

test.v

AUTHORS

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DATES

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INFORMATION

Brief

Test bench for apb using cocotb

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test

```
module test #(
  parameter
  ADDRESS_WIDTH
  =
  32,
  parameter
  BUS_WIDTH
  =
  4
) ( input clk, input rstn, inout [ADDRESS_WIDTH-1:0] apb_paddr, inout apb_ps
```

Test bench loop for apb

Parameters

ADDRESS_WIDTH <small>parameter</small>	Width of the APB3 address port in bits.
BUS_WIDTH <small>parameter</small>	Width of the APB3 bus data port in bytes.

Ports

clk	Clock
rstn	Negative reset
apb_paddr	APB3 address bus, up to 32 bits wide.
apb_psel	APB3 select per slave (1 for this core).
apb_penable	APB3 enable device for multiple transfers after first.
apb_pready	APB3 ready is a output from the slave to indicate its able to process the request.
apb_pwrite	APB3 Direction signal, active high is a write access. Active low is a read access.
apb_pwdata	APB3 write data port.
apb_prdata	APB3 read data port.
apb_pslverror	APB3 error indicates transfer failure, not implimented.