

A CORRELATION STUDY BETWEEN COM REFERENCE PKG AND PHYSICAL PKG EXTRACTED MODEL

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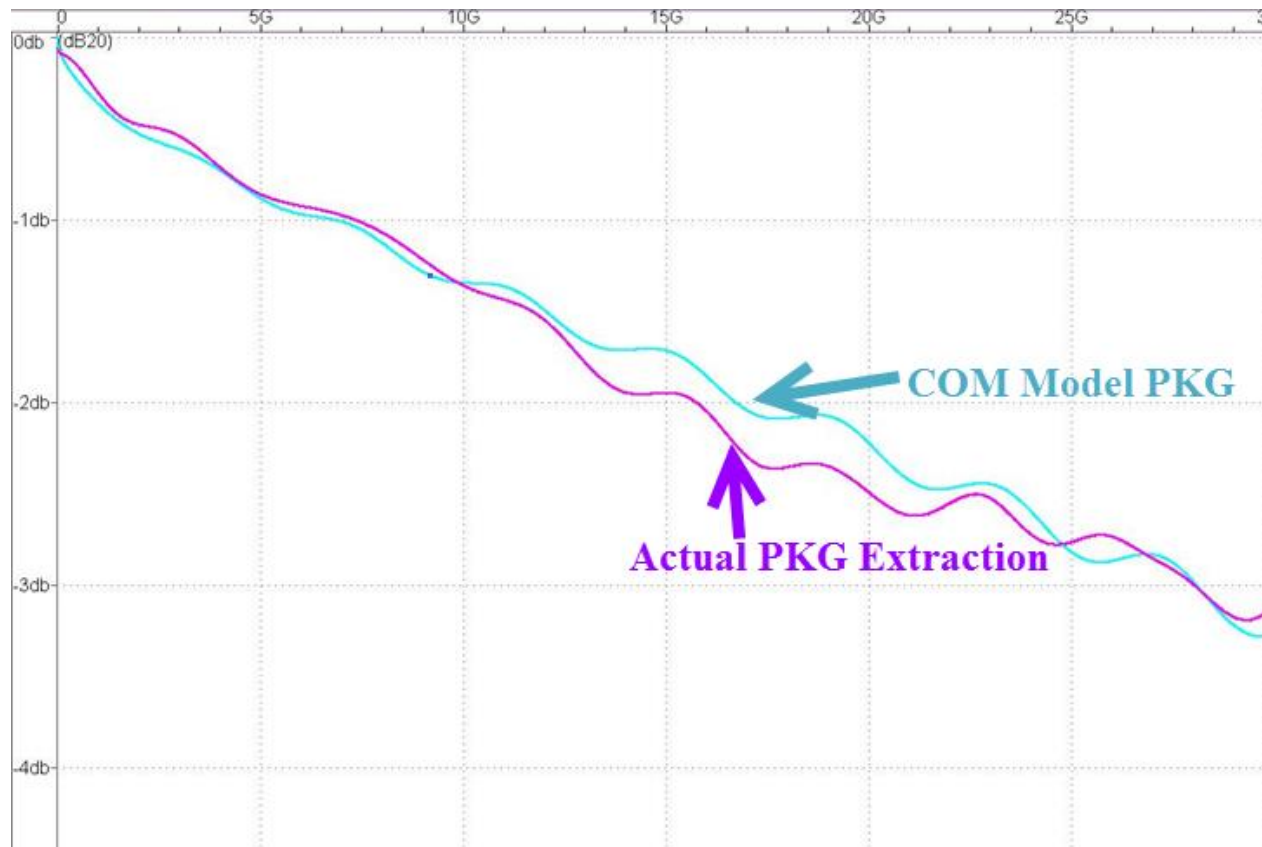
Marvell Israel Ltd.

Executive Summary

- A COM methodology based PKG model as defined for 100GEL provides proper correlation to an extracted PKG model @:
 - 50Gbps/lane
 - Taking No PKG manufacturing tolerance
- A COM methodology based PKG model has a noticeable performance difference compared to the extracted PKG while running 100Gbps before taking into account manufacturing tolerance
- Once decided (suggested straw poll), further adjustment work to be conducted and suggest which of the parameters should be updated in the COM PKG model

