

Homework Assignment #6 - Design Presentations

EECS 427, Winter 2009

We will use the final lecture (April 21) for design presentations. These will consist of a 15-20 minute presentation that includes a small amount of time allotted to questions/answers (aim for 12-15 minutes + 3 minutes for Q/A). You should provide an introduction to your application, and a discussion of your changes/additions to the baseline including particular emphasis on a portion of your design that you feel is unique or implemented well. This will often be one of your datapath components, or something specific to your application. Provide layout and critical path analysis information of whichever component you choose to emphasize. Examples might include a tree-style adder, the register file design, a unique custom designed peripheral, or the use of any novel design techniques described in class (pulsed registers, bus encoding, gated clocks, sleep transistors, etc.).

Describing and reviewing a design is a common step in any design flow. Design reviews can take on many forms, from formal high-level reviews with customers in attendance to more informal reviews in which a designer's peers will review the design in an effort to uncover any potential problems that were overlooked. This presentation is not really a design review in that typically you would need a lot more time to adequately review a design of this size. Also, reviews are usually done at an earlier time such that changes resulting from the review can still be incorporated into the design. Nonetheless, this exercise serves as a good opportunity to practice the same skills used in conducting a design review.

A grade will be assigned based on the effectiveness of your talk, including your use of the presentation materials. You must attend in order to receive full credit for this assignment. Excessively short (e.g., <12 minutes) or long (e.g., 22+ minutes of total time) will affect your grade. You may assign one person to speak for the group, or at most two may speak provided it is done within the allotted time period. A laptop will be provided for the presentation, or you can use your own. Make sure to turn in a hardcopy to the instructor.

Time slots:

9:10-9:30: Group 1

9:30-9:50: Group 2

9:50-10:10: Group 3