

module parity_bit (A,B,C,f);

input A,B,C;

output f;

wire w1,w2,w3,w4,A_Bar,B_bar,C_bar;

not n1(A_bar,A);

not n2(B_bar,B);

not n3(C_bar,C);

and a1(w1,A_bar,B_bar-C_bar);

and a2(w2,A_bar,B,C);

and a3(w3,A,B_bar,C);

and a4(w4,A,B,C_bar);

iend module