Abstracts

Analog MMICs for millimeter-wave applications based on a commercial 0.14-/spl mu/m pHEMT technology

H. Zirath, C. Fager, M. Garcia, P. Sakalas, L. Landen and A. Alping. "Analog MMICs for millimeter-wave applications based on a commercial 0.14-/spl mu/m pHEMT technology." 2001 Transactions on Microwave Theory and Techniques 49.11 (Nov. 2001 [T-MTT] (Special Issue on the 2000 Asia-Pacific Microwave Conference)): 2086-2092.

This paper describes recent results obtained from the monolithic-microwave integrated-circuit design activity at Chalmers University, Goteborg, Sweden. The goal is to design all circuits needed for the front end of a 60-GHz wireless local area network and to build various system demonstrators. Some recent experimental results from this activity like different 60-GHz amplifiers, a general-purpose IF amplifier, a 60-GHz resistive mixer, and frequency multipliers are reported in this paper. Parameters such as the gain, conversion loss, noise figure, dc-power dissipation, as well as the model used in the simulations are reported and discussed.

❑ Return to main document.