

VciPiTargetWrapper

1) Functional Description

This hardware component is a VCI/PIBUS protocol converter for a VCI target. It behaves as a target on the PIBUS interface, and behaves as an initiator on the VCI interface. It can be used by a VCI target to interface a PIBUS based system on chip.

As a single FSM controls both the PIBUS and VCI interfaces, the maximum throughput is 2 cycles per 32bits words, even in case of a burst.

3) Component definition & usage

source:trunk/soclib/soclib/module/network_component/vci_pi_target_wrapper/caba/metadata/vci_pi_target_wrapper.sd?

See [SoclibCc/VciParameters](#)

```
Uses( 'vci_pi_target_wrapper', **vci_parameters )
```

3) CABA Implementation

CABA sources

- interface :
source:trunk/soclib/soclib/module/network_component/vci_pi_target_wrapper/caba/source/include/vci_pi_target_wrapper.h
- implementation :
source:trunk/soclib/soclib/module/network_component/vci_pi_target_wrapper/caba/source/src/vci_pi_target_wrapper.c

CABA Constructor parameters

```
VciPiTargetWrapper( sc_module_name name); // Instance Name
```

CABA Ports

- `sc_in<bool> p_resetrn` : Global system reset
- `sc_in<bool> p_clk` : Global system clock
- `sc_in<bool> p_sel` : Target select (from the PIBUS controller)
- `soclib::caba::VciInitiator<vci_param> p_vci` : The VCI port
- `soclib::caba::PibusTarget p_pi` : The PIBUS port

4) TLM-T Implementation

There is no TLM-T implementation for this component.