Птахова ИВТ-21

Дз

Закодировать внутренние состояния автомата на RS-триггерах

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | a1 | a2 | a3 | a4 | a5 | a6 |
| z1 | a3 | - | a6 | a4 | a2 | a3 |
| z2 | a6 | a3 | a4 | - | a1 | a5 |
| z3 | - | a4 | a2 | a5 | a6 | a1 |

T = → → T = → M\* =

**a3=000, a6 =001**

M’ =

M5 = B**5**={6} = {001}

={011, 101}

={011,101}

W011=|011-001|2+ |001-011|2=1+1=2

W101=|101-001|2+|001-101|2 =1+1=2

**a5 = 011**

M” =

M1 = B**1**={3,5,6} = {000,011,001}

={101}

= {010, 100}

= {111}

={010,100,101, 111}

W010=|010-000|2 +|010-011|2 +|010-001|2 + |001-010|2=1+1+2+2=6

W100=|100-000|2 +|100-011|2 +|100-001|2 + |001-100|2=1+3+2+2=8

W111=|111-000|2 +|111-011|2 +|111-001|2 + |001-111|=3+1+2+2=8

W101 =|101-000|2 +|101-011|2 +|101-001|2 +|001-101|2=2+2+1+1=6

**a1 = 101**

M”’=

M2 = B2={3,5} = {000, 011}

={010, 100}

= {111}

={010,100,111}

W010=|010-000|2 +|000-010|2+|010-011|2 =1+1+1=3

W100=|100-000|2 +|000-100|2+|100-011|2=1+1+3 = 5

W111=|111-000|2 +|000-111|2+|111-011|2=3+3+1=7

**a2 = 010**

M””=

M4 = B4={2, 3, 5}={010, 000, 011}

={100}

= {110}

= {111}

={100,111,110}

W100=|100-000|2 +|100-010|2+ |100-011|2=1+2+3=6

W111=|111-000|2 +|111-010|2+ |111-011|2=3+2+1=6

W110=|110-000|2 +|110-010|2+|110-011|2 =2+1+2=5

**a4 = 110**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q1** | **Q2Q3** | | | |
| **00** | **01** | **11** | **10** |
| **0** | a3 | a6 | a5 | a2 |
| **1** | a4 | a1 |  |  |

Кодирование завершено.

19

P=15

K = = 1,27 – кодирование можно считать удовлетворительным