2.4-GHz VCO DESIGN WITH COMPENSATION OF PROCESS VARIATIONS

E. KURJATA-PFITZNER

Institute of Electron Technology, al. Lotników 32/46, 02-668 Warszawa, Poland

Received September 20, 2002; published December 31, 2002

ABSTRACT

This work presents voltage controlled oscillator (VCO) design intended for integrated transceiver of Bluetooth standard communication system, in which full compensation of process parameters variations can be obtained. This is realized by fitting on chip capacitance of LC resonator in. This capacitance consists of two independent parts - first is used for coarse tuning of resonant frequency and the second is used for tuning inside the band 2.4 GHz.