

```

1  library IEEE;
2  use IEEE.STD_LOGIC_1164.ALL;
3  use work.meu_pacote_led.all;
4
5  entity top is
6
7      GENERIC (N : integer := 4);
8      port(mclk, reset: in std_logic;
9          anodos: out std_logic_vector(3 downto 0);
10         catodos: out std_logic_vector(0 to 7)
11         );
12 end top;
13
14 architecture Behavioral of top is
15
16     signal clk1, clk2, clk3, clk4: std_logic;
17     signal aux3 : std_logic_vector(3 downto 0);
18     begin
19         map1 : entity work.ccto(arq)
20             generic map (N => N)
21             port map( mclk, reset,  clk1 ); --in,in,out
22
23         map2 : entity work.ccto2(arq)
24             generic map (N => N)
25             port map( mclk, reset,  clk2 ); --in,in,out
26
27         map3 : entity work.ccto3(arq)
28             generic map (N => N)
29             port map( mclk, reset,  clk3 ); --in,in,out
30
31         map4 : entity work.ccto4(arq)
32             generic map (N => N)
33             port map( mclk, reset,  clk4 ); --in,in,out
34
35         aux3 <= clk4 & clk3 & clk2 & clk1 ;
36
37         map5 : entity work.decod_7_seg(arq)
38             port map(aux3, anodos, catodos); --entrada,saida,saida
39
40
41 end Behavioral;
42
43

```