35dB High Loss FR4 Channel

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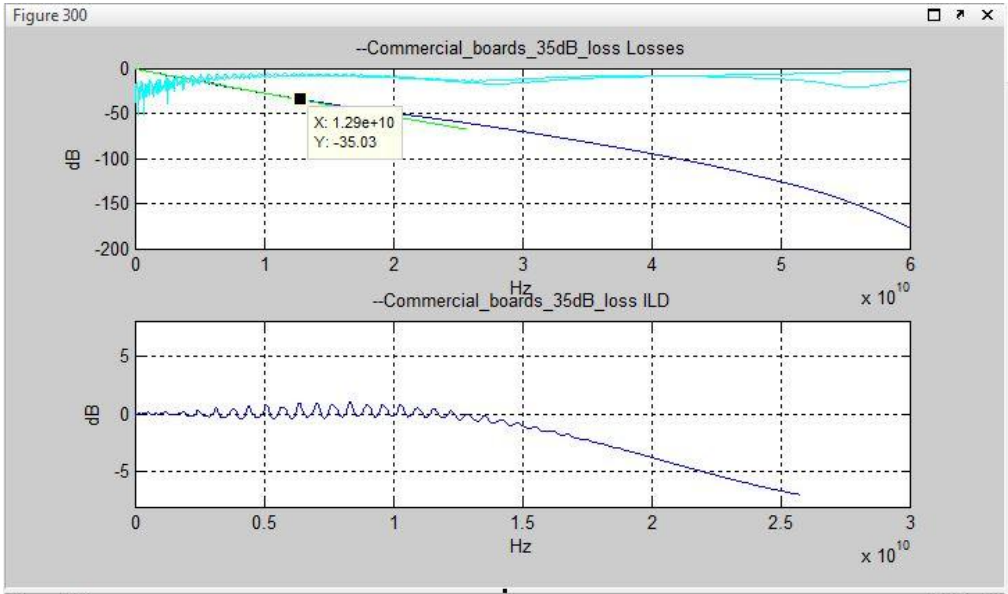
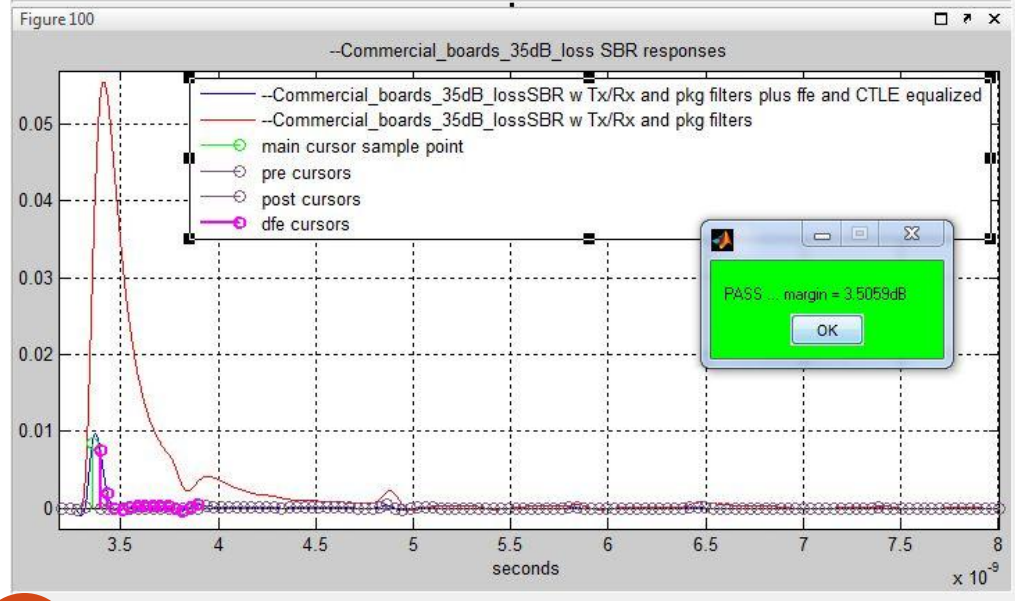
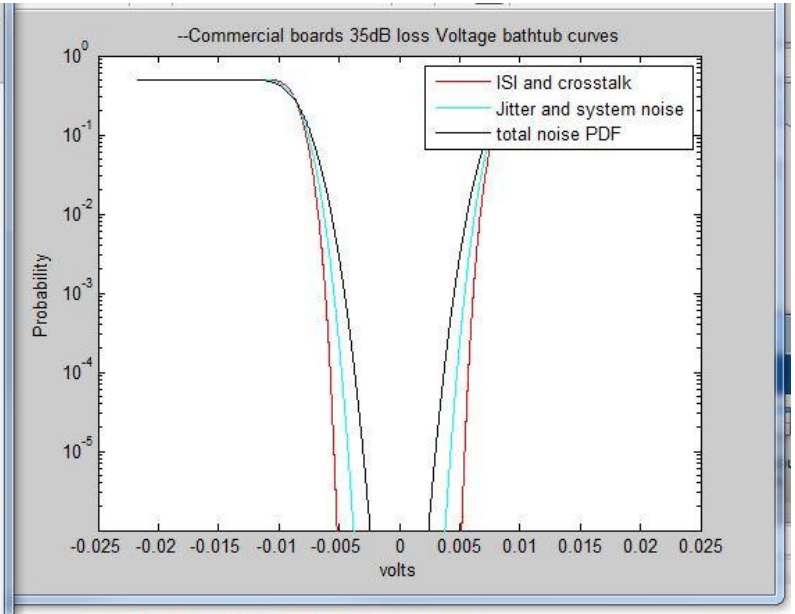
Synthesized channel composition

- Approximately 17 inches of typical low cost FR4 at 85 degrees C and 85% humidity.
  - D_f= 0.025, D_k= 3.8
- Vias and board to board interconnect (connector) are tuned to minimize loss and reflections.
- The transmitter board is 5.5 inches and 90 ohms.
- The backplane/carrier is 7.2 inches at 100 ohms.
- The receiver board is 4.5 inches at 110 ohms.
- Frequency: DC to 60 GHz, 5 MHz steps

Channel Performance for Zd=35mm





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               peak_ISI_mV: 3.1500
  peak_MDXTK_interference_mV: 0
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peak_MDFEXT_interference_mV: 0
available_signal_after_eq_mV: 8.4894
          fit_loss_dB_at_Fnq: 35.0156
                IL_dB_at_Fnq: 35.0010
              baud_rate_GHz: 25.7813
                    ILD_RMS: 0.6002
          equivalent_ISI_ICN: 6.1270e-04
 ctle_zero_poles_acdcgaindB: [1.6190e+09 2.5781e+10 6.4453e+09]
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                  dfe_taps: [14x1 double]
           sci_noise_FD_RMS: 0.1622
max_peak_interference_at_BER: 0.0032
                       FOM: 15.6624
                  dfe4_rss: 0.1096
                file_names: '--Commercial_boards_35dB_loss'
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