

SAS-2 07-386r1 Answer

T10/07-415r0



Never stop thinking

Answer

Harvey,

With jitter turned on then

When DFE ≥ 3 taps then there is no statistical improvement in the eye opening between 2dB and 3dB de-emphasis.

When DFE ≤ 2 then 3dB is more open than 2dB

If we turn jitter off then

When DFE = 3 there is a slight improvement from 2dB to 3dB. (see included).

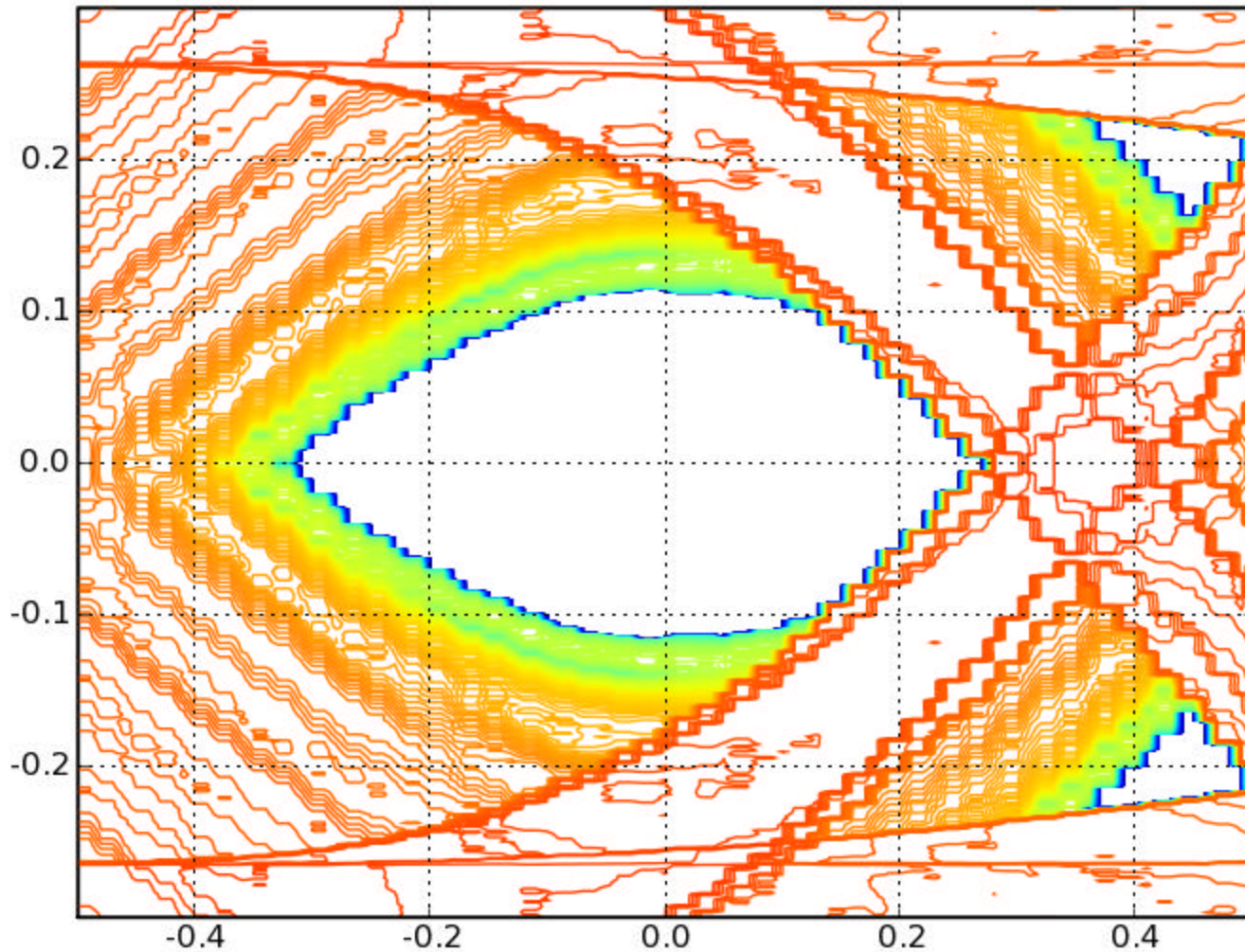
This is explainable because of the relative short run length of 8b10b.

