

2. 3 latches / ff

3.

C2	C1	C0	I	N2	N1	N0	U
0	0	0	0	0	0	1	0
0	0	0	1	0	0	0	0
0	0	1	0	0	0	1	0
0	0	1	1	0	1	0	0
0	1	0	0	0	0	1	0
0	1	0	1	0	1	1	0
0	1	1	0	1	0	0	0
0	1	1	1	0	0	0	0
1	0	0	0	0	0	1	1
1	0	0	1	0	1	0	1
1	0	1	0	x	x	x	x
1	0	1	1	x	x	x	x
1	1	0	0	x	x	x	x
1	1	0	1	x	x	x	x
1	1	1	0	x	x	x	x
1	1	1	1	x	x	x	x

4.

C2C1 \ C0I	00	01	11	10
00	0	0	0	0
01	0	0	0	0
11	x	x	x	x
10	1	1	x	x

$$U = C_2$$

5.

$C_2C_1 \setminus C_0I$	00	01	11	10
00	1			1
01	1	1		
11	x	x	x	x
10	1	x	x	x

$$N_0 = C_2 + !C_2C_1!C_0 + !C_2!C_1!I$$