CHIP ISA_SEL  PALCE22V10    ; Device not selected

;----------------------------------------------------- PIN Declarations ---------------

PIN 1  bpSYNC  ;S100 bus address valid when high
PIN 2  bsVAL   ;S100 bus address valid when low
PIN 3  SA16    ;ISA Address line 16
PIN 4  LA17    ;ISA Address line 17
PIN 5  LA18    ;ISA Address line 18
PIN 6  LA19    ;ISA Address line 19
PIN 7  LA20    ;ISA Address line 20
PIN 8  LA21    ;ISA Address line 21
PIN 9  LA22    ;ISA Address line 22
PIN 10 LA23    ;ISA Address line 23
PIN 11 bsOUT   ;S100 Port Output
PIN 12 bsINP   ;S100 Port Input
PIN 13 bsINTA  ;S100 bus INTA
PIN 14 VGA_RAM ;VGA RAM selected* (active OUTPUT LOW)
PIN 15 VGA_ROM ;VGA ROM selected* (active OUTPUT LOW)
PIN 16 bsMWRT  ;S100 Status Mem Write
PIN 17 bsMEMR  ;S100 Status Mem Read
PIN 18 ISA_SEL ;ISA Board select (active OUTPUT HIGH)
PIN 19 VGA_PORTS ;Port Select from V_PORTS GAL (active LOW)
PIN 20 ISA_PORT_READ ;For LED
PIN 21 ISA_PORT_WRITE ;For LED
PIN 22 ISA_ROM_READ ;For LED

;----------------------------------------------------- Boolean Equation Segment -----

EQUATIONS

/VGA_RAM = LA19 * LA18 * LA17 * SA16 + LA19 * LA18 * LA17 * /SA16 ;Read/Write RAM Bxxx:0H
            ;Read/Write RAM Axxx:0H (for EGA Board)

/VGA_ROM = LA19 * LA18 * LA17 * /SA16 * /bsMWRT ;Read ROM C0000 to CxxxxH RAM (Not write)

ISA_SEL = /VGA_RAM + /VGA_ROM + /VGA_PORTS ;The Main Board address selection line

/ISA_PORT_READ = /VGA_PORTS * bsINP ;For read VGA Ports LED
/ISA_PORT_WRITE = /VGA_PORTS * bsOUT ;For Write VGA Ports LED
/ISA_ROM_READ = /VGA_ROM * bsMEMR ;For read VGA ROM LED