

CompArch HW 2

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21 September 2017

Decoder

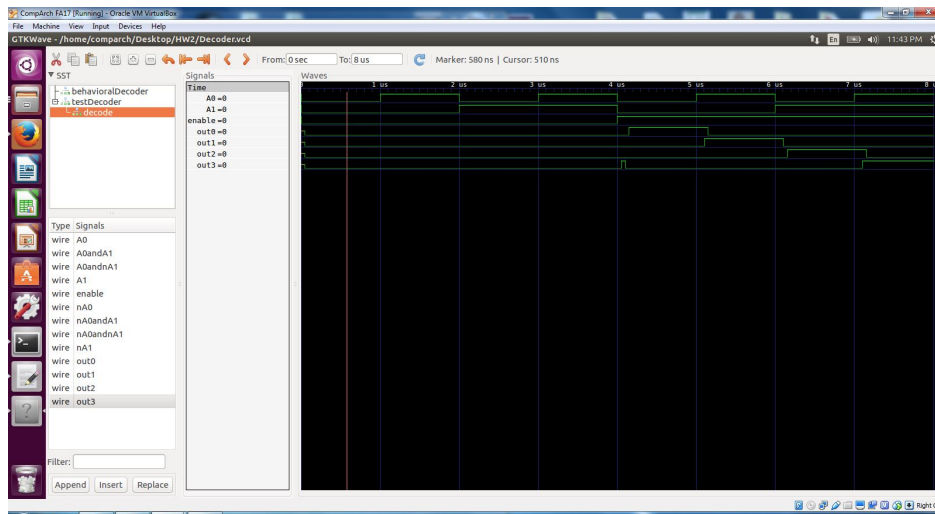


Figure 1: Decoder waveform results

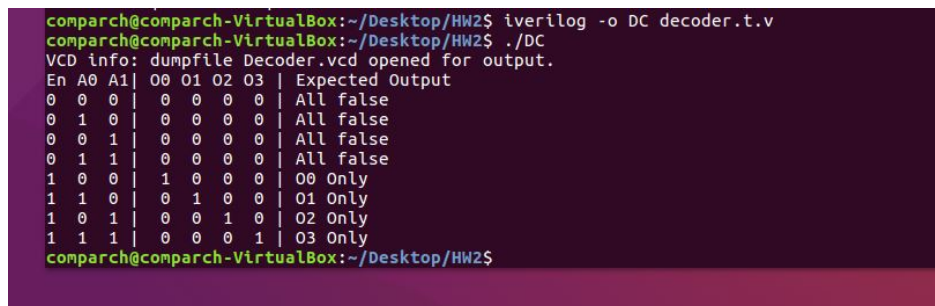


Figure 2: Decoder text bench results

Multiplexer

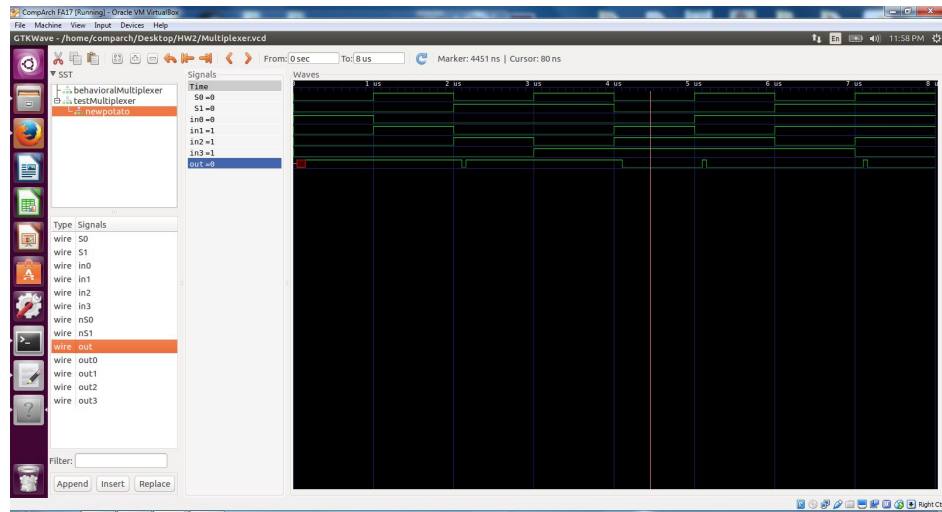


Figure 3: Multiplexer waveform results

```
comparch@comparch-VirtualBox:~/Desktop/HW2$ iverilog -o MP multiplexer.t.v
comparch@comparch-VirtualBox:~/Desktop/HW2$ ./MP
VCD info: dumpfile Multiplexer.vcd opened for output.
