

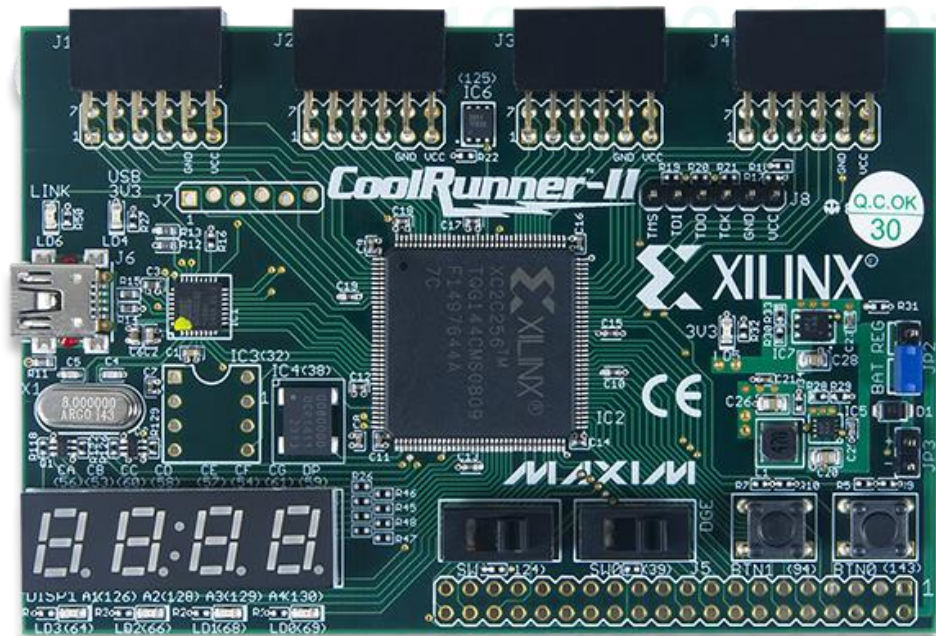
# VHDL - stopky

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# Coolrunner 2

1 tlačítko – start

1 tlačítko – reset



# Časové signály

```
clk_sfi_o <= '0' after 500 ms when clk_sfi_o = '1' else -- for seconds  
            '1' after 500 ms when clk_sfi_o = '0';
```

```
clk_ssi_o <= '0' after 5000 ms when clk_ssi_o = '1' else -- for tens of seconds  
            '1' after 5000 ms when clk_ssi_o = '0';
```

```
clk_mfi_o <= '0' after 50000 ms when clk_mfi_o = '1' else -- for minutes  
            '1' after 50000 ms when clk_mfi_o = '0';
```

```
clk_msi_o <= '0' after 500000 ms when clk_msi_o = '1' else -- for tens of minutes  
            '1' after 500000 ms when clk_msi_o = '0';
```

# Čítání času

```
if rising_edge(clk_sfi_o) then

    if sec_fi_o = "1001" then -- counting seconds
        sec_fi_o <= "0000";

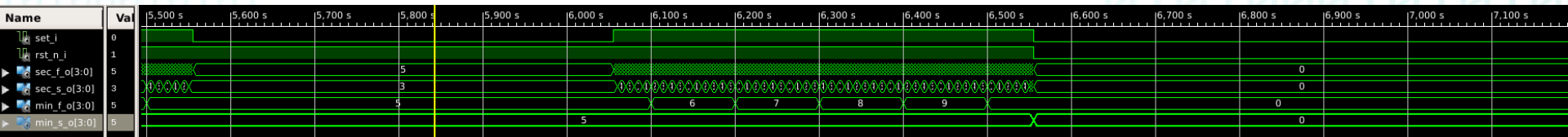
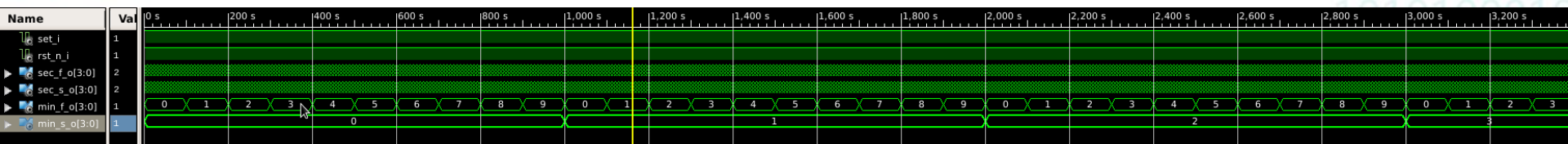
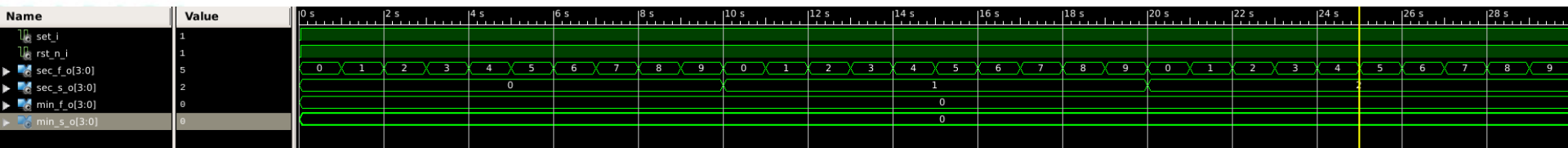
    else
        sec_fi_o <= sec_fin_o;
    end if;
end if;
```

```
if rising_edge (clk_sfi_o) then
```

