
Latent Damage and Reliability in Semiconductor Devices

Advisor: Dr. Randall Geiger**Client:** Dr. Randall Geiger, EcpE**Members (roles):**

Sean Santella (Leader)

Jaehyuk Han (Webmaster)

Hayle Olson (Communication Leader)

David Ackerman (Key Concept Holder)

Weekly Summary:

This week we met with our team on two different occasions. During these meetings we discussed our thoughts about the burn-in PCBs, as well as needing to re-design the resistor string. We also met with our Advisor where we shared our concerns about the burn-in boards and discussed our next steps forward. Throughout the week David worked on analyzing the burn-in board. Hayle and Sean were able to find some needed equipment and cleared a space in the VLSI lab for the team to work.

Meeting Notes:Team Meeting (Nov. 9th at 3PM in Coover 3014)*Duration:* 1 Hour*Members Present:* Sean Santella, Jaehyuk Han, Hayle Olson, David Ackerman*Notes:* This team meeting was held to discuss and share our thoughts in relation to the burn-in boards. We also discussed how we would be meeting with a 492 group on Thursday, Nov. 12th.Advisor/Client Meeting (Nov. 11th at 9AM in Coover 2205)*Duration:* 1 Hour*Members Present:* Dr. Geiger, Sean Santella, Hayle Olson, David Ackerman*Notes:* This meeting was held with Dr. Geiger. We spent the majority of the meeting sharing our concerns with Dr. Geiger regarding the burn-in boards. We will consider our options after David has completed analyzing and creating a schematic. Dr. Geiger will be gone next week.

Team Meeting (Nov. 11th at 5PM in Coover 3014)

Duration: 1 Hour

Members Present: Sean Santella, Jaehyuk Han, Hayle Olson, David Ackerman

Notes: This team meeting was held to analyze the burn-in board. We concluded as a team that the boards are non-functional. This will be discussed with Dr. Geiger at our next Advisor meeting.

Weekly Accomplishments:

- We acquired our 10M Ω resistors needed for our resistor string.
- Completed Analyzing the Burn-in Board schematics.

Plans for Next Week:

- Finish soldering the new resistor string
- Recreate our resistor string correctly and successfully integrate the electric fencer with our stress PCB
- Start stressing devices

Pending Issues:

- We need to discuss our next steps with Dr. Geiger regarding the Burn-in PCBs.

Individual Contributions:

Sean Santella: Attended lecture and weekly Advisor/team meetings, worked on organizing our lab bench in Coover 3014, and met with a member from a 492 group.

Jaehyuk Han: Attended lecture and weekly team meetings and met with a member from a 492 group.

Hayle Olson: Attended lecture and weekly Advisor/team meetings, worked on organizing our lab bench in Coover 3014, met with a member from a 492 group, and wrote the weekly report.

David Ackerman: Attended lecture and weekly Advisor/team meetings and analyzed/created schematics for the Burn-in Boards.

Hourly Contributions:

<u>Member:</u>	<u>Weekly Hours:</u>	<u>Total Hours:</u>
Sean Santella	5.5	48.0
Jaehyuk Han	3.5	32.5
Hayle Olson	6.0	41.0
David Ackerman	6.0	38.0

Semester Total: 159.5 Hours