the most)

| | Stop Date (Est.) | Hours (Est.) |
|--|---------------------|-----------------|
| Build I2C interface for LCD screen in VHDL | 2/9/20 | 5 |
| Use IP to create and explore a RISC-V processor in TMR | 3/1/20 | 6 |
| Class assignments | 2/2/20 | 2 |
| | | |

| | |
|---|----|
| Estimated time needed to work on goals for this coming week (typ. 13 hrs) | 13 |
|---|----|

How can we help you achieve your goals?

- Help me get interviews at the BYU Career Fair (Prayers)

Week 1, 2, & 3 (8-Jan to 21-Jan) - Sam Bagley

| Goal/Task | % Done | Hours (Act.) |
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Progress made during the week (Log)

(What I did)

- Helped to create project proposal to submit to NASA to receive funding for this project
- Met with team to research and decide what features/sensors to include and how to distribute work.

Difficulties encountered during the week

(What I did not do and why)

- Haven't learnt as much about VHDL as much as I should have due to prioritizing other class assignments above this.

Goals for this coming week

(Ones that move the project forward the most)

| | Stop Date (Est.) | Hours (Est.) |
|--|---------------------|-----------------|
| Work on implementing I2C in VHDL | 2/2/20 | 5 |
| Source heartrate sensor and pressure sensors | 2/2/20 | 5 |
| Class assignments | 2/2/20 | 3 |
| | | |

| | |
|---|----|
| Estimated time needed to work on goals for this coming week (typ. 13 hrs) | 13 |
|---|----|

How can we help you achieve your goals?

All members who are working on PCB could meet to get acquainted with using Altium.

