**Szinkron sorrendi hálózat tervezése (beadandó feladat)**

**Név:**

**Neptun kód:**

**Feladat:**

**Állapotgráf:**

**Előzetes állapottábla:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| x1x2  q1q2 | 00 | 01 | 11 | 10 |
| a |  |  |  |  |
| b |  |  |  |  |
| c |  |  |  |  |
| d |  |  |  |  |

**Állapot összevonás lépcsős tábla segítségével:**

|  |  |  |  |
| --- | --- | --- | --- |
| b |  |  |  |
| c |  |  |  |
| d |  |  |  |
|  | a | b | c |

|  |  |  |  |
| --- | --- | --- | --- |
| b |  |  |  |
| c |  |  |  |
| d |  |  |  |
|  | a | b | c |

**Összevont állapottábla:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| x1x2  q1q2 | 00 | 01 | 11 | 10 |
| a |  |  |  |  |
| b |  |  |  |  |
| c |  |  |  |  |
| d |  |  |  |  |

**Kódválasztás:**

**Kódolt állapottábla:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| x1x2  q1q2 | 00 | 01 | 11 | 10 |
| 00 |  |  |  |  |
| 01 |  |  |  |  |
| 11 |  |  |  |  |
| 10 |  |  |  |  |

**Kimenet meghatározása:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | |  | |  |  |  |
| **Z** |  | x1 | |  |  |  |
|  | x2 | |  |  |  |  |
|  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |
|  |  |  |  |  | q2 |  |
|  |  |  |  |  | q1 |
|  |  |  |  |  |  |

**Flip-flopok bemeneteinek vezérlése:**

Q1 átmeneti tábla

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Q1** | |  | |  |  |  |
|  |  | x1 | |  |  |  |
|  | x2 | |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  | q2 |  |
|  |  |  |  |  | q1 |
|  |  |  |  |  |  |

Vezérlési táblák

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | |  | |  |  |  |
|  |  | x1 | |  |  |  |
|  | x2 | |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  | q2 |  |
|  |  |  |  |  | q1 |
|  |  |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | |  | |  |  |  |
|  |  | x1 | |  |  |  |
|  | x2 | |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  | q2 |  |
|  |  |  |  |  | q1 |
|  |  |  |  |  |  |

Q2 átmeneti tábla

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Q2** | |  | |  |  |  |
|  |  | x1 | |  |  |  |
|  | x2 | |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  | q2 |  |
|  |  |  |  |  | q1 |
|  |  |  |  |  |  |

Vezérlési táblák

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | |  | |  |  |  |
|  |  | x1 | |  |  |  |
|  | x2 | |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  | q2 |  |
|  |  |  |  |  | q1 |
|  |  |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | |  | |  |  |  |
|  |  | x1 | |  |  |  |
|  | x2 | |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  | q2 |  |
|  |  |  |  |  | q1 |
|  |  |  |  |  |  |

**Kapcsolási rajz:**