

TOP MODULE

alu

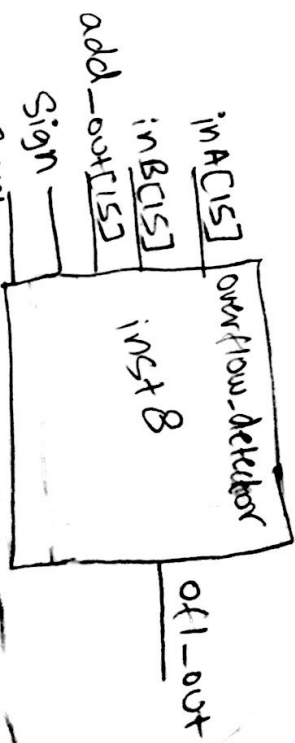
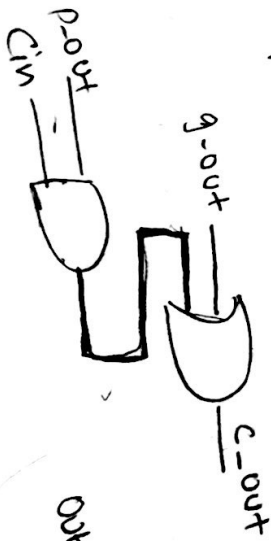
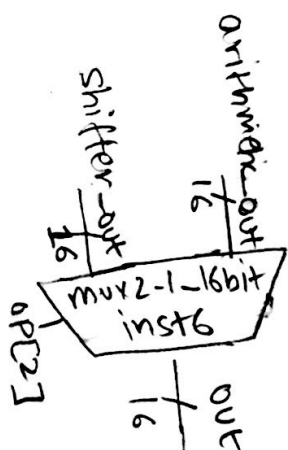
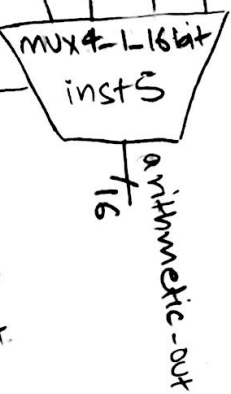
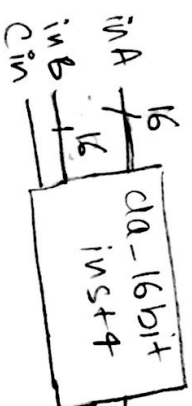
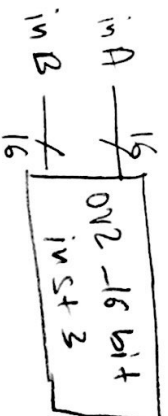
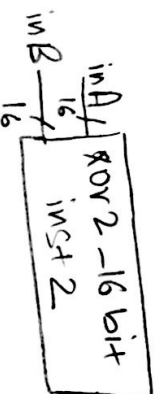
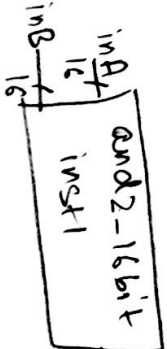
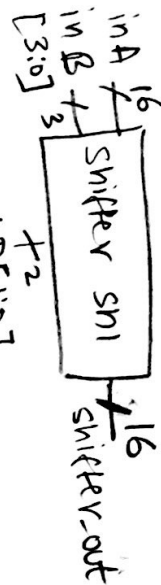
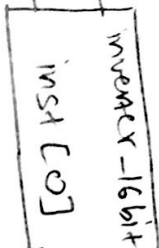
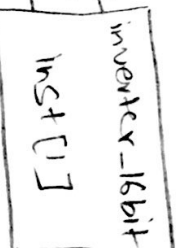
Inputs:

A

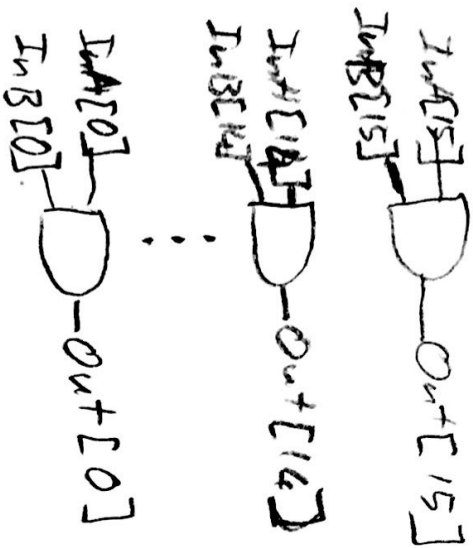
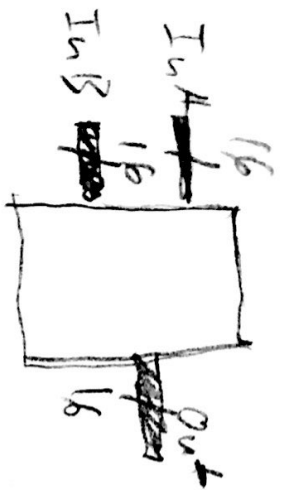
inv A