S0 S1 | 00 01 02 03 | output | Expected Output
0 0 | 1 0 0 0 | 1 | in0
1 0 | 0 1 0 0 | 1 | in1
0 1 | 0 0 1 0 | 1 | in2
1 1 | 0 0 0 1 | 1 | in3
0 0 | 0 1 1 1 | 0 | in0
1 0 | 1 0 1 1 | 0 | in1
0 1 | 1 1 0 1 | 0 | in2
1 1 | 1 1 1 0 | 0 | in3
comparch@comparch-VirtualBox:~/Desktop/HW2$
```

Figure 4: Multiplexer text bench results

Adder

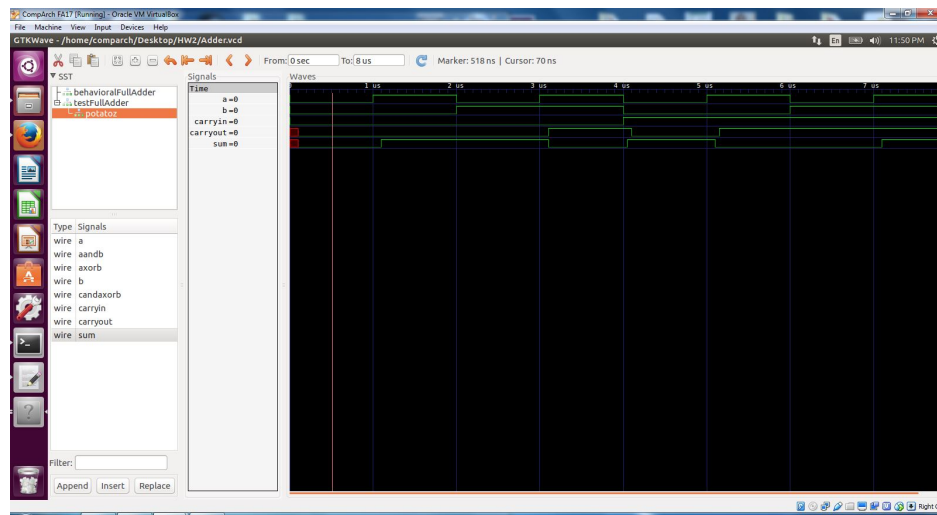


Figure 5: Adder waveform results

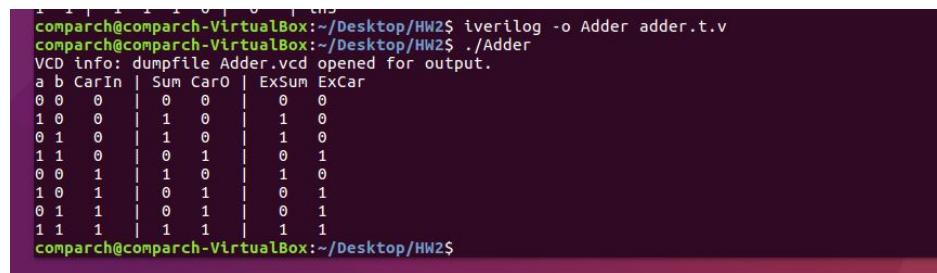


Figure 6: Adder text bench results