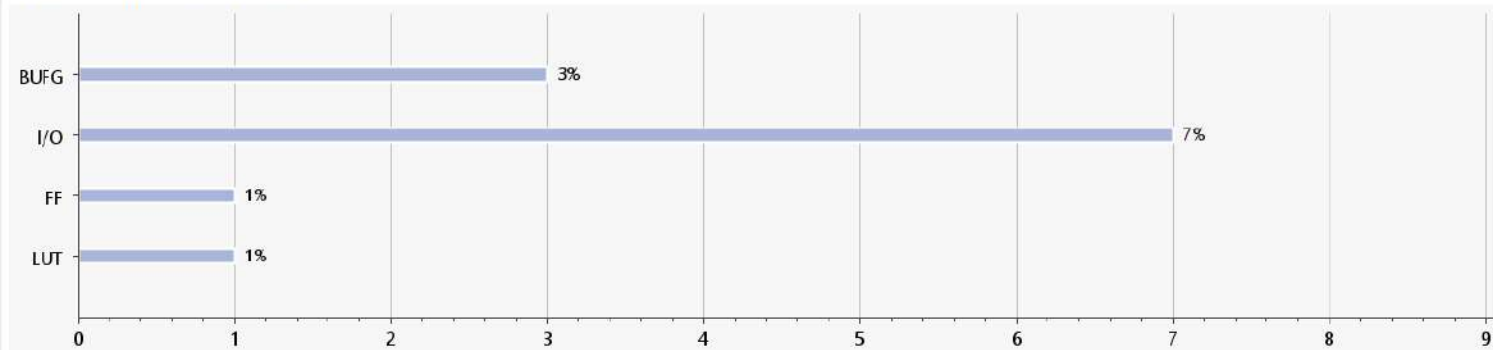
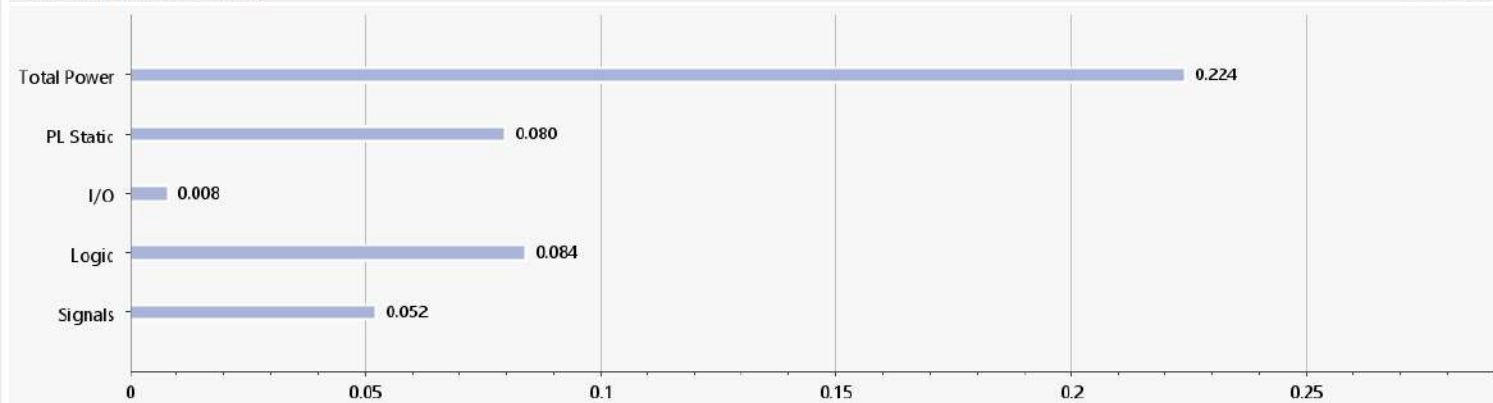


