

0.1 Zakodowane wejśc, wyjsc i stanow wewnetrznych

	Z
z_0	0
z_1	1

	Y
y_0	0
y_1	1

	Q_4	Q_3	Q_2	Q_1	Q_0
q_1	0	0	0	0	1
q_2	0	0	0	1	0
q_3	0	0	0	1	1
q_4	0	0	1	0	0
q_5	0	0	1	0	1
q_6	0	0	1	1	0
q_7	0	0	1	1	1
q_8	0	1	0	0	0
q_9	0	1	0	0	1
q_{10}	0	1	0	1	0
q_{11}	0	1	0	1	1
q_{12}	0	1	1	0	0
q_{13}	0	1	1	0	1
q_{14}	0	1	1	1	0
q_{15}	0	1	1	1	1
q_{16}	1	0	0	0	0
q_{17}	1	0	0	0	1
q_{18}	1	0	0	1	0
q_{19}	1	0	0	1	1
q_0	0	0	0	0	0

0.2 Zakodowane przejścia stanów

t	t+1
0	1
1	2
2	3
3	4
4	5
5	6
6	7
7	8
8	9
9	10
10	11
11	12
12	13
13	14
14	15
15	16
16	17
17	18
18	19
19	0

0.3 Tabela przejść dla przerzutników JK

t					t+1					Przerzutniki									
Q_4	Q_3	Q_2	Q_1	Q_0	Q_4	Q_3	Q_2	Q_1	Q_0	J_4	K_4	J_3	K_3	J_2	K_2	J_1	K_1	J_0	K_0
0	0	0	0	0	0	0	0	0	1	0	*	0	*	0	*	0	*	1	*
0	0	0	0	1	0	0	0	1	0	0	*	0	*	0	*	1	*	*	1
0	0	0	1	0	0	0	0	1	1	0	*	0	*	0	*	*	0	1	*
0	0	0	1	1	0	0	1	0	0	0	*	0	*	1	*	*	1	*	1
0	0	1	0	0	0	0	1	0	1	0	*	0	*	*	0	0	*	1	*
0	0	1	0	1	0	0	1	1	0	0	*	0	*	*	0	1	*	*	1
0	0	1	1	0	0	0	1	1	1	0	*	0	*	*	0	*	0	1	*
0	0	1	1	1	0	1	0	0	0	0	*	1	*	*	1	*	1	*	1
0	1	0	0	0	0	1	0	0	1	0	*	*	0	0	*	0	*	1	*
0	1	0	0	1	0	1	0	1	0	0	*	*	0	0	*	1	*	*	1
0	1	0	1	0	0	1	0	1	1	0	*	*	0	0	*	*	0	1	*
0	1	0	1	1	0	1	1	0	0	0	*	*	0	1	*	*	1	*	1
0	1	1	0	0	0	1	1	1	0	0	*	*	0	*	0	1	*	*	1
0	1	1	1	0	0	1	1	1	1	0	*	*	0	*	0	*	0	1	*
0	1	1	1	1	1	0	0	0	0	1	*	*	1	*	1	*	1	*	1
1	0	0	0	0	1	0	0	0	1	*	0	0	*	0	*	0	*	1	*
1	0	0	0	1	1	0	0	1	0	*	0	0	*	0	*	1	*	*	1
1	0	0	1	0	1	0	0	1	1	*	0	0	*	0	*	*	0	1	*
1	0	0	1	1	0	0	0	0	0	*	1	0	*	0	*	*	1	*	1

0.4 Minimalizacja metoda Karnough dla przerzutników JK

J_4				
$Q_4Q_3Q_2 / Q_1Q_0$	00	01	11	10
000	0	0	0	0
001	0	0	0	0
011	0	0	1	0
010	0	0	0	0
110	*	*	*	*
111	*	*	*	*
101	*	*	*	*
100	*	*	*	*

$$J_4 = Q_3Q_2Q_1Q_0$$

J_3				
$Q_4Q_3Q_2 / Q_1Q_0$	00	01	11	10
000	0	0	0	0
001	0	0	1	0
011	*	*	*	*
010	*	*	*	*
110	*	*	*	*
111	*	*	*	*
101	*	*	*	*
100	0	0	0	0

$$J_3 = Q_2Q_1Q_0$$

J_2				
$Q_4Q_3Q_2 / Q_1Q_0$	00	01	11	10
000	0	0	1	0
001	*	*	*	*
011	*	*	*	*
010	0	0	1	0
110	*	*	*	*
111	*	*	*	*
101	*	*	*	*
100	0	0	0	0

$$J_2 = \overline{Q}_4Q_1Q_0$$

K_4				
$Q_4Q_3Q_2 / Q_1Q_0$	00	01	11	10
000	*	*	*	*
001	*	*	*	*
011	*	*	*	*
010	*	*	*	*
110	*	*	*	*
111	*	*	*	*
101	*	*	*	*
100	0	0	1	0

$$K_4 = Q_1Q_0$$

K_3				
$Q_4Q_3Q_2 / Q_1Q_0$	00	01	11	10
000	*	*	*	*
001	*	*	*	*
011	0	0	1	0
010	0	0	0	0
110	*	*	*	*
111	*	*	*	*
101	*	*	*	*
100	*	*	*	*

$$K_3 = Q_2Q_1Q_0$$

K_2				
$Q_4Q_3Q_2 / Q_1Q_0$	00	01	11	10
000	*	*	*	*
001	0	0	1	0
011	0	0	1	0
010	*	*	*	*
110	*	*	*	*
111	*	*	*	*
101	*	*	*	*
100	*	*	*	*

$$K_2 = Q_1Q_0$$

J_1				
$Q_4Q_3Q_2 / Q_1Q_0$	00	01	11	10
000	0	1	*	*
001	0	1	*	*
011	0	1	*	*
010	0	1	*	*
110	*	*	*	*
111	*	*	*	*
101	*	*	*	*
100	0	1	*	*

$$J_1 = Q_0$$

J_0				
$Q_4Q_3Q_2 / Q_1Q_0$	00	01	11	10
000	1	*	*	1
001	1	*	*	1
011	1	*	*	1
010	1	*	*	1
110	*	*	*	*
111	*	*	*	*
101	*	*	*	*
100	1	*	*	1

$$J_0 = 1$$

K_1				
$Q_4Q_3Q_2 / Q_1Q_0$	00	01	11	10
000	*	*	1	0
001	*	*	1	0
011	*	*	1	0
010	*	*	1	0
110	*	*	*	*
111	*	*	*	*
101	*	*	*	*
100	*	*	1	0

$$K_1 = Q_0$$

K_0				
$Q_4Q_3Q_2 / Q_1Q_0$	00	01	11	10
000	*	1	1	*
001	*	1	1	*
011	*	1	1	*
010	*	1	1	*
110	*	*	*	*
111	*	*	*	*
101	*	*	*	*
100	*	1	1	*

$$K_0 = 1$$