Week 7 Student Checklist Created: Vidya Varadrajan, Fall 2005 Modified: Shong Yin, Spring 2006

Student checklist

- Review the overall Process Flow. This can be found at the lab webpage: <u>http://www-inst.eecs.berkeley.edu/~ee143/sp06/lab/fabrication_process_flow.pdf</u>
- Read the detailed Process Flow for week 7 available on the lab web site at: <u>http://www-inst.eecs.berkeley.edu/~ee143/fa05/lab/NMOS-process-flow.pdf</u> Week 7a: Source-Drain (n+) deposition and week 7b: Source-Drain (n+) Drive-in and Intermediate oxidation. This lab involves TWO furnace steps and therefore is time consuming. You should understand the purpose of the two furnace runs and the concept of diffusion from a solid source. This week's lab session is particularly long so be prepared.
- To review furnace processing, please look at the Furnace Oxidation Module Video available online at: <u>http://www-inst.eecs.berkeley.edu/~ee143/fa05/lab.html</u> Link: <u>EE143 Lab: Furnace Oxidation module video</u> This video is set up for the gate oxidation step, but week 7's processing is going to be very similar to that.
- Read the manual for Four Point Probe available on the lab web-site at: <u>http://www-inst.eecs.berkeley.edu/~ee143/fa05/lab/four_point_probe.pdf</u>
- Print out and complete the Week 7 Quiz from the lab web page, before coming to your lab session.