6.2500 ST23 Design Project

Final Report Grading Rubric

Must be 6 – 10 pages, not including code. Attach code separately or in a zip together with the report.

On the first page:

1. Drawing of your final optimized transistor design with labels **[10 points]**
   a. -2.5 points if not labeled well (i.e. physical dimensions, material labels missing).
   b. -5 points if not descriptive at all (i.e. just took a screenshot of sde).

2. List of 3-8 changes you made **[20 points]**
   a. -5 points if changes are not according to specifications (*e.g. V_{DD} is too high*).

3. Energy and speed for ARM microprocessor, using optimized transistor **[30 points]** if you exceed the project goals you should get full points.
   a. -10 points if the energy consumption is higher than the initial transistor,
   b. -20 points if you did not meet the target frequency (*It should be easy for everyone to attain the 200 MHz frequency goal*).

On remaining pages:

4. Discussion of (i) how you approached the project, (ii) why you made the specific changes (make sure to also show the calculations you performed), and (iii) observations about surprising and interesting results and what worked and what did not work. **[30 points]**

   a. This is the most subjective part, since the structure of each report is different; however, we are using the following rubric:
      i. Description of your general approach (5 points)
      ii. Calculations/Explanations for each specific change (20 points)
         a. -1 or -2 points (depending on how important the error is) for each incorrect or incomplete explanation (but not more than -10 points total)
      iii. Description of surprising/interesting results found (5 points). If none are given then ii will be weighted as 25 points.

5. Submission of working code **[10 points]**