Abstracts

An MMIC Local Oscillator for 16-QAM Digital Microwave Radio Systems

H. Suwaki, T. Nakagawa and T. Ohira. "An MMIC Local Oscillator for 16-QAM Digital Microwave Radio Systems." 1995 Transactions on Microwave Theory and Techniques 43.6 (Jun. 1995 [T-MTT]): 1230-1235.

The first MMIC local oscillator for 16-QAM digital microwave systems is presented. The key advance is achieving the very low phase noise required by such systems. Low phase noise is realized with a low phase noise VCO (voltage-controlled oscillator) that is installed into a new PLL (phase-locked loop). Although the developed local oscillator is 90% smaller than the existing Dielectric Resonator-based local oscillators, it achieves comparable receiver performance.

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