

EECS 427 Homework 6 – Design Presentations

We will use the final lecture plus an extra 100 minutes that day for design presentation. These will consist of a 15-minute presentation that includes a small amount allotted to questions/answers (aim for 12 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 typically be one of your datapath components. Provide layout and critical path analysis information of whichever component you choose to emphasize. Examples might include a unique shifter design, a square-root carry-select adder, the register file design, 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 isn't 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 typically 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 presenting 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., under 10 minutes) or long (e.g., 18 minutes of total time) will affect your grade. We need to keep on schedule such that teams at the end are not rushed. You may assign one person to speak for the group or at most two may speak provided it is done within the 15 minutes time period (one speaker is recommended for such a short talk). Prepare overhead transparencies and turn in a hardcopy (on ordinary paper) to the instructor. PowerPoint presentations are acceptable as well.