

HalfGatewayInitiator

1) Functional Description

This hardware component is a subcomponent of the dedicated interface : [RingGateway](#). It handles outgoing commands and incoming responses from and to the ring interconnect to which it is attached.

2) Component definition & usage

source:trunk/soclib/soclib/module/network_component/half_gateway_initiator/caba/metadata/half_gateway_initiator.sd

3) CABA implementation

CABA sources

- interface :
source:trunk/soclib/soclib/module/network_component/half_gateway_initiator/caba/source/include/half_gateway_initiator.h
- implementation :
source:trunk/soclib/soclib/module/network_component/half_gateway_initiator/caba/source/src/half_gateway_initiator.cpp

CABA Constructor parameters

```
HalfGatewayInitiator(sc_module_name           insname,          // instance name
                     bool                alloc_init,      // default initiator token owner
                     const int            &rsp_fifo_depth, // response fifo depth
                     const soclib::common::MappingTable &mt, // mapping table
                     const soclib::common::IntTab &ringid, // global subsystem index
                     bool    local);                  // response routing parameter
```

CABA ports

- sc_in<bool> p_clk; *Global system clock*
- sc_in<bool> p_resetn; *Global system reset*
- soclib::caba::RingIn p_ring_in; *Ring input port*
- soclib::caba::RingOut p_ring_out; *Ring output port*
- soclib::caba::GateInitiator p_gate_initiator; *Port to gate target*

4) TLMT implementation

The TLM-T implementation is not available yet.