

CS552 Final Project

Team Name
Team Members

1 Overview

Less than a page describing overall what the project is about and what you did. Discuss each of the pipeline stages and cache design.

2 Design and Optimizations

Design overview which should include your high-level processor schematics. Your design hierarchy must be clear. One high-level schematic that shows only the high-level pipeline is too little detail. Showing schematics for every MUX is too much. Use your discretion. It is OK to scan hand-drawn schematics or attach them to the end of the document with a clear note in the document explaining what is where.

Discussion of optimizations implemented.

A discussion of what does not work and why. Also include what you would have liked to implement given more time. For each part of the implementation that does not work, turn in an annotated output in the form of a trace or script run that clearly shows the error. Give your thoughts as to why the error occurs and what could be done to fix it.

3 Design Analysis

A table listing the possible hazards that arise in your pipelined design and the number of stall cycles that each hazard incurs.

A brief discussion of your cache design that explains the number of cycles for a cache-hit, cache-hiss (with eviction of a line), cache-miss (without any eviction).

A table describing additional programs you wrote. This table should also include the CPI of the programs. In an appendix include the printout of the assembly source code. It should be well commented and include a description of the program at the top of the file.

A state diagram for any state machine controllers in your design. All other controllers should include a high-level textual description.

4 Conclusions and Final Thoughts

A conclusion outlining what you learned by doing this project and what you would have done differently.

5 Appendix

Run `create_final_report_table.sh`. Print `all.summary.pdf` and `table.pdf` that it generates and include here.

Listing of your summary page from Mantis.

Listing of additional assembly programs

Anything else.