

# tb\_coctb.v

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## AUTHORS

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## DATES

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2024/12/09

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## INFORMATION

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### Brief

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Test bench wrapper for cocotb

### License MIT

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## tb\_cocotb

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```
module tb_cocotb #(
    parameter
    FIFO_DEPTH
    =
    4,
    parameter
    BUS_WIDTH
    =
    8
) ( input aclk, input arstn, output [(BUS_WIDTH*8)-1:0] m_axis_tdata, output
```

Test bench for axis\_tiny\_fifo. This will run a file through the system and write its output. These can then be compared to check for errors. If the files are identical, no errors. A FST file will be written.

Parameters

<b>FIFO_DEPTH</b> parameter	Number of transactions to buffer.
<b>BUS_WIDTH</b> parameter	Number of bytes for tdata width.

Ports

<b>aclk</b>	Clock for AXIS
<b>arstn</b>	Negative reset for AXIS
<b>m_axis_tdata</b>	Output data
<b>m_axis_tvalid</b>	When active high the output data is valid
<b>m_axis_tlast</b>	Indicates last word in stream.
<b>m_axis_tready</b>	When set active high the output device is ready for data.
<b>s_axis_tdata</b>	Input data
<b>s_axis_tvalid</b>	When set active high the input data is valid
<b>s_axis_tlast</b>	Is this the last word in the stream (active high).
<b>s_axis_tready</b>	When active high the device is ready for input data.

INSTANTIATED MODULES

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dut

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```
axis_tiny_fifo #(
    FIFO_DEPTH(FIFO_DEPTH),
    BUS_WIDTH(BUS_WIDTH)
) dut ( .aclk(aclk), .arstn(arstn), .s_axis_tvalid(s_axis_tvalid), .s_axis_tlast(s_axis_tlast), .m_axis_tdata(m_axis_tdata), .m_axis_tvalid(m_axis_tvalid), .m_axis_tlast(m_axis_tlast), .m_axis_tready(m_axis_tready), .s_axis_tdata(s_axis_tdata), .s_axis_tvalid(s_axis_tvalid), .s_axis_tlast(s_axis_tlast), .s_axis_tready(s_axis_tready))
```

Device under test, axis\_tiny\_fifo