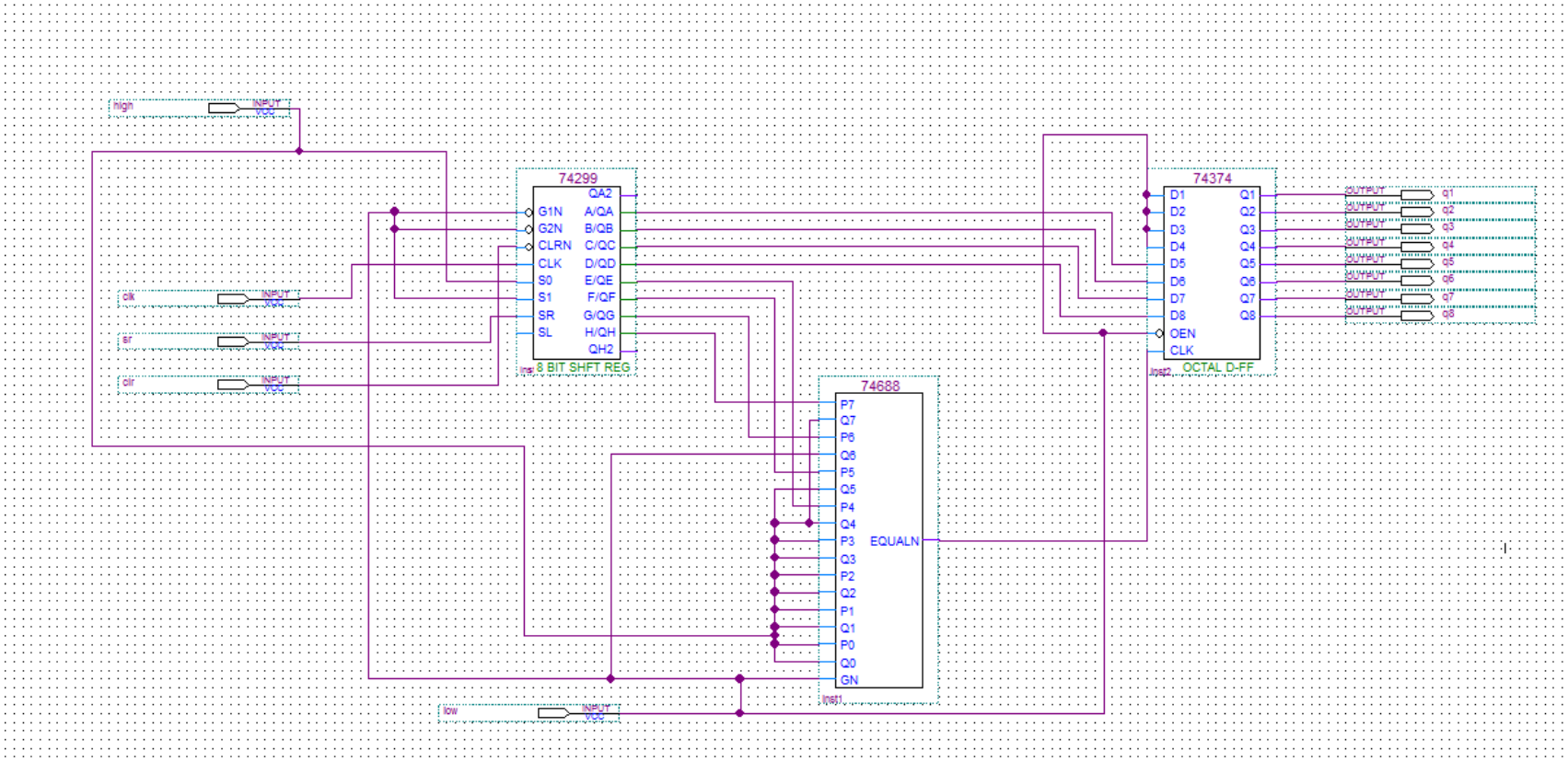
