

Checkpoints for SV Testbench

A. Class Transaction

1. Declare all the inputs and outputs with equivalent sizes
2. Add modifiers (randc, rand) to all inputs
3. Do not add modifiers to output ports

B. Class Generator

1. Generate random stimulus for inputs
2. send data to Driver with Mailbox
3. Signify to Driver about completion of Stimuli generation using event

C. Interface

1. Declare all the inputs and outputs with logic datatypes

D. Class Driver

1. Receives data from Generator through Mailbox
2. Send data to the interface

E. Class Monitor

1. Receives data from Interface
2. Send data to Scoreboard with Mailbox

F. Class Scoreboard

1. Receives data from Monitor
2. Compare with Golden Reference data

G. Class Environment

1. Initialize the class
2. Connect the respective Mailbox
3. Connect respective Event
4. Connect respective Interfaces
5. Schedule execution of different processes

H. Testbench Top

1. Instance of Environment
2. New method to Mailbox
3. Connect Interface
4. Perform connection between interface and DUT