$X_0 X_1 X_2$ $X_0 = 0$ $X_0 = 1$

K-map ($X_0 = 0$), column headers: 00 01 11 10; row labels: 00 01 11 10

K-map ($X_0 = 1$), column headers: 00 01 11 10; row labels: 00 01 11 10

X_2	X_1	X_0	Q_1	Q_0
0	0	1	0	0
0	1	0	0	1
0	1	1	1	1

Code

$X_0 = 0$

$X_0 = 1$

D1

$q_0 q_1$ \ $X_0 X_1 X_2$	00	01	11	10
00				1
01				
11				
10				

	00	01	11	10

Output

$q_0 q_1$ \ $X_0 X_1 X_2$	00	01	11	10
00				
01				
11				
10				

	00	01	11	10
				0
				0
				1
				0