

WbInterco

1) Functional Description

This hardware component is a generic Wishbone interconnect with a round robin arbiter.

It is a multiplexed bus with integrated address decoding.

2) CABA Implementation

CABA sources

- interface : [source:trunk/soclib/soclib/module/network_component/wb_interco/include/wb_interco.h?](#)
- implementation : [source:trunk/soclib/soclib/module/network_component/wb_interco/src/wb_interco.cpp?](#)
- Arbiter definition: [source:trunk/soclib/soclib/module/network_component/wb_interco/include/arbiter.h?](#)
- Arbiter implementation:
[source:trunk/soclib/soclib/module/network_component/wb_interco/src/arbiter.cpp?](#)

CABA Constructor parameters

```
WbInterco    (      sc_module_name insname,
                  const soclib::common::MappingTable &mtb,
                  const size_t &nb_of_masters,
                  const size_t &nb_of_slaves
                ) ;
```

CABA Ports

- `sc_in<bool> p_resetn` : Global system reset
- `sc_in<bool> p_clk` : Global system clock
- `WbMaster<wb_param> *p_to_slave`: ports to wishbone slaves
- `WbSlave <wb_param> *p_from_master`: ports from wishbone masters

3) TLM-T implementation

There is no TLM-T implementation for this component.

4) Component definition & usage

The WbInterco uses the mapping table to identify the slaves and to decode addresses. The slaves must be connected to the `p_to_slave` ports at the position as the mapping table index.