

Computer Organization 2023 Lab 4

Finished part:

Instructions including ADD, SUB, AND, OR, NOR, SLT, SRL, SLL, ADDI, LW, SW, BEQ, BNE, J. The architecture diagram is same as the one given by TAs.

Problems you met and solutions:

I finished writing the code in about 30 minutes, but I debug for at least ten hours. I had 3 points loss in my score having message “Jump (r15)”. I thought my jump instruction was wrong, so I printed out all the process when executing the code. After I am certain that my jump instruction is correct (I counted the instructions one by one and map them with the 32-bit instructions), I started to look for different bugs, then I finally realized that I had 3 point loss because I used unsigned comparison in SLT, and that is the bug that took me 5 hours to find.

If you create additional module, please give a short explanation here:

No additional module was made.