inv B

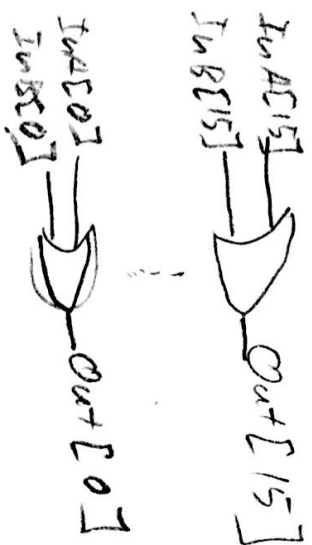
3



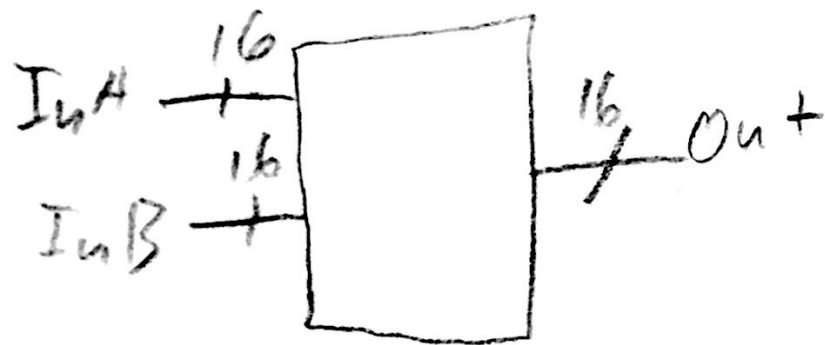
and 2-16bit



Or 2-16bit



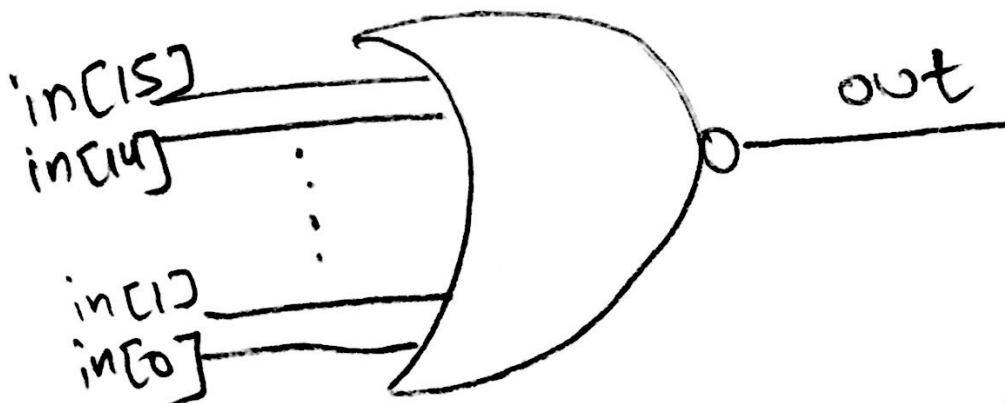
XorZ-16b+



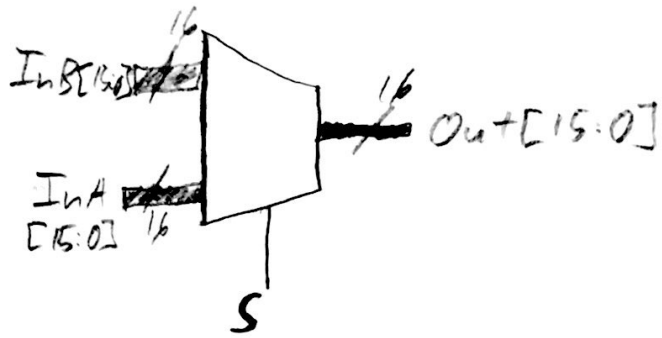
⋮
6



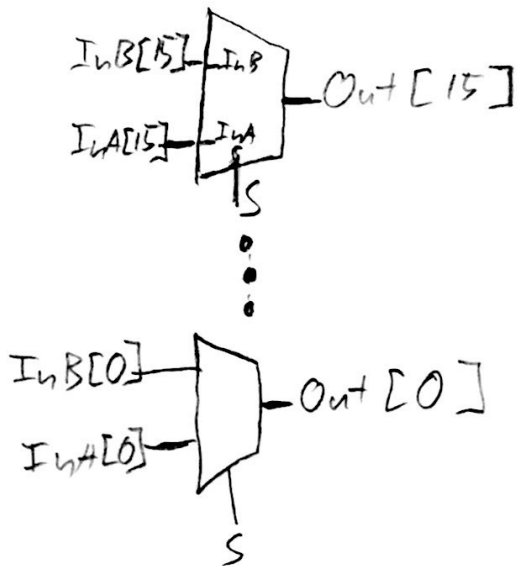
nor 16



mux2-1-16bit

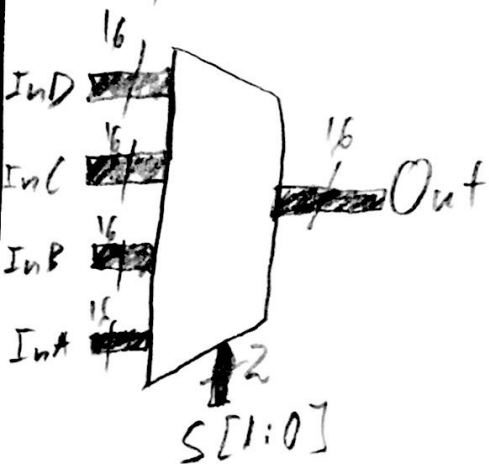


Schematic(s):

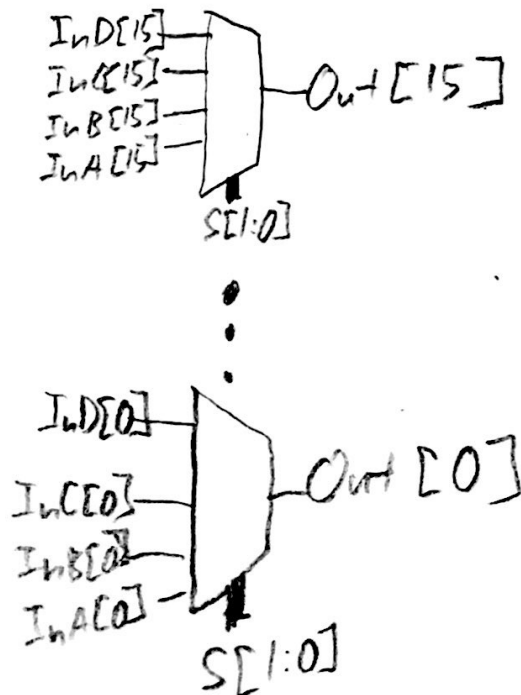


mux4-1-16bit

Symbols

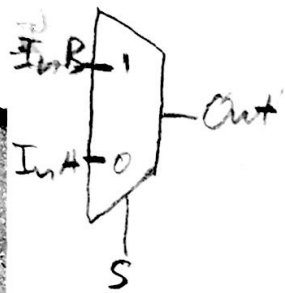


Schematic(s):

