

# DIVISION MODULE

Phase #2



**Cairo University**  
**Faculty of Engineering**  
**Computer Engineering**  
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	Using Carry look ahead adder	Using carry select adder
Placeable Area	1897	2142
Movable Cell Area	1097	1196
Utilization (%)	57	55
Total Power(uw)	2497.855225	3379.492676
Data arrival time	1434.1	1359.9
Slack	35.5	102.1

To run the simulation:

Python3 division 0000000000000111 0000000000000010  
                                     Dividend                    divisor

The output will be overFlow, result, divide by zero, ready

To the Verilog files:

We have to types from the division

1- division with carry select adder.

We need to include:

- 1- carry\_select\_adder\_2bit
- 2- carry\_select\_adder\_16bit
- 3- Division\_CSA
- 4- full\_adder
- 5- mux2x1
- 6- ripple\_adder\_2bit
- 7- Division\_CSA\_TestBench

And then we can run the test bench file from the do-file called testbench\_dofile.

2- division with carry look a head adder.

We need to include:

- 1- carry\_lookahead\_adder\_4bit
- 2- carry\_lookahead\_adder\_16bit
- 3- Division\_CLHA
- 4- Division\_LHA\_tb

And then we can run the test bench file from the do-file called testbench\_dofile.