Abstracts

Development of a millimeter-wave system-on-a-package utilizing MCM integration

A. Pham, R. Ramachandran, J. Laskar, V. Krishnamurthy, D. Bates, W. Marcinkewicz, B. Schmanski, P. Piacente and L. Sprinceanu. "Development of a millimeter-wave system-on-a-package utilizing MCM integration." 2001 Transactions on Microwave Theory and Techniques 49.10 (Oct. 2001, Part I [T-MTT] (Mini-Special Issue on Electrical Performance of Electronic Packaging (EPEP))): 1747-1749.

We present the development of a system-on-a-package at millimeter-wave frequencies utilizing a commercially available multichip-module process. This technology has established a platform for integrating multiple components of different material systems to combine digital application-specific integrated circuits (ASICs), radio-frequency integrated circuits, and microelectromechanical devices onto a package. The multilayer polymer thin films also empower the design and fabrication of integral passive devices, including thin-film resistors, filters, and Wilkinson power combiners.

❑ Return to main document.