MINILAB 0 REPORT

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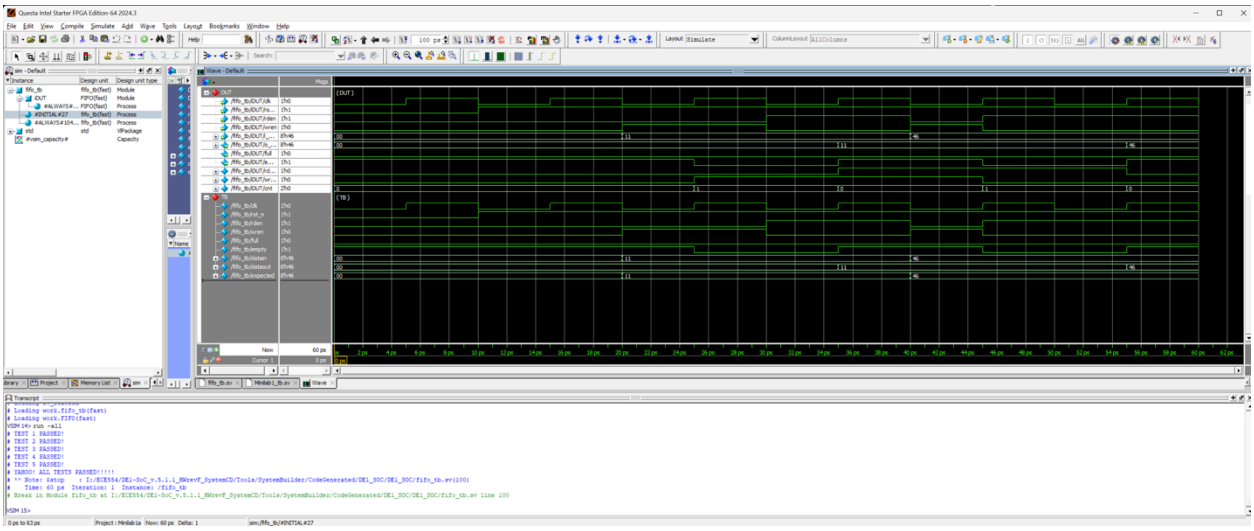
Overview

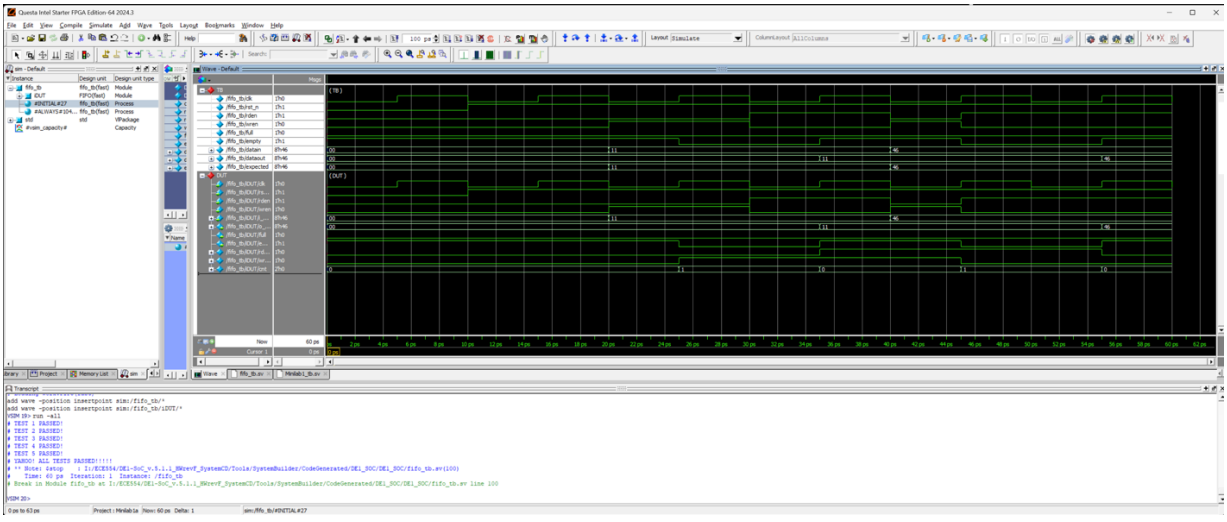
In this minilab, we were required to write a FIFO and MAC along with its test benches and then use the IPs instead.

