tb_cocotb.py

AUTHORS

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DATES

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INFORMATION

Brief

Cocotb test bench

License MIT

piso

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Convert parallel data to serial

VARIABLES

wqueue

```
self.wqueue
```

Queue to store write requests

_idle_write

```
self._idle_write
```

Event trigger for cocotb read

FUNCTIONS

_restart

```
def _restart(
self
)
```

kill and restart _run thread.

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.

increment test MSb

Coroutine that is identified as a test routine. Write data, on one clock edge, read on the next.

Parameters

dut Device under test passed from cocotb.

increment test LSb

Coroutine that is identified as a test routine. Write data, on one clock edge, read on the next.

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.