CS250 - Computer Organization and Architecture

A2 - uPOWER ALU Design

Points to Note

- In the comments section of each HDL code file, include a short description of the module, your name, roll number, date of writing the program and other information you deem relevant.
- Your submission is an archive containing the following: One README file + One directory per ALU design. For both the ALU designs include the following: High level block diagram(s), Module level block diagrams, HDL code, snapshots of the simulator at key execution stages, and other relevant information.
- This is a team assignment. One submission per team. Same teams from the Functional Simulator assignment may continue.
- (a) Submission is due on March, 06, end-of-day. Pack your report, code, screenshots and other files in an archive. Submit to

Design the following 2 ALUs in HDL.

1. MIPS ALU as shown in the class.
2. Design and implement an equivalent uPOWER ALU. You are free to follow the MIPS ALU design (or build from scratch). Apart from the slt instruction, the uPOWER ALU should support all other tasks supported by the MIPS ALU.