

LAB #08 ALU Design

Refer to Appendix B (lecture slides and textbook)

Task to do

1. Build 1 bit ALU (lecture slides 20).
2. With 1 bit ALU, make a 32 bit ripple carry adder and test your circuit. (lecture slides 21).
3. Complete your ALU with the following functions. (lecture slides 27). Test your circuit of each function.

	Ainv	Binv	Op
AND	0	0	00
OR	0	0	01
Add	0	0	10
Sub	0	1	10
NOR	1	1	00
NAND	1	1	01
SLT	0	1	11
BEQ	0	1	10

NOTE:

1. Write a report according to the LAB questions and submit a word (or pdf) file.
2. For each question, **you can screen capture for each of your circuit.**
3. For each circuit, save it as circ file with proper name and **zip** them with your report.
(file name of your circ file **should** be ALU1, RCA, FA, etc.)