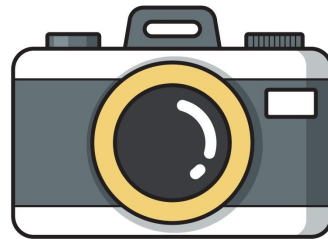


EEEC136 Digital Camera

Week 8 Project Update



Waylon, Cassandra, Viktor, Alina, Angel

Overview

1. Received Photodiode board PCB
2. Worked on code for LCD display to show camera indication
3. Received all parts for assembly
4. Worked on beta prototype code.
5. Start the PCB assembly.

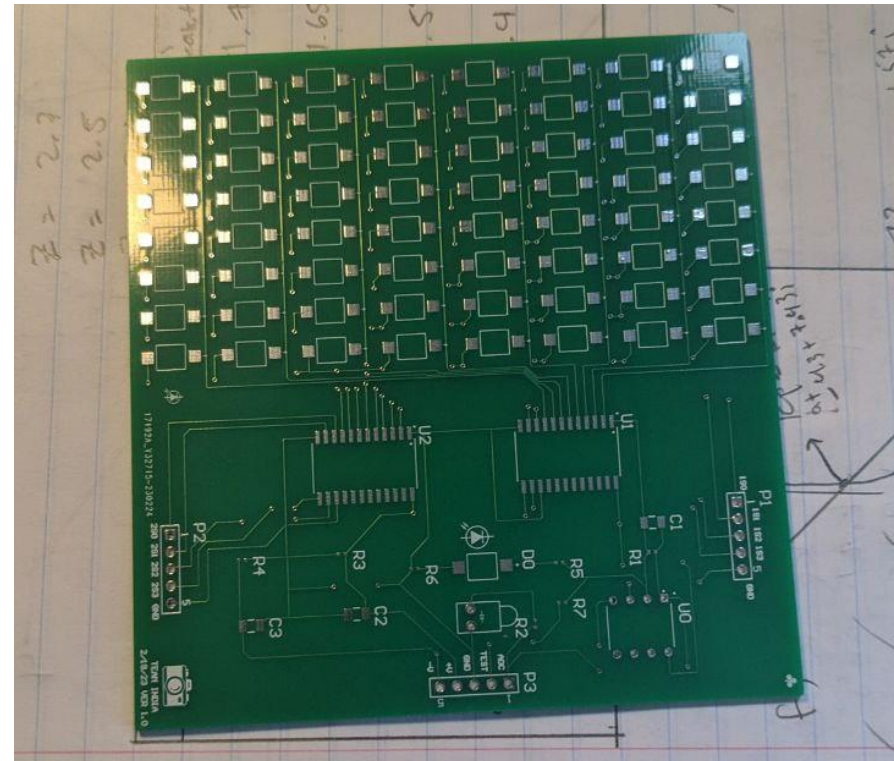
Waylon

This week:

- Received photodiode PCB after weather delays
- Ordered missing resistor values

Next week:

- Assemble PCB
- Test PCB



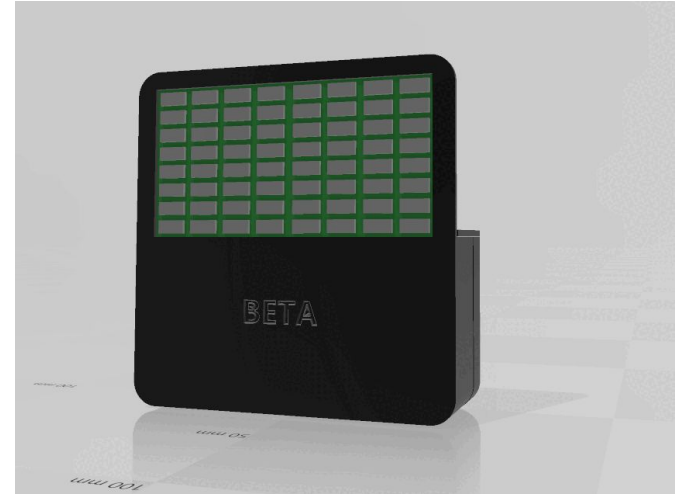
Alina

This week:

- Work on the concept for the 3D beta enclosure with Viktor.
- Help with the logistics of receiving the board.

Plans for next week:

- **Software** - Help with the final details for the board
- **Hardware** - Help testing the board.