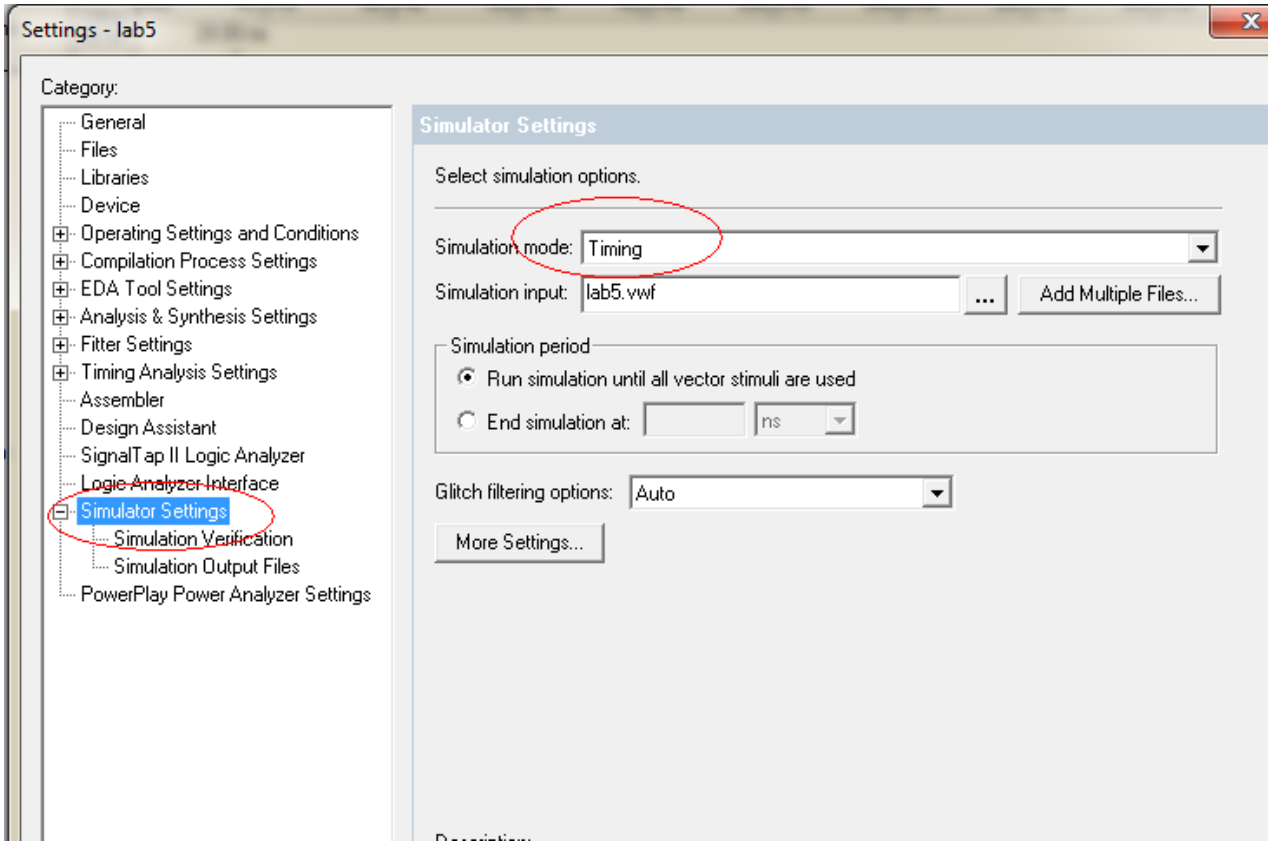
Lab 5 Examples

