

CONTROL UNIT

$$S_1(B) = LDB$$

$$S_0(B) = LDB + S$$

$$S_1(A) = LDA$$

$$S_0(A) = LDA + S$$

EQ	EQ			
	00	01	11	10
00	0	0	1	1
01	X	1	1	X
11	X	1	1	X
10	X	1	1	X

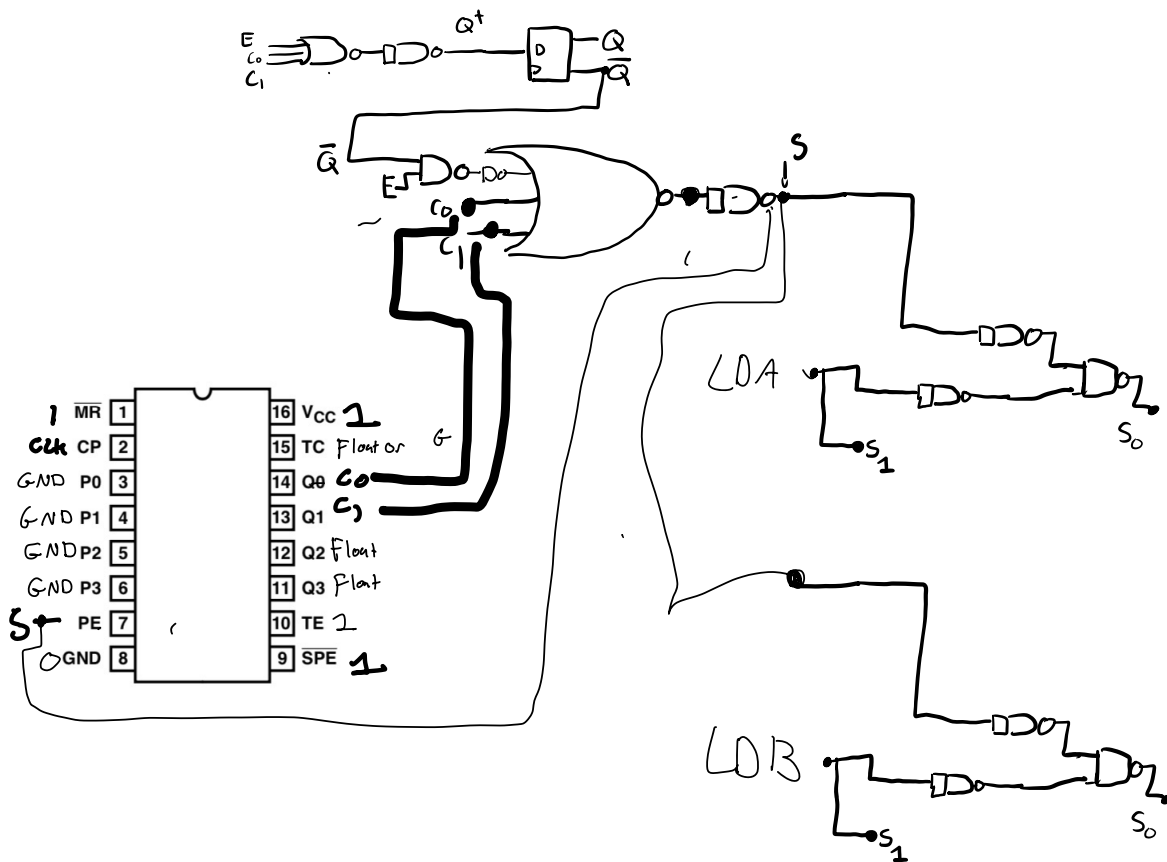
EQ	EQ			
	00	01	11	10
00	0	0	0	1
01	X	1	1	X
11	X	1	1	X
10	X	1	1	X

