

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_0 | 0 | 0 | 0 | 0 | 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 |

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 przerzutków D

| t | | | | | t+1 | | | | | Przerzutniki | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|-------|-------|-------|-------|
| Q_4 | Q_3 | Q_2 | Q_1 | Q_0 | Q_4 | Q_3 | Q_2 | Q_1 | Q_0 | D_4 | D_3 | D_2 | D_1 | D_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 | 0 |
| 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 |
| 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 |
| 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 |
| 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 |
| 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 |
| 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 |
| 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 |
| 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 |
| 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 |
| 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 |
| 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 |
| 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

0.4 Minimalizacja metoda Karnough dla przerzutników D

| D_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 | 1 | 1 | 0 | 1 |