

AFFORDABILITY STRATEGIES IN MILITARY MICROWAVE SYSTEMS

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ABSTRACT

Applications of advanced microwave and millimeter wave integrated circuits have long been dominated by military users. As these technologies have matured, in part because of programs such as MIMIC, commercial users are beginning to apply these components to volume and cost-driven applications. While continuing to use the highest performance GaAs and InP in many

applications, we anticipate that the military user will increasingly try to exploit much lower cost dual-use microwave technologies and manufacturing methods. These include, the use of SiGe, microelectromechanical switches and phase shifters, low-cost flip chip packaging, microwave photonics, and computer-aided engineering tools and environments for first-pass design success.