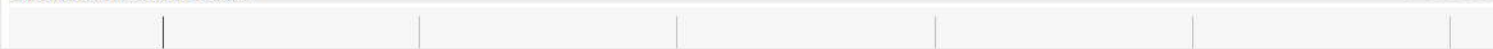
Utilization (synth_1, Synth Design)



Power (impl_1, Route Design)



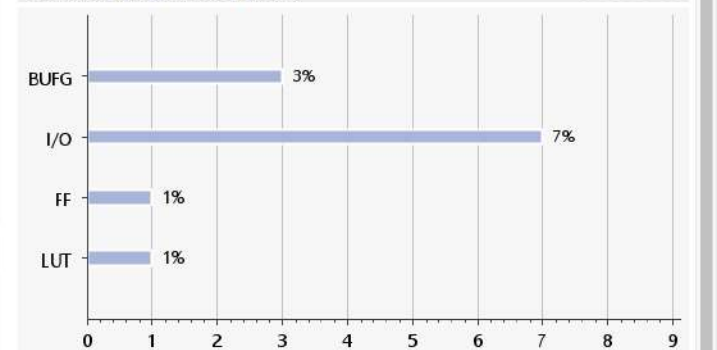
DRC (impl_1, Route Design)



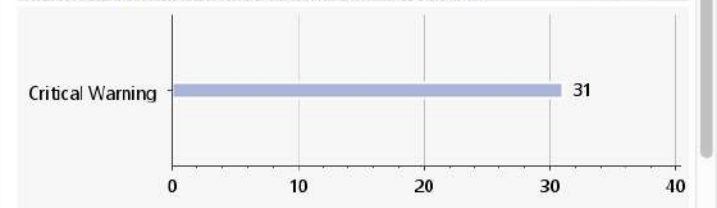
Timing (impl_1, Route Design)

