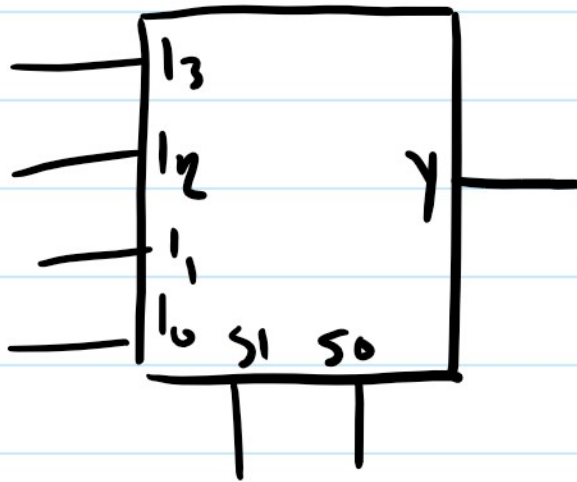


Section 2 - Multiplexors

Wednesday, June 19, 2019 12:04 PM

SECTION 2.



S_1, S_0		Y
0	0	I_0
0	1	I_1
1	0	I_2
1	1	I_3

S_1, S_0 - SELECT LINE

- CHOOSES INPUT LINE

- THAT INPUT LINE BECOMES Y

$I_0 - I_3$ - SEPARATE INPUT LINES

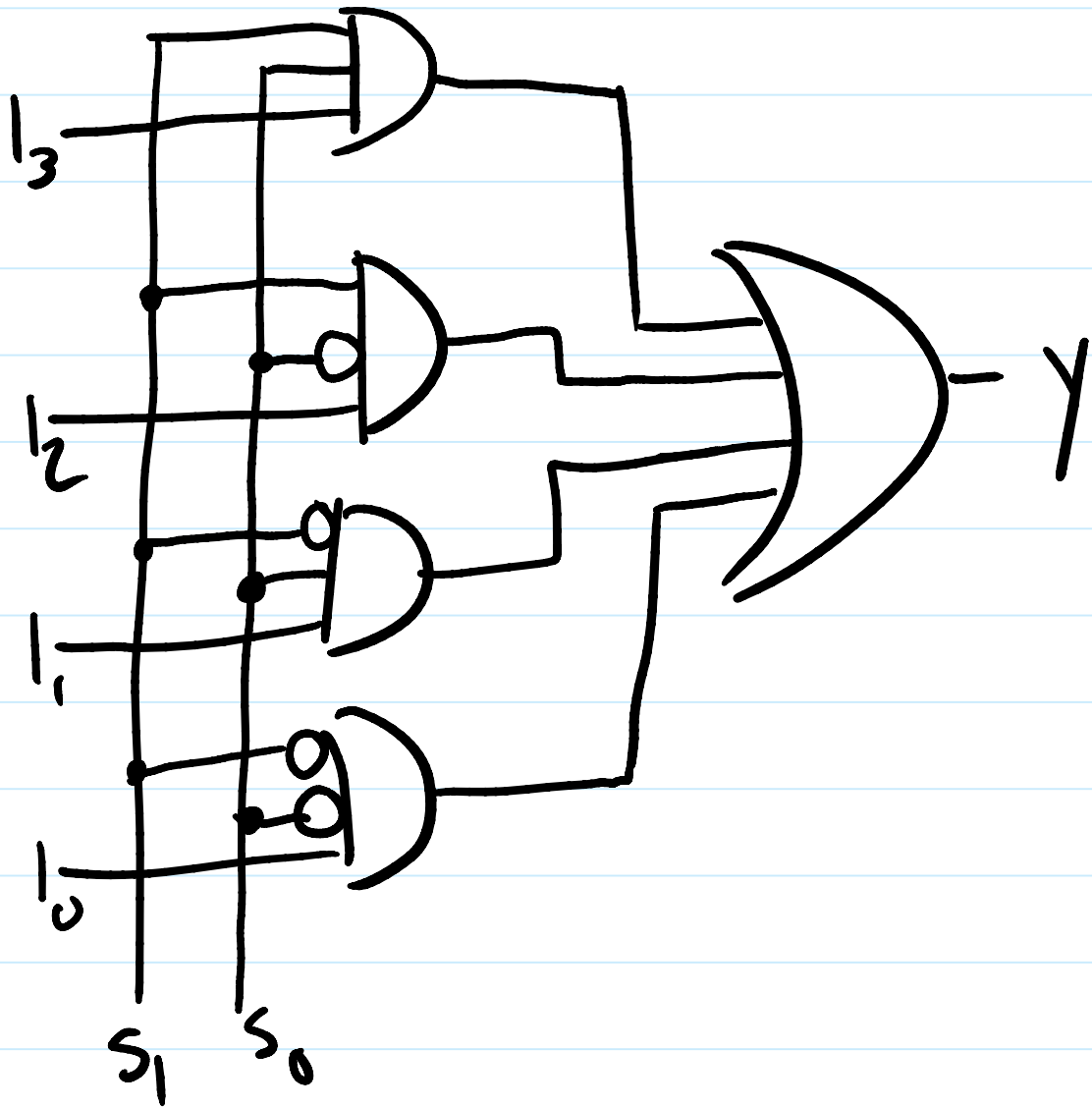
- CAN BE 1 OR 0

Y - Output line

- depending on S_1, S_0 can be $I_3 - I_0$

$$Y = S_1' S_0' I_0 + S_1' S_0 I_1 + S_1 S_0' I_2 + S_1 S_0 I_3$$

THE CIRCUIT:



- THE NUMBER OF INPUT LINES IS SELECT LINES SQUARED.
- SELECT IS A BINARY NUMBER THAT CHOOSES AN INPUT LINE