

# Abstracts

## Design and performance of a high density 3D microwave module

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*R. Sturdivant, Chung Ly, J. Benson and M. Hauhe. "Design and performance of a high density 3D microwave module." 1997 MTT-S International Microwave Symposium Digest 2. (1997 Vol. II [MWSYM]): 501-504.*

Microwave packaging involves the electrical interconnection, environmental protection, and thermal management of active components such as MMICs, ASICs, and regulators as well as passive components like resistors, capacitors and substrates. The distinguishing feature between microwave modules and lower frequency modules is that the packaging dimensions are a significant fraction of a wavelength. This requires special care in the design of interconnects and substrate metalization. As packaging densities increase, concerns of coupling and high thermal density often drive the choice of materials and packaging configurations. This work describes the design and performance of a high density microwave module. The development of interconnects, thermal management and coupling reduction are described.

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