



q_3	q_2	q_1	q_0	Dec	A	B	C	D	$q_3^+ q_2^+ q_1^+ q_0^+$	Dec
0	0	0	0	0	0	0	0	1	0 0 0 1	1
0	0	0	1	1	1	1	1	1	0 0 1 0	2
0	0	1	0	2				1	0 0 1 1	3
0	0	1	1	3		1		1	0 1 1 1	7
0	1	0	0	4			1		0 1 0 1	5
0	1	0	1	5			1	1	0 1 1 0	6
0	1	1	0	6			1	1	0 1 0 0	4
0	1	1	1	7	1	1	1	1	1 0 0 0	8
1	0	0	0	8				1	1 0 0 1	9
1	0	0	1	9				1	1 0 1 0	10
1	0	1	0	10				1	1 0 0 0	8
1	0	1	1	11	1			1	0 0 0 1	1
1	1	0	0	12	1	1		1	0 0 0 1	1
1	1	0	1	13		1		1	1 1 1 0	14
1	1	1	0	14			1	1	1 0 1 1	11
1	1	1	1	15	1	1	1	1	0 0 0 1	1

$$A = q_3 q_2 \bar{q}_1 \bar{q}_0 + q_2 q_1 q_0 + q_3 q_1 q_0$$

$$B = q_3 q_2 \bar{q}_0 + q_3 q_2 q_1 + \bar{q}_3 q_1 q_0$$

$$C = \bar{q}_1 q_0 + q_2 q_0 + q_3 q_0 + \bar{q}_3 q_2 q_1 + q_3 \bar{q}_2 q_1$$

$$D = \bar{q}_1 + (\overline{q_2 \oplus q_0})(\overline{q_3 q_1}) + q_3 q_2 \bar{q}_1 \bar{q}_0$$

0111	q3	q2	q1	q0	Dec	A	B	C	D	q3+q2+q1+q0+	Dec
0010	0	0	0	0	0	0	0	0	1	0	1
	0	0	0	1	1	0	0	0	1	0	2
	0	0	1	0	2	0	0	0	1	0	3
	0	0	1	1	3	0	1	0	0	1	7
	0	1	0	0	4	0	0	0	1	0	5
	0	1	0	1	5	0	0	1	1	0	6
	0	1	1	0	6	0	0	1	0	0	4
	0	1	1	1	7	1	1	1	1	0	8
	1	0	0	0	8	0	0	0	1	1	9
	1	0	0	1	9	0	0	1	1	0	10
	1	0	1	0	10	0	0	1	0	0	8
	1	0	1	1	11	1	0	1	0	0	11
	1	1	0	0	12	1	1	0	1	0	11
	1	1	0	1	13	0	0	1	1	1	0
	1	1	1	0	14	0	1	0	1	1	11
	1	1	1	1	15	1	1	1	0	0	1

