

System Verilog DPI Under Windows using Modelsim

```
// File name: dpi_top.v
// Author: A.G.Raja
// Website: agraja.wordpress.com
// License: GPL
module top ();
import "DPI-C" context pass_string_c= task pass_string_sv(input string a);
import "DPI-C" context string_c2v_c= function string string_c2v_sv();
string v2c_string,c2v_string;
initial
begin
v2c_string = "This is v2c_string";
pass_string_sv(v2c_string);
c2v_string = string_c2v_sv();
$display("c2v_string: %s \n",c2v_string);
end
endmodule
// EOF dpi_top.v
```

```
// File name: dpi_main.c
// Author: A.G.Raja
// Website: agraja.wordpress.com
// License: GPL
#include <stdio.h>
#include "svdpi.h"
#include "dpiheader.h"
int pass_string_c(const char* v2c_string)
{
    printf("v2c_string: %s\n",v2c_string);
    return 0;
}
const char* string_c2v_c(void) {
    char* c2v_string;
    c2v_string="This is c2v_string";
    return c2v_string;
}
// EOF dpi_main.c
```

```
#File name run.tcl
# Author: A.G.Raja
# Website: agraja.wordpress.com
# License: GPL
#Type at Transcript terminal: source run.tcl
vlib work
vlog -sv -dpiheader dpiheader.h dpi_top.v
exec gcc -c -g -IE:/modelsim/include dpi_main.c -o dpi_main.obj
exec gcc -shared -o dpi_main.dll dpi_main.obj -LE:/modelsim/win32
vsim -novopt top -sv_lib dpi_main
run
# EOF run.tcl
```