

```
`timescale 1ns/1ps
module alu_tb;
reg[3:0] A,B;
reg[7:0]ALU_sel;
wire[7:0]ALU_out;
wire Carryout;
integer i;
alu test_unit(A,B,ALU_sel,ALU_out,Carryout
);
initial begin
$dumpfile("alu.vcd");
$dumpvars(1,alu_tb);
A=8'h05;
B=8'h02;
ALU_sel=4'h0;
for(i=0;i<4;i=i+1)
begin
ALU_sel=ALU_sel+8'h01;
#10;
end;
A=8'hFF;
B=8'h00;
end
endmodule
```



## Testbench + Design

SystemVerilog/Verilog

## UVM / OVM

None

## Other Libraries

None  
OVL  
SVUnit

- ☐ Enable TL-Verilog
- ☐ Enable Easier UVM
- ☐ Enable VUnit

## Tools &amp; Simulators

Aldec Riviera Pro 2023.04

## Compile Options

-timescale 1ns/1ns

## Run Options

+access+r

Run Time: 10 ms

- ☐ Use run.do Tcl file
- ☐ Use run.bash shell script
- ☒ Open EPWave after run
- ☐ Show output file after run
- ☐ Download files after run

## Examples

## Community

Collaborate

Forum

Follow @edaplayground

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testbench.sv



```
1 `timescale 1ns/1ps
2 module alu_tb;
3   reg[7:0] A,B;
4   reg[3:0] ALU_sel;
5   wire[7:0] ALU_out;
6   wire Carryout;
7   integer i;
8   alu_test_unit(A,B,ALU_sel,ALU_out,Carryout);
9   initial begin
10     $dumpfile("alu.vcd");
11     $dumpvars(1,alu_tb);
12     A=8'h05;
13     B=8'h02;
14     ALU_sel=4'h0;
15     for(i=0;i<4;i=i+1)
16       begin
17         ALU_sel=ALU_sel+8'h01;
18         #10;
19       end;
20     A=8'hFF;
21     B=8'h00;
22   end
23 endmodule
```

Log

Share

```
# KERNEL: warning: you are using the RIVIERA PRO EDA edition
# KERNEL: Warning: Contact Aldec for available upgrade options
# KERNEL: SLP simulation initialization done - time: 0.0 [s]
# KERNEL: Kernel process initialization done.
# Allocation: Simulator allocated 4671 kB (elbread=427 elab
```

EDA playground

Run Save Copy Support email is support@

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Playgrounds Profile

### EPWave

From: 0ps To: 40,000ps

Get Signals Radix 100% 10,000ps

| Signal       | 0 | 5,000 | 10,000 | 15,000 | 20,000 | 25,000 | 30,000 | 35,000 |
|--------------|---|-------|--------|--------|--------|--------|--------|--------|
| A[7:0]       | 5 |       |        |        |        |        |        |        |
| ALU_out[7:0] | 3 | a     |        |        | 2      |        | 0      |        |
| ALU_sel[3:0] | 1 | 2     |        |        | 3      |        | 4      |        |
| B[7:0]       | 2 |       |        |        |        |        |        |        |
| Carryout     | 0 |       |        |        |        |        |        |        |
| i            | 0 | 1     |        |        | 2      |        | 3      |        |

Note: To revert to EPWave opening in a new browser window, set that option on your profile page.