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## 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)

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### Weekly Summary:

This week we met with our team on two different occasions. During these meetings we were able to duplicate the burn-in board PCB on a breadboard and were also able to finish the new resistor string. We did not have an Advisor meeting this week as Dr. Geiger was out of town.

### Meeting Notes:

Team Meeting (Nov. 16<sup>th</sup> 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 work on our resistor string and to analyze the resistor array that is on our burn-in boards. New calculations and designs were made for the resistor string; this will be soldered before our next meeting.

Team Meeting (Nov. 18<sup>th</sup> 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 continue the work from the previous meeting. Jaehyuk and David continued working on duplicating the burn-in board PCB on a breadboard. Hayle and Sean worked on connecting the new resistor string to the ESD PCB and the electric fencer.

### Weekly Accomplishments:

- We completed the new resistor string for our electric fencer.
- We successfully duplicated the burn-in PCB on a breadboard.

### **Plans for Next Week:**

- Stress a device with the electric fencer.
- Start preparing for our final presentation.

### **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 team meetings and worked on soldering the new resistor string, researched correct resistors.

Jaehyuk Han: Attended lecture and weekly team meetings, and worked on duplicating the existing burn-in board PCB.

Hayle Olson: Attended lecture and weekly team meetings and worked on soldering the new resistor string, and wrote weekly report.

David Ackerman: Attended lecture and weekly team meetings, and worked on duplicating the existing burn-in board PCB.

### **Hourly Contributions:**

<u>Member:</u>	<u>Weekly Hours:</u>	<u>Total Hours:</u>
Sean Santella	5.0	53.0
Jaehyuk Han	4.0	36.5
Hayle Olson	5.5	46.5
David Ackerman	4.0	42.0

**Semester Total: 178.0 Hours**