

# driver.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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Bus Driver for Wishbone Classic Master/echoSlave

### License MIT

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## wishboneClassicMaster

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wishboneClassicBase

wishboneClassicMaster

Drive slave devices over the Wishbone Classic bus

## FUNCTIONS

---

init

---

```
def __init__(
    self,
    entity,
    name,
    clock,
    reset,

    args,
    kwargs
)
```

Setup defaults and call base class constructor.

## read

---

```
async def read(
    self,
    address
)
```

Read from a address and return data

## write

---

```
async def write(
    self,
    address,
    data
)
```

Write to a address some data

## \_check\_type

---

```
def _check_type(
    self,
    trans
)
```

Check and make sure we are only sending 2 bytes at a time and that it is a bytes/bytearray

## \_run

---

```
async def _run(
    self
)
```

\_run thread that deals with read and write queues.

# wishboneClassicEchoSlave

---

wishboneClassicBase

wishboneClassicEchoSlave

Respond to master reads and write by returning data, simple echo core.

## FUNCTIONS

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### \_\_init\_\_

```
def __init__(
    self,
    entity,
    name,
    clock,
    reset,
    numreg
    =
    256,
    args,
    kwargs
)
```

Setup defaults and call base class constructor.

### \_check\_type

```
def _check_type(
    self,
    trans
)
```

Check and make sure we are only sending a type of wishboneClassicTrans.

### \_run

```
async def _run(
    self
)
```

\_run thread that deals with read and write request over bus.