



1993 IEEE MTT-S International Microwave Symposium Digest

Panel Sessions

MTT-S Panel Sessions

Panel Sessions

PSWA: Multifunction MMIC Design: Issues and Tradeoffs

Date: June 16, 1993
Time: 12:00 PM–1:30 PM
Location: Rooms 304/305, GWCC
Sponsor: MTT-6 Microwave and mm-Wave Integrated Circuits
Organizers: Fazal Ali, Westinghouse-ATL
Yalcin Ayasli, Hittite Microwave
Raymond Pengelly, Compact Software
Moderator: Fazal Ali, Westinghouse-ATL
Speakers: Christian Kermarrec, M/A-COM
Don Estrieck, Hewlett-Packard
Phil Wallace, Anadigics
Peter Katzin, Hittite Microwave
Ray Pengelly, Compact Software
Jim Degenford, Westinghouse-ATL
Masayoshi Aikawa, NTT

Abstract:

Recent advances in GaAs MMIC technology developments have resulted in a shift from the design of single function GaAs ICs to more complex multifunction MMICs offering higher levels of integration. From GaAs IC design perspective, tradeoffs between bandwidth, performance, frequency, noise figure, output power, gain/insertion loss and port isolation of several functional blocks are critical. Insertion of these MMICs in practical systems presents major design challenges in overall system architecture definition, component selection and MMIC packaging. This panel session will discuss the design, process and test tradeoff issues, and limitations relevant to the implementation of multiple functions in a single chip for commercial and military applications.