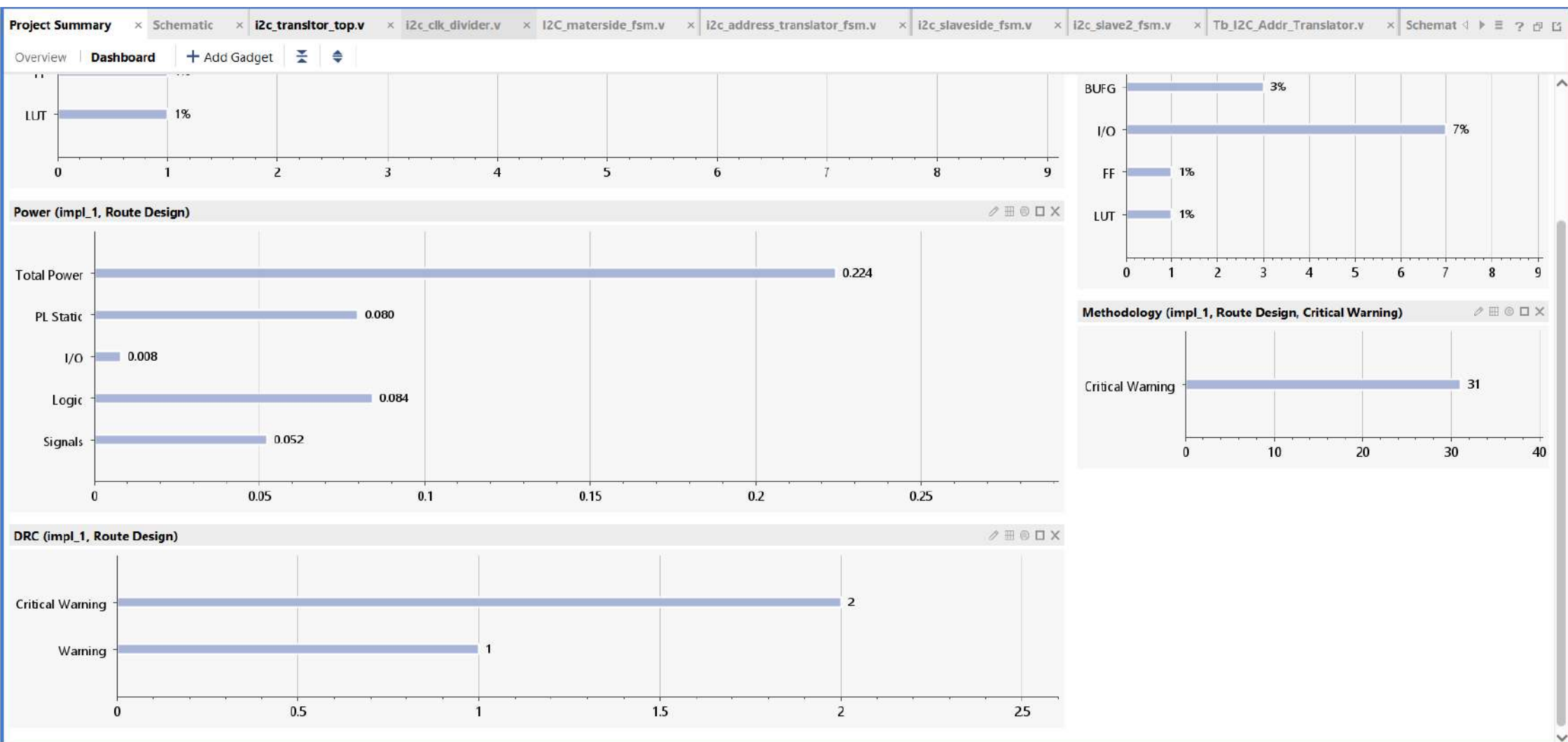


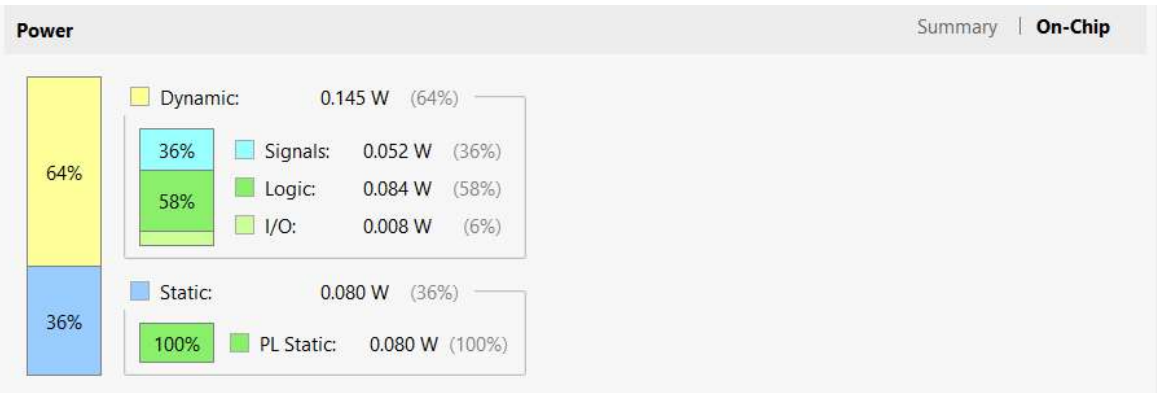
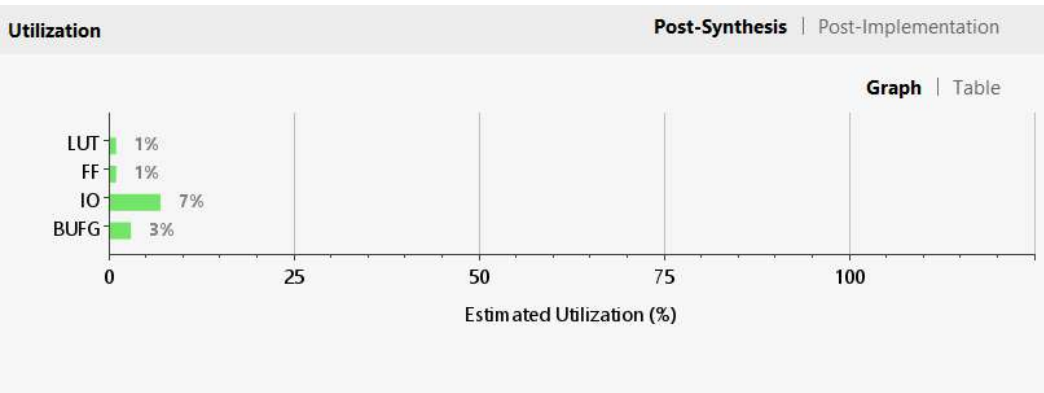
Utilization (impl_1, Place Design)



