

1. user check

```
set search_path "."
set link_library " "

analyze -format sverilog -vcs "chip.v"
elaborate chip

foreach_in_collection cell [get_cells] {
    set cell_name [get_object_name $cell]
    set ref_name [get_attribute -objects $cell -name ref_name];
    set orig_ref_name [regsub {_d\d\d\d} $ref_name {}]
    puts "cell_name: $cell_name, ref_name: $ref_name, orig_ref_name:
$orig_ref_name"
}
```

1.1 file

chip.v

```
module chip(
    in, sel, clk, out
);

input  in, clk, sel;
output out;

reg    out;

core core_0 (
    .in      (in),
    .clk     (clk),
    .sel     (sel),
    .out     (out_0)
);

core core_1 (
    .in      (out_0),
    .clk     (clk),
    .sel     (sel),
    .out     (out_1)
);

core core_2 (
    .in      (in),
    .clk     (clk),
    .rst_n   (1'b0),
    .sel     (sel),
```

```
    .out    (out_2)
);
core core_3 (
    .in     (in),
    .clk    (clk),
    .rst2_n (1'b0),
    .sel    (sel),
    .out    (out_2)
);

always @(posedge clk) begin
    out <= out_0 | out_1 | out_2;
end

endmodule
```