

**ECR #: 27**

**Title: Specification for Strobe widths**

**Release Date: Mar. 3, 1997**

**Impact: Clarification**

**Spec Version: A.G.P. 1.0**

**Summary:** The data strobes AD\_STB0, AD\_STB1 and SB\_STB have no min high or low times specified.

**Background:** A minimum high and low time needs to be specified to limit the cases of strobe timing that need to be considered by the designers of AGP-2X receiver interface. A minimum high and low time is also required by the test engineers.

The width of strobe is determined by the edge spacing of the clock used to produce the strobes and the delay skew in the strobe buffer between rising and falling edges. An ideal clock has 7.5 ns edge spacing at 66 Mhz (internal clock of 133 MHz). Real clocks may vary  $\pm 20\%$  because of duty cycle and jitter unless considerable care is used or a yet higher frequency (266 MHz) is divided by two to produce an accurate clock. Buffer skews are design dependent, but skews of 1.0 ns are not unrealistic. The total for these two examples is 2.5 ns.

**Change Current Specification as shown:**

Add these lines to Table 4-4 after the  $t_{TSr}$  spec:

**Table 4-4 A.G.P 2X AC Timing Parameters**

Symbol	Parameter	Min	Max	Units	Notes
...					
$t_{S\text{Low}}$	Strobe width low	5.0		ns	
$t_{S\text{High}}$	Strobe width high	5.0		ns	