# tb\_axi\_lite\_cocotb.py AUTHORS JAY CONVERTINO DATES

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#### **INFORMATION**

#### **Brief**

Cocotb test bench

#### **License MIT**

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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.

# 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.

## bulk\_test

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

Coroutine that is identified as a test routine. This routine tests streaming data to the axi lite device. Parameters: dut - Device under test passed from cocotb.

# random\_ready\_bulk

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

Coroutine that is identified as a test routine. This routine tests streaming data to the axi lite

device with random ready. 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.