



X	q <sub>2</sub>	q <sub>1</sub>	q <sub>0</sub>	C	B	A	q <sub>2</sub> <sup>+</sup>	q <sub>1</sub> <sup>+</sup>	q <sub>0</sub> <sup>+</sup>	Dec
0	0	0	0	1	1	1	1	1	1	7
0	0	0	1			1	0	0	0	0
0	0	1	0		1	1	0	0	1	1
0	0	1	1			1	0	1	0	2
0	1	0	0	1	1	1	0	1	1	3
0	1	0	1			1	1	0	0	4
0	1	1	0		1	1	1	0	1	5
0	1	1	1			1	1	1	0	6
1	0	0	0				0	0	1	1
1	0	0	1		1	1	0	1	0	2
1	0	1	0			1	0	1	1	3
1	0	1	1	1	1	1	1	0	0	4
1	1	0	0			1	1	0	1	5
1	1	0	1		1	1	1	1	0	6
1	1	1	0			1	1	1	1	7
1	1	1	1	1	1	1	0	0	0	0

$$A=1$$

$$B = Xq_0 + \overline{X}\overline{q_0} = \overline{X \oplus q_0}$$

$$C = Xq_1q_0 + \overline{X}\overline{q_1}\overline{q_0}$$