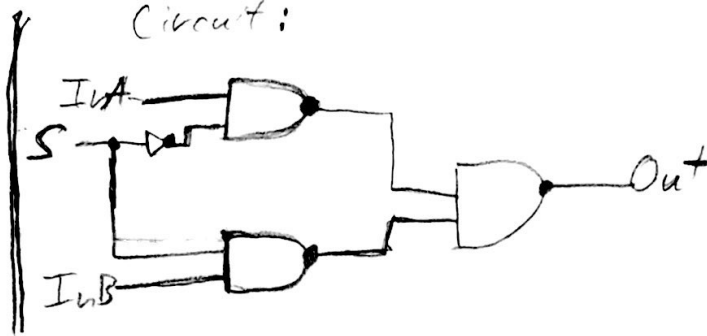


Mux 2-1

Symbol:



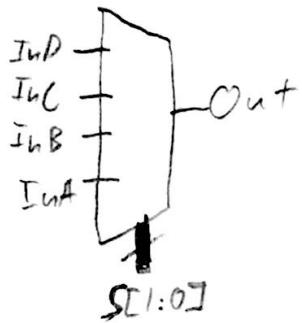
Circuit:



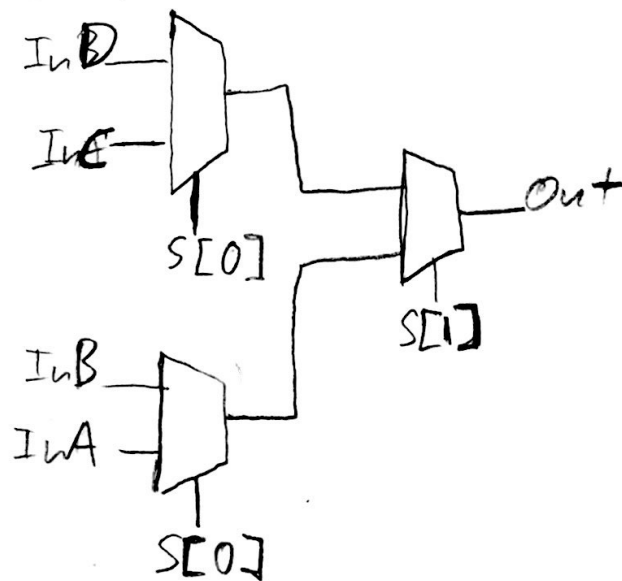
S	Out
1	InB
0	InA

Mux 4-1

Symbol:

