Число образующих: 4

Множ Б: соверш нормальная форма кантора

Конституенты: числа

Множ B: 0, 15, 1, 5, 7, 12, 8

1. Записать B в виде формулы
2. Найти мин. нормальную форму Кантора B

1)

Перевод в двоичную

0 0000

1 (0001) !X1&!X2&!X3&X4

5 101

7 0111

8 1000

12 (1100) X1&X2&!X3&!X4

15 1111

2)

слои:

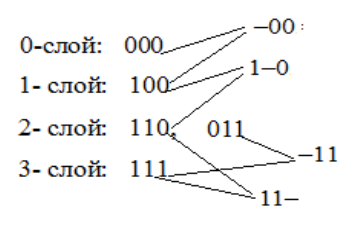
0: 0000

1: 0001 1000

2: 0101 1100

3: 0111

4: 1111



0,1) 000-

3.4) -111

1,2) 1-00, 0-01

01-1, -000

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 0000 | 0001 | 1000 | 0101 | 1100 | 0111 | 1111 |  |
| 000- | 1 | 1 |  |  |  |  |  |  |
| -000 | 1 |  | 1 |  |  |  |  |  |
| 0-01 |  | 1 |  | 1 |  |  |  |  |
| 1-00 |  |  | 1 |  | 1 |  |  | ~ |
| 01-1 |  |  |  | 1 |  | 1 |  |  |
| -111 |  |  |  |  |  | 1 | 1 | ~ |
|  |  |  |  |  | v |  | v |  |

0,15,3,4,7,12,11

0 0000

3 0011

4 0100

7 0111

11 1011

12 1100

15 1111

0: 0000

1: 0100

2: 0011, 1100

3: 0111, 1011

4: 1111

0-00, -100, 0-11, -011, -111, 1-11

(0-11, 1-11) --11, (0-11, -111) --11

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 0000 | 0100 | 0011 | 1100 | 0111 | 1011 | 1111 |  |
| 0-00 | 1 | 1 |  |  |  |  |  | ~ |
| -100 |  | 1 |  | 1 |  |  |  | ~ |
| --11 |  |  | 1 |  | 1 | 1 | 1 | ~ |
|  |  |  |  |  |  |  |  |  |
|  | v |  | V | v | v | v | v |  |

!X1&!X3&!X4 V X2&!X3&!X4 V X3&X4

Ядро покрытия является полным покрытием

0, 15, 13, 9, 8, 3

0 0000

3 0011

8 1000

9 1001

13 1101

15 1111

0: 0000

1: 1000

2: 0011, 1001

3: 1101

4: 1111

-000, 100-, 1-01, 11-1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 0000 | 1000 | 0011 | 1001 | 1101 | 1111 |  |
| -000 | 1 | 1 |  |  |  |  | ~ |
| 100- |  | 1 |  | 1 |  |  |  |
| 1-01 |  |  |  | 1 | 1 |  |  |
| 11-1 |  |  |  |  | 1 | 1 | ~ |
| 0011 |  |  | 1 |  |  |  | ~ |
|  | v |  | V |  |  | v |  |

!X2&!X3&!X4 V X1&X2&X4 V !X1&!X2&X3&X4