0.1 Zakodowane wejscia, wyjscia i stany wewnetrzne

	Z
z_0	0
z_1	1

	Y
y_0	0
y_1	1

	Q_3	Q_2	Q_1	Q_0
q_0	0	0	0	0
q_1	0	0	0	1
q_2	0	0	1	0
q_3	0	0	1	1
q_4	0	1	0	0
q_5	0	1	0	1
q_6	0	1	1	0
q_7	0	1	1	1
q_8	1	0	0	0
q_9	1	0	0	1
q_{10}	1	0	1	0
q_{11}	1	0	1	1
q_{12}	1	1	0	0
q_{13}	1	1	0	1
q_{14}	1	1	1	0
q_{15}	1	1	1	1

0.2 Zakodowane przejscia stanow

Z	t	t+1
0	0	3
0	1	4
0	2	5
0	3	6
0	4	7
0	5	8
0	6	9
0	7	10
0	8	11
0	9	12
0	10	13
0	11	14
0	12	15
0	13	0
0	14	1
0	15	2
1	0	13
1	1	14
1	2	15
1	3	0
1	4	1
1	5	2
1	6	3
1	7	4
1	8	5
1	9	6
1	10	7
1	11	8
1	12	9
1	13	10
1	14	11
1	15	12

0.3 Tabela przejsc dla przerzutnikow JK

	t				t+1				Przerzutniki							
Z	Q_3	Q_2	Q_1	Q_0	Q_3	Q_2	Q_1	Q_0	J_3	K_3	J_2	K_2	J_1	K_1	J_0	K_0
0	0	0	0	0	0	0	1	1	0	*	0	*	1	*	1	*
0	0	0	0	1	0	1	0	0	0	*	1	*	0	*	*	1
0	0	0	1	0	0	1	0	1	0	*	1	*	*	1	1	*
0	0	0	1	1	0	1	1	0	0	*	1	*	*	0	*	1
0	0	1	0	0	0	1	1	1	0	*	*	0	1	*	1	*
0	0	1	0	1	1	0	0	0	1	*	*	1	0	*	*	1
0	0	1	1	0	1	0	0	1	1	*	*	1	*	1	1	*
0	0	1	1	1	1	0	1	0	1	*	*	1	*	0	*	1
0	1	0	0	0	1	0	1	1	*	0	0	*	1	*	1	*
0	1	0	0	1	1	1	0	0	*	0	1	*	0	*	*	1
0	1	0	1	0	1	1	0	1	*	0	1	*	*	1	1	*
0	1	0	1	1	1	1	1	0	*	0	1	*	*	0	*	1
0	1	1	0	0	1	1	1	1	*	0	*	0	1	*	1	*
0	1	1	0	1	0	0	0	0	*	1	*	1	0	*	*	1
0	1	1	1	0	0	0	0	1	*	1	*	1	*	1	1	*
0	1	1	1	1	0	0	1	0	*	1	*	1	*	0	*	1
1	0	0	0	0	1	1	0	1	1	*	1	*	0	*	1	*
1	0	0	0	1	1	1	1	0	1	*	1	*	1	*	*	1
1	0	0	1	0	1	1	1	1	1	*	1	*	*	0	1	*
1	0	0	1	1	0	0	0	0	0	*	0	*	*	1	*	1
1	0	1	0	0	0	0	0	1	0	*	*	1	0	*	1	*
1	0	1	0	1	0	0	1	0	0	*	*	1	1	*	*	1
1	0	1	1	0	0	0	1	1	0	*	*	1	*	0	1	*
1	0	1	1	1	0	1	0	0	0	*	*	0	*	1	*	1
1	1	0	0	0	0	1	0	1	*	1	1	*	0	*	1	*
1	1	0	0	1	0	1	1	0	*	1	1	*	1	*	*	1
1	1	0	1	0	0	1	1	1	*	1	1	*	*	0	1	*
1	1	0	1	1	1	0	0	0	*	0	0	*	*	1	*	1
1	1	1	0	0	1	0	0	1	*	0	*	1	0	*	1	*
1	1	1	0	1	1	0	1	0	*	0	*	1	1	*	*	1
1	1	1	1	0	1	0	1	1	*	0	*	1	*	0	1	*
1	1	1	1	1	1	1	0	0	*	0	*	0	*	1	*	1

0.4 Minimalizacja metoda Karnough dla przerzutnikow JK

J_3				
ZQ_3Q_2 / Q_1Q_0	00	01	11	10
000	0	0	0	0
001	0	1	1	1
011	*	*	*	*
010	*	*	*	*
110	*	*	*	*
111	*	*	*	*
101	0	0	0	0
100	1	1	0	1

$J_3 = Z\overline{Q}_2\overline{Q}_1 + Z\overline{Q}_2\overline{Q}_0 + \overline{Z}Q_2Q_1 + \overline{Z}Q_2Q_0$

K_3				
ZQ_3Q_2 / Q_1Q_0	00	01	11	10
000	*	*	*	*
001	*	*	*	*
011	0	1	1	1
010	0	0	0	0
110	1	1	0	1
111	0	0	0	0
101	*	*	*	*
100	*	*	*	*

$K_3 = Z\overline{Q}_2\overline{Q}_1 + Z\overline{Q}_2\overline{Q}_0 + \overline{Z}Q_2Q_1 + \overline{Z}Q_2Q_0$

J_2				
ZQ_3Q_2 / Q_1Q_0	00	01	11	10
000	0	1	1	1
001	*	*	*	*
011	*	*	*	*
010	0	1	1	1
110	1	1	0	1
111	*	*	*	*
101	*	*	*	*
100	1	1	0	1

$J_2 = Z\overline{Q}_0 + \overline{Z}Q_1 + \overline{Q}_1Q_0$

K_2				
ZQ_3Q_2 / Q_1Q_0	00	01	11	10
000	*	*	*	*
001	0	1	1	1
011	0	1	1	1
010	*	*	*	*
110	*	*	*	*
111	1	1	0	1
101	1	1	0	1
100	*	*	*	*

$K_2 = Z\overline{Q}_0 + \overline{Z}Q_1 + \overline{Q}_1Q_0$

J_1				
ZQ_3Q_2 / Q_1Q_0	00	01	11	10
000	1	0	*	*
001	1	0	*	*
011	1	0	*	*
010	1	0	*	*
110	0	1	*	*
111	0	1	*	*
101	0	1	*	*
100	0	1	*	*

$J_1 = ZQ_0 + \overline{ZQ}_0$

K_1				
ZQ_3Q_2 / Q_1Q_0	00	01	11	10
000	*	*	0	1
001	*	*	0	1
011	*	*	0	1
010	*	*	0	1
110	*	*	1	0
111	*	*	1	0
101	*	*	1	0
100	*	*	1	0

$K_1 = ZQ_0 + \overline{ZQ}_0$

J_0				
ZQ_3Q_2 / Q_1Q_0	00	01	11	10
000	1	*	*	1
001	1	*	*	1
011	1	*	*	1
010	1	*	*	1
110	1	*	*	1
111	1	*	*	1
101	1	*	*	1
100	1	*	*	1

$J_0 = 1$

K_0				
ZQ_3Q_2 / Q_1Q_0	00	01	11	10
000	*	1	1	*
001	*	1	1	*
011	*	1	1	*
010	*	1	1	*
110	*	1	1	*
111	*	1	1	*
101	*	1	1	*
100	*	1	1	*

$K_0 = 1$