

Abstract

A Very Low Phase Noise Quadrature VCO is presented, featuring an inherently better Figure Of Merit than the existing architectures. Through an improved circuit schematic and a special layout technique, the phasenoise of the circuit could be lowered amongst the lowest published. The circuit draws 15 mA from a 2V supply. The phasenoise is -136.5 dBc/Hz@600kHz and the Tuning Range is 24% wide at a center frequency of 1.57 GHz.

The Figure Of Merit outperforms other published QVCOs.