Methodology (impl_1, Route Design, Critical Warning)







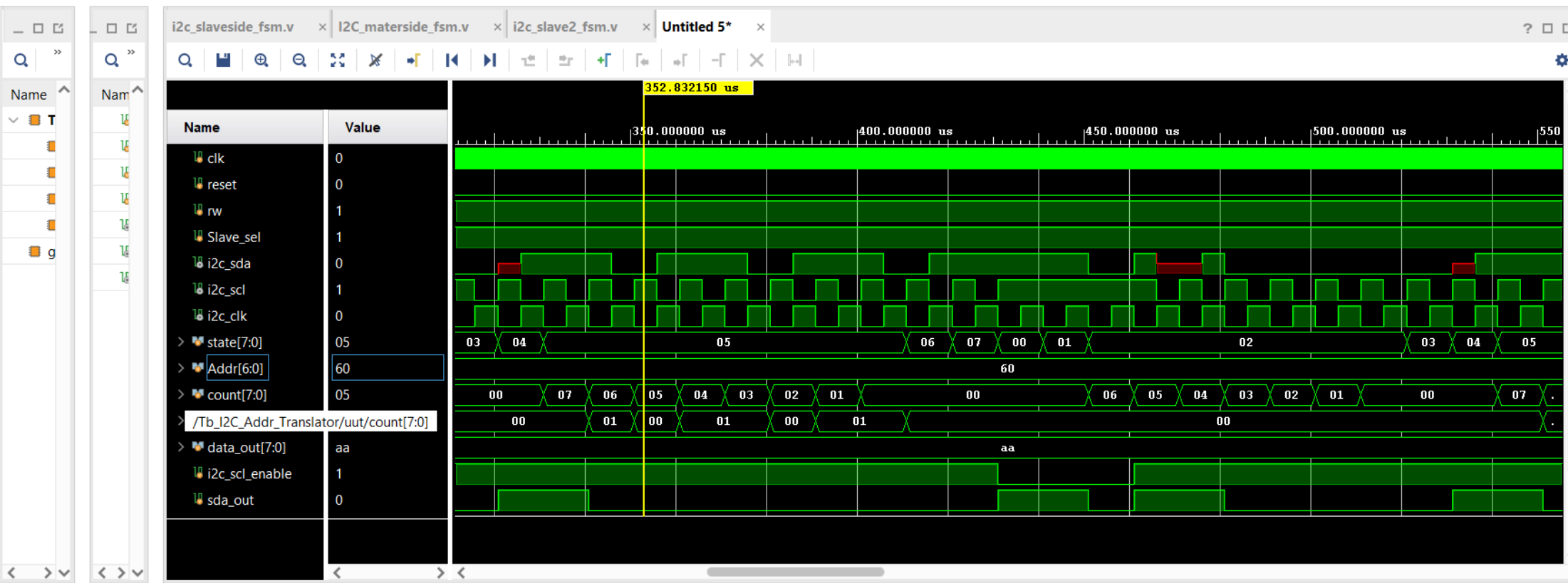
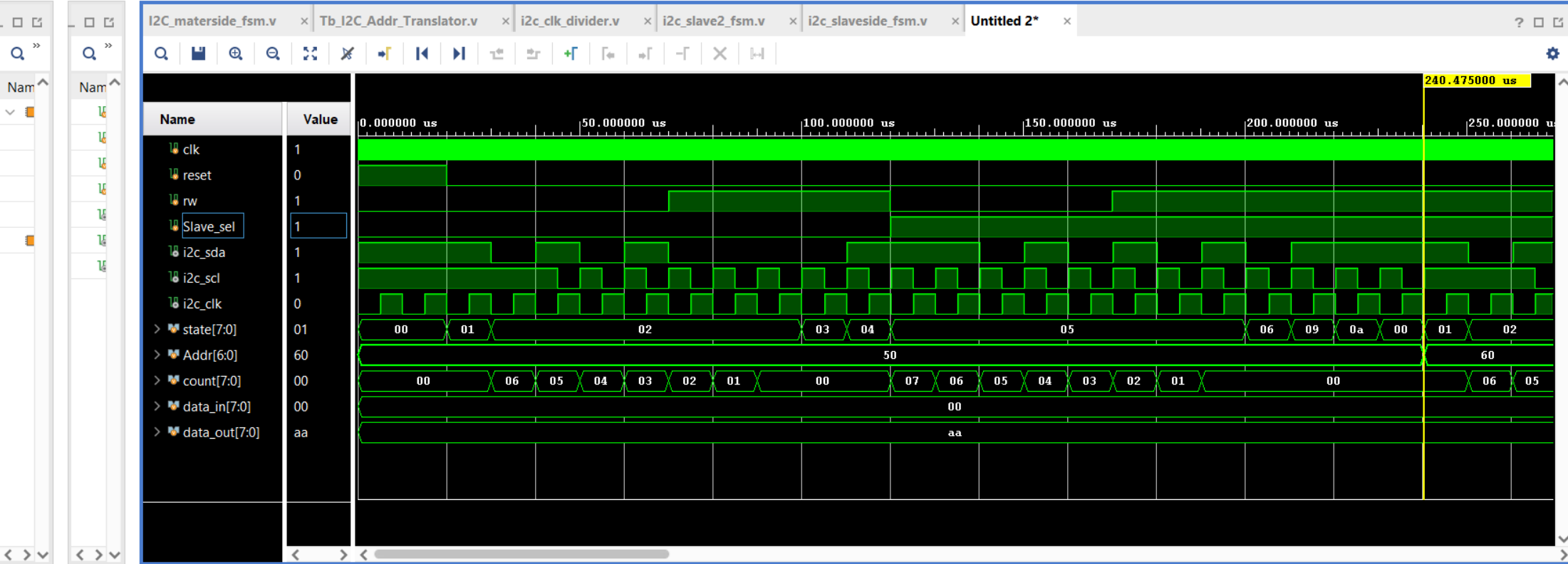