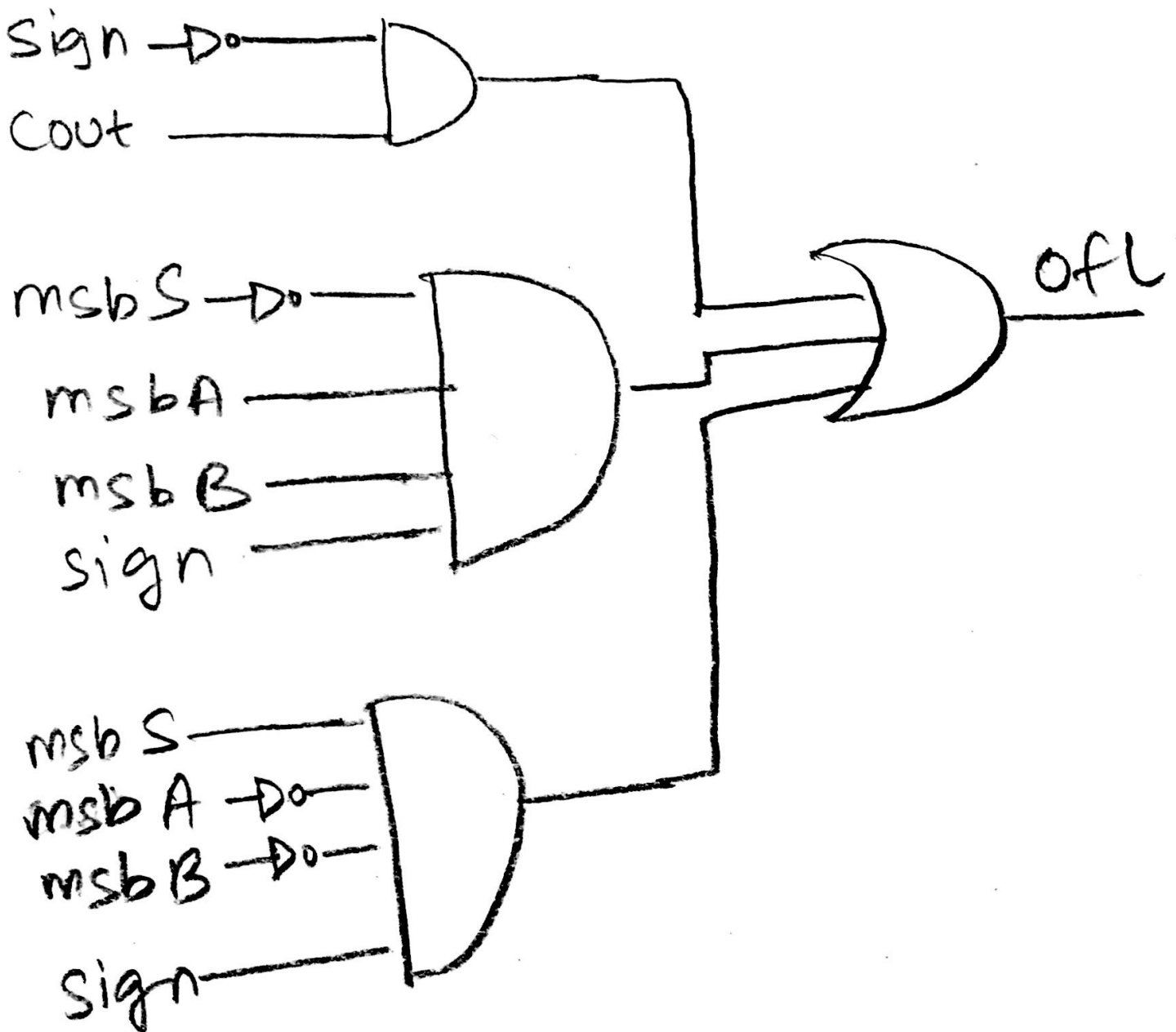


Schematics:



