



## Passive On-Chip Components for Fully Integrated Silicon RF VCOs

<http://www.firstlight.cn> 2001-12-03

In this work integrated passive devices used in RF VCOs are presented. The operation of on-chip inductors and variable capacitors is outlined along with simple electrical equivalent circuits suitable for hand calculations. Design examples of passive devices operating at 5 and 6 GHz in a commercial HBT BiCMOS process are also presented. The parallel resonator quality factor is computed as a function of inductor L, capacitor C and their respective losses RSL and RSC .

[存档文本](#)