Abstracts

An Efficient Recursive Technique for Calculation of Planar Multiple Strips on Composite Substrates for M(H)MIC and High-Speed Interconnects

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A novel technique is proposed to analyze multiple strips or slots on composite isotropic or uniaxial anisotropic multilayer substrates with segments. This technique is based on the method of lines with vertical space discretization to enhance the numerical efficiency. A recursive algorithm is formulated to efficiently analyze composite substrates with segments for reduction of the coupling among the different strips together with cross-talk and pulse distortion in high-speed interconnects. Numerical results are shown for both quasi-static and hybrid-mode analysis. This technique is validated by comparison of the calculated results with literature.

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