|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Зм****.*  ***Арк.***  ***№ докум.***  ***Підп.***  ***Дата***  ***Арк.***  ***5***  *4*  ***ІАЛЦ.463626.004 ПЗ*** |  | *Q1* | |  |  | *Y1* |
| *Q3* | *Q2* | *1* | *1* | *0* | *1* |  |
| *1* | *1* | *0* | *1* | *X1* |
|  | *0* | *0* | *0* | *0* |
|  | *0* | *0* | *0* | *0* |  |
|  | *Q2* | *0* | *0* | *0* | *0* |  |
|  | *0* | *0* | *0* | *0* | *X1* |
|  |  | *1* | *1* | *1* | *1* |
|  |  | *1* | *1* | *1* | *1* |  |
|  |  |  | *X2* | |  |  |

***Y1 = (Q3Q̅2) v (Q̅3Q2) v (Q3Q̅1X2)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | *Q1* | |  |  | *Y2* |
| *Q3* | *Q2* | *0* | *0* | *1* | *0* |  |
| *0* | *0* | *1* | *0* | *X1* |
|  | *0* | *0* | *0* | *0* |
|  | *0* | *0* | *0* | *0* |  |
|  | *Q2* | *0* | *0* | *0* | *0* |  |
|  | *0* | *0* | *1* | *1* | *X1* |
|  |  | *0* | *0* | *0* | *0* |
|  |  | *0* | *0* | *0* | *0* |  |
|  |  |  | *X2* | |  |  |

***Y2 = (Q1) v (Q̅2) v (Q3X̅2) v (Q̅3Q̅2X̅1)***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | *Q1* | |  |  | *Y3* |
|  | *Q3* | *Q2* | *0* | *0* | *0* | *0* |  |
|  | *0* | *0* | *0* | *0* | *X1* |
|  |  | *0* | *0* | *0* | *0* |
|  |  | *0* | *0* | *0* | *0* |  |
|  |  | *Q2* | *1* | *1* | *0* | *0* |  |
|  |  | *1* | *1* | *0* | *0* | *X1* |
|  |  |  | *0* | *0* | *0* | *0* |
|  |  |  | *0* | *0* | *0* | *0* |  |
|  |  |  |  | *X2* | |  |  |

***Y3 = (Q̅2) v (Q3) v (Q̅1)***

***Зм****.*

***Арк.***

***№ докум.***

***Підп.***

***Дата***

***Арк.***

***6***

*4*

***ІАЛЦ.463626.004 ПЗ***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | *Q1* | |  |  | *Y4* |
| *Q3* | *Q2* | *0* | *0* | *0* | *0* |  |
| *0* | *0* | *0* | *0* | *X1* |
|  | *0* | *0* | *0* | *1* |
|  | *0* | *0* | *0* | *1* |  |
|  | *Q2* | *0* | *0* | *0* | *0* |  |
|  | *0* | *0* | *0* | *0* | *X1* |
|  |  | *0* | *0* | *0* | *0* |
|  |  | *0* | *0* | *0* | *0* |  |
|  |  |  | *X2* | |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | *Q1* | |  |  | *R3* |
| *Q3* | *Q2* | *1* | *1* | *1* | *0* |  |
| *1* | *1* | *1* | *0* | *X1* |
|  | *0* | *0* | *0* | *0* |
|  | *0* | *0* | *0* | *0* |  |
|  | *Q2* | *0* | *0* | *-* | *-* |  |
|  | *0* | *0* | *-* | *-* | *X1* |
|  |  | *-* | *-* | *-* | *-* |
|  |  | *-* | *-* | *-* | *-* |  |
|  |  |  | *X2* | |  |  |

