02132 Assignment 2 report

Hardware implementation in Chisel of a small CPU running the image erosion

Group: 22

Mikkel Arn Andersen **s224187**
Niclas Juul Schæffer **s224744**
Rasmus Kronborg Finnemann Wiuff **s163977**
github.com/rwiuff/02132Assignment2 ⦿

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1 Work distribution

Table 1 shows the work distribution in the group for this project.

Table 1: Work distribution on the project

Name	Implementation tasks	Report tasks
Mikkel Arn Andersen		
Niclas Juul Schæffer		
Rasmus Wiuff		

2 Design

Explain here what the design process was. List and describe your ISA and how the instructions are encoded. List and describe your compiled program (put a reference to attached file if the compiled program is too long to fit here). Show and describe the bock diagram of your CPU. Motivate the design decision you made.

3 Implementation

Briefly discuss the implementation in Chisel of your design. You can include some code snippets if these are relevant to explain certain aspects of the implementation. In other words, try to answer the question "What does a reader need to know about your Chisel implementation?"

4 Test and analysis

Report here the results from the test you have carried out. Present the test you have developed (if any). Remember to discuss the results and the test you have carried out, do not just present them, but explain and argue their meaning. Address the design evaluation questions listed in Task 11 in the Assignment 2 document.

References

[1] Arduino, José Bagur, Taddy Chung *Arduino Memory Guide (19/09/2023)*
https://docs.arduino.cc/learn/programming/memory-guide