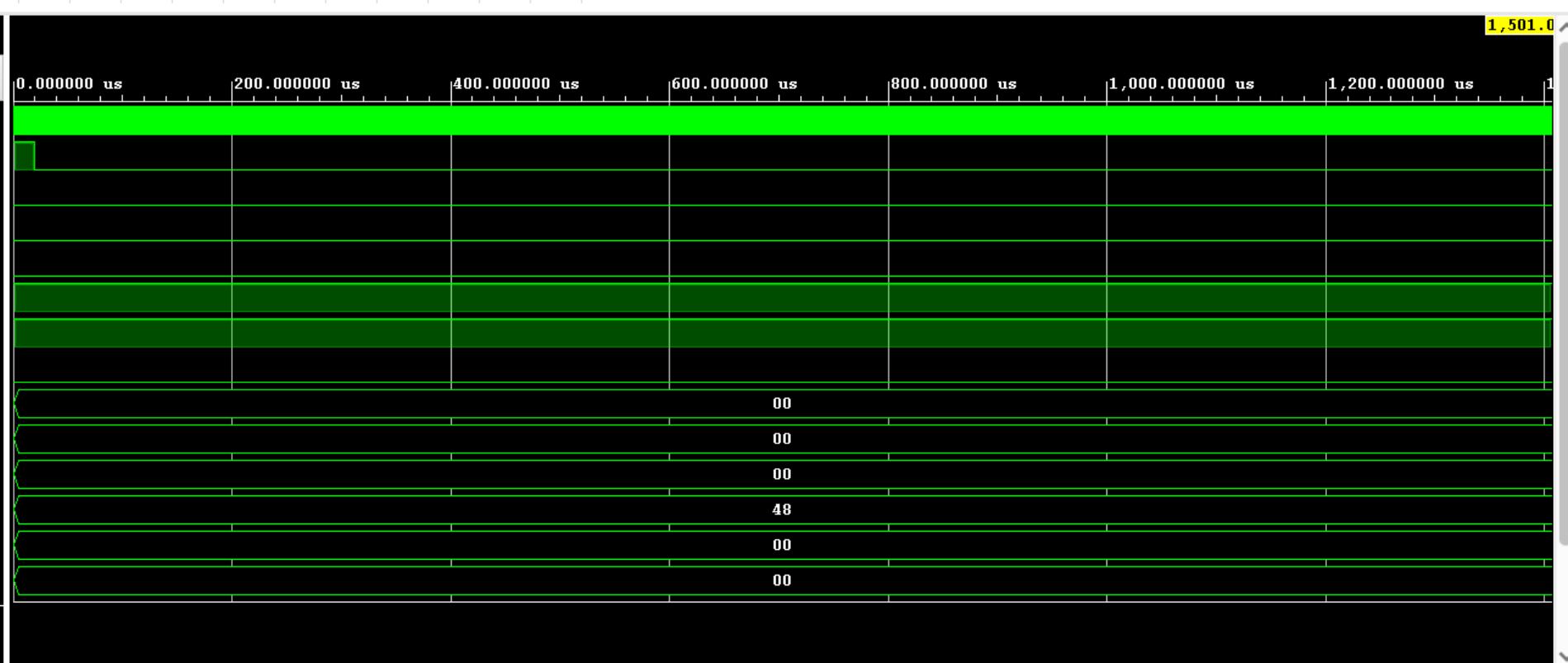
Figure 10: Waveform of the I2C slave2. The waveform shows the I2C bus activity for the slave2. The time scale is in microseconds (us). The signals shown are:

- clk: Clock signal, high throughout.
- reset: Reset signal, low throughout.
- rw: Read/Write signal, high throughout.
- Slave_sel: Slave select signal, high throughout.
- i2c_sda: I2C data line, showing data transfer.
- i2c_scl: I2C clock line, showing clock pulses.
- i2c_clk: I2C clock signal, high throughout.
- state[7:0]: State register value, 05.
- Addr[6:0]: Address register value, 60.
- count[7:0]: Counter value, 07.
- data_in[7:0]: Data input register value, 0.
- data_out[7:0]: Data output register value, 170.
- i2c_scl_enable: I2C clock enable signal, high throughout.
- sda_out: SDA output signal, high throughout.

The waveform shows a successful I2C transaction where the slave2 receives data from the master. The data_in register is updated with the value 0, and the data_out register is updated with the value 170. The transaction ends with a stop condition on the SDA line.



Name	Value
clk	0
reset	0
rw	0
Slave_sel	0
txn_done	0
i2c_sda	1
i2c_scl	1
txn_done	0
> slave1_data[7:0]	00
> slave2_data[7:0]	00
> state[7:0]	00
> Addr[6:0]	48
> count[7:0]	00
> data_in[7:0]	00



```
/lib/IO-Addr-Translator/dut/unit-master/data_out[7:0]
```