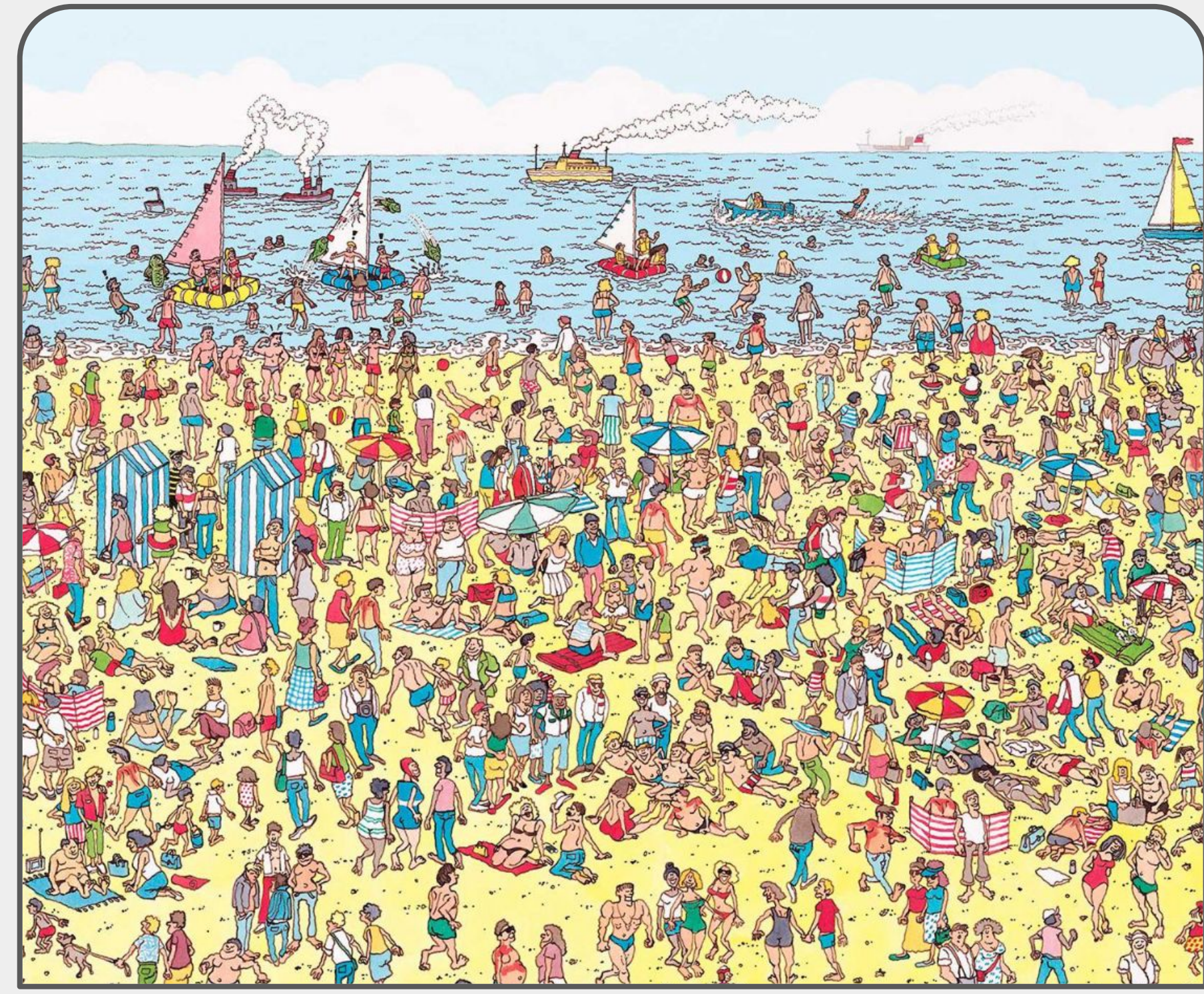


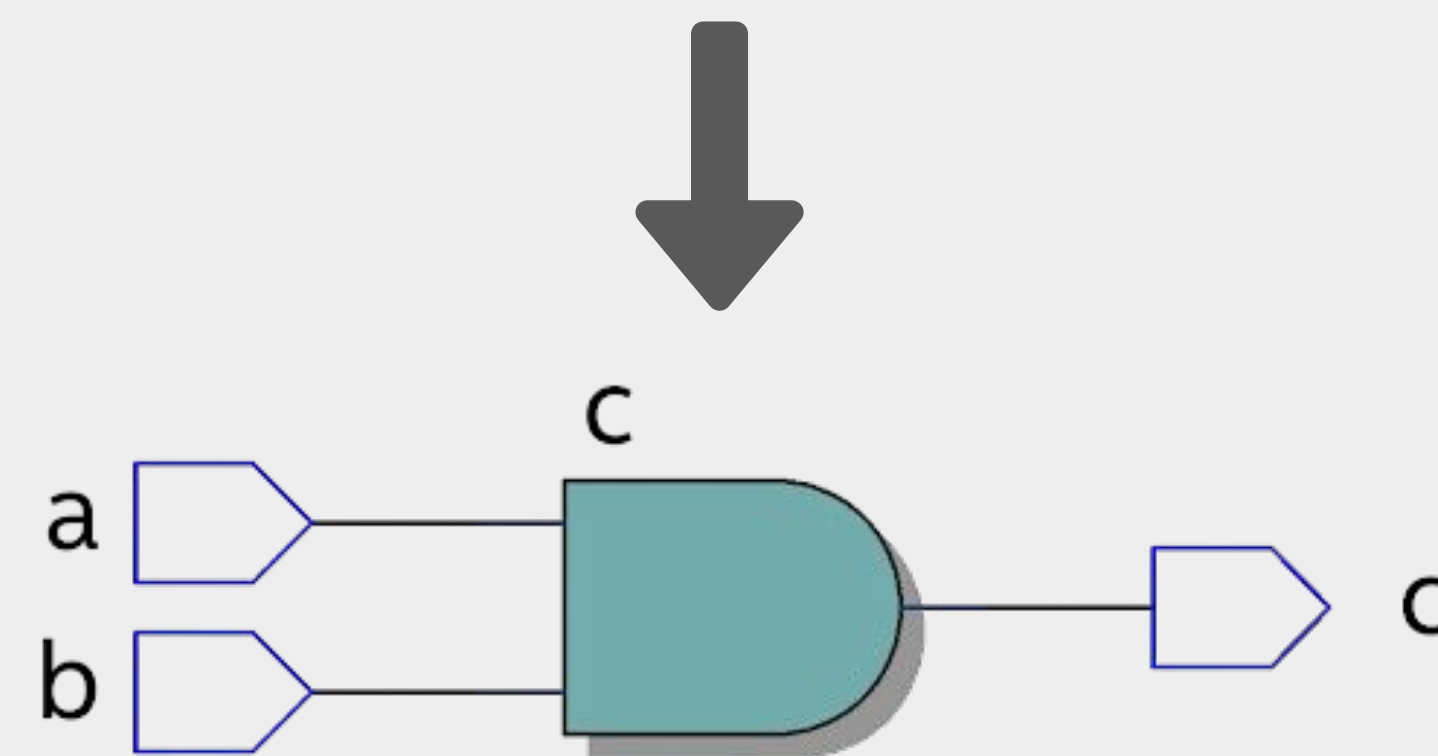
Seeker's Dilemma: RISC-V Benchmark for Hardware Trojans