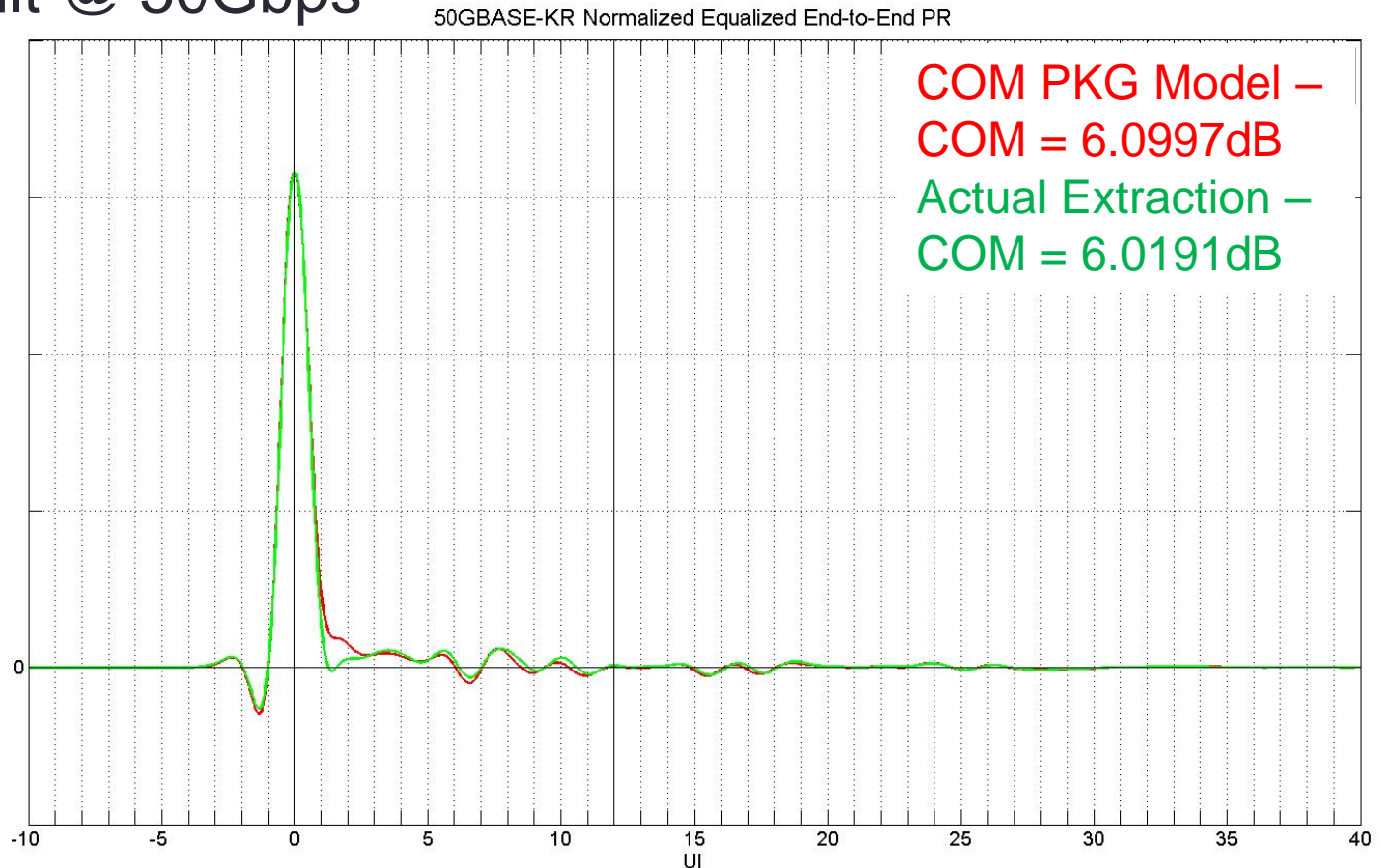
COM PKG Model Vs. Extracted Model

- A 20mm PKG was taken for extraction and compared to a 20mm COM model based PKG



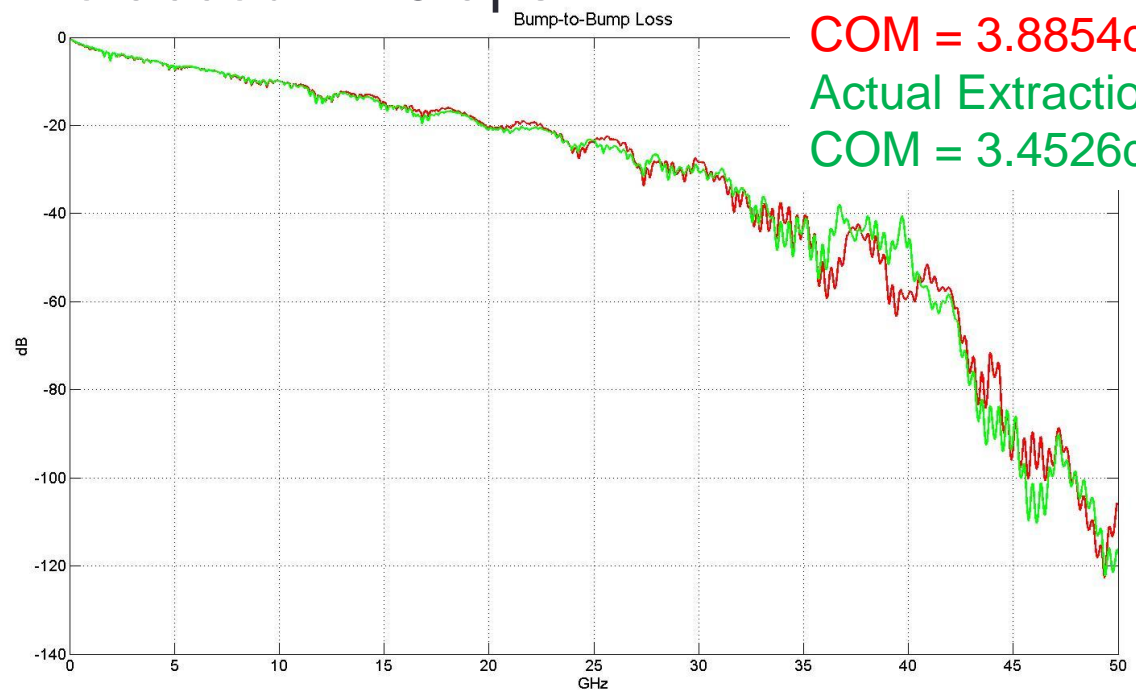
End to End Performance Comparison

- End to end comparison
- Concatenated with mellitz_100GEL_adhoc_02_010318
- COM result @ 50Gbps



