# EE492 Weekly Report

Week 20

# May1625 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:

We held both team and advisor meetings this week. We were able to tinker with the tristate buffers that Dr. Geiger had suggested, but are still waiting on the insulating varnish to continue our testing of the stressing condition.

# **Meeting Notes:**

Team Meeting (March 1<sup>st</sup> at 2PM in Coover 3014)

Duration: 1 Hour

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. Sean checked to the progress on ordering the insulating varnish. David continued to tinker with the stress PCB and the tri-state buffer that Dr. Geiger had suggested.

# Advisor Meeting (March 3<sup>rd</sup> at 1PM in Coover 1219)

#### Duration: 1 Hour

Members Present: Dr. Geiger, Sean Santella, Jaehyuk Han, Hayle Olson, David Ackerman *Notes:* During this advisor meeting we were able to discuss with Dr. Geiger our progress with the tri-state buffers. We plan to look into a more updated version of what we used.

# Weekly Accomplishments:

- We started to test with the tri-state buffers
- The Insulating Varnish is on order and should arrive mid next week.

## **Plans for Next Week:**

- Start developing a new PCB design for our burn-in boards.
- Research Tri-State Buffers.
- Research components with high temp. thresholds.
- Find a stressing condition that will destroy 50% of our devices.
- Find burn-in temperature.

## **Pending Issues:**

None

## **Individual Contributions:**

Sean Santella: Attended both team and advisor meetings, and conducted component research.

Jaehyuk Han: Attended both team and advisor meetings.

Hayle Olson: Attended both team and advisor meetings, and wrote weekly report. David Ackerman: Attended both team and advisor meetings, and tinkered with the stress PCB.

# **Hourly Contributions:**

Member:	Weekly Hours:	Semester Hours:	Yearly Hours:
Sean Santella	3.5	12.0	65.0
Jaehyuk Han	2.0	10.0	46.5
Hayle Olson	2.5	13.5	60.0
David Ackerman	4.0	14.5	56.5

Semester Total: 50.0 Hours Yearly Total: 228.0 Hours