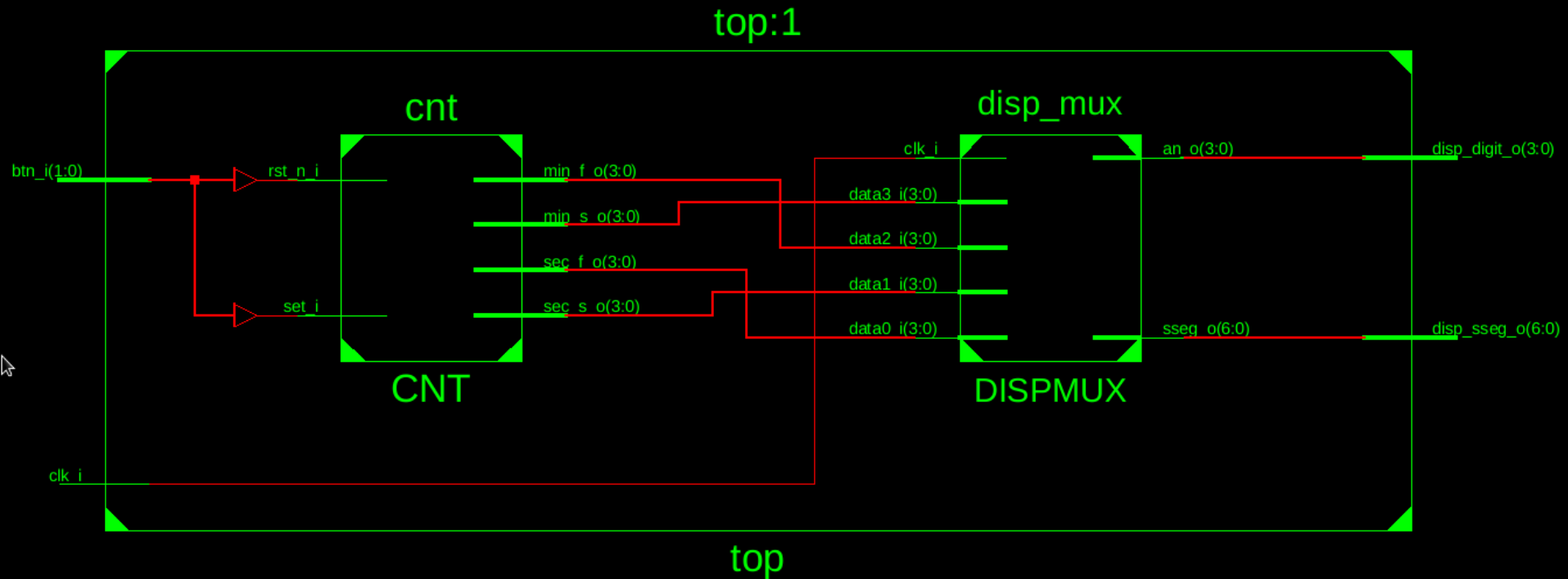
```
if sec_fi_o = "1001" then -- counting seconds
    sec_fi_o <= "0000";
```

```
else
    sec_fi_o <= sec_fin_o;
end if;
```

```
end if;
```



# Schematické zapojení programu



Děkujeme za pozornost

[github.com/petrkastanek483/BICT](https://github.com/petrkastanek483/BICT)

[youtube.com/stopwatch](https://youtube.com/stopwatch)