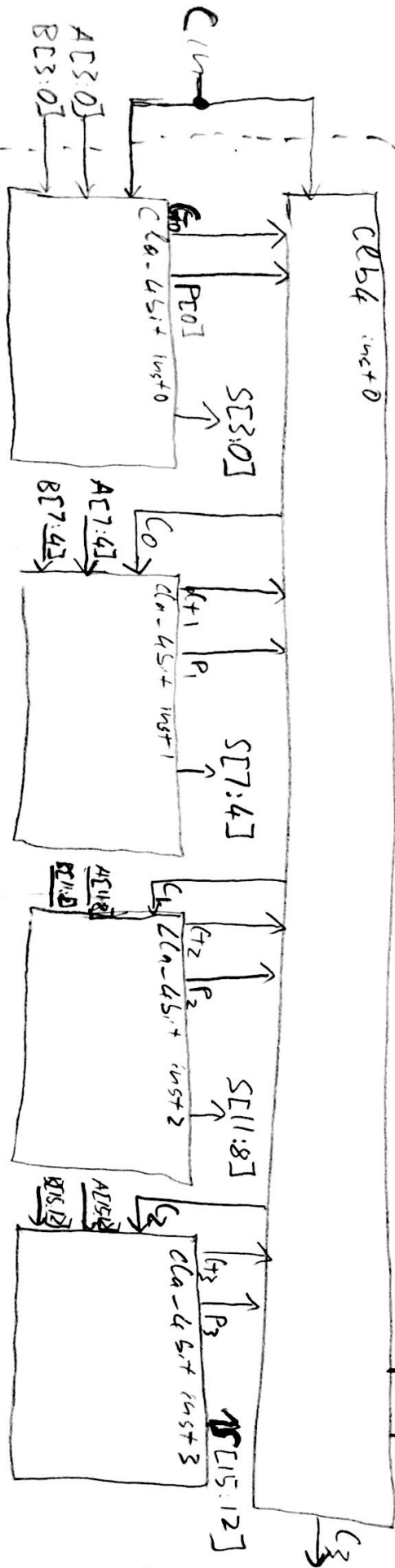
S	Out
11	InD
10	InC
01	InB
00	InA

overflow_detector

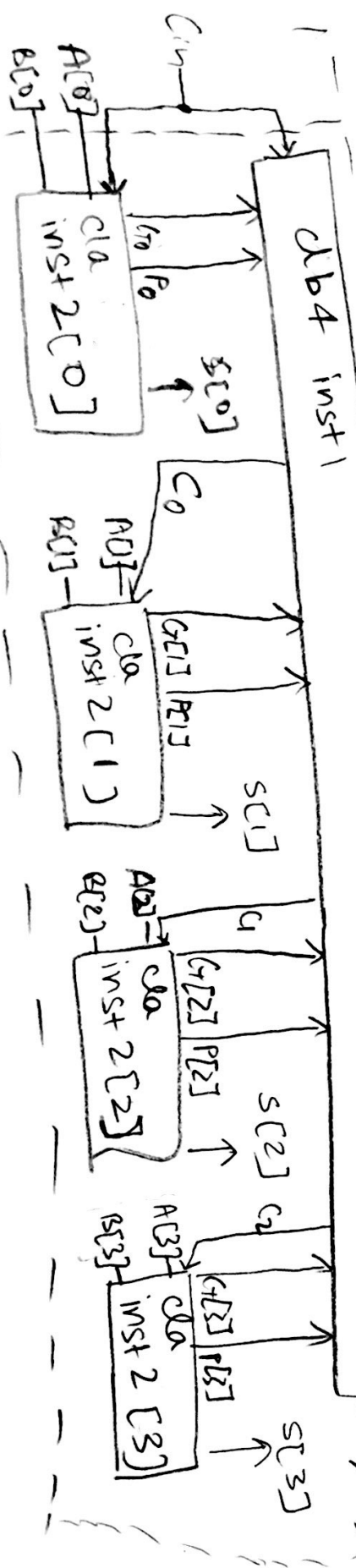


Cla-16 bit

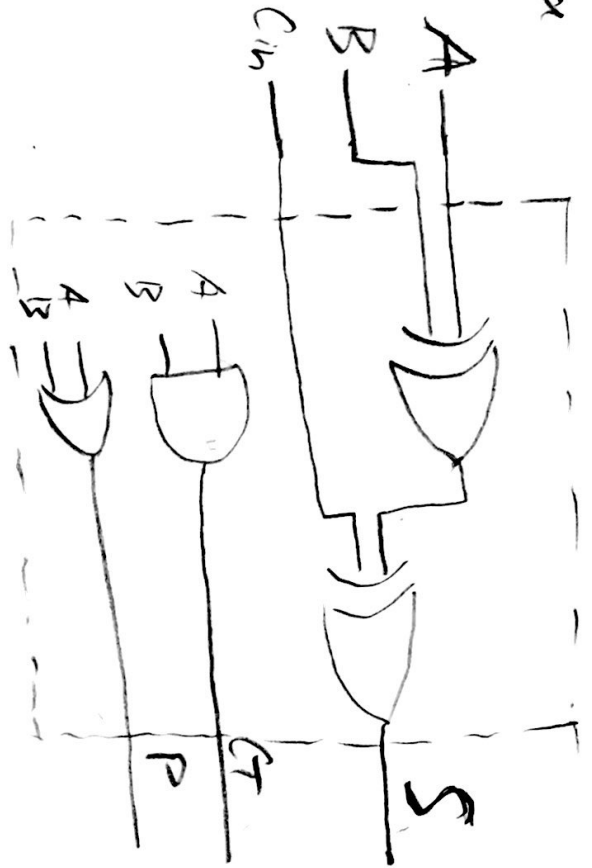
A[15:0] ~~16 bit~~
B[15:0] ~~16 bit~~