1. 4-bit serial transmission
(Single receiver)

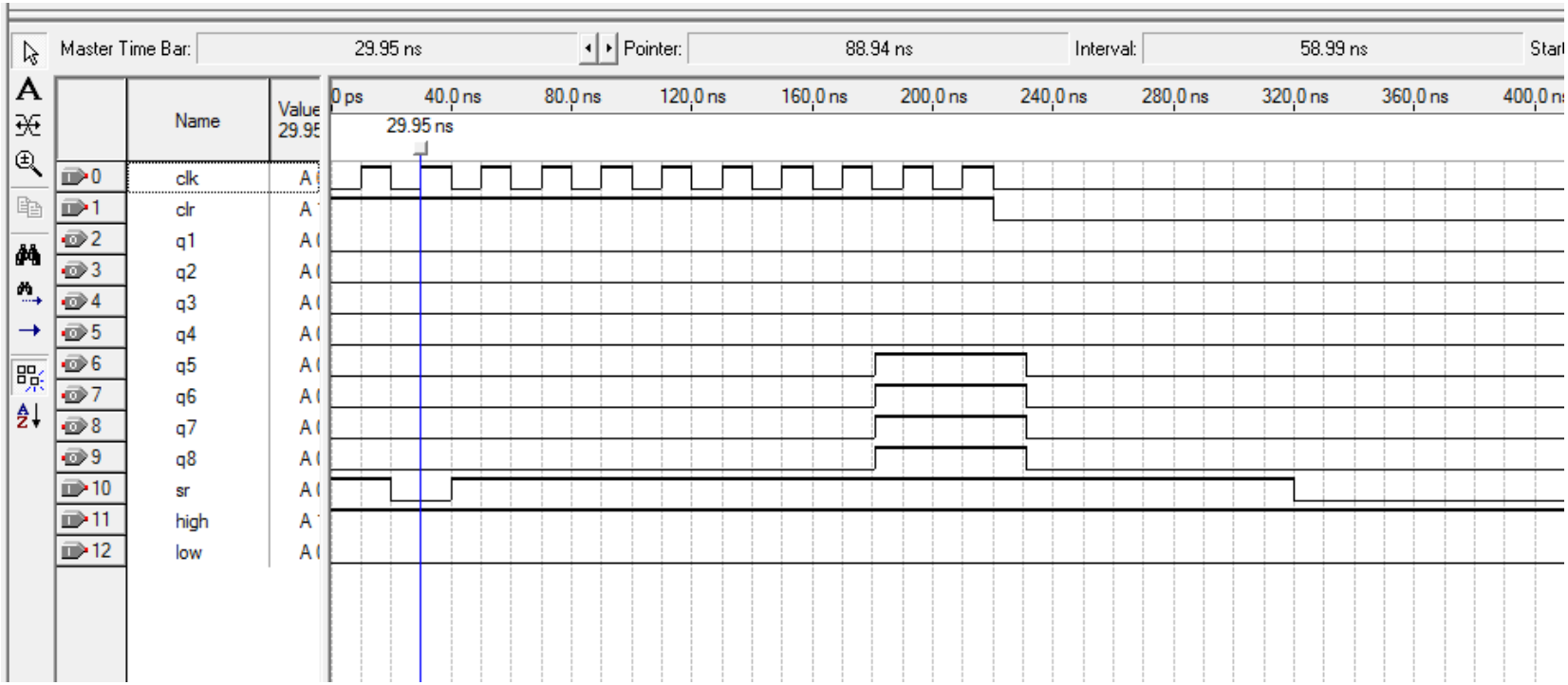


Address is 1011 1111

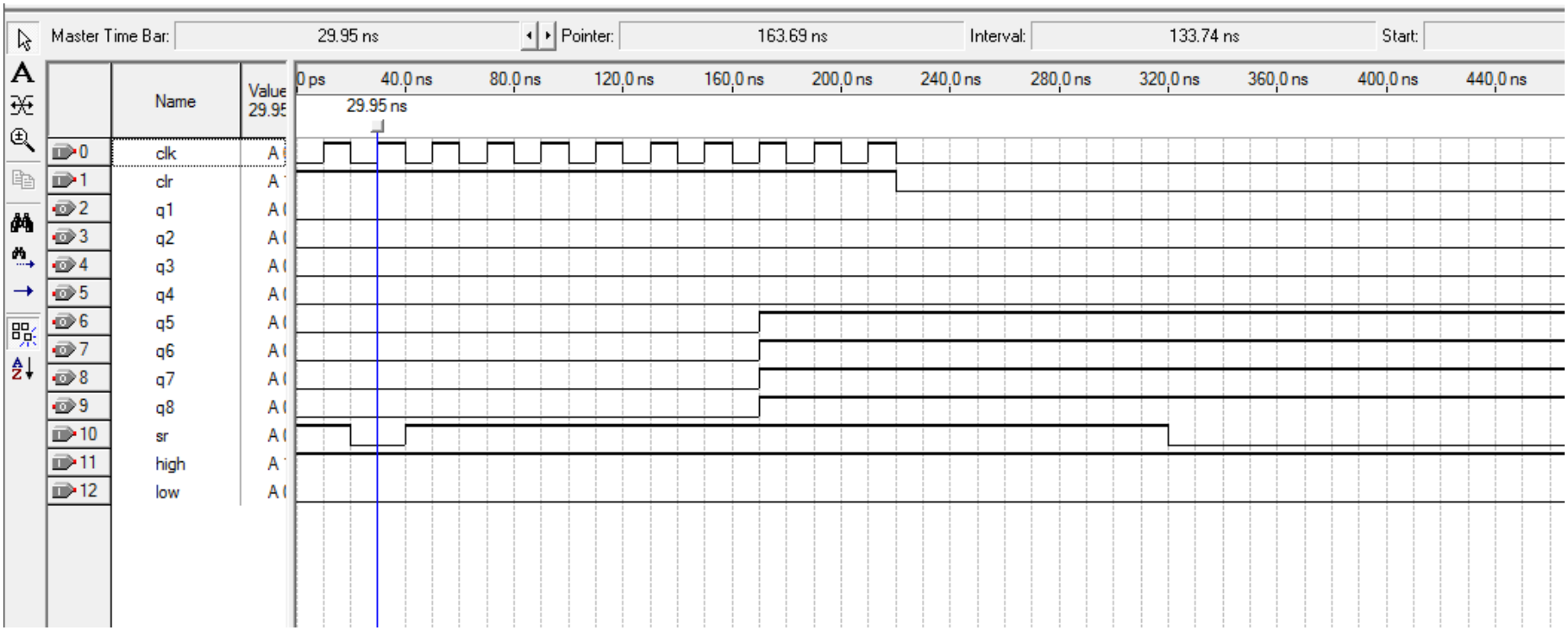
Timing Simulation Result



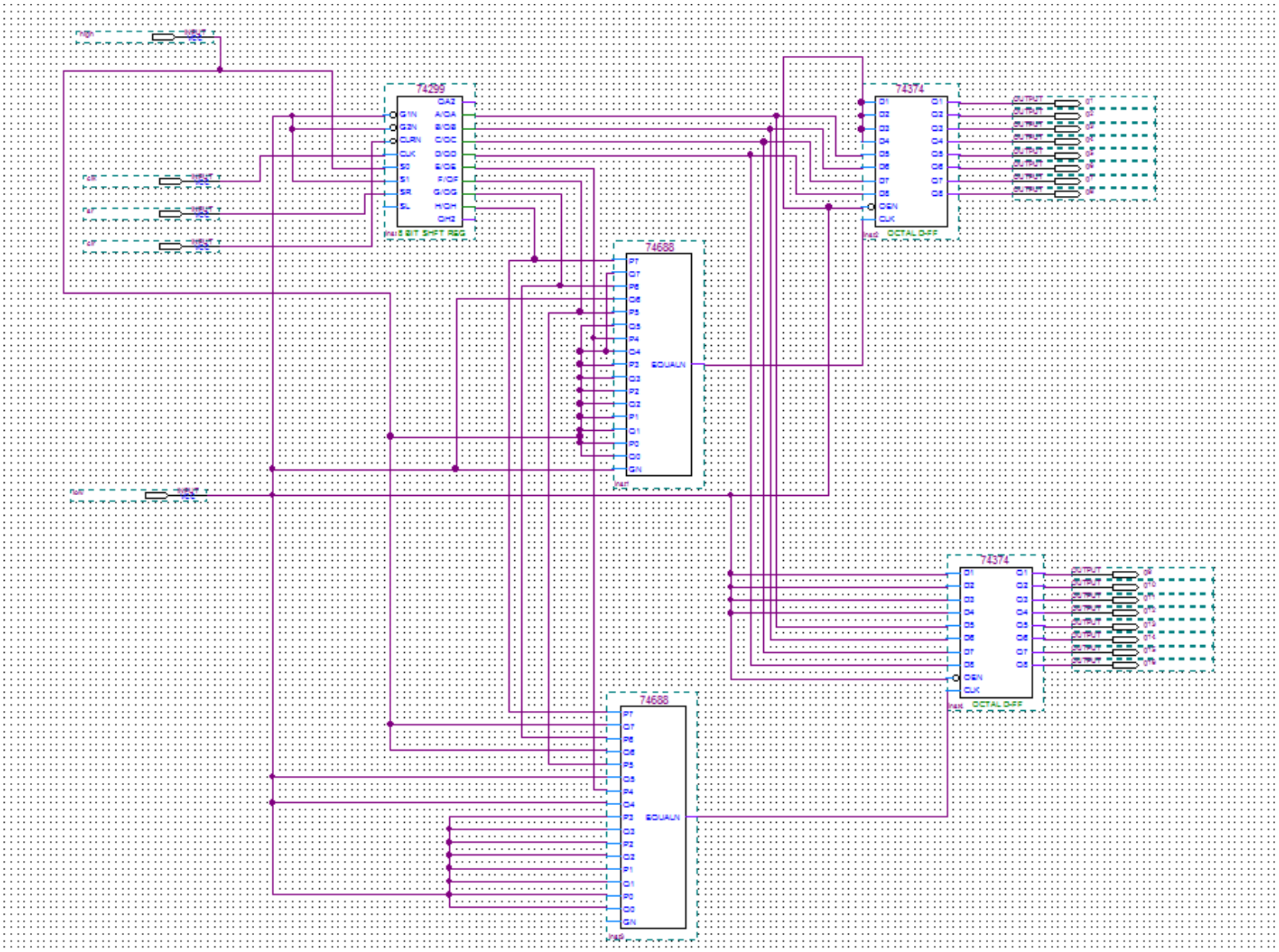
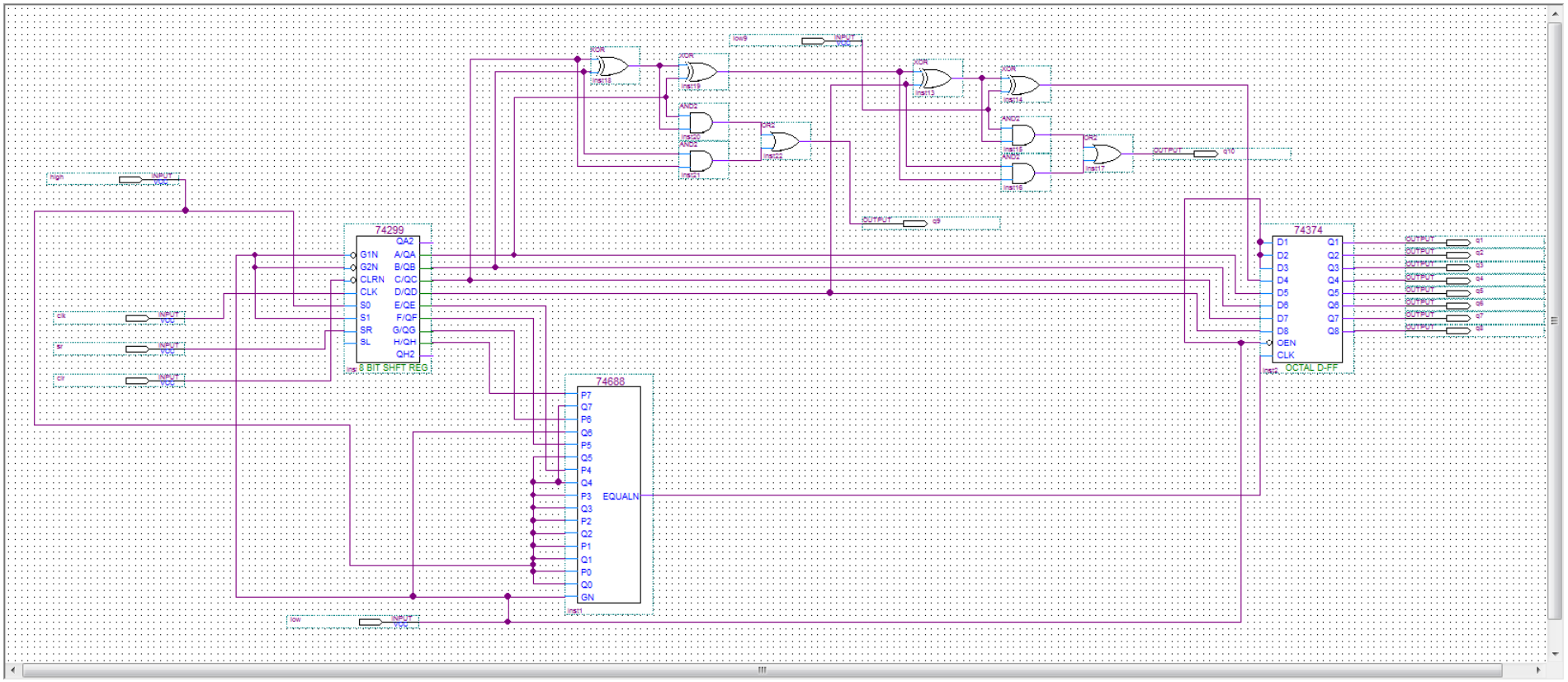
Remember to re-generate the functional Simulation Netlist at ‘Processing-Generate Functional Simulation Netlist.


Master Time Bar:
29.95 ns
Pointer:
88.94 ns
Interval:
58.99 ns
Name
Value
29.95
0 ps
40.0 ns
80.0 ns
120.0 ns
160.0 ns
200.0 ns
240.0 ns
280.0 ns
320.0 ns
360.0 ns
400.0 ns
29.95 ns
0 clk
1 clr
2 q1
3 q2
4 q3
5 q4
6 q5
7 q6
8 q7
9 q8
10 sr
11 high
12 low

Functional Simulation Result



Add another receiver which has a different address: 1100 0000



Sum up the 4-bit data you can get the even parity bit.
I didn’t remove one of the address line. You can design it in many ways, any of them will be Okay if it works.