Abstracts

A multiresolution MoM analysis of multiport structures using matched terminations

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This paper presents the modeling of microstrip structures involving matched terminations with a one-dimensional multiresolution method of moment (MRMoM). Semiorthogonal spline wavelets are used as basis and testing functions. For large structures, the MRMoM generates a sparse linear system, which permits a significant reduction of the central processing unit time and of the memory storage. The modeling of matched terminations also enables a full characterization of multiport microstrip structures. Theoretical results involving microstrip dipoles are presented and compared with experiments.

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