tb_cocotb.py

AUTHORS

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DATES

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INFORMATION

Brief

Cocotb test bench

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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.

Parameters

    dut   Device under test passed from cocotb.

count_pulses

```
async def count_pulses(
dut
)
```

Cocotb task to count pulses from a output.

speed_test

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

Test various speeds of the output enable

Parameters

    dut   Device under test passed from cocotb.

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.