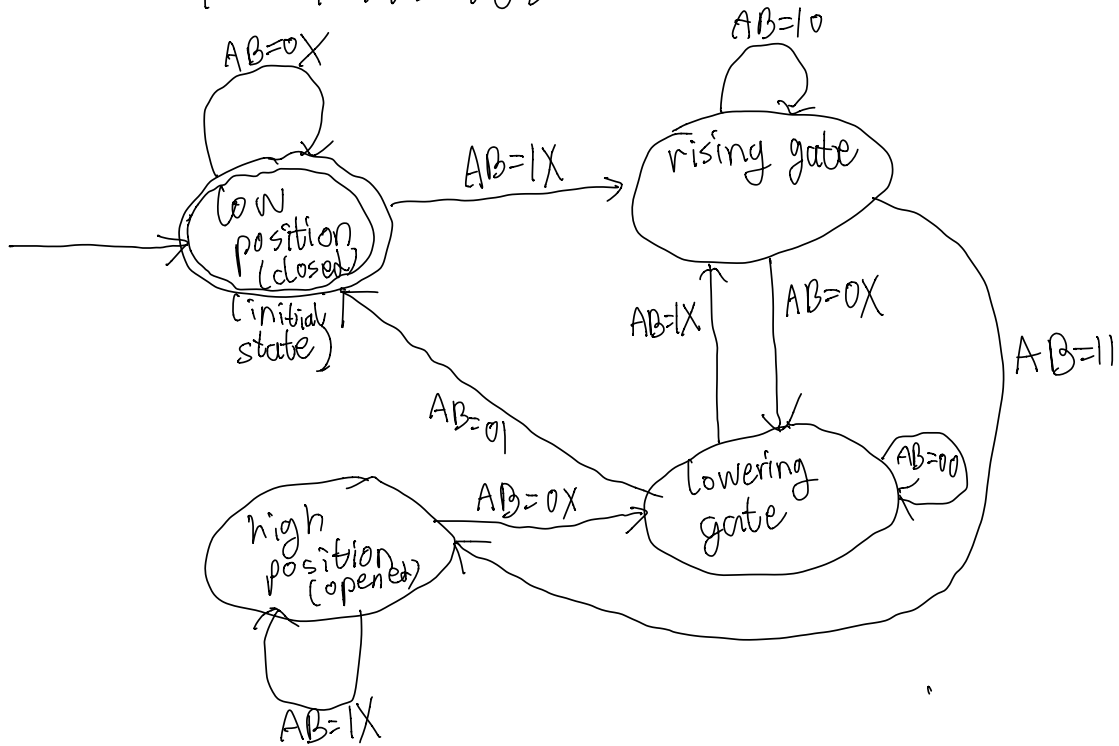


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current state	A	B	next state
low position	0	X	low position
low position	1	X	rising gate
rising gate	1	0	rising gate
rising gate	1	1	high position
rising gate	0	X	lowering gate
lowering gate	1	X	rising gate
lowering gate	0	0	lowering gate
lowering gate	0	1	low position
high position	1	X	high position
high position	0	X	lowering gate

low position =  $F_2 F_1$

rising gate = 10

lowering gate = 01

high position = 11

state logic truth table

$F_2$	$F_1$	A	B	new $F_2$	new $F_1$
0	0	0	X	0	0
0	0	1	X	1	0
1	0	1	0	1	0
1	0	1	1	1	1
1	0	0	X	0	1
0	1	1	X	1	0
0	1	0	0	0	1
0	1	0	1	0	0
1	1	1	X	1	1
1	1	0	X	0	1

output logic truth table

$F_2$	$F_1$	R	L
0	0	0	0
0	1	0	1
1	0	1	0
1	1	0	0