

Void Functions

Verilog makes a very clear differentiation between tasks and functions. The most important difference is that a task can consume time, whereas a function cannot. A function cannot have a delay.

a System Verilog task that does not consume time, you should make it a void function, which is a function that does not return a value. Now it can be called from any task or function.

Void function syntax:

```
function void print_method();  
    $display("state = %s", cur state.name());  
endfunction
```

Note:- void function means (function with no return value).

```
module void_function;  
    int x;  
    //void function to display current simulation time  
    function void print_state();  
        $display("\tCurrent simulation time is %0d\n", $time);  
    endfunction  
  
    initial begin  
        #5;  
        current_time();  
        #15;  
        current_time();  
    end  
endmodule
```

System Verilog function can be,

Static function: Static functions share the same storage space for all function calls.

Automatic function: Automatic functions allocate unique, stacked storage for each function call.