
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 were able to meet as a team and discuss some important functionality issues. We were also able to finally have our first advisor meeting with Dr. Geiger.

Meeting Notes:

Team Meeting (Feb. 16th at 2PM in Coover 3014)

Duration: 2 Hours

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

Notes: During this team meeting we continued to try to find a stressing condition for our DUTs. We had trouble getting enough voltage to the DUT. We were testing the voltage divider we had created previously while attempting to charge the capacitor. Our initial thoughts are that there was an issue with either the voltage divider or the Stressing PCB.

Advisor Meeting (Feb. 18th at 1PM in Coover 1219)

Duration: 1 Hour

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

Notes: This was our very first advisor meeting with Dr. Geiger. We were able to discuss our concerns with the burn-in PCB. Dr. Geiger agreed that we should re-design a board. We also discussed the burn-in oven, how we're going to check devices while accelerating their lifetime, and that we need to look into a temperature to use.

Weekly Accomplishments:

- First Advisor Meeting

Plans for Next Week:

- Start developing a new PCB design for our burn-in boards.
- Find a stressing condition that will destroy 50% of our devices.
- Find burn-in temperature.

Pending Issues:

- None

Individual Contributions:

Sean Santella: First team meeting and first advisor meeting.

Jaehyuk Han: First team meeting and first advisor meeting.

Hayle Olson: First team meeting, first advisor meeting, and wrote weekly report.

David Ackerman: First team meeting, first advisor meeting, drafting schematics, and tinkering with boards.

Hourly Contributions:

<u>Member:</u>	<u>Weekly Hours:</u>	<u>Semester Hours:</u>	<u>Yearly Hours:</u>
Sean Santella	3.0	6.0	59.0
Jaehyuk Han	3.0	6.0	42.5
Hayle Olson	3.5	9.5	56.0
David Ackerman	4.5	7.5	49.5

Semester Total: 29.0 Hours

Yearly Total: 207.0 Hours