

Abstracts

Computer-Aided Design for the 1980's

L. Besser, C. Holmes, M. Ball, M. Medley and S. March. "Computer-Aided Design for the 1980's." 1981 MTT-S International Microwave Symposium Digest 81.1 (1981 [MWSYM]): 51-53.

This paper describes a new, third generation computer program called SUPER-COMPACT, that opens a new era in automated microwave circuit design. Although the program is moderately large (approximately 50,000 FORTRAN statements), it can be run efficiently on midi-computers, as well as on most of the large-scale computer systems. The program combines analysis, optimization, and synthesis with interactive graphics for maximum user convenience and efficiency. Databanks, which provide scattering and noise parameters for transistors, dielectric information for substrate materials, and a library of available circuit topologies are integral to the program. While SUPER-COMPACT retains all of the previous capabilities of its first and second generation predecessors, it uses a completely new approach to analyze and optimize microwave circuits. The program utilizes a novel interconnection scheme based upon scattering parameters without requiring the manipulation of large matrices. Both the inputting and outputting of data are handled through interactive graphic terminals.

 [Return to main document.](#)

Click on title for a complete paper.