test.v

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DATES

2025/03/17

INFORMATION

Brief

Test bench for xilinx fifo using cocotb

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test

```
module test #(
parameter
FIFO_DEPTH
 =
8,
parameter
BYTE_WIDTH
 =
4,
parameter
FWFT
 =
1
) ( input rd_clk, input rd_rstn, inout rd_en, inout rd_valid, inout [(BYTE_W
```

Test bench loop for xilinx fifo

Parameters

FIFO_DEPTH	parameter	Depth of the fifo, must be a power of two number(divisable aka 256 = 2^8). Any non-power of two will be rounded up to the next closest.
BYTE_WIDTH	parameter	How many bytes wide the data in/out will be.
FWFT	parameter	1 for first word fall through mode. 0 for normal.

Ports

rd_clk	Clock for read data
rd_rstn	Negative edge reset for read.
rd_en	Active high enable of read interface.
rd_valid	Active high output that the data is valid.
rd_data	Output data
rd_empty	Active high output when read is empty.
wr_clk	Clock for write data
wr_rstn	Negative edge reset for write
wr_en	Active high enable of write interface.
wr_ack	Active high when enabled, that data write has been done.
wr_data	Input data
wr_full	Active high output that the FIFO is full.