***Y4 = (Q̅3) v (Q1) v (X2) v (Q2)***

***R3 = (Q̅3) v (Q̅1X̅2) v (Q̅2)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Зм****.*  ***Арк.***  ***№ докум.***  ***Підп.***  ***Дата***  ***Арк.***  ***7***  *4*  ***ІАЛЦ.463626.004 ПЗ*** |  | *Q1* | |  |  | *S3* |
| *Q3* | *Q2* | *0* | *0* | *0* | *-* |  |
| *0* | *0* | *0* | *-* | *X1* |
|  | *-* | *-* | *-* | *-* |
|  | *-* | *-* | *-* | *-* |  |
|  | *Q2* | *1* | *1* | *0* | *0* |  |
|  | *1* | *1* | *0* | *0* | *X1* |
|  |  | *0* | *0* | *0* | *0* |
|  |  | *0* | *0* | *0* | *0* |  |
|  |  |  | *X2* | |  |  |

***S3= (Q̅1) v (Q̅2) v (Q3)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | *Q1* | |  |  | *R2* |
| *Q3* | *Q2* | *1* | *1* | *1* | *0* |  |
| *1* | *1* | *1* | *0* | *X1* |
|  | *0* | *0* | *-* | *-* |
|  | *0* | *0* | *-* | *-* |  |
|  | *Q2* | *1* | *1* | *1* | *1* |  |
|  | *1* | *1* | *0* | *-* | *X1* |
|  |  | *0* | *0* | *-* | *-* |
|  |  | *0* | *0* | *-* | *-* |  |
|  |  |  | *X2* | |  |  |

***R2 = (Q3Q2X̅1) v (Q̅2) v (Q̅3Q̅2X1)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | *Q1* | |  |  | *S2* |
| *Q3* | *Q2* | *0* | *0* | *0* | *-* |  |
| *0* | *0* | *0* | *-* | *X1* |
|  | *1* | *1* | *0* | *0* |
|  | *1* | *1* | *0* | *0* |  |
|  | *Q2* | *0* | *0* | *0* | *0* |  |
|  | *0* | *0* | *-* | *-* | *X1* |
|  |  | *1* | *1* | *0* | *0* |
|  |  | *1* | *1* | *0* | *0* |  |
|  |  |  | *X2* | |  |  |

***S2 = (Q2) v (Q̅1)***

***Зм****.*

***Арк.***

***№ докум.***

***Підп.***

***Дата***

***Арк.***

***8***

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***ІАЛЦ.463626.004 ПЗ***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | *Q1* | |  |  | *R1* |
| *Q3* | *Q2* | *1* | *1* | *-* | *0* |  |
| *1* | *1* | *-* | *0* | *X1* |
|  | *1* | *1* | *0* | *0* |
|  | *1* | *1* | *0* | *0* |  |
|  | *Q2* | *1* | *1* | *0* | *0* |  |
|  | *1* | *1* | *-* | *-* | *X1* |
|  |  | *1* | *1* | *0* | *0* |
|  |  | *1* | *1* | *0* | *0* |  |
|  |  |  | *X2* | |  |  |

***R1 =(Q̅1)***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | *Q1* | |  |  | *S1* |
| *Q3* | *Q2* | *0* | *0* | *0* | *1* |  |
| *0* | *0* | *0* | *1* | *X1* |
|  | *0* | *0* | *1* | *1* |
|  | *0* | *0* | *1* | *1* |  |
|  | *Q2* | *0* | *0* | *0* | *0* |  |
|  | *0* | *0* | *1* | *1* | *X1* |
|  |  | *0* | *0* | *1* | *1* |
|  |  | *0* | *0* | *1* | *1* |  |
|  |  |  | *X2* | |  |  |

***S1 =(Q̅3Q2X̅1) v (Q1) v (Q3Q2X2)***

***2.6. Побудова схеми автомата в заданому базисі***

***Отриманих після мінімізації даних достатньо для побудови***

***комбінаційних схем функцій збудження тригерів і функцій сигналів***

***виходів, таким чином, і всієї комбінаційної схеми. Автомат будуємо на***

***RS-тригерах. Автомат є синхронним, так як його роботу синхронізує***

***генератор, а RS-тригер керований перепадом сигналу.***