FULL ADDER

**PROGRAM:**

full\_adder( A, B, Cin, S, Cout);

input wire A, B, Cin;

output reg S, Cout;

always @(A or B or Cin)

begin

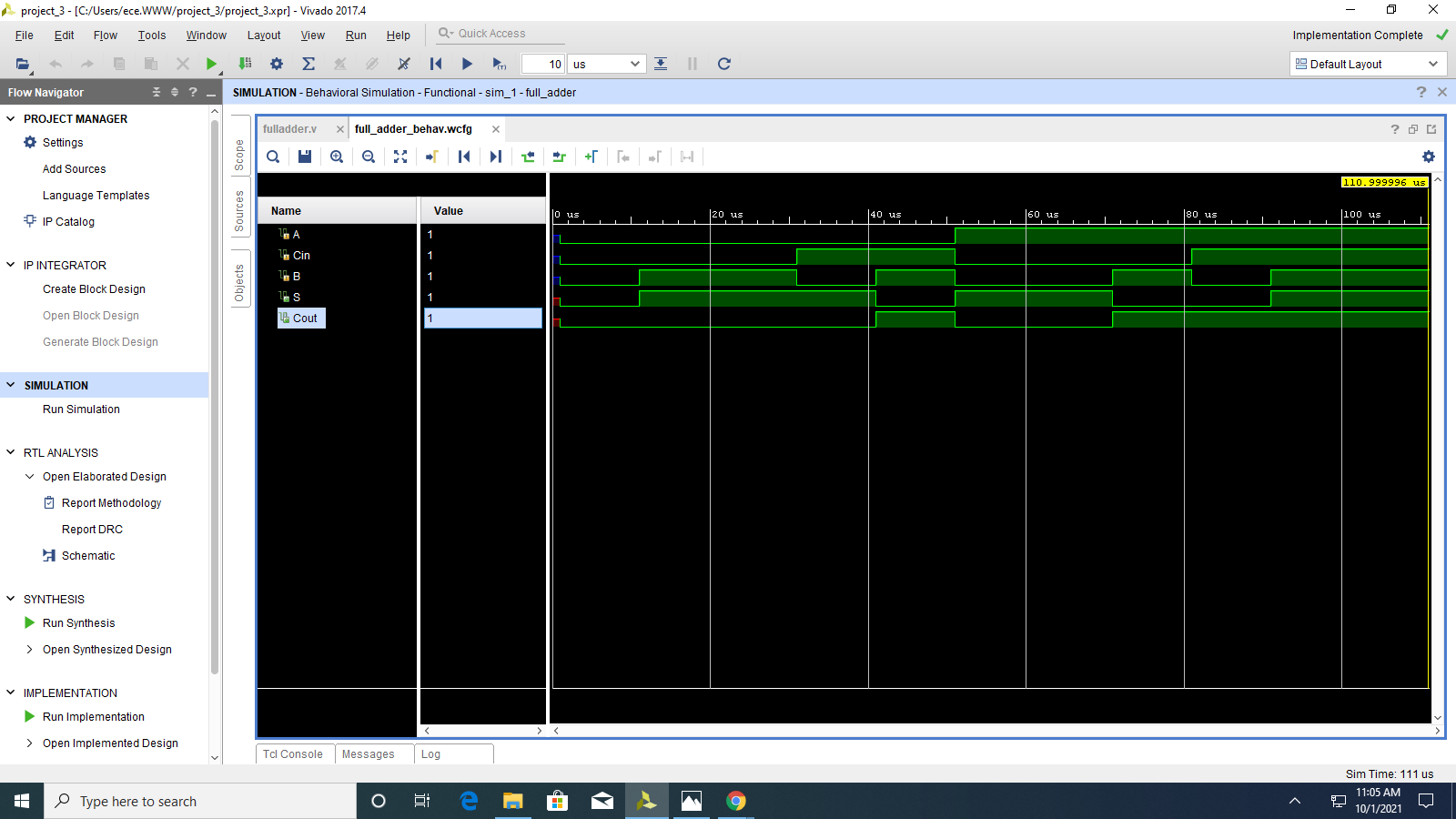
S = A ^ B ^ Cin;

