CHIP ISA_RW PALCE22V10 ; Device not selected

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

;----- INPUT SIGNALS -------
PIN 1 bpSYNC ;Not used below
PIN 2 DUAL ;High if back to back 8 bit bytes required
PIN 3 RD16_OE ;$100 bus 16 bit write (Active LOW)
PIN 4 WR16_OE ;$100 bus 16 bit read (Active low)
PIN 5 IO READY ;<--- LOW, ISA bus wait request
PIN 6 RAW_A0 ;$100 bus A0
PIN 7 ISA_SEL ;ISA board select
PIN 8 SHIFT1 ;Output from counter U20
PIN 9 SHIFT2 ;Output from counter U20
PIN 10 SHIFT3 ;Output from counter U20
PIN 11 SHIFT4 ;Output from counter U20
PIN 12 SHIFT5 ;Output from counter U20
PIN 13 SHIFT6 ;Output from counter U20
PIN 14 SHIFT7 ;Output from counter U20
PIN 15 SHIFT8 ;Output from counter U20

;----- OUTPUT SIGNALS -------
PIN 17 STOP_CLOCK ;Stop clock PHI signal on U20
PIN 18 GAL_XRDY ;<--- LOW, ISA wait request to S100 bus
PIN 19 GAL_A0 ;ISA A0
PIN 20 W_LOW ;ISA memory low byte write
PIN 21 W_HIGH ;ISA memory high byte write
PIN 22 R_LOW ;ISA memory low byte read
PIN 23 R_HIGH ;ISA memory high byte read.

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

EQUATIONS

/R_LOW = SHIFT2 * SHIFT3 * /RD16_OE * DUAL
/W_LOW = SHIFT2 * /SHIFT3 * /WR16_OE * DUAL
GAL_A0 = ISA_SEL * RAW_A0 * /DUAL + SHIFT4 * DUAL
/R_HIGH = SHIFT5 * /SHIFT6 * /RD16_OE * DUAL
/W_HIGH = SHIFT5 * /SHIFT7 * /WR16_OE * DUAL

/GAL_XRDY = ISA_SEL * /IO READY ;Hold CPU if ISA board wants more time
STOP_CLOCK = ISA_SEL * IO READY * DUAL ;ALSO stop further shifts until ISA is ready