

```
1: library STD;
2: library IEEE;
3: use IEEE.std_logic_1164.all;
4:
5: entity valid_test is
6:
7: end valid_test;
8:
9: architecture test of valid_test is
10:
11:     component Cache_Cell_Valid
12:     port(
13:         s      : in  std_logic;
14:         r      : in  std_logic;
15:         Rd_En  : in  std_logic;
16:         Wr_En  : in  std_logic;
17:         q      : out std_logic
18:     );
19: end component;
20:
21: signal s_s, s_r, s_Rd_En, s_Wr_En, s_q : std_logic := '0';
22:
23: for asdf : Cache_Cell_Valid use entity work.Cache_Cell_Valid(structur
al);
24:
25: begin
26:
27:     asdf : Cache_Cell_Valid port map(s_s, s_r, s_Rd_En, s_Wr_En, s_q);
28:
29: p : process
30: begin
31:
32:     s_s <= 'U';
33:     s_Wr_En <= 'U';
34:     s_r <= '1';
35:     wait for 5 ns;
36:     s_r <= '0';
37:     wait for 5 ns;
38:     s_s <= '0';
39:     s_Rd_En <= '1';
40:     s_Wr_En <= '0';
41:     wait for 5 ns;
42:     s_s <= '1';
43:     wait for 5 ns;
44:     s_s <= '0';
45:     wait for 5 ns;
46:     s_r <= '1';
47:     wait for 5 ns;
48:     s_r <= '0';
49:     wait for 5 ns;
50:     s_q <= '1';
51:     s_Rd_En <= '1';
52:     wait for 5 ns;
53:     s_q <= '0';
54:     s_Rd_En <= '0';
55:     wait for 5 ns;
56:     wait;
57: end process;
58: end test;
```