

# tb\_cocotb.v

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## AUTHORS

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## DATES

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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
  BUS_WIDTH
  =
  4
) ( input clk, input rstn, input ena, input load, output [BUS_WIDTH*8-1:0]
```

SIPO interface DUT

### Parameters

**BUS\_WIDTH** Width of the APB3 bus data port in bytes.  
*parameter*

Ports

clk	Clock
rstn	negative reset
ena	enable for core, use to change input rate. Enable serial shift input.
load	load parallel data from core, and reset counters for next incoming serial data.
pdata	parallel data output, valid when dcount is BUS_WIDTH*8.
sdata	serialized data input.
dcount	Number of bits to shift out. BUS_WIDTH*8 means all bits have been sampled and put into the register.

INSTANTIATED MODULES

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dut

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```
sipo #(
    .BUS_WIDTH(BUS_WIDTH)
) dut ( .clk(clk), .rstn(rstn), .ena(ena), .load(load), .pdata(pdata), .sdata(sdata))
```

Device under test, sipo