

Call for Papers

**Special Issue on
Interconnections and Packaging
IEEE Transactions on Microwave Theory and Techniques
to be published September 1994**

With the advancements in MMIC and VLSI technologies, packaging of the resultant high speed digital, and microwave and millimeter integrated circuits and systems in a cost effective and high performance manner has become a major challenge. This special issue will review recent advances in the design, fabrication and volume production of packaging for microwave and millimeter wave MMICs and hybrid circuits and highlight the applications of these microwave oriented techniques to the development of high speed, high density digital integrated circuits and modules. In light of the recent profusion of commercial microwave and high speed digital applications, special attention will be paid to those technologies aimed at high volume, low cost packaging.

Topics of particular interest include, but are not limited to, the following areas:

- o New materials for packages to improve electrical or thermal properties
- o Circuit and electromagnetic modeling and simulation of interconnects and packages including vias, bends, crossovers, wire bonds, multi-conductor structures, leaky-waves, ...
- o Advanced time and frequency domain measurement and characterization techniques
- o Computer aided design, engineering and manufacturing
- o MMIC modules and packaging
- o Low cost, high volume packages
- o Reliability considerations, including RwoH (Reliability without Hermeticity)
- o High speed optoelectronic packages
- o Micron and submicron multilayer interconnects for ULSI/GSI
- o Package testing issues

Professor Vijai Tripathi of Oregon State University and Dr. Douglas Maki of Raytheon will be guest editors of this special issue. Prospective authors are requested to submit five copies of the paper describing original work in the above mentioned areas by September 30, 1993 to:

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