

## **sdmay19-25: Handheld Emulation Station**

Semester 2 Week 5 Report

3/4 - 3/8

### **Team Members**

Jacob Nachman — *Meeting Facilitator*

Nick Lang — *Meeting Scribe*

Nic Losby — *Chief Engineer*

Sean Hinchee — *Test Engineer*

Matthew Kirpes — *Report Manager*

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### **Summary of Progress this Report**

Bit operations got mostly completed with some work yet to be done next week, V4 was successfully soldered, more opcode tests were implemented.

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### **Pending Issues**

Finish opcodes, opcode review and revision, buttons/GPIO, dev platform on the raspberry pi.

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### **Plans for Upcoming Reporting Period**

Jacob Nachman: Finish bit operations and work on opcode revisions in preparation for after spring break.

Nic Losby: Work on Button PCB, Redesign the layout because newer is always better, and get V2 of Button PCB ordered.

Nick Lang: Prepare the memory unit for integration with the cpu once opcodes are complete

Sean Hinchee: Continue pursuing a development platform for the rpi3 dev board.

Matthew Kirpes: Work on cpu integration to get started on testing soon.

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### **Past Week Accomplishment**

Jacob Nachman: Mostly completed bit operations.

Nic Losby: Relayed out the PCB and ordered V4; Researched RPi Compute Module. Found out they are not technically out yet and on back order.

Nick Lang: Completed the memory unit.

Sean Hinchee: Worked on tests for opcodes in the cpu.

Matthew Kirpes: Worked on Memory bank controller.

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## Individual Contributions

<b>Team Member</b>	<b>Contribution</b>	<b>Weekly Hours</b>	<b>Total Hours</b>
Jacob Nachman	Worked implementing bit operations, mostly completed opcodes with exceptions of interrupts.	8	50
Nick Lang	Completed the memory unit.	9	49
Nic Losby	Soldered V4 and debugging the power circuit again.	10	52
Sean Hinchee	Continued analyzing opcodes and, once pointed out, verified functionality against the more accurate cpu specification.	10	52
Matthew Kirpes	Research GPU and how it will work along with the memory and cpu.	8	40