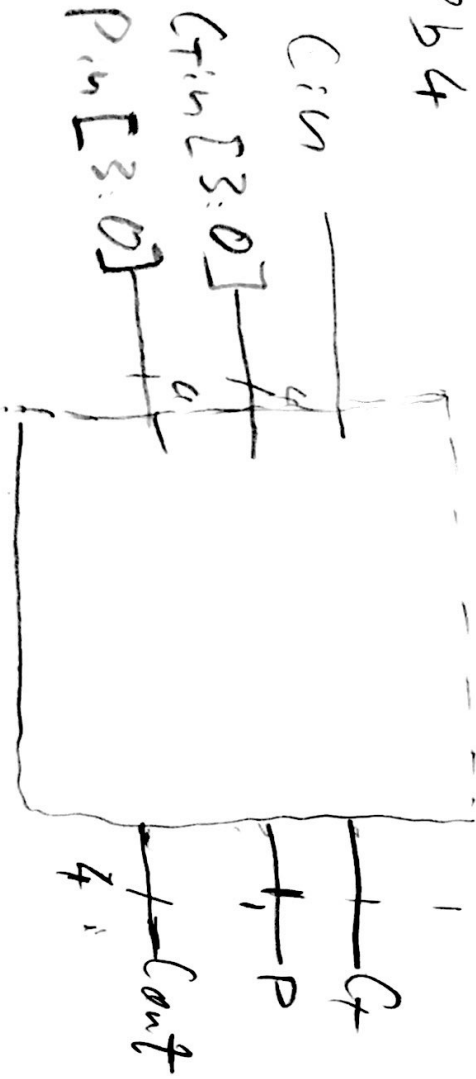
Cla-4 bit



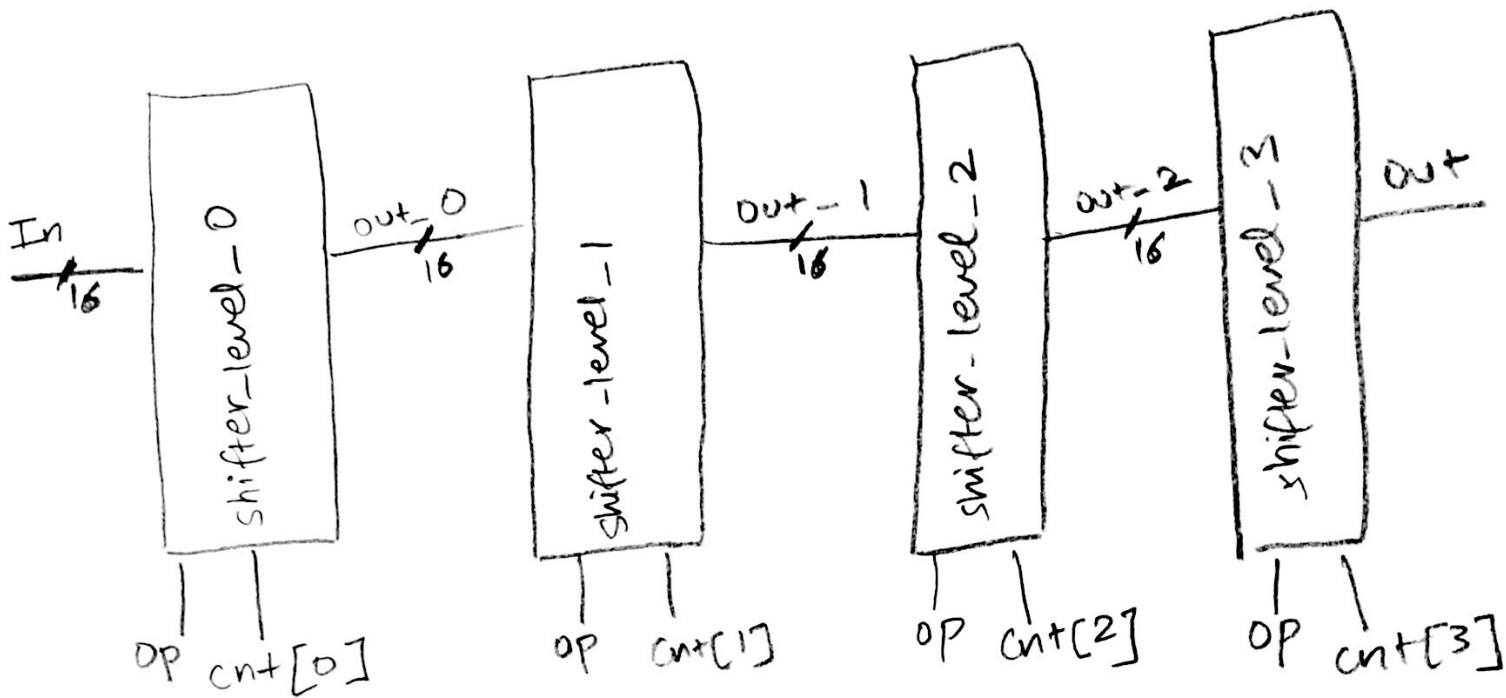
clea



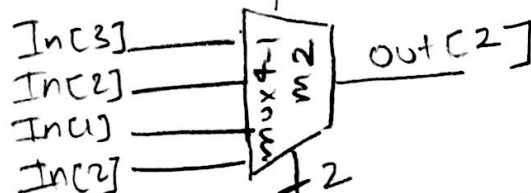
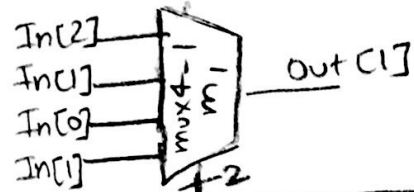
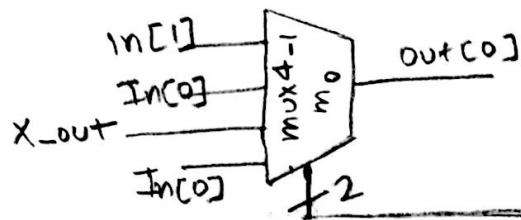
