Abstracts

Time-domain macromodel of planar microwave devices by FDTD and moment expansion

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The microwave design of highly complex systems can be addressed by segmentation techniques. To this purpose, a subsystem macromodel, such as the impulse response matrix, needs to be computed in an accurate and efficient way. In this paper, we present a combined procedure, based on finite-difference time-domain and a moment-expansion deconvolution by which the impulse response matrix is obtained via time-domain processing only. The algorithm has been tested on microwave planar devices with satisfactory accuracy.

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