11/15/2012

Comp 331 – Intro to Hardware
FSM

1. Asgt08
2. VHDL Packages
3. Example 62 Traffic Light

-- package containing component declarations for traffic
library IEEE;
use IEEE.STD_LOGIC_1164.all;
package traffic_components is
    component clkdiv is
        port(mclk: in STD_LOGIC;
             clr : in STD_LOGIC;
             clk3 : out STD_LOGIC);
    end component;
    component traffic is
        port(clk: in STD_LOGIC;
             clr: in STD_LOGIC;
             lights: out STD_LOGIC_VECTOR(5 downto 0));
    end component;
end traffic_components;

A package is simply (?) a list of component declarations – usually located in working Directory.

To use a package insert the directive

library IEEE;
use IEEE.STD_LOGIC_1164.all;
use work.traffic_components.all;