

/home/itzzinfinity/Cozy Drive/100daysofRTL/day_003/project_1/project_1.srscs/sources_1/new/gate_level.v

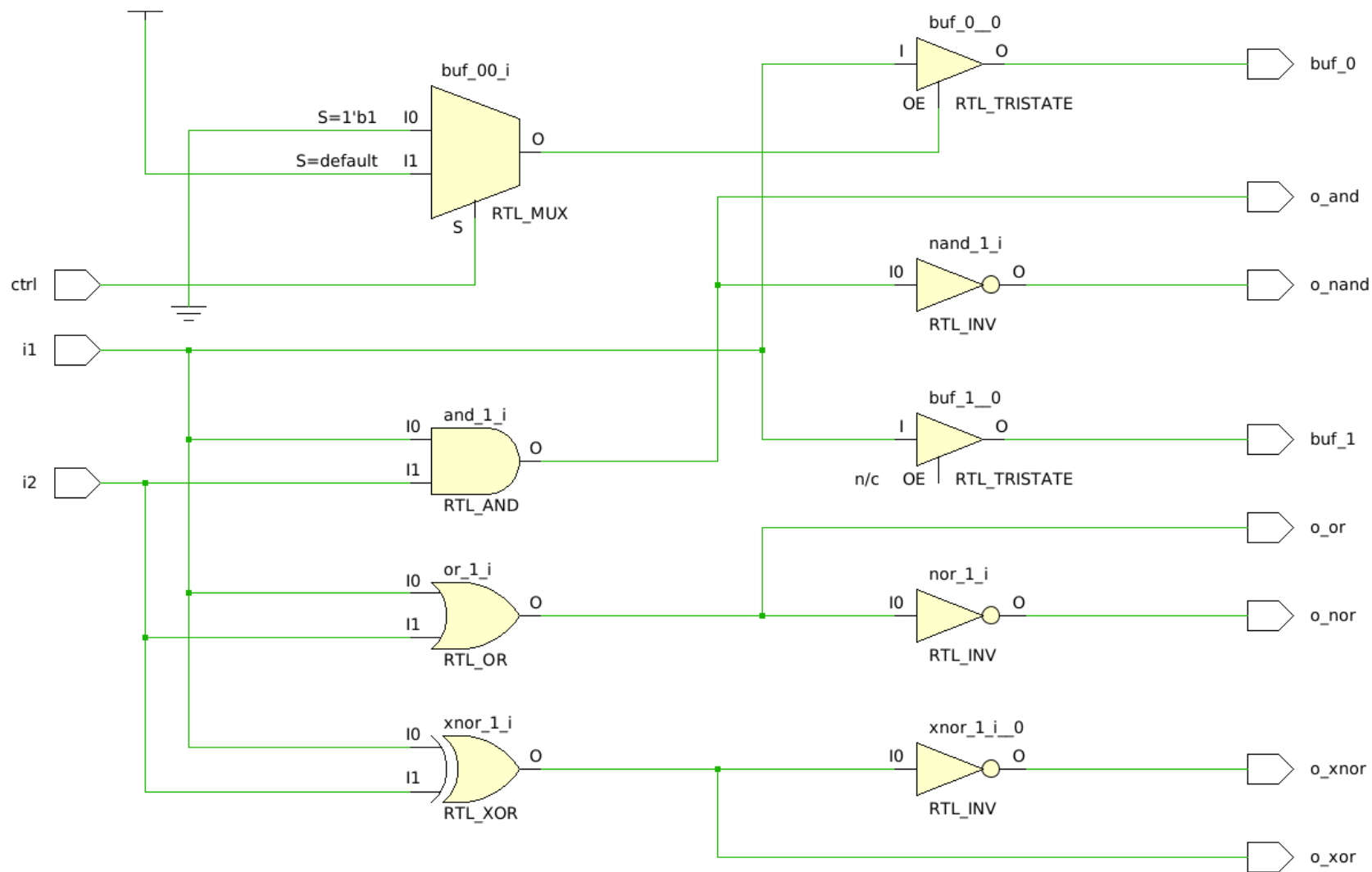


```
1 : `timescale 1ns / 1ps
2 : ///////////////////////////////////////////////////////////////////
3 : // Engineer: Anjan Prasad
4 : // Create Date: 09/24/2024 10:42:52 PM
5 : // Module Name: gate_level
6 : ///////////////////////////////////////////////////////////////////
7 :
8 :
9 : module gate_level(
10 :     input i1,i2,ctrl,
11 :     output o_and,o_or,o_nand,o_nor,o_xnor,o_xor,buf_0,buf_1
12 : );
13 :
14 :     and and_1 (o_and,i1,i2);
15 :     or or_1 (o_or,i1,i2);
16 :     nand nand_1 (o_nand,i1,i2);
17 :     nor nor_1 (o_nor,i1,i2);
18 :     xnor xnor_1 (o_xnor,i1,i2);
19 :     xor xor_1 (o_xor,i1,i2);
20 :     bufif0 buf_o (buf_0,i1,ctrl);
21 :     bufif1 buf_n (buf_1,i1,ctrl);
22 : endmodule
```

/home/itzzinfinity/Cozy Drive/100daysofRTL/day_003/project_1/project_1.srscs/sim_1/new/gate_level_tb.v



```
1 `timescale 10ns / 10ps
2 //////////////////////////////////////
3 // Engineer: Anjan Prasad
4 // Create Date: 09/24/2024 10:42:52 PM
5 // Module Name: gate_level
6 //////////////////////////////////////
7
8
9 module gate_level_tb;
10     reg i1,i2,ctrl;
11     wire o_and,o_or,o_nand,o_nor,o_xnor,o_xor,buf_0,buf_1;
12     gate_level DUT (i1,i2,ctrl,o_and,o_or,o_nand,o_nor,o_xnor,o_xor,buf_0,buf_1);
13     initial begin
14         #10 i1 = 1'b0; i2 = 1'b0;
15         #10 i1 = 1'b0; i2 = 1'b1;
16         #10 i1 = 1'b1; i2 = 1'b0;
17         #10 i1 = 1'b1; i2 = 1'b1;
18     end
19
20 endmodule
21
```



[illegible]