

Computer Organization

Final Project 2000.11.7/Due 12.21

1. Topic: 16-bits MIPS CPU Design
2. Team: 6 students form a team. Each team must have a project leader.
We will have 17 teams.
3. Report:
 - (1) Midterm report
 - (I) Specifications and Block diagram
 - (II) Job partition: Team work
 - (III) Schedule and status
 - (2) Final report (Each teams shall give an oral presentation, and each team have 5~10 minutes, at least 2 person shall present the results)
 - (I) Specifications
 - (II) Block diagram
 - (III) HDL Design & Style
 - (IV) Achieved items
 - (V) Conclusions
4. System Specifications:
 - (1) 16-bit data
 - (2) 16-bit instruction
 - (1) 8 Register, each is 16-bit long
 - (2) Memory size 8 bit by 2^8
 - (3) Instruction set:
 - (I) Logic operation: and, or, inversion, xnor
 - (II) Arithmetic operation: add, sub, addi
 - (III) Data transfer: lw, sw
 - (IV) Control: beq, slt
 - (V) Jump: j, jr
 - (VI) Others, if you can add something into your design (bonus)

5. Time Schedule

Items	Date
Name of team member and project leader	12/11
Midterm report	12/25
Final report and presentation	1/8

*In the report, you must list the work done by each student