$$S_0 = \underline{LD} \times S$$

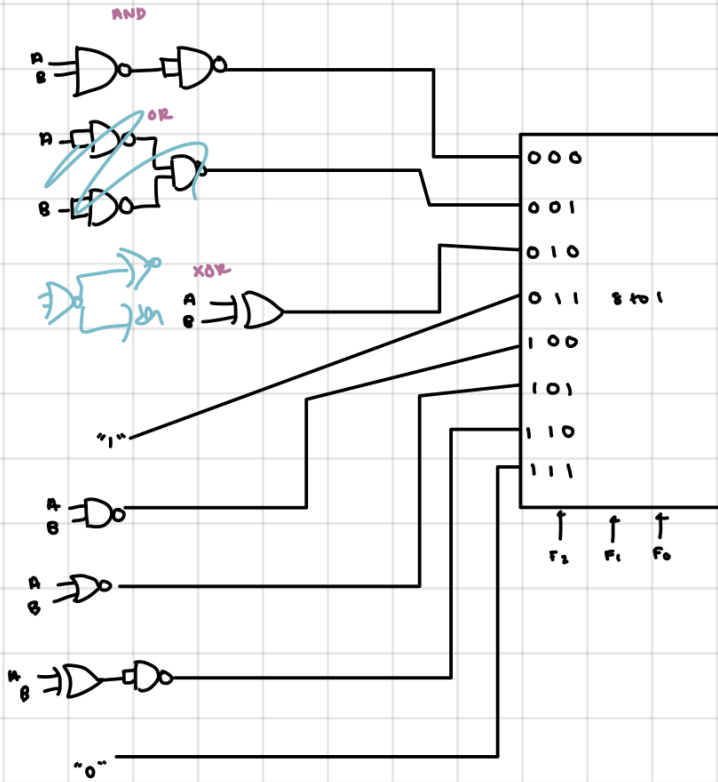
$$S_1 = \underline{LD}$$

$$Q^+ = E + C_0 + C_1$$

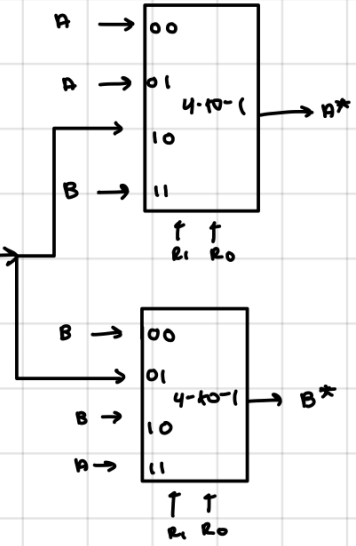
$$S = C_1 + C_0 + EQ'$$



ALU



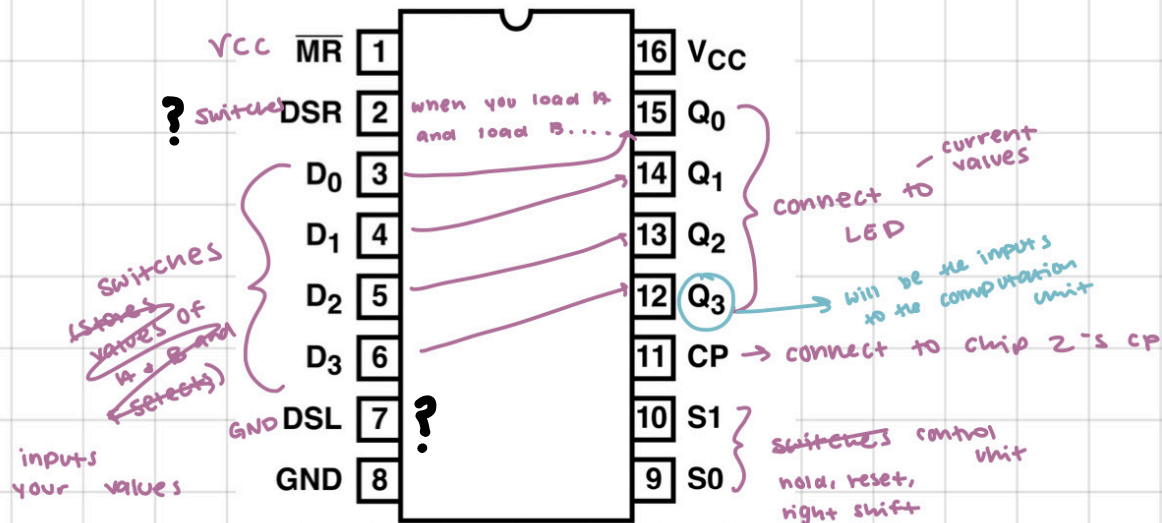
Routing Unit



Register Unit

Still have

- CLK
- chip connections



- D₀-D₃ have the input that you do manually
- S₁-S₀ are switches that tell the register to parallel load bits into current state (Q₃-Q₀)
- load A + load B load the current
- move D₀-D₃ to somewhere on board, do some logic, and then connect the output of logic to S₁ and S₀

