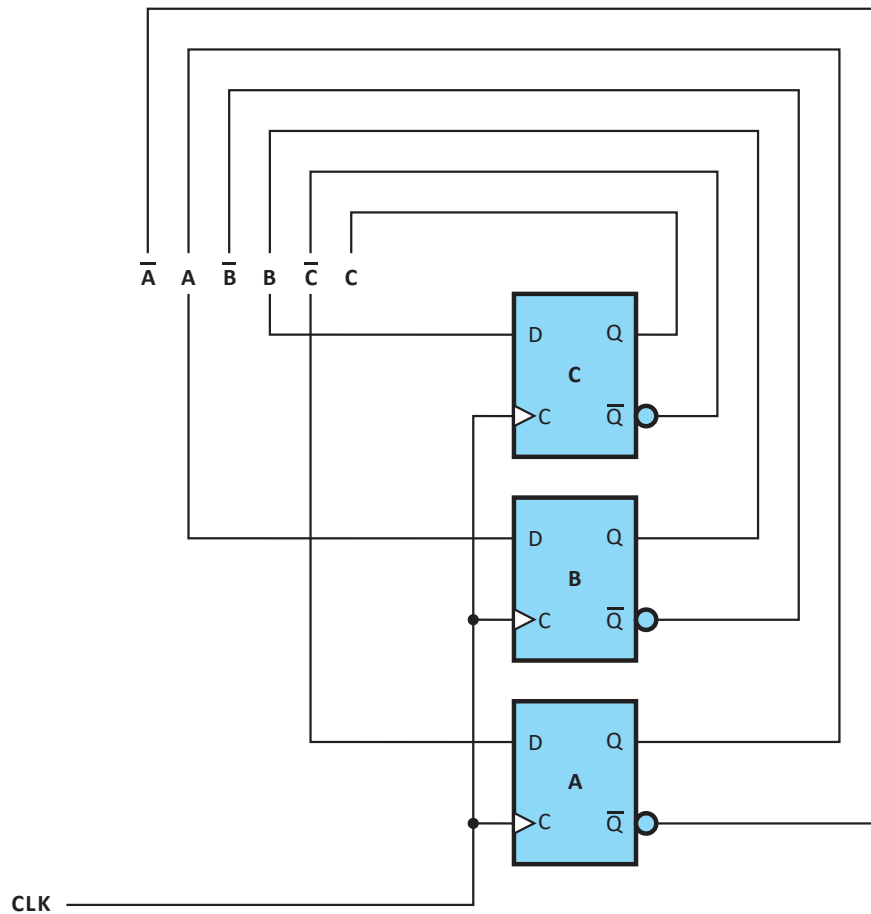


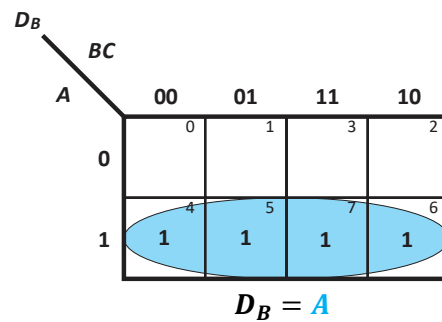
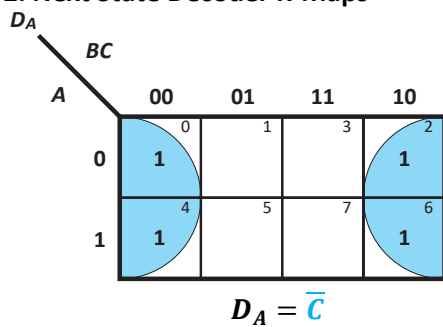


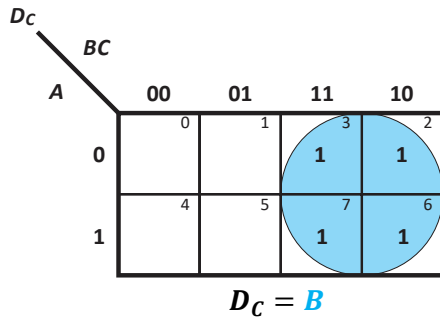
Example 8-State Logic Diagram

Step 1. Next State Decoder Equations

- $D_A = \bar{C}$
- $D_B = A$
- $D_C = B$

Step 2. Next State Decoder K-Maps



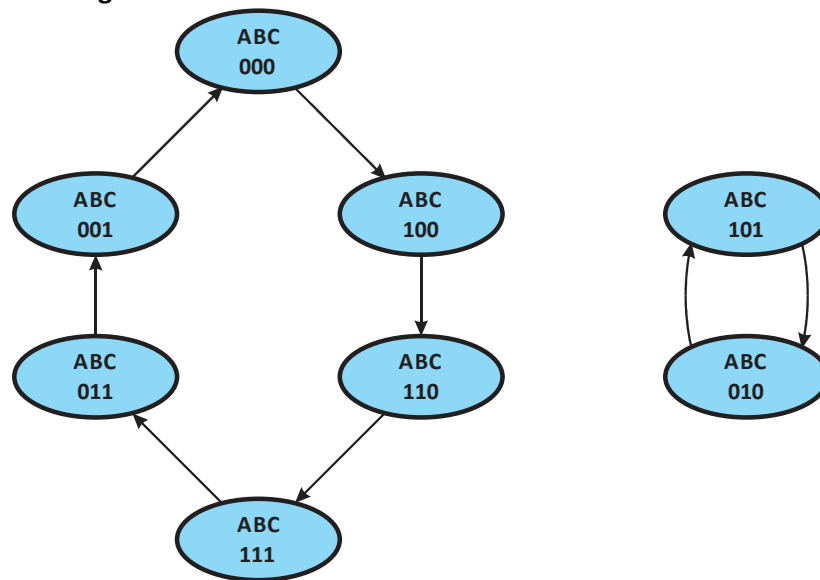


Step 3. Present-State-Next-State Table

Present State			Next State Decoder			Next State		
A	B	C	D_A	D_B	D_C	A	B	C
0	0	0	1	0	0	1	0	0
0	0	1	0	0	0	0	0	0
0	1	0	1	0	1	1	0	1
0	1	1	0	0	1	0	0	1
1	0	0	1	1	0	1	1	0
1	0	1	0	1	0	0	1	0
1	1	0	1	1	1	1	1	1
1	1	1	0	1	1	0	1	1

Present-State-Next-State Table

Step 4. The State Diagram



State Diagram