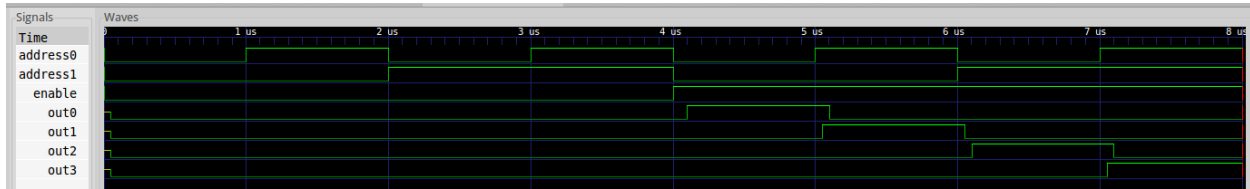


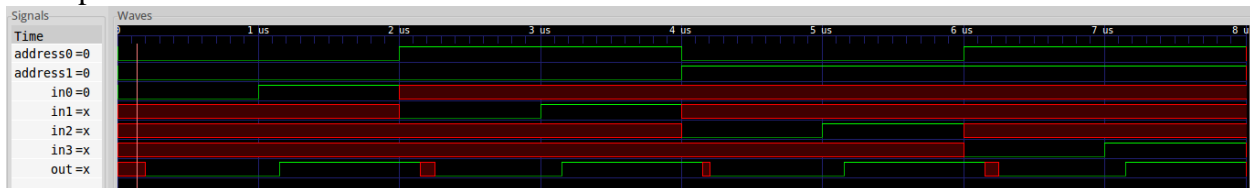
## Decoder



En A0 A1 | O0 O1 O2 O3 | Expected Output

0	0	0		0	0	0	0		All false
0	1	0		0	0	0	0		All false
0	0	1		0	0	0	0		All false
0	1	1		0	0	0	0		All false
1	0	0		1	0	0	0		O0 Only
1	1	0		0	1	0	0		O1 Only
1	0	1		0	0	1	0		O2 Only
1	1	1		0	0	0	1		O3 Only

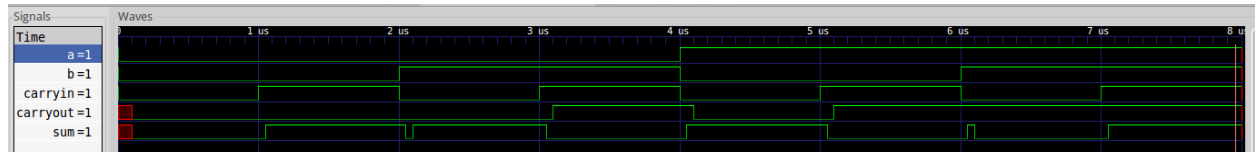
## Multiplexer



A0 A1 | I0 I1 I2 I3 | out | expected out

0	0		0	x	x	x		0		0
0	0		1	x	x	x		1		1
1	0		x	0	x	x		0		0
1	0		x	1	x	x		1		1
0	1		x	x	0	x		0		0
0	1		x	x	1	x		1		1
1	1		x	x	x	0		0		0
1	1		x	x	x	1		1		1

## Adder



A	B	Cin	Sum	Cout	exp Sum	exp Cout
0	0	0	0	0	0	0
0	0	1	1	0	1	0
0	1	0	1	0	1	0
0	1	1	0	1	0	1
1	0	0	1	0	1	0
1	0	1	0	1	0	1
1	1	0	0	1	0	1
1	1	1	1	1	1	1