

T10/00-231r0

To: T10 Technical Committee
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Date: 8 May 2000
Subject: SPI-4 training pattern DC signal strengths

During the initial DC portion of the training pattern, SPI-4 devices with precompensation enabled will drive signals like this:

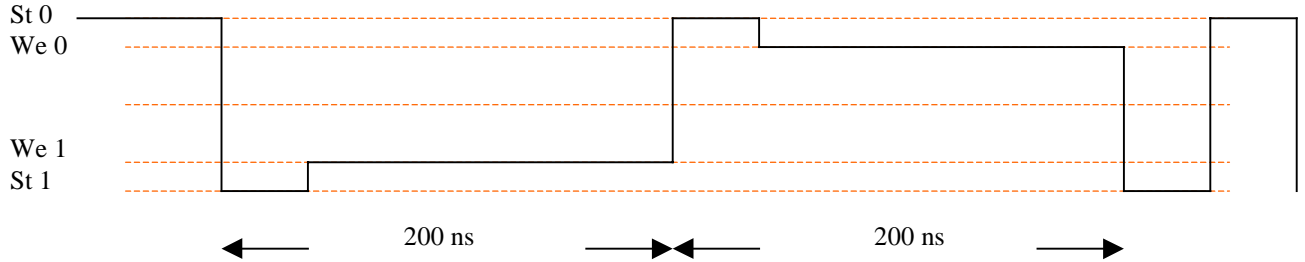


Figure 1. Start of training pattern (SPI-4 revision 0).

This makes the signal less valuable for AAF (adjustable active filter/aka receive equalizer) training, because it makes the “stable” level less stable and adds an 80 MHz edge, which corresponds to the ideal boost frequency, to the signal.

To eliminate this reason from keeping precompensation and AAF from working together, I propose that precompensation drivers use their strong drive strengths for the initial DC portion, not “cutting back” to the weak drive strength. The precompensation drivers should delay introduction of the weak drive strength until the pauses that follow the 80 MHz section of the training pattern.

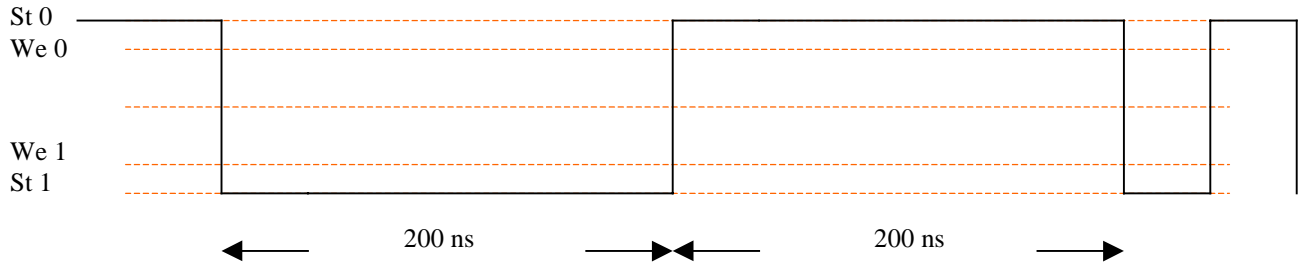


Figure 2. Start of training pattern (proposed).

This does not purport to solve all potential precompensation/AAF interaction problems, just the one described.