VALIDATION

This part involves forming the skeleton for validation of the sub-partitioned units for the Network on Chip as designed as well as the top level validation for the entire design. Each validation skeleton has essentially 4 parts:

1. Interface

This file has to be modified for each module in accordance with the sub-unit specification for interfaces given by the design team.

1. Top level file

This file assigns the clock, instantiates the appropriate Design Under Test(DUT) and the testbench.

1. Bench file

The bench file further consists of the following classes:

* env

This class initializes all the parameters such as cycle number, maximum transactions and warmup time.

* do\_cycle task

This increments the cycle number and passes the data to DUT and golden model.

* Checker

This defines whether the result passes or fails.

* golden module

This calculates the golden model result against which the output is checked.

* packet

1. Make file

This empty test harness compiles with the top level file successfully and runs for 10,000 cycles.