Chris Lallo, Blake Rile, Jerry Chen
Dr. Peter Jamieson and Dr. Suman Bhunia

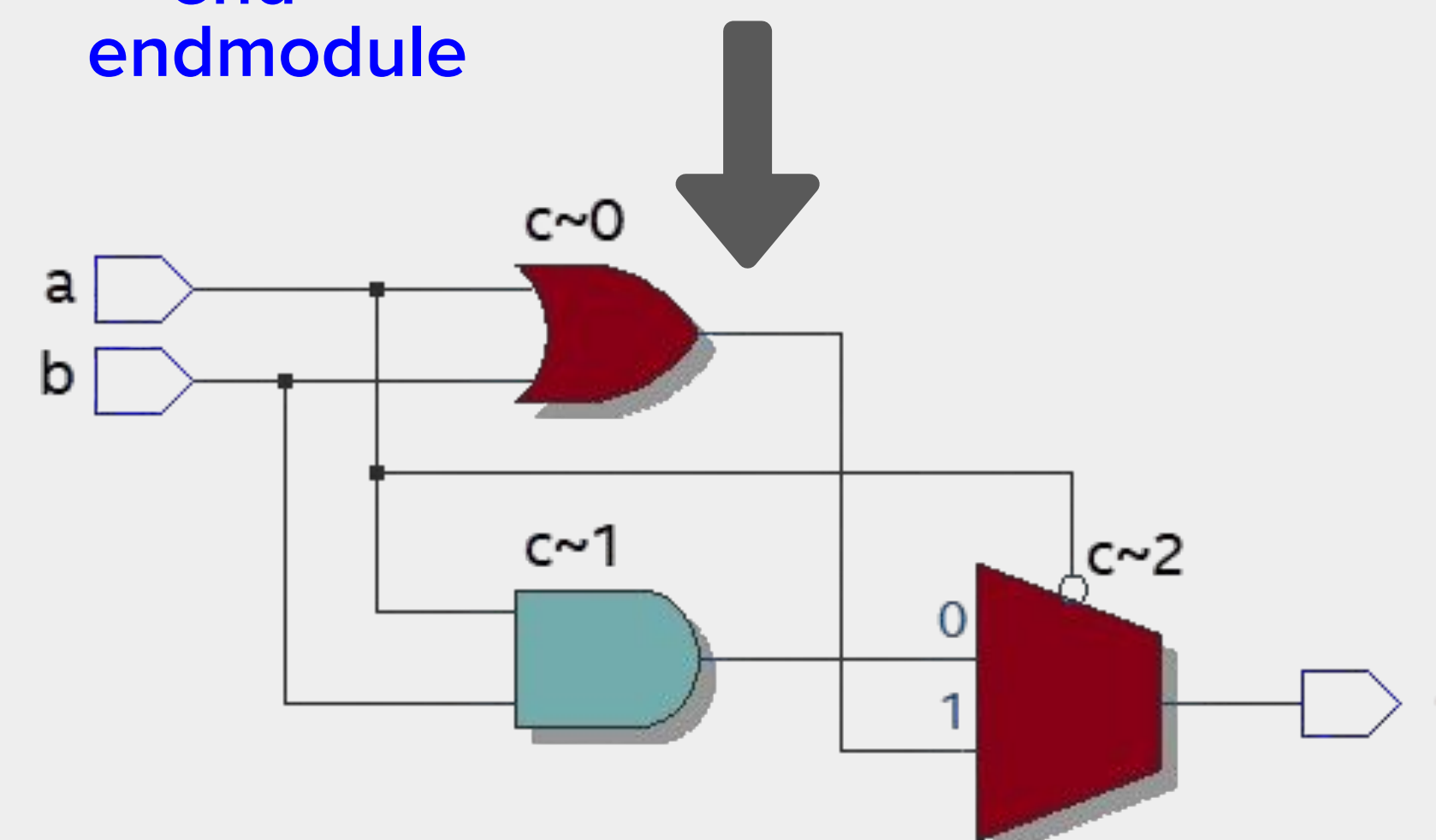
Where's Waldo?



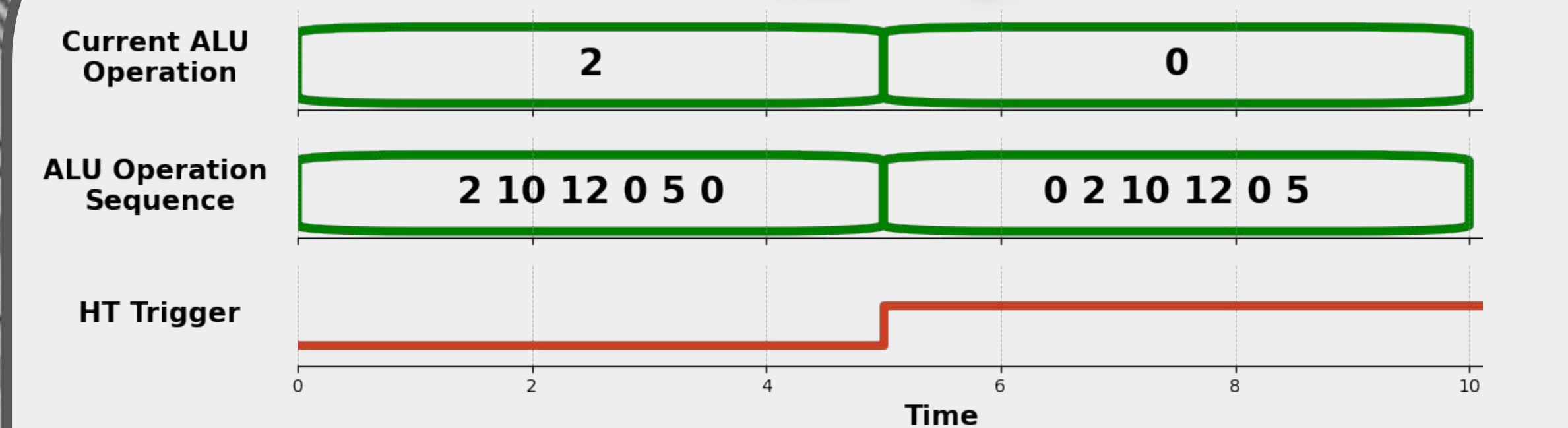
```
module AND_gate( input a, input b,  
output c );  
assign c = a & b;  
endmodule
```



