

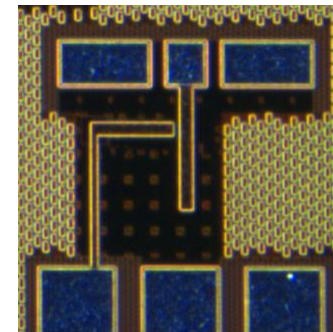
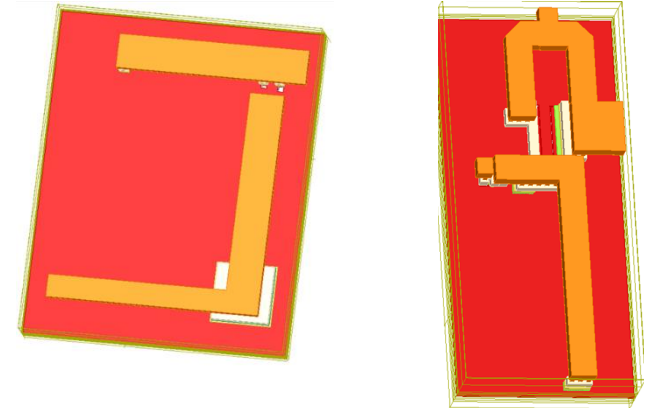
Design of Phase-Shifters at Frequencies above 200 GHz

Recently, there has been a growing interest in millimeter-wave systems with electronic beam steering. A special area of interest is mm-wave radar systems for frequencies above 200 GHz that can provide outstanding resolution.

For such a system, the development of high performance phase shifters is required. The main goal of this thesis work is an investigation of different types of phase shifters to achieve the wide phase coverage with minimum insertion losses while keeping a compact circuit size. The circuits will be EM-simulated and designed by using state-of-the-art 0.13 μm SiGe BiCMOS technology.

Requirements:

- Basic knowledge ