

ISim (P.28xd) - [Default.wcfg]

File Edit View Simulation Window Layout Help

Zoom to Full View

Name	Value
x1	0
x3	0
f	0
s1	1
s2	1
s3	1
s4	0
s5	0
s6	0

0 ns 50 ns 100 ns 150 ns 200 ns 250 ns 300.000 ns

X1: 300.000 ns

Default.wcfg

Console

Simulator is doing circuit initialization process.  
Finished circuit initialization process.

```
ISim> restart
ISim> put x1 1
ISim> put x2 0
ISim> put x3 1
ISim> run
Simulator is doing circuit initialization process.
Finished circuit initialization process.
ISim> put x3 0
ISim> run
ISim> put x1 0
ISim> run
ISim>
```

Set view such that the entire contents is visible

Sim Time: 300,000 ps

11:53 24.10.2018

ISim (P.28xd) - [Default.wcfg]

File Edit View Simulation Window Layout Help

1.00us Re-launch

Name	Value
x1	0
x2	0
x3	0
f	0
s1	1
s2	1
s3	1
s4	0
s5	0
s6	0

0 ns 50 ns 100 ns 150 ns 200 ns 250 ns 300 ns 350 ns 400 ns 450 ns 500.000 ns

X1: 500.000 ns

Default.wcfg

Console

Finished circuit initialization process.

```
ISim> put x3 0
ISim> run
ISim> put x1 0
ISim> run
ISim> put x3 1
ISim> put x2 1
ISim> put x1 1
ISim> run
ISim> put x1 0
ISim> put x2 0
ISim> put x3 0
ISim> run
ISim>
```

Sim Time: 500,000 ps

11:55 24.10.2018

```
-----  
-----  
-- Company:  
-- Engineer:  
--  
-- Create Date:      10:36:39 10/24/2018  
-- Design Name:  
-- Module Name:      Devre - Behavioral  
-- Project Name: 2. Uygulama - D  
-- Target Devices:  
-- Tool versions:  
-- Description:  
--  
-- Dependencies:  
--  
-- Revision:  
-- Revision 0.01 - File Created  
-- Additional Comments:  
--  
-----
```

```
-----  
library IEEE;  
use IEEE.STD_LOGIC_1164.ALL;
```

```
-- Uncomment the following library declaration if using  
-- arithmetic functions with Signed or Unsigned values  
--use IEEE.NUMERIC_STD.ALL;
```

```
-- Uncomment the following library declaration if instantiating  
-- any Xilinx primitives in this code.  
--library UNISIM;  
--use UNISIM.VComponents.all;
```

```
-- Genel devre her peyden bađýmsýzdýr  
entity Devre is  
    port(  
        x1, x2, x3 :in STD_LOGIC;  
        F:out STD_LOGIC  
    );  
end Devre;
```

```
architecture Behavioral of Devre is
```

```
-- And kapýsýnýn eklenmesi  
component tri_and  
    port(a1, a2, a3: in STD_LOGIC;  
        aout: out STD_LOGIC  
    );  
end component;
```

```
-- Or kapýsýnýn eklenmesi  
component tri_or  
    port(o1, o2, o3:in STD_LOGIC;  
        oout:out STD_LOGIC  
    );  
end component;
```

```
-- Not kapýsýnýn eklenmesi  
component not_kapisi  
    port(  
        --
```

```

        n1:in STD_LOGIC;
        nout:out STD_LOGIC
    );
end component;

```

```

-- ara kablolar (component'ten gelen kablolar)
signal s1: STD_LOGIC;
signal s2: STD_LOGIC;
signal s3: STD_LOGIC;
signal s4: STD_LOGIC;
signal s5: STD_LOGIC;
signal s6: STD_LOGIC;

```

```

begin
    -- b'ler etikettir
    b1: not_kapisi port map(x1, s1);
    b2: not_kapisi port map(x2, s2);
    b3: not_kapisi port map(x3, s3);
    b4: tri_and port map(x1, s2, x3, s4);
    b5: tri_and port map(s1, s2, x3, s5);
    b6: tri_and port map(s1, x2, s3, s6);
    b7: tri_or port map(s4, s5, s6, F);

```

```

end Behavioral;
-----
-----

```

```

library IEEE;
use IEEE.STD_LOGIC_1164.ALL;

```

```

entity tri_and is

```

```

    port(a1, a2, a3: in STD_LOGIC;
          aout:out STD_LOGIC
    );

```

```

end tri_and;

```

```

architecture Behavioral of tri_and is

```

```

begin
    process(a1, a2, a3)

        begin
            aout <= a1 AND a2 AND a3;
        end process;

```

```

end Behavioral;
-----
-----

```

```

library IEEE;
use IEEE.STD_LOGIC_1164.ALL;

```

```

entity tri_or is

```

```

    port(o1, o2, o3: in STD_LOGIC;
          oout : out STD_LOGIC
    );

```

```

end tri_or;

```

```

architecture Behavioral of tri_or is
begin
    process(o1, o2, o3)
        begin
            oout <= o1 OR o2 OR o3;
        end process;
    end Behavioral;
-----
-----
library IEEE;
use IEEE.STD_LOGIC_1164.ALL;

entity not_kapisi is
port(
    n1:in STD_LOGIC;
    nout:out STD_LOGIC
);

end not_kapisi;

architecture Behavioral of not_kapisi is
begin
    process(n1)
        begin
            nout <= not n1;
        end process;
    end Behavioral;

```

ISE Project Navigator (P.28xd) - D:\BotLab2\BotLab2.xise - [Devre (RTL1)]

File Edit View Project Source Process Tools Window Layout Help

Design

View: Implementation Simulation

Hierarchy

- BotLab2
  - xc3s500e-4fg320

No Processes Running

Processes: Devre - Behavioral

- Design Summary/Reports
- Design Utilities
- User Constraints
- Synthesize - XST
- View RTL Schematic**
- View Technology Schematic
- Check Syntax
- Generate Post-Synthesis Si...
- Implement Design
- Generate Programming File

Start Design Files Libraries

Devre.vhd Design Summary (Implemented) Devre (RTL1)

View by Category

Design Objects of Top Level Block

Instances

- b1
- b2
- b3

Pins

- Devre

Signals

- Devre

Properties of Instance: b2

Name	Value
Type	not_kapisi
Instance Name	b2

Console Warnings Find in Files Results View by Category

[1032,976]

Lightshot — ekra... ISE Project Naviga... Karşidan Yükleme... botlab

TR 11:51 24.10.2018

```
graph LR
    a((a)) --> b2[not_kapisi b2]
    b((b)) --> b1[not_kapisi b1]
    c((c)) --> b3[not_kapisi b3]
    b2 --> b4[tri_and b4]
    b1 --> b4
    b3 --> b4
    b2 --> b5[tri_and b5]
    b1 --> b5
    a --> b5
    b2 --> b6[tri_and b6]
    b1 --> b6
    a --> b6
    b4 --> f((f))
    b5 --> f
    b6 --> f
```

