



read
address
by te enable

wait request
read data
read data for valid

```

graph TD
    wait((wait)) -- self-loop --> wait
    in(( )) --> wait
  
```

fetch address enable = 0

~~~ pause~~

```
fetch_addressenable = 1
read = 0
```

get address

wait request

~ wait request & address ready

wait request

~ wait request & address ready

fetch.addressenable = 0  
read = 0

~ read data valid

read state

```
dataenable = 1
read = 1
byteenable = 111
```

read data  
valid

get LSB data edge detect

Counter 0

Counter 1

edge detect

edge detect

diff states

data

## Counter

byte enable

read

fetchaddressenable

