

1: Statement of using QuestaSim

I'm using the QuestaSim by ssh-ing to servers.

2: Modeling Type

I'm using dataflow as the modeling type. The reason I choose it is that the 'AND2' gate is a very simple circuit, and dataflow is usually used for small and simple circuits.

3: Waveforms

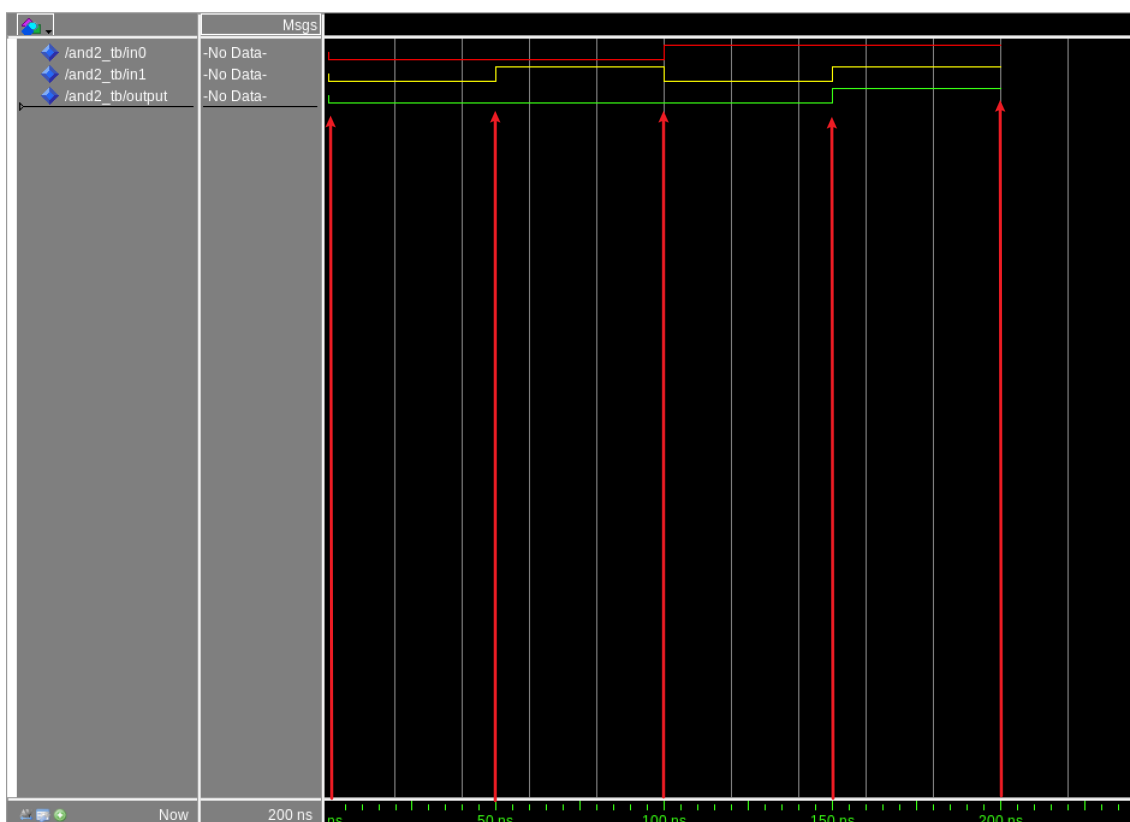


Figure 1: Simulation Waveform of AND2

According to 'AND2' gate's logic, $output = in0 \text{ AND } in1$.

In the figure above, we can see the *output* signal has four values corresponding to 4 different combination of values of *in0* and *in1* signals.

At 0 ns, *in0* and *in1* both changes from *U* to 0, *output* changes from *U* to 0. ($output = 0 \text{ AND } 0 = 0$)

At 50 ns, *in1* changes from 0 to 1, *output* is still 0. ($output = 0 \text{ AND } 1 = 0$)

At 100 ns, *in1* changes from 1 to 0, *in0* changes from 0 to 1, *output* is still 0. ($output = 1 \text{ AND } 0 = 0$)

At 150 *ns*, *in1* changes from 0 to 1, *output* changes from 0 to 1. (*output* = 1 AND 1 = 1)
At 200 *ns*, my testbench ends.