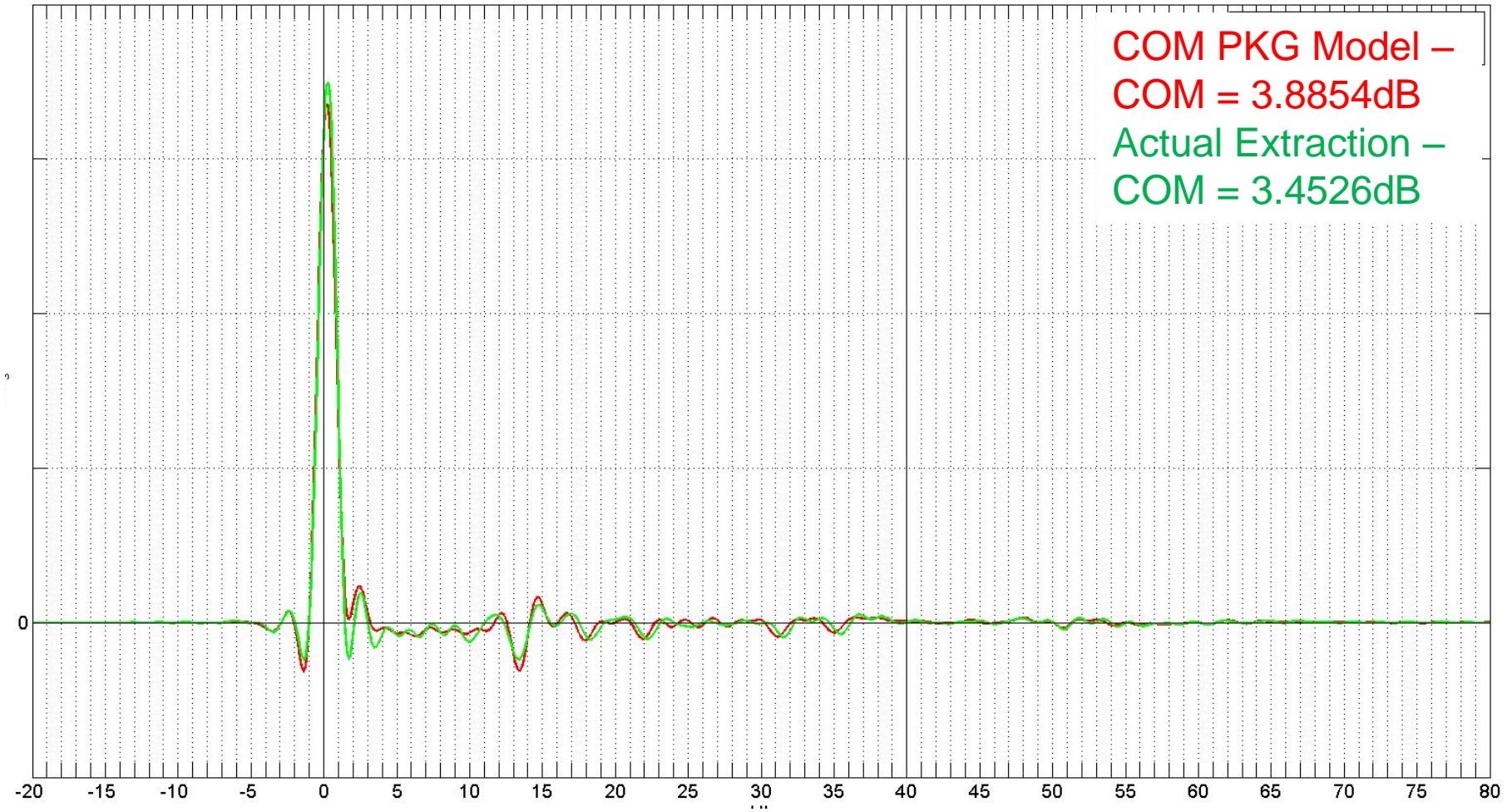
End to End Performance Comparison

- End to end comparison
- Concatenated with mellitz_100GEL_adhoc_02_010318
- COM result taking into account 40taps DFE



COM PKG Model Vs. Extracted Model - SBR

Normalized Equalized End-to-End PR



TDR Comparison

- TDR from Ball-side ; No actual die side front end placed



Thank You!