

VciPiInitiatorWrapper

1) Functional Description

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

2) Component definition & usage

[source:trunk/soclib/soclib/module/network_component/vci_pi_initiator_wrapper/caba/metadata/vci_pi_initiator_wrapper.sd?](#)

```
Uses( 'vci_pi_initiator_wrapper', **vci_parameters, **avalon_parameters)
```

See [SoclibCc/VciParameters](#) and [SoclibCc/AvalonParameters](#)

3) CABA Implementation

CABA sources

- interface :
[source:trunk/soclib/soclib/module/network_component/vci_pi_initiator_wrapper/caba/source/include/vci_pi_initiator_wrapper.h](#)
- implementation :
[source:trunk/soclib/soclib/module/network_component/vci_pi_initiator_wrapper/caba/source/src/vci_pi_initiator_wrapper.c](#)

CABA Constructor parameters

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

CABA Ports

- `sc_in<bool> p_resetn` : Global system reset
- `sc_in<bool> p_clk` : Global system clock
- `sc_in<bool> p_gnt` : bus grant port (from the PIBUS contrioller)
- `sc_out<bool> p_req` : bus request port (to the PIBUS controller)
- `soclib::caba::VciTarget<vci_param> p_vci` : The VCI port
- `soclib::caba::PibusInitiator p_pi` : The PIBUS port

4) TLM-T Implementation

There is no TLM-T implementation for this component.