Вариант 2   
Условие перехода неравенство R и C код 001

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| № | Действие | Микрокоманда | | | | | | | | |
| Код  перехода | S[3:0] | M | P0 | ISR,  ISL | A | wr | adr[2:0] | v[3:0] |
| 0 | DataIn(A) -> RgA | 000 | 0000 | 0 | 0 | 00 | 1 | 0 | 000 | 100 |
| 1 | RgA(A) -> BRON-0 | 000 | 0000 | 0 | 0 | 00 | 0 | 1 | 000 | 000 |
| 2 | RgA(!A) ->BRON-1  DataIn(B) ->RgA | 000 | 1111 | 0 | 0 | 00 | 1 | 1 | 001 | 100 |
| 3 | RgA(B) -> BRON-2 | 000 | 0000 | 0 | 0 | 00 | 0 | 1 | 010 | 000 |
| 4 | BRON-2 -> RgB | 000 | 0000 | 0 | 0 | 00 | 0 | 0 | 010 | 011 |
| 5 | BRON-1 -> RgA | 000 | 0000 | 0 | 0 | 00 | 0 | 0 | 001 | 100 |
| 6 | RgA(!A) plus RgB(B) | 000 | 1001 | 1 | 0 | 00 | 0 | 0 | 001 | 000 |
| 7 | ALU -> BRON-3 | 000 | 0000 | 0 | 0 | 00 | 0 | 1 | 011 | 000 |
| 8 | BRON-3 -> RgB | 000 | 0000 | 0 | 0 | 00 | 0 | 0 | 011 | 011 |
| 9 | BRON-0 -> RgA | 000 | 0000 | 0 | 0 | 00 | 0 | 0 | 000 | 100 |
| 10 | RgA and RgB | 000 | 0100 | 0 | 0 | 00 | 0 | 0 | 000 | 000 |
| 11 | PC = 0 | 111 | 0000 | 0 | 0 | 00 | 0 | 0 | 000 | 000 |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| № | Действие | Микрокоманда | | | | | | | | |
| Код  перехода | S[3:0] | M | P0 | ISR,  ISL | A | wr | adr[2:0] | v[3:0] |
| 0 | DataIn(C) -> RgA | 000 | 0000 | 0 | 0 | 00 | 1 | 0 | 000 | 0001 |
| 1 | RgA(C) -> BRON-0 | 000 | 0000 | 0 | 0 | 00 | 0 | 1 | 000 | 0000 |
| 2 | DataIn(A) -> RgA | 000 | 0000 | 0 | 0 | 00 | 1 | 0 | 000 | 0001 |
| 3 | RgA(A) -> BRON-1 | 000 | 0000 | 0 | 0 | 00 | 0 | 1 | 001 | 0000 |
| 4 | RgA(!A) ->BRON-2 | 000 | 1111 | 0 | 0 | 00 | 0 | 1 | 010 | 0000 |
| 5 | DataIn(B) ->RgA | 000 | 0000 | 0 | 0 | 00 | 1 | 0 | 000 | 0001 |
| 6 | RgA(B) -> BRON-3 | 000 | 0000 | 0 | 0 | 00 | 1 | 1 | 011 | 0000 |
| 7 | BRON-3 -> RgB | 000 | 0000 | 0 | 0 | 00 | 0 | 0 | 011 | 0110 |
| 8 | BRON-2 -> RgA | 000 | 0000 | 0 | 0 | 00 | 0 | 0 | 010 | 0001 |
| 9 | RgA(!A) plus RgB(B) | 000 | 1001 | 1 | 0 | 00 | 0 | 0 | 010 | 0000 |
| 10 | ALU -> BRON-4 | 000 | 0000 | 0 | 0 | 00 | 0 | 1 | 100 | 0000 |
| 11 | BRON-4 -> RgB | 000 | 0000 | 0 | 0 | 00 | 0 | 0 | 100 | 0110 |
| 12 | BRON-1 -> RgA | 000 | 0000 | 0 | 0 | 00 | 0 | 0 | 001 | 0001 |
| 13 | RgA and RgB | 000 | 0100 | 0 | 0 | 00 | 0 | 0 | 001 | 0000 |
| 14 | ALU -> BRON-5 | 000 | 0000 | 0 | 0 | 00 | 0 | 1 | 101 | 0000 |
| 15 | BRON-5 -> RgA | 000 | 0000 | 0 | 0 | 00 | 0 | 0 | 101 | 0001 |
| 16 | BRON-3 -> RgB | 000 | 0000 | 0 | 0 | 00 | 0 | 0 | 011 | 0110 |
| 17 | RgA minus RgB | 000 | 0110 | 1 | 1 | 00 | 0 | 0 | 011 | 0000 |
| 18 | ALU -> BRON-6 | 000 | 0000 | 0 | 0 | 00 | 0 | 1 | 111 | 0000 |
| 19 | PC = 0 | 001 | 0000 | 0 | 0 | 00 | 0 | 0 | 000 | 0000 |

С = 0101

A = 0011

B = 1000

(!A+B) = 1100 + 1000 = 0100