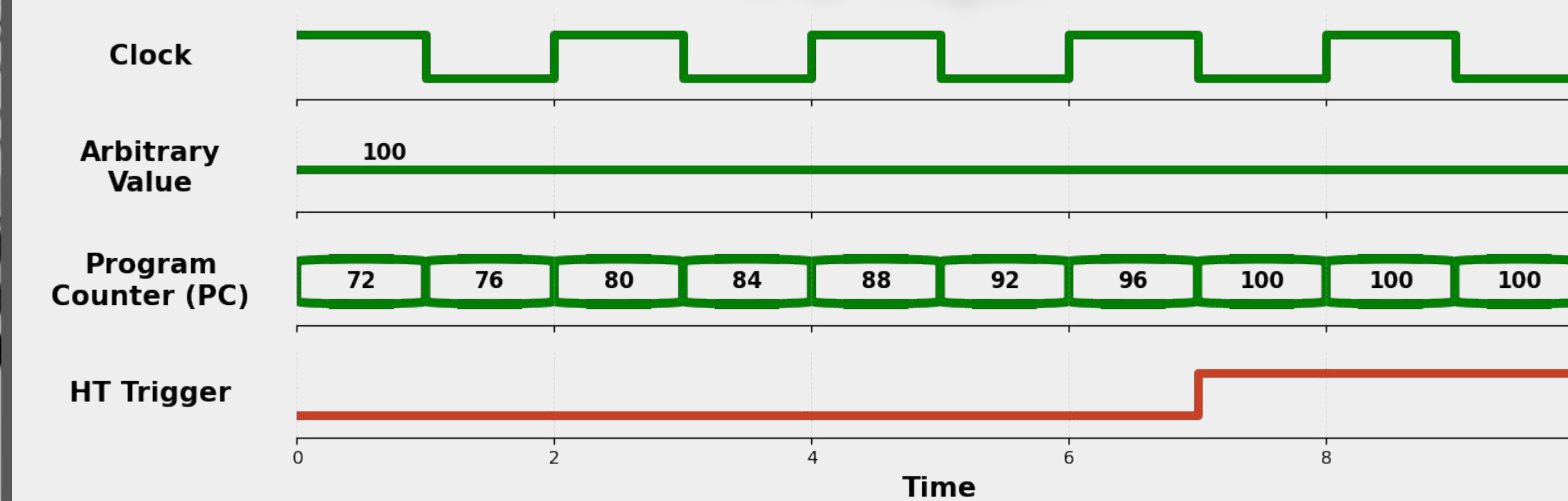
```
module AND_gate( input a, input b,  
output reg c );  
always @(*) begin  
if (a == '1'b0)  
c = a || b;  
else  
c = a && b;  
end  
endmodule
```



ALU Trojan



PC Trojan



Seeker's Dilemma

Digital Hardware

Hardware Trojan

Our Trojans

Final Benchmark

Simulation

Yosys

"Cut Out"

- HT_benchmark_01.v
- HT_benchmark_02.v
- HT_benchmark_03.v
- HT_benchmark_04.v
- HT_benchmark_05.v
- HT_benchmark_06.v
- HT_benchmark_07.v
- HT_benchmark_08.v
- HT_benchmark_09.v
- HT_benchmark_10.v

