Abstracts

State of the Art and Present Trends in Nonlinear Microwave CAD Techniques

V. Rizzoli and A. Neri. "State of the Art and Present Trends in Nonlinear Microwave CAD Techniques." 1988 Transactions on Microwave Theory and Techniques 36.2 (Feb. 1988 [T-MTT] (Special Issue on Computer-Aided Design)): 343-365.

The paper presents a survey of modern nonlinear CAD techniques as applied to the specific field of microwave circuits. A number of fundamental aspects of the nonlinear CAD problem, including simulation, optimization, intermodulation, frequency conversion, stability, and noise, are addressed and developed. For each one it is shown that either well-established CAD solutions are available, or at least a solution approach suitable for implementation in a general-purpose CAD environment can be outlined. Also, the discussion shows that the various subjects are not just separate items, but rather can be chained in a strictly logical sequence. Finally an elementary treatment of vector processing is given, to show that supercomputers can handle the involved large-size numerical problems in a most efficient way.

❑ Return to main document.