tb_wishbone_cocotb.py

AUTHORS

JAY CONVERTINO

DATES

2024/12/09

INFORMATION

Brief

Cocotb test bench

License MIT

FUNCTIONS

random_bool

```
def random_bool()
```

Return a infinte cycle of random bools

Returns: List

start_clock

```
def start_clock(
dut
)
```

Start the simulation clock generator.

Parameters

dut Device under test passed from cocotb test function

reset_dut

```
async def reset_dut(
dut
)
```

Cocotb coroutine for resets, used with await to make sure system is reset.

single_word

```
@cocotb.test()
async def single_word(
dut
)
```

Coroutine that is identified as a test routine. This routine tests for writing a single word, and then reading a single word.

Parameters

dut Device under test passed from cocotb.

full_empty

Coroutine that is identified as a test routine. This routine tests for writing till the fifo is full, # Then reading from the full FIFO. # # Parameters: # dut - Device under test passed from cocotb. @cocotb.test() async def full_empty(dut):

random_ready

Coroutine that is identified as a test routine. This routine tests for randomized ready from the sink. # # Parameters: # dut - Device under test passed from cocotb. @cocotb.test() async def random_ready(dut):

in_reset

```
@cocotb.test()
async def in_reset(
dut
)
```

Coroutine that is identified as a test routine. This routine tests if device stays in unready state when in reset.

Parameters

dut Device under test passed from cocotb.

no_clock

```
@cocotb.test()
async def no_clock(
dut
)
```

Coroutine that is identified as a test routine. This routine tests if no ready when clock is lost and device is left in reset.

Parameters

dut Device under test passed from cocotb.