celb4



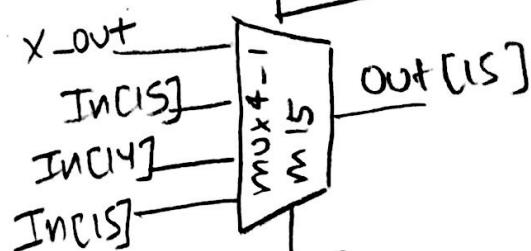
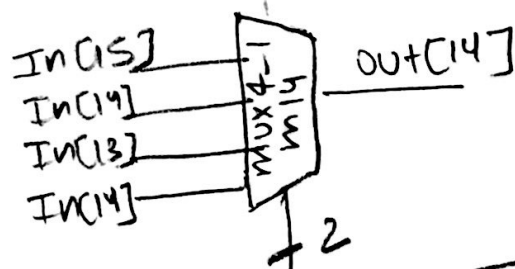
TOP MODULE
shifter.



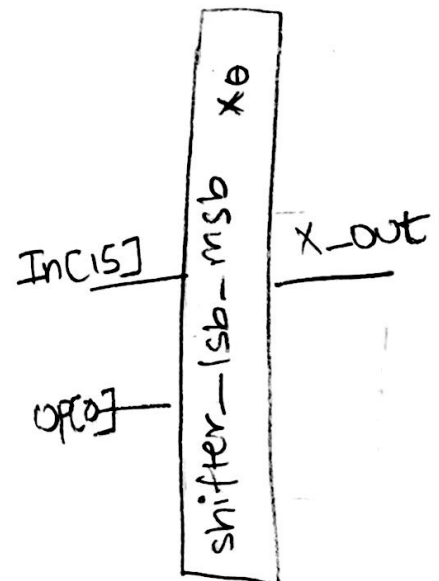
Shifter_level_0



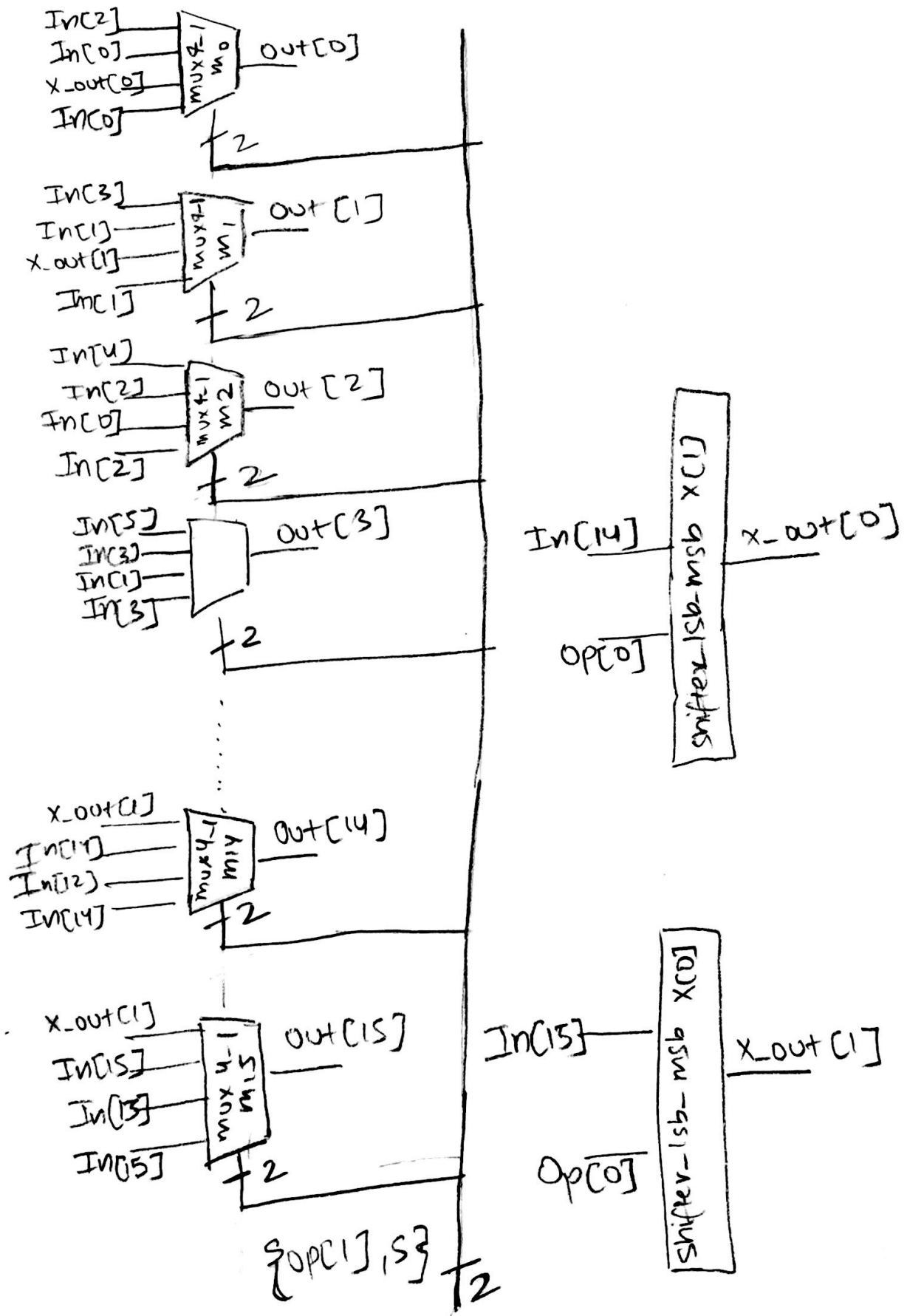
...



