```vhdl
-------------------------------------------------------------------------
-- VHDL Code for IceCube Flasher Board
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--
-- Created: 8/9/2003
-- flash_defs.vhd
-------------------------------------------------------------------------
library IEEE;
use IEEE.STD_LOGIC_1164.all;

package flash_defs is
    subtype address is std_logic_vector(5 downto 0);
    subtype mode_bits is std_logic_vector(1 downto 0);

    type cpld_states is (mode_normal, mode_spi, mode_onewire);

    constant    addr_status           : address := B"000000";
    constant    addr_reset            : address := B"000001";
    constant    addr_cpld_id          : address := B"000010";
    constant    addr_mode_select      : address := B"000011";
    constant    addr_spi              : address := B"000100";
    constant    addr_dcdc_ctrl        : address := B"000101";

    constant    addr_delay_adjust     : address := B"001000";
    constant    addr_delay_config0    : address := B"001001";
    constant    addr_delay_config1    : address := B"001010";
    constant    addr_delay_config2    : address := B"001011";
    constant    addr_mux              : address := B"001100";

--Bit assignment for the byte at addr_mode_select
    constant    bits_mode_normal      : mode_bits := B"00";
    constant    bits_mode_spi         : mode_bits := B"01";
    constant    bits_mode_onewire     : mode_bits := B"10";

--Bit assignment for the byte at addr_serial_chan
    constant    bit_ser_sclk      : integer := 0;   --(TBR)
    constant    bit_ser_mosi      : integer := 1;   --(TBR)
    constant    bit_ser_ncs       : integer := 2;   --(TBR)
    constant    bit_ser_onewire   : integer := 3;   --(TBR)

--Bit assignment for the byte at addr_mux
    constant    bit_mux_0         : integer := 0;
    constant    bit_mux_1         : integer := 1;
    constant    bit_mux_a         : integer := 2;
    constant    bit_mux_b         : integer := 3;
    constant    bit_mux_c         : integer := 4;
    constant    bit_mux_d         : integer := 5;
    constant    bit_mux_f         : integer := 6;
    constant    bit_mux_sd        : integer := 7;

--Bit assignment for the byte at addr_dcdc_ctrl
    constant    bit_dcdc_en       : integer := 0;
    constant    bit_dcdc_on       : integer := 1;


end flash_defs;
```