EIT Simulation Results

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EIT Simulation Results

- Simulation conditions
  - Channel - ITTC20dB_returnloss
  - Transmitter
    - 800mVpp, 47ps rise time, 50ohm ideal driver 0.13UI DJ, 0.15UI RJ
    - Amplitude measured as 2*Vss (Clause 72.7.1.10), when equalization disabled
- Sinusoidal interferer for 1e-12: 16mVpp
- Broadband noise
  - Assumed a first order pole with 3dB at 6GHz
  - 1e-13   -140.7dBm/Hz   3.9mV RMS
  - 1e-12   -140.1dBm/Hz   4.2mV RMS
  - 1e-11   -139.4dBm/Hz   4.55mV RMS

EIT Simulation Variations

- Measure Vpp using 1010101... pattern
  - Set Vpp = 800mV, with alternating pattern
  - Amplitude similar to Vss = 462mV (925mVpp) with equalization disabled
  - Difference is due to very slow rise time implemented in RC model
  - Sinusoidal interferer for 1e-12: 19mVpp
  - Broadband noise level: TBD

- Change rise time to 24ps
  - Amplitude is 800mVpp with both methods
  - Sinusoidal interferer level for 1e-12: 21.5mVpp
  - Broadband noise level: TBD

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