# EC302 VLSI Design Lab Project

## **Simple ALU** in **Magic VLSI**

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### Objective:

To design a simple ALU that can perform basic operations such as addition, bitwise and, bitwise xor, and bitwise or; along with necessary verification of the ALU.

### Block circuit diagram:

### Description:

### Implementation:

### Test strategy:

The verification is started by running the shell script ***verify.sh***which then runs the necessary commands for further testing.

In-order to test our ALU we have implemented a python script that randomly generates instructions for our ALU to run. It asks the user the number of instructions to generate and the name of the **.cmd** file it has to create.

#### verify.sh:

#### cmdGenerate.py:

### Results:

### Conclusion: