

Design and Modeling Methodology of Vertical Interconnects (TSV, mC4...) for 3DI technologies in IBM

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My team in Haifa Research Lab was fortunate to follow closely the product generations of IBM 3DI technologies while providing compact semi-analytical high bandwidth spice level simulation models for the entire vertical interconnects - TSV's and mini C4 - plus the models for the standard transmission lines used within each planar strata. In this presentation I will try to discuss the underlying fundamental principles of this vertical interconnect modeling.