When we have 3 taps then this is already correcting the 8b10b ISI that would otherwise be corrected using the de-emphasis.

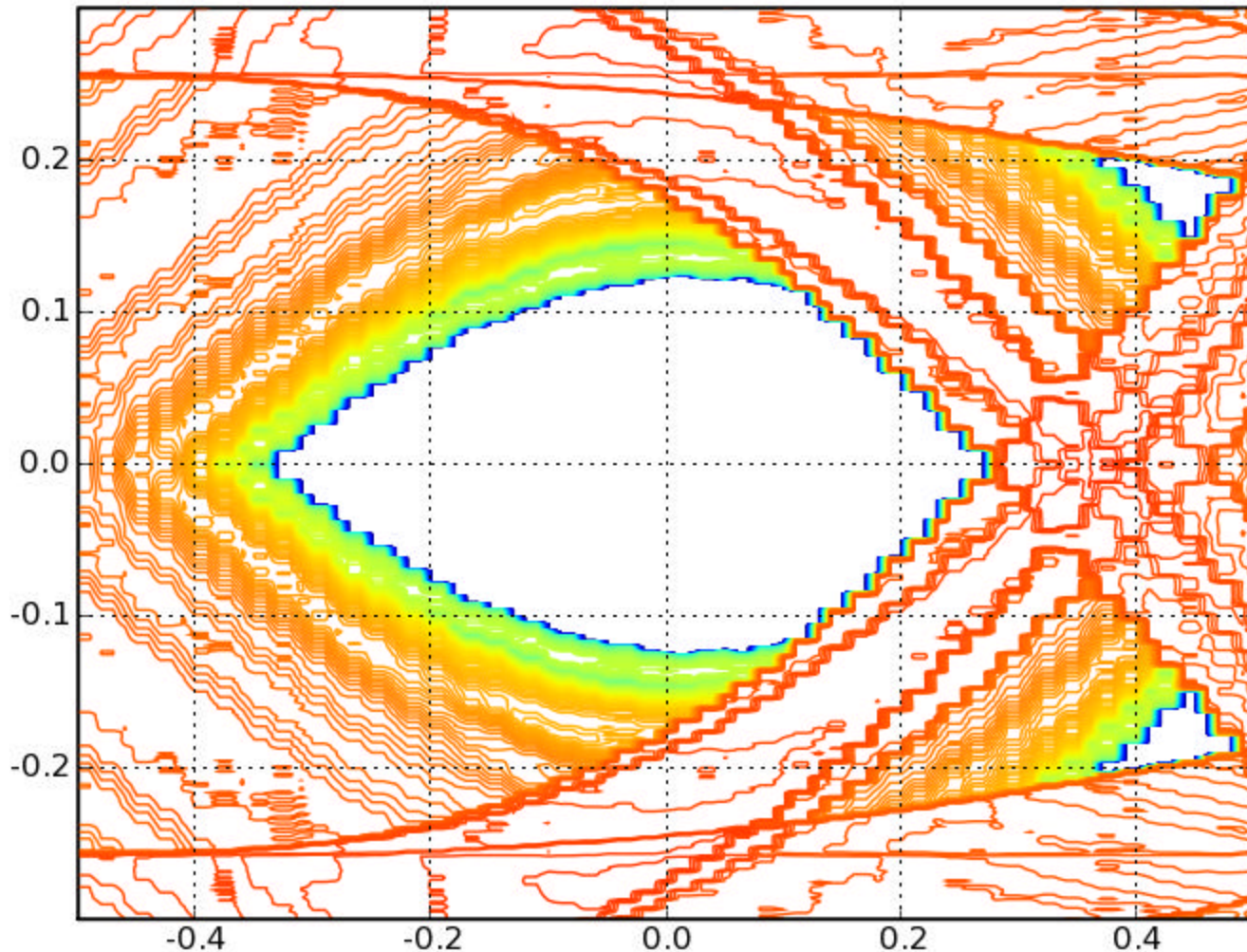
There is also a similar effect we see also with scrambled data, but usually above 5 taps.

Cheers,
Anthony

070908_2_contour_scrambled=0_dfe=2_fir=-0.10_cursor=30_baud=6.0e+09.png



070908_2_contour_scrambled=0_dfe=2_fir=-0.15_cursor=30_baud=6.0e+09.png





We commit.
We innovate.
We partner.
We create value.



Never stop thinking