

# Final Report

CS 150, UC Berkeley, Spring 2012

The final report is due 11:59 PM, Wednesday, May 2.

## Expectations

Good technical reports are direct and to the point. We will grade for clarity, organization, and grammar. Make sure to proofread and correct mistakes before turning it in. Also, consider having someone besides your project partner (perhaps your roommate) read over your report and offer suggestions on wording improvements or others changes to help make your report clear and easy to understand.

Report expectations:

- Clear, **concise**, organized
- Performance specs on the title page
- Block diagrams drawn in Visio, PowerPoint or other professional drawing program
- No verilog code in the report (but you may reference code in your repo)
- Final document in pdf format only

## Report Structure

### Title Page

Team member names, team number, performance specs (mmult CPI, LUT count, clock frequency)

### Project Functional Description and Design Requirements

Describe the design objectives of your project. You don't need to go into details about the MIPS ISA, but you need to describe the high-level design parameters (pipeline structure, memory hierarchy, etc.) for this version of the MIPS. ( $\approx 0.5$  page)

### High-level organization

How is your project broken down into pieces? Block diagram of the top hierarchy (keep this high-level) ( $\approx 1$  page)

### Detailed Description of Sub-pieces

Describe how your circuits work. Concentrate here on novel or non-standard circuits. Also, focus your attention on the parts of the design that were not supplied to you by the teaching staff. This should include details of your cache design as well as other blocks of your choosing. ( $\approx 2$  pages)

### Status and Results

What is working and what is not? This section is particularly important for non-working designs

(to help us assign partial credit). ( $\approx$  1 page)

### **Testing**

How did you approaching testing and verification? How did you prove that your design was correct? ( $\approx$  1 page)

### **Demo summary**

Ex: image drawn on monitor / simple game using XUP buttons / other demos. ( $\approx$  0.5 page)

### **Miscellaneous**

Any additional information about your project may be included here. ( $\approx$  1 page)

### **Conclusions**

What have you learned from this experience? How would you do it different next time? ( $\approx$  0.5 page)

### **Feedback**

*Optional:* How would you improve the labs, project, and/or assignments? In order to keep the GSI's in a positive mood while grading your report, please limit your feedback to specific, constructive suggestions. ( $\approx$  0.5-1 page)

## **Submission**

Please add and push a PDF of your report to your GitHub repository by midnight, Wednesday, May 2. Your graded report (including project grade) will be returned after the final exam.