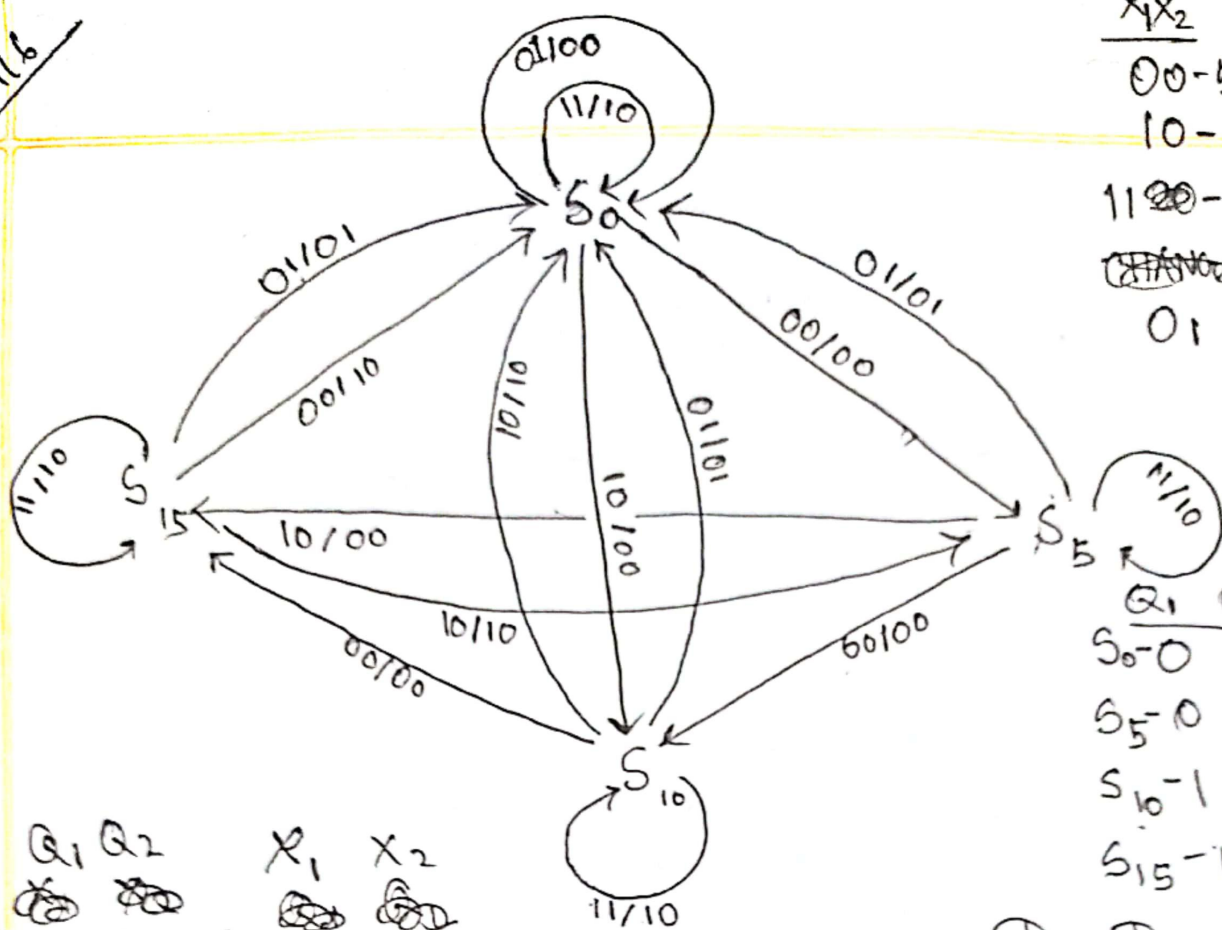


1805116



X_1X_2
 00-5 Hz
 10-10 Hz
 11-20 Hz
 01 - change

	Q_1	Q_2
S_0	0	0
S_5	0	1
S_{10}	1	0
S_{15}	1	1

Q_1	Q_2	X_1	X_2	Q_1^*	Q_2^*	T_1	T_2	Y_1	Y_2
0	0	0	0	0	1	0	1	0	0
0	0	0	1	0	0	0	0	0	0
0	0	1	0	1	0	1	0	0	0
0	0	1	1	0	0	0	0	1	0
0	1	0	0	0	0	1	1	0	0
0	1	0	1	0	0	0	1	0	1
0	1	1	0	1	1	1	0	0	0
0	1	1	1	0	1	0	0	1	0
1	0	0	0	1	0	0	1	0	0
1	0	0	1	0	0	1	0	0	1
1	0	1	0	1	0	0	0	1	0
1	0	1	1	0	0	1	1	1	0
1	1	0	0	0	0	0	1	0	1
1	1	0	1	0	0	1	0	1	0
1	1	1	0	1	1	0	0	0	1
1	1	1	1	1	1	0	0	1	0

$X_1 X_2$	00	01	11	10
00	0	1	X	X
01	0	0	X	X
11	0	0	X	X
10	1	1	X	X

Kmap for T_1 :

$X_1 X_2$	00	01	11	10
00	0	0	0	1
01	1	0	0	1
11	1	0	0	1
10	0	1	0	1

$$T_1 = \bar{X}_1 \bar{X}_2 + Q_2 \bar{X}_2$$

for T_2

$X_1 X_2$	00	01	11	10
00	1	0	0	0
01	1	1	0	0
11	1	1	0	0
10	1	0	1	0

$$T_2 = \bar{X}_1 \bar{X}_2 + Q_2 \bar{X}_1 + Q_1 Q_2 X_1 X_2$$

Kmap for Y_1

$X_1 X_2$	00	01	11	10
00	0	0	1	0
01	0	0	1	0
11	1	0	1	1
10	0	0	1	1

$$Y_1 = X_1 X_2 + Q_1 X_1 + Q_1 Q_2 \bar{X}_2$$

Kmap for Y_2

$X_1 X_2$	00	01	11	10
00	0	1	0	0
01	0	1	0	0
11	0	1	0	0
10	0	1	0	0

$$Y_2 = Q_2 \bar{X}_1 \bar{X}_2 + Q_1 \bar{X}_1 X_2$$