

# tb\_cocotb.py

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## AUTHORS

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## DATES

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## INFORMATION

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### Brief

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Cocotb test bench

### License MIT

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# piso

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piso

Convert parallel data to serial

## VARIABLES

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### wqueue

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self.wqueue

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Queue to store write requests

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## **`_idle_write`**

`self._idle_write`

Event trigger for cocotb read

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## **FUNCTIONS**

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### **`_restart`**

```
def _restart(  
    self  
)
```

kill and restart `_run` thread.

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### **`random_bool`**

```
def random_bool()
```

Return a infinite cycle of random bools

Returns: List

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### **`start_clock`**

```
def start_clock(  
    dut  
)
```

Start the simulation clock generator.

#### **Parameters**

**dut**     Device under test passed from cocotb test function

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### **`reset_dut`**

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

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

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### **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

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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.