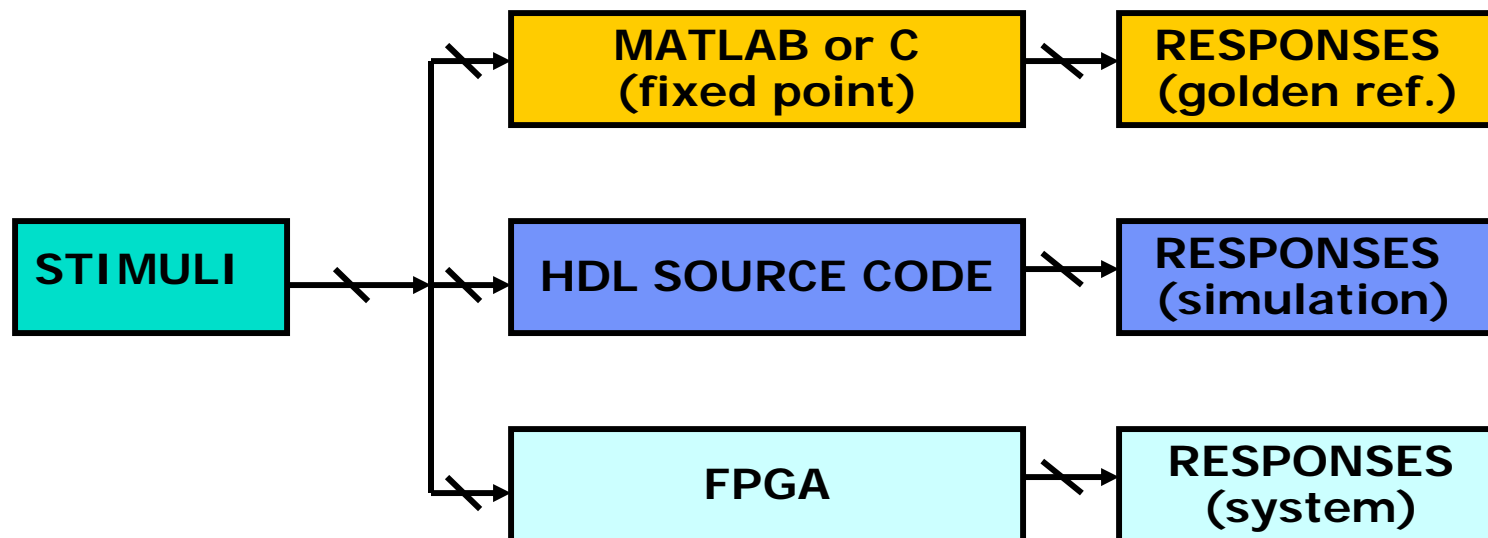


# DEVELOPING QUALITY IP

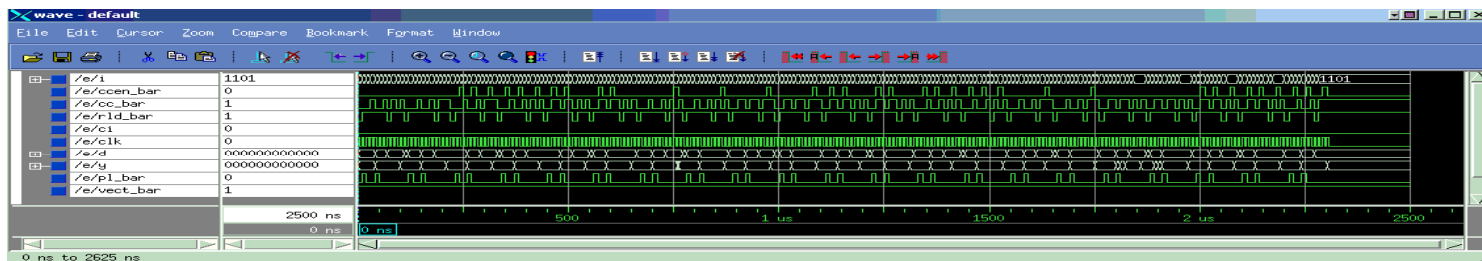
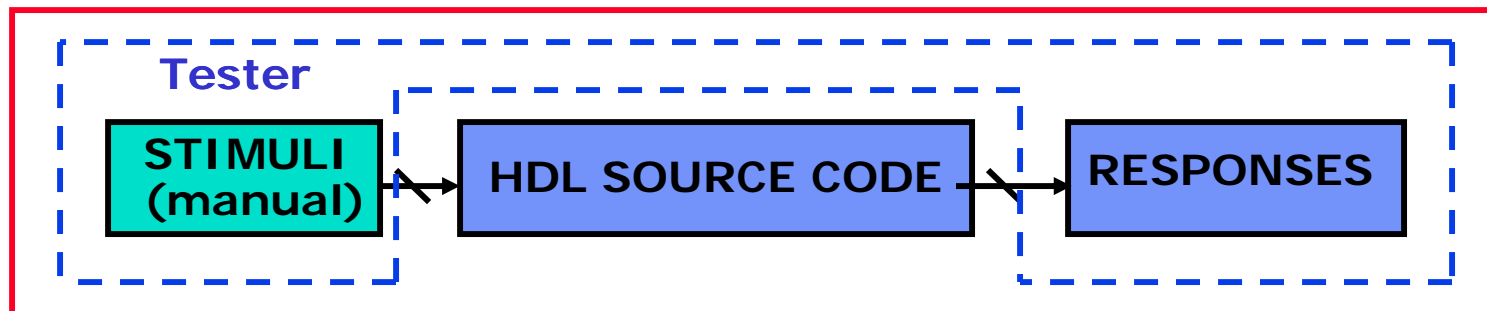
- Requirements should be mapped into an executable specification which produces the desired golden reference responses.
- HDL and FPGA responses must match the golden responses identically.



# THE TESTBENCH CONTAINS THE STIMULI, RESPONSES AND UUT

- Functional stimuli are developed by the designer to mimic the system environment.
- The tester is written in HDL but is **not** synthesized into the FPGA.

## Testbench (Tester + HDL Source Code)



# RAPID VERIFICATION SAVES TIME

- Minimizing time-to-market encourages designers to develop only a few tests for simulation and then proceed to testing the design inside the FPGA in its real-world environment. The FPGA executes tests 500x faster than the simulator and the real-world system environment produces the tests automatically.

