

5

$q_1$	$q_2$	$q_3$	$q_4$	$q_5$	$q_6$	$q_7$	$q_8$
0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1
0	0	1	0	0	0	0	1
0	0	1	1	0	0	1	0
0	1	0	0	0	1	0	0
0	1	0	1	0	0	0	1
0	1	0	1	0	0	1	0
0	1	1	0	0	1	0	0
0	1	1	1	0	1	1	0
1	0	0	0	1	0	0	0
1	0	0	1	0	1	0	0
1	0	0	1	0	1	0	0
1	0	1	0	1	0	0	1
1	0	1	0	1	1	0	0
1	1	0	0	1	1	1	0
1	1	0	1	0	1	0	0
1	1	1	0	1	1	0	0
1	1	1	1	0	0	0	0
1	1	1	1	1	0	0	1

2. Lösungsweg:

$$q_1 = \alpha_1 \alpha_2$$

$$q_2 = \alpha_1 \bar{\alpha}_2 + \alpha_1 \alpha_3$$

$$q_3 = \alpha_1 \bar{\alpha}_2 \bar{\alpha}_3 \bar{\alpha}_4 + \alpha_1 \bar{\alpha}_2 \alpha_3 + \alpha_1 \alpha_2 \bar{\alpha}_3 + \alpha_1 \alpha_2 \alpha_4$$

$$q_4 = \alpha_2 \bar{\alpha}_3 \bar{\alpha}_4 + \bar{\alpha}_1 \alpha_2 \alpha_4 + \alpha_1 \bar{\alpha}_2 \bar{\alpha}_4$$

$$q_5 = \bar{\alpha}_2 \alpha_3 \alpha_4 + \alpha_2 \bar{\alpha}_3 \alpha_4$$

$$q_6 = \alpha_3 \alpha_4$$

$$q_7 = 0$$

$$q_8 = \alpha_4$$