

;PALASM Design Description

----- Declaration Segment -----

TITLE FOCUS20 - Focus Waveform Counter
PATTERN U82 of Control Board
REVISION 2.0
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CHIP FOCUS PALCE22V10

----- Description -----

; This device is configured as a 7-bit synchronous counter whose
; outputs drive a PROM (U85) programmed with a parabola waveform.
; The 8-bit PROM data is input to three 8-bit registered DACs (U76,
; U77, U78) which output horizontal dynamic focus waveforms for the
; red, green and blue CRTs. The most significant bit of the count
; (F6) is also fed to a triple bilateral switch (U80) which
; alternates between left side and right side reference voltages for
; each of the DACs. A WE_DAC signal loads data into the DAC
; registers 64 times each scan line.

; Changes from earlier versions:

; All previous versions (1.X) were based on a 16V8 device.

----- PIN Declarations -----

PIN 1	CLK128B	COMBINATORIAL ; INPUT	clock signal
PIN 2	START_FB	COMBINATORIAL ; INPUT	waveform start pulse
PIN 3	I3	COMBINATORIAL ; INPUT	N/C
PIN 4	I4	COMBINATORIAL ; INPUT	N/C
PIN 5	I5	COMBINATORIAL ; INPUT	N/C
PIN 6	I6	COMBINATORIAL ; INPUT	N/C
PIN 7	I7	COMBINATORIAL ; INPUT	N/C
PIN 8	I8	COMBINATORIAL ; INPUT	N/C
PIN 9	I9	COMBINATORIAL ; INPUT	N/C
PIN 10	I10	COMBINATORIAL ; INPUT	N/C
PIN 11	I11	COMBINATORIAL ; INPUT	N/C
PIN 12	GND		
PIN 13	OE	COMBINATORIAL ; INPUT	output enable (test only)
PIN 14	F0	REGISTERED ; OUTPUT	counter output- LSB
PIN 15	F5	REGISTERED ; OUTPUT	counter output
PIN 16	F4	REGISTERED ; OUTPUT	counter output
PIN 17	F3	REGISTERED ; OUTPUT	counter output
PIN 18	F2	REGISTERED ; OUTPUT	counter output
PIN 19	F1	REGISTERED ; OUTPUT	counter output
PIN 20	F6	REGISTERED ; OUTPUT	counter output- MSB
PIN 21	FTC	REGISTERED ; OUTPUT	focus terminal count
PIN 22	ENF	REGISTERED ; OUTPUT	end of focus count
PIN 23	WE_DAC	COMBINATORIAL ; OUTPUT	write enable for DACs
PIN 24	VCC		