Screenshots

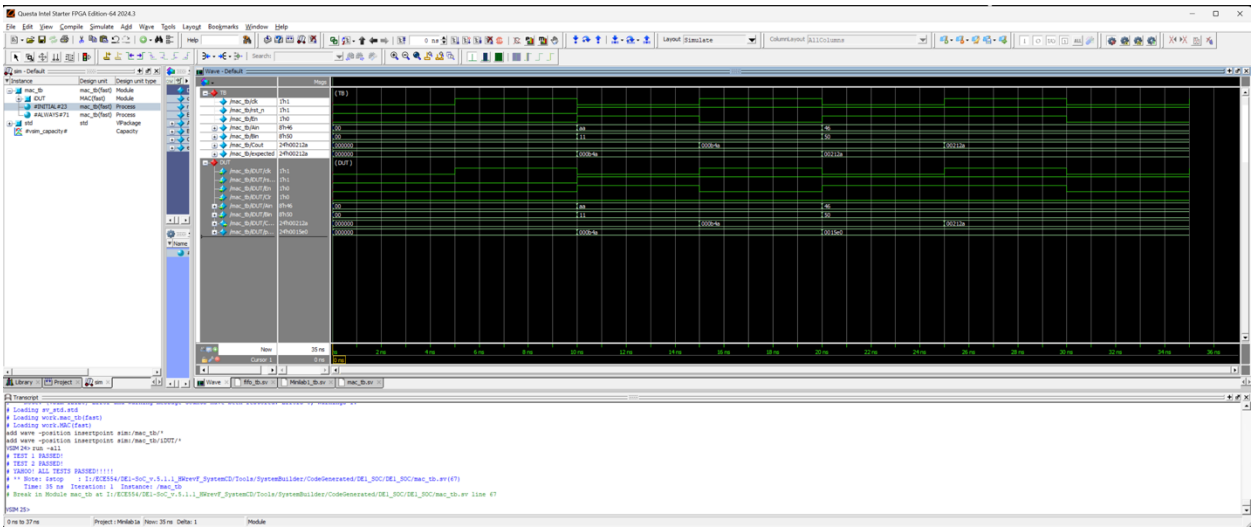
- Without IP FIFO Waveform and Log



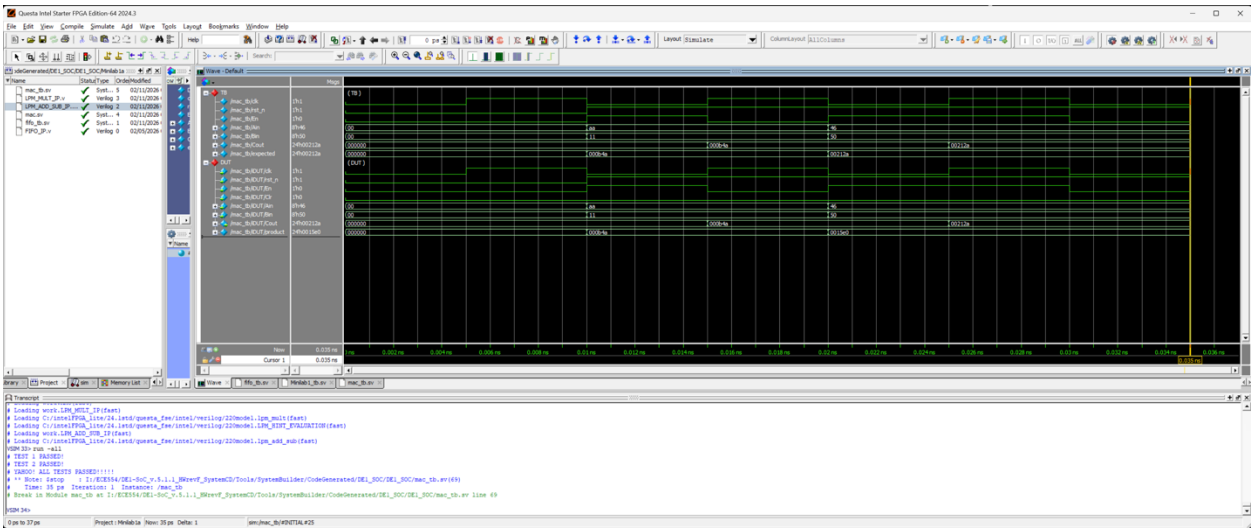
- With IP FIFO Waveform and Log



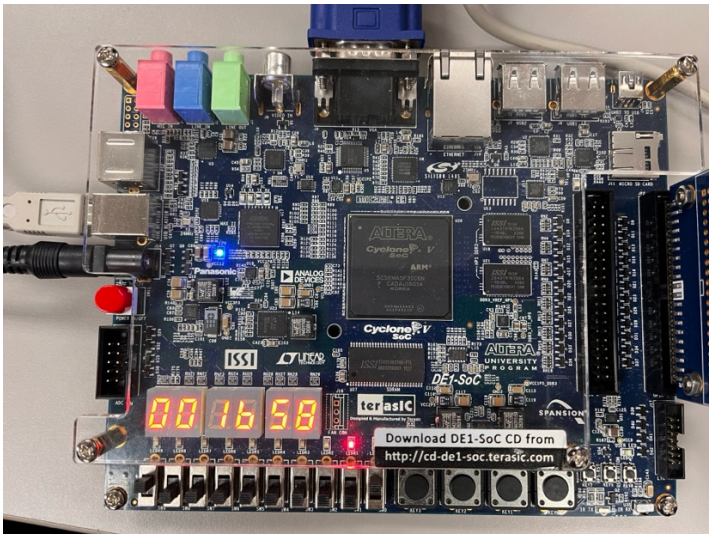
- Without IP MAC Waveform and Log



- With IP MAC Waveform and Log



- Working Board



Usage Reports

- Both usage reports are included in the Minilab0 folder.
- In Summary1, the design uses a larger number of 6- and 7-input logic functions.
- In Summary2, the design reduces the use of higher-input logic functions and instead relies more on smaller-input logic elements. However, this version uses more block memory bits.
- Additionally, Summary2 shows lower fanout compared to Summary1, indicating slightly improved signal distribution in that implementation.