

# SoCLib components documentation

## VCI Targets

- VciRam : A multi-segment embedded Ram controller
- VciMultiTty : A memory mapped multi-TTY controller
- VciMultiTimer : A memory mapped multi-Timer controller
- VciIcu : A memory mapped interrupt controller
- VciLocks : A memory mapped locks controller

## VCI Initiators

- VciXcache : A generic data & instruction cache controller for 32 bits RISC processors
- VciDma : A DMA engine
- VciFdAccess : A component wrapping access to simulator file descriptors
- VciMwmrController : A component allowing access to Mwmr channels

## VCI Interconnects

- VciVgmn : A VCI advanced generic micro-network
- VciLocalCrossbar : A VCI crossbar with a dedicated port to access the global micro-network
- VciPiInitiatorWrapper : A VCI-PIBUS protocol converter for a VCI initiator
- VciPiTargetWrapper : A VCI-PIBUS protocol converter for a VCI target
- PibusBcu : A PIBUS controller
- VciRingInitiatorWrapper : A VCI-Ring controler for a VCI initiator
- VciRingTargetWrapper : A VCI-Ring controler for a VCI target
- RingRegister? : A pipe-line stage for a Ring interconnect
- VciDspinInitiatorWrapper : A VCI-DSPIN protocol converter for a VCI initiator
- VciDspinTargetWrapper : A VCI-DSPIN protocol converter for a VCI target
- DspinRouter : The DSPIN router

## Processor wrappers

- IssWrapper : A generic ISS wrapper, used to build CABA models for 32 bits RISC processors

## Common utilities

- TtyWrapper : A simulator-side TTY abstraction tool, used by VciMultiTty
- MappingTable : A tool to declare and list all memory segments in a platform

## Instruction Set Simulators

- Mips : Mips-R3000
- Ppc405 : PPC405
- MicroBlaze : MicroBlaze
- NiosII : NiosII