Cout = A&B | (A^B) & Cin;

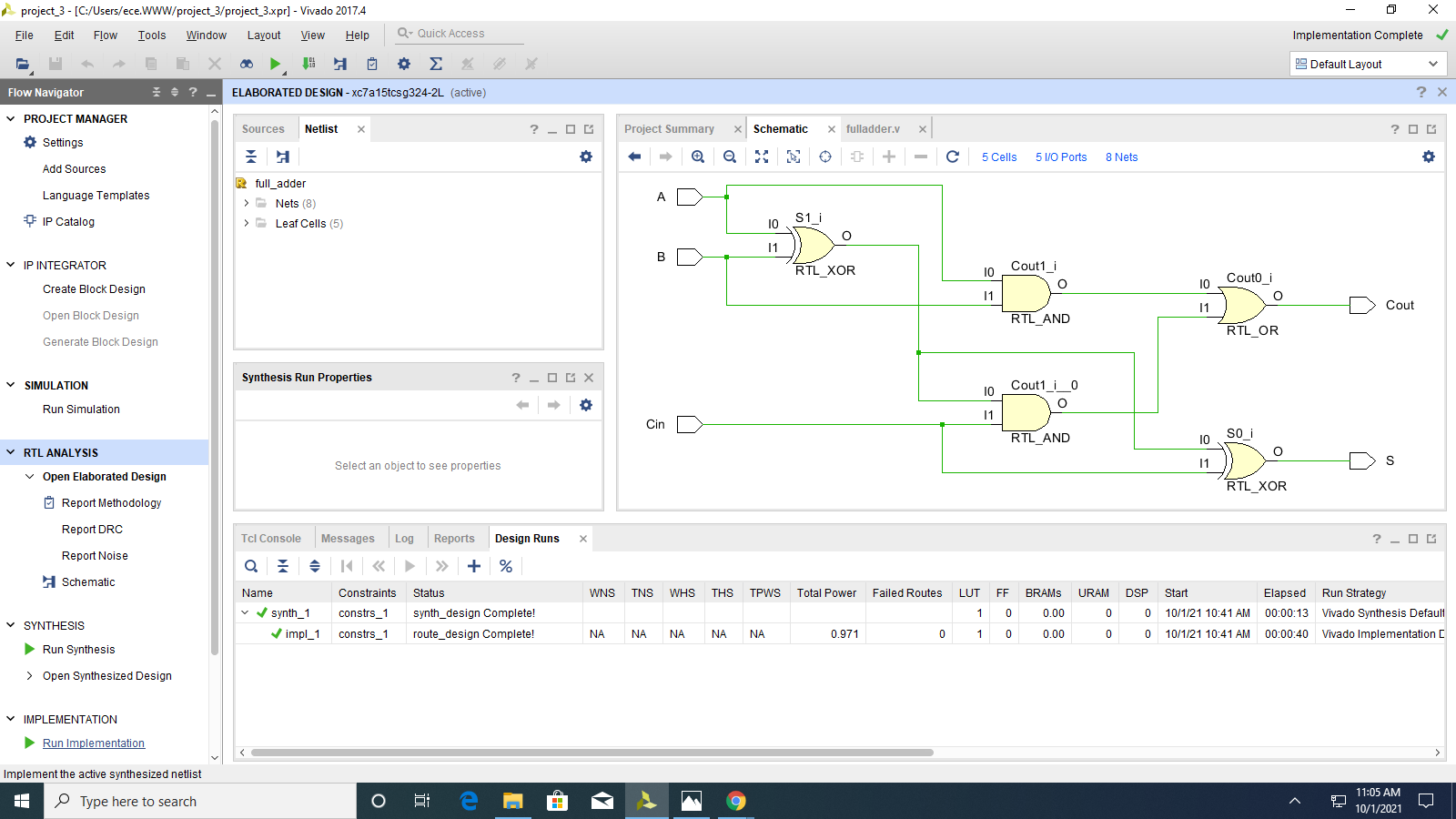
end

endmodule

**WAVE FORMS:**



**RTL SIMULATION:**

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**#5**