

Arbiter

Input: clk, res_n, r[3:0]

Output: g[3:0]

Transitions

| Trans. | r0 | r1 | r2 | r3 |
|--------|----|----|----|-------------|
| r | 0 | 0 | 0 | 0 // !res_n |
| l0 | 1 | X | X | X |
| l1 | 0 | 1 | X | X |
| l2 | 0 | 0 | 1 | X |
| l3 | 0 | 0 | 0 | X |
| a0 | 1 | X | X | X |
| a1 | 0 | 1 | X | X |
| a2 | 0 | 0 | 1 | X |
| a3 | 0 | 0 | 0 | 1 |
| b0 | 1 | 0 | 0 | 0 |
| b1 | X | 1 | X | X |
| b2 | X | 0 | 1 | X |
| b3 | X | 0 | 0 | 1 |
| c0 | 1 | X | 0 | 0 |
| c1 | 0 | 1 | 0 | 0 |
| c2 | X | X | 1 | X |
| c3 | X | X | 0 | X |
| d0 | 1 | X | X | 0 |
| d1 | 0 | 1 | X | 0 |
| d2 | 0 | 0 | 1 | 0 |
| d3 | X | X | X | 1 |

