

DE-20180613

1

| A | Q2 | Q1 | Q0 | D2 | D1 | D0 |   |
|---|----|----|----|----|----|----|---|
| 0 | 0  | 0  | 0  | 1  | 0  | 0  | 4 |
| 0 | 0  | 0  | 1  | 0  | 0  | 0  | 0 |
| 0 | 0  | 1  | 0  | 0  | 0  | 1  | 1 |
| 0 | 0  | 1  | 1  | 0  | 1  | 0  | 2 |
| 0 | 1  | 0  | 0  | 0  | 1  | 1  | 3 |
| 0 | 1  | 0  | 1  | X  | X  | X  |   |
| 0 | 1  | 1  | 0  | X  | X  | X  |   |
| 0 | 1  | 1  | 1  | X  | X  | X  |   |
| 1 | 0  | 0  | 0  | 0  | 0  | 1  | 1 |
| 1 | 0  | 0  | 1  | 0  | 1  | 0  | 2 |
| 1 | 0  | 1  | 0  | 0  | 1  | 1  | 3 |
| 1 | 0  | 1  | 1  | 1  | 0  | 0  | 4 |
| 1 | 1  | 0  | 0  | 0  | 0  | 0  | 0 |
| 1 | 1  | 0  | 1  | X  | X  | X  |   |
| 1 | 1  | 1  | 0  | X  | X  | X  |   |
| 1 | 1  | 1  | 1  | X  | X  | X  |   |

D2

|     | Q1Q0 |    |    |    |
|-----|------|----|----|----|
|     | 00   | 01 | 11 | 10 |
| AQ2 | 00   | 01 | 11 | 10 |
| 00  | 1    | 0  | 0  | 0  |
| 01  | 0    | X  | X  | X  |
| 11  | 0    | X  | X  | X  |
| 10  | 0    | 0  | 1  | 0  |

D1

|    |    |    |    |    |
|----|----|----|----|----|
|    | 00 | 01 | 11 | 10 |
| 00 | 0  | 0  | 1  | 0  |
| 01 | 1  | X  | X  | X  |
| 11 | 0  | X  | X  | X  |
| 10 | 0  | 1  | 0  | 1  |

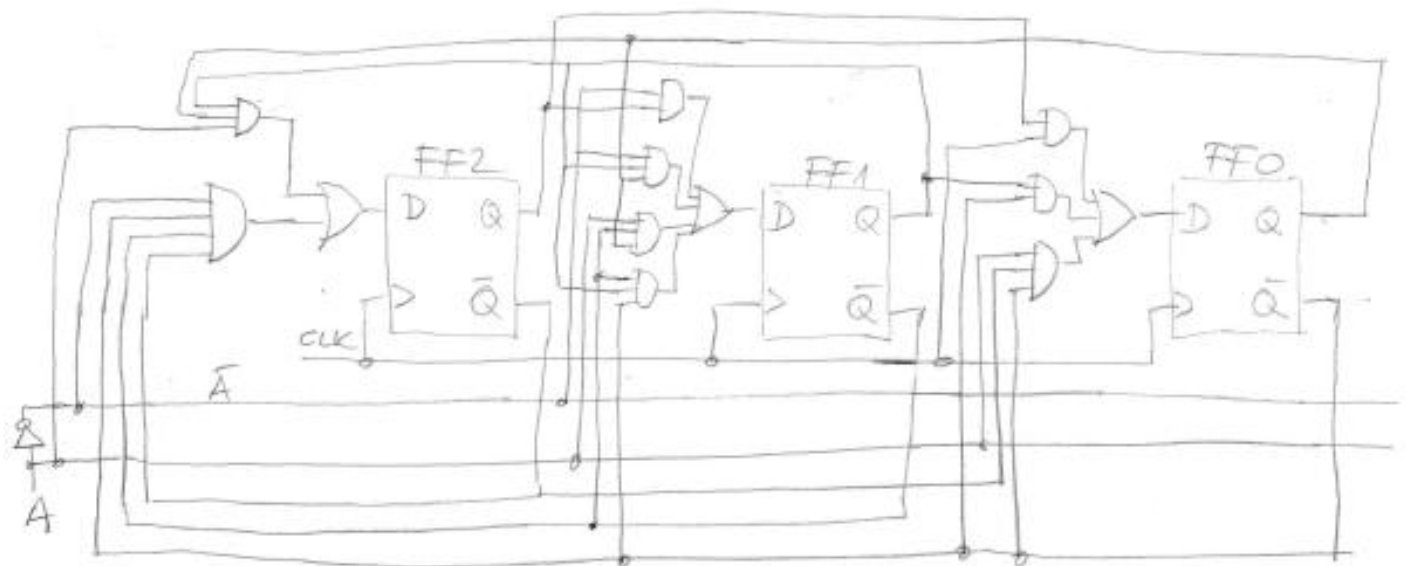
D0

|   |   |   |   |
|---|---|---|---|
| 0 | 0 | 0 | 1 |
| 1 | X | X | X |
| 0 | X | X | X |
| 1 | 0 | 0 | 1 |

$$D2 = \bar{A} \bar{Q}_2 \bar{Q}_1 \bar{Q}_0 + A Q_1 Q_0$$

$$D1 = \bar{A} Q_2 + \bar{A} \cdot Q_1 Q_0 + A \cdot \bar{Q}_1 \cdot Q_0 + A Q_1 \bar{Q}_0$$

$$D0 = \bar{A} Q_2 + Q_1 \bar{Q}_0 + A \bar{Q}_2 \cdot \bar{Q}_0$$



2.

