

SEQUENTIAL ALU

RST:

- Asynchronous active low “Output is set to zero”
- Randomized with Constraint to be not active for 99% of the time

En:

- Set to 1: ALU will update the output according to the opcode
- Set to 1: ALU will be the output the same as the pervious cycle
- Randomized with Constraint to be active for 95% of the time

Opcode:

- Randomized to take all the possible values “ADD,SUB,AND,OR”

A, B:

- Randomized with Constraint to have the extreme values “maximum positive, zero, maximum negative” when the opcode is “ADD,SUB”