

multi plexor

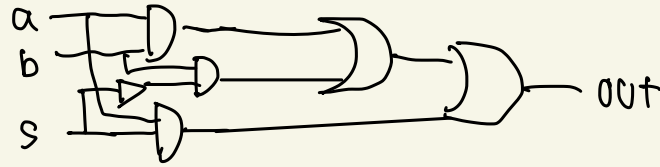
X

	b	\bar{b}		
a	1	1	0	0
\bar{a}	1	1	1	1
	0	0	0	0
\bar{a}	1	1	0	0

O

	b	\bar{b}		
a	1	1	1	1
\bar{a}	1	1	0	0
	1	1	0	0
\bar{a}	0	0	0	0

$$(a \wedge b) \vee (b \wedge \bar{s}) \vee (a \wedge s)$$



s	out
0	a
1	b

$$(a \wedge b) \vee (a \wedge \bar{s}) \vee (b \wedge s)$$

Demultiplexor

sel	a	b
0	in	0
1	0	in

		sel	
		1	0
in	1	(0,1)	(1,0)
	0	(0,0)	(0,0)

And ($a = in, b = sel, out = b$)

And ($a = in, b = sel_{not}, out = a$)