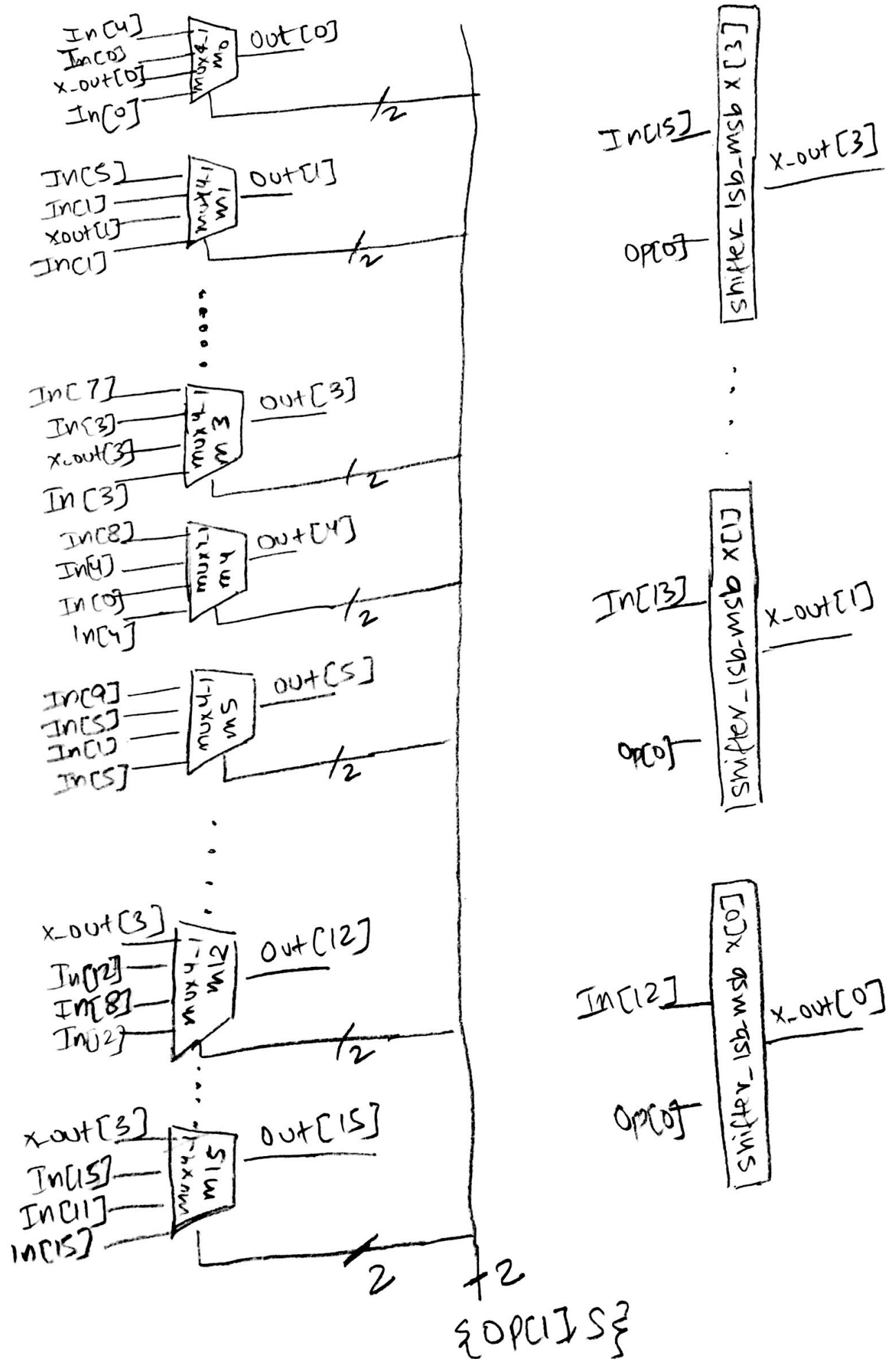
{OPC[1], S} 2



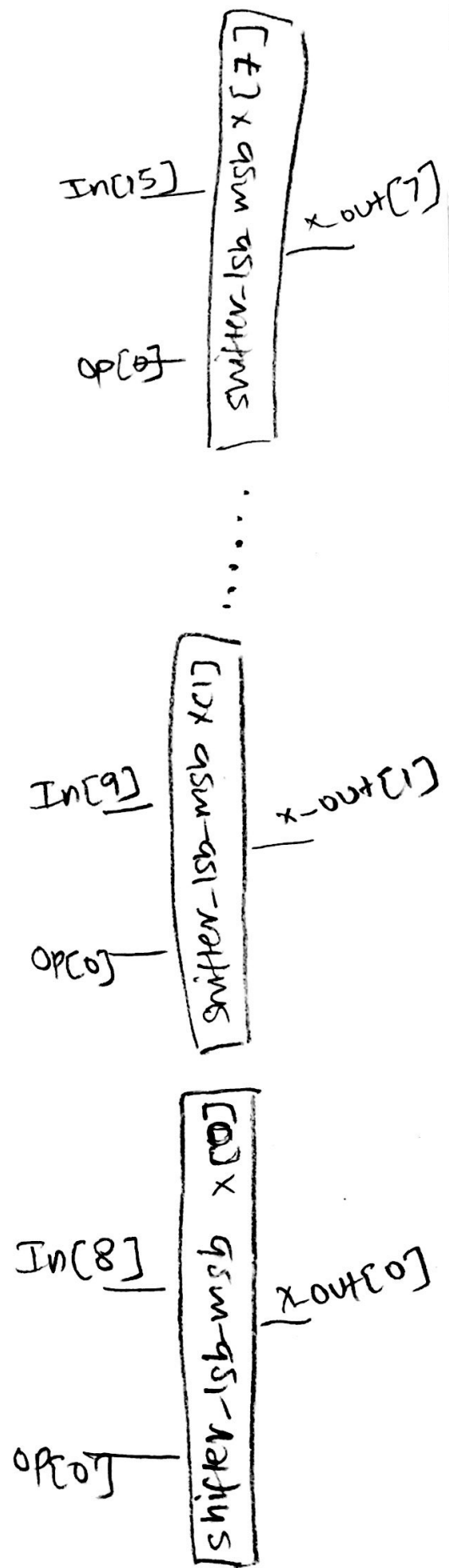
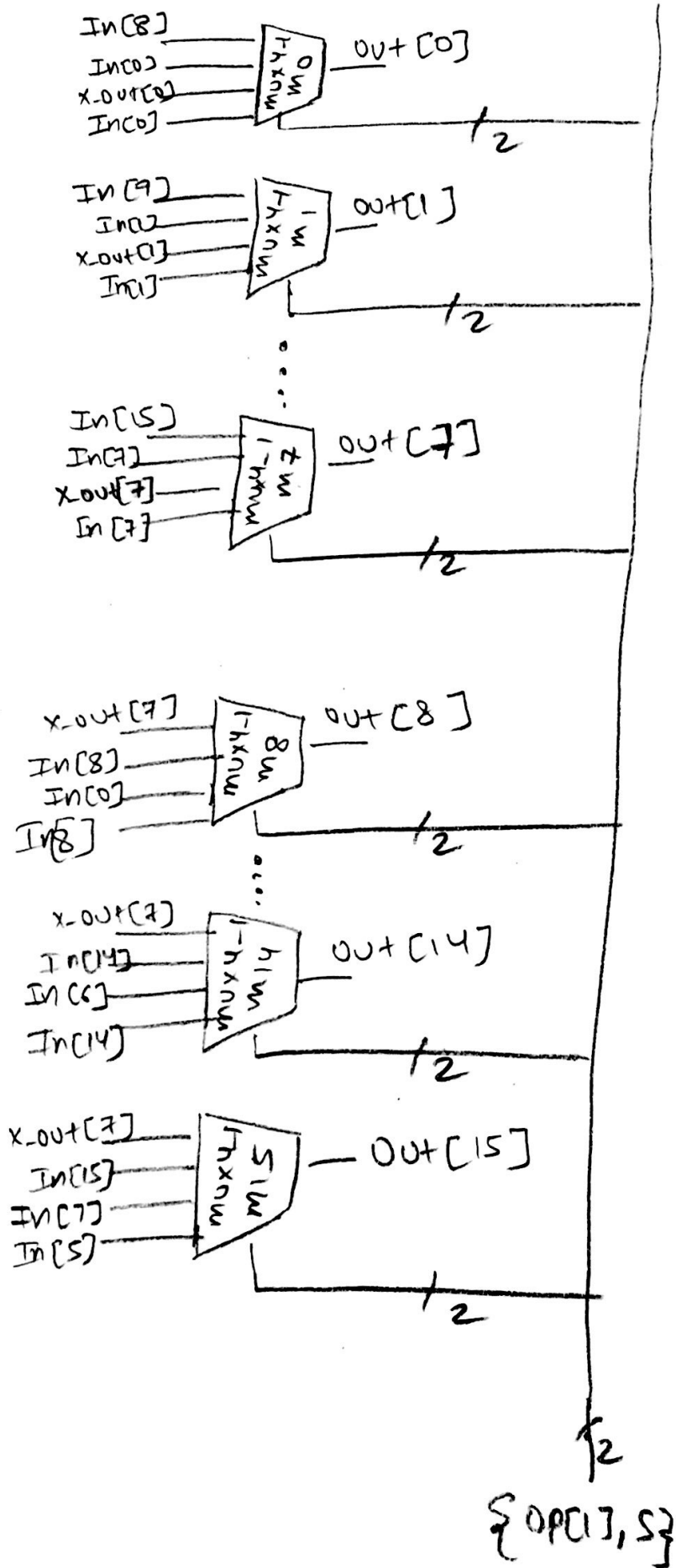
shifter-level-1



Shifter-level_2



Shifter-level-3



shifter - lsb - msb

