

Proposed SDD21

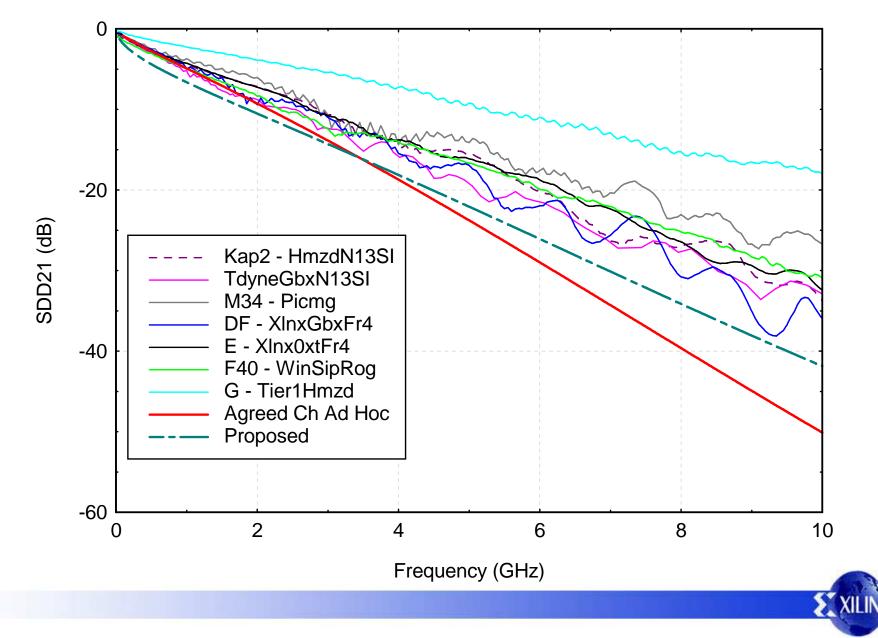
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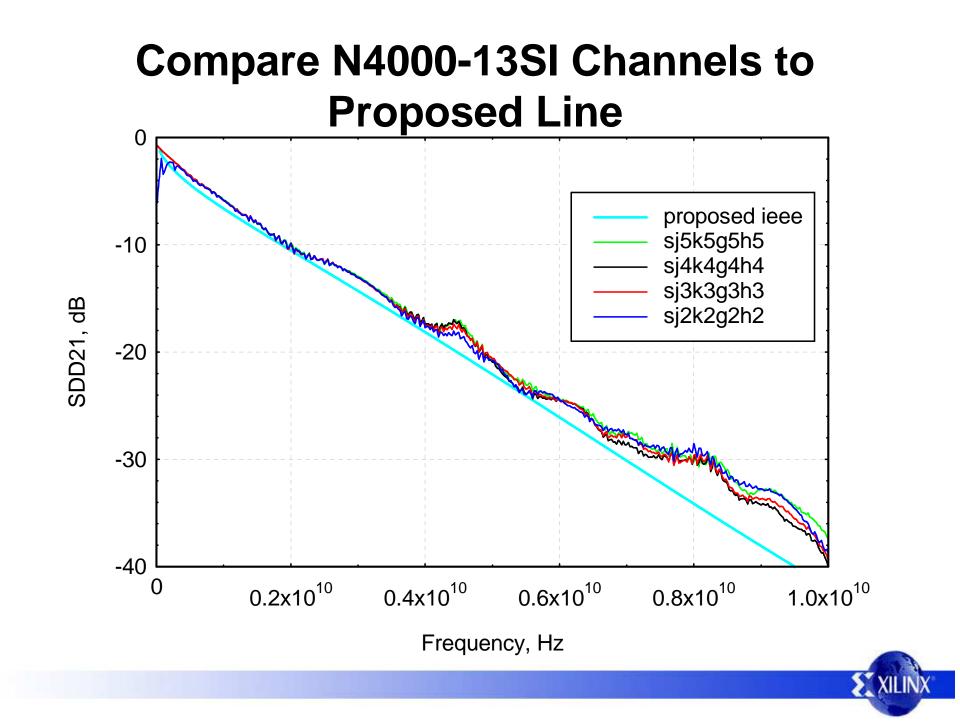
Agenda

- IEEE Should Consider An Alternate SDD21 Magnitude Template
 Using
 - b1 = 2e-5, b2 = 1e-10, b3 = 3.2e-20, b4 = 1.38e-30
- Proposed Line Allows Modeling of Skin Effect
- Study of ParkNelco Data on N4000-13 and N4000-13SI shows that they are above this line.
 - Assumes 50% to 60% resin content
 - Includes Variation Due to Temp and Humidity
 - Assumes 6 mil traces
 - Worst-case N4000-13 and N4000-13SI are about the same
- Compare Backplane Data Presented By Xilinx To Proposed Line
 - Includes Two Connectors
- Compare Recently Received Backplane Data (From Major Backplane Designer/Connector Vendor) on 40-inch Channels Using N4000-13SI To Proposed Line
 - Includes Two Connectors



Compare Backplanes With Proposed Line





Conclusion

- Proposed Line Allows Modeling of Skin Effect
- Proposed Line is a Better Lower Limit to Theoretical and Measured Channels