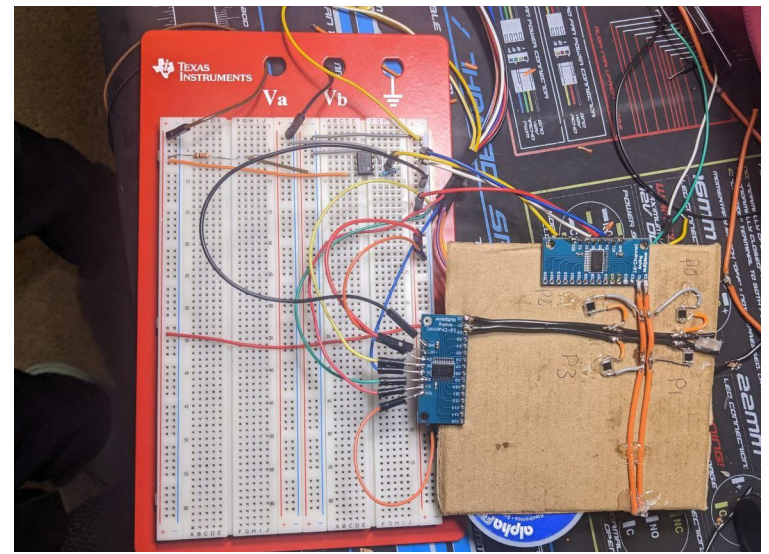
Viktor

This week:

- **Troubleshooting:** Perform testing on the board.
- **Design:** Help Alina with the 3D beta model.
- **Troubleshooting:** Work with the team for alternatives for possibles errors.

Plans for next week:

- **Hardware** : Help with the PCB assembly
- **3D:** Printing the model.
- **Code:** Work on the Psoc code details.



Angel

This week:

- **Hardware:** Made sure connections from prototype can be read accordingly with the code. Soldering parts to newly received PCB on this upcoming Saturday.
- **Code:** Fixed the logic to change the multiplexers position and changed features of LCD to display correct messages.
 - Made sure the readings are actually being sent out through UART for MatLab connection.

Plans for next week:

- Focus on soldering the new PCB that was sent to manufacture, now we received it.
- Start testing both PCB to make the final product enclosure.

Cassandra

This week:

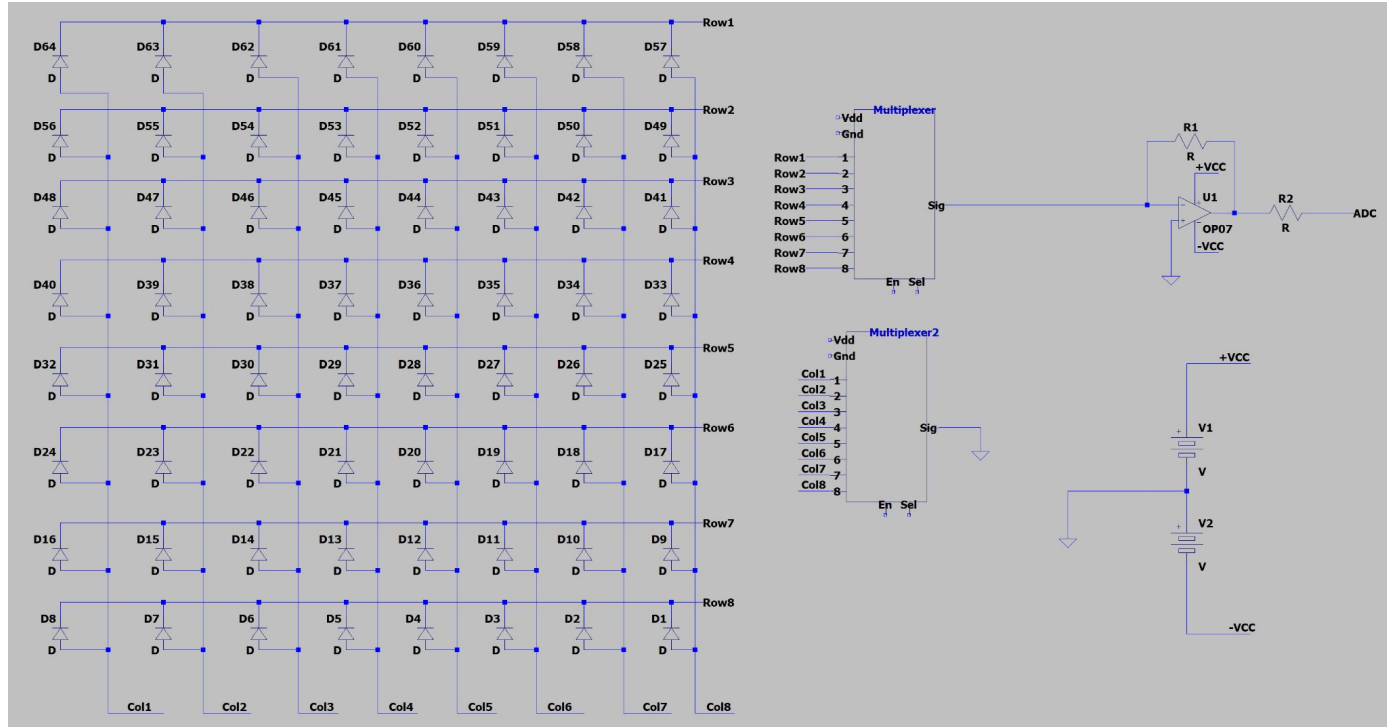
- Nothing :(

Plans for next week:

- [Hardware](#) - assist with PCB assembly, testing, and troubleshooting
- [Documentation](#) - update documentation

Reference Images

Fig 1.4 Sensor PCB Schematic



Gantt Chart

PROJECT TITLE	Digital Camera	COMPANY NAME	EEC136B
PROJECT MANAGER	Waylon	DATE	2/10/23

WBS NUMBER	TASK TITLE	TASK OWNER	START DATE	DUE DATE	DURATION	PCT OF TASK COMPLETE	PHASE ONE															PHASE TWO																									
							WEEK 1 - Jan 9-13					WEEK 2 - Jan 16-20					WEEK 3 - Jan 23-27					WEEK 4 - Jan 30-Feb 3					WEEK 5 - Feb 6 - 10					WEEK 6 Feb 13 - 17					WEEK 7 Feb 20 - 24										
							M	T	W	R	F	M	T	W	R	F	M	T	W	R	F	M	T	W	R	F	M	T	W	R	F	M	T	W	R	F	M	T	W	R	F						
1	Project Conception																																														
1.1	Concept Design	Casandra	1/9/23	1/27/23	18	100%																																									
1.1.1	Bill of Materials	Vic/Way	12/1/22	1/13/23	42	100%																																									
2	Circuit Design																																														
2.1	PSOC Programming Board	Angel	1/9/23	1/27/23	18	80%																																									
2.2	Photo Diode Board	Alina	1/13/23	2/10/23	27	90%																																									
3	Software/Coding																																														
3.1	Reading charge on pixels	Cassandra	1/21/22	2/18/22	27	100%																																									
3.2	Processing Data	Cassandra	1/21/22	2/18/22	27	100%																																									
3.4	Displaying Files	Angel	2/4/22	2/25/22	21	80%																																									
4	PCB Assembly																																														
4.1	Parts Order Placed	Waylon	1/13/23	2/3/23	20	100%																																									
4.2	PCB Boards Order Placed	Angel	1/13/23	2/3/23	20	100%																																									
4.3	Soldering	Waylon	2/11/22	2/18/22	7	50%																																									
4.4	Continuity Testing	Waylon	2/25/22	3/4/22	9	10%																																									
5	Enclosure Design																																														
5.1	3D Model	Victor	1/14/22	2/11/22	27	15%																																									
5.2	3D Print	Victor	1/28	2/11/22	13	5%																																									
5.3	Assembly	Waylon	2/11/22	2/18/22	7	0%																																									

[Gantt Chart Google Slides Link](#)

Bill of Materials Page 1 of 2

Item	Part No.	QTY	Cost	Received
Photodiode	VBPW34S	64	\$54.00	X
Button	474-COM-08720	5	\$5.25	X
Header Pins	HDR100IMP40M-G-V-TH	10	\$4.95	X
PSOC	CYBLE-416045-02	2	TBD	X
Crystal Oscillator	ECS-2520MV-250-CL-TR	1	TBD	
Battery	LIPO Battery (3.7V)	1	\$10.95	X
OLED Display	LCD-13003	2	\$35.76	X
Tri-LED	HSMD-C191	5	TBD	X
Multiplexer	BOB-13906	2	\$5.90	

Bill of Materials Page 2 of 2

Item	Part No.	QTY	Cost	Received
10KΩ Resistor	3503G2B10K7FTDF	4	\$6.56	
0Ω Resistor	MCT0603HZ0000ZP500	10	\$6.10	
1KΩ Resistor	RA73F1J143RBTDF	2	\$3.88	
10uF Capacitor	GMK316BJ106KL-T	1	\$0.33	
22pF Capacitor	12065A220JAT2A	2	\$2.80	
4.7KΩ Resistor	263-4.7K-RC	2	\$0.20	
330Ω Resistor	CMP0805-FX-3300ELF	1	\$0.21	
220KΩ Resistor	CRGCQ2512F220K	8	\$3.68	
470Ω Resistor	CRG0603F470R	1	\$0.14	