

DspinRouter

Functional Description

This hardware component is the generic router for the DSPIN micronetwork. It can be used in conjunction with the [VciDspinTargetWrapper](#) and the [VciDspinInitiatorWrapper](#) components to build a VCI compliant DSPIN micro-network. It implements a packet switching network, with a wormhole routing strategy, for low latency.

The DSPIN network on chip is a distributed network, with a 2D mesh topology. It has been designed for shared memory clusterized, multi-processors architectures. It supports the GALS (Globally Asynchronous Locally Synchronous) approach.

Component definition

Usage

CABA Implementation

- interface :
source:trunk/soclib/soclib/module/network_component/vci_dspin_initiator_wrapper/caba/source/include/dspin_router.h
- implementation :
source:trunk/soclib/soclib/module/network_component/vci_dspin_initiator_wrapper/caba/source/src/dspin_router.cc

TLM-T implementation

There is no TLM-T implementation for the DSPIN network. (You can use the [VciVgmn](#) generic interconnect)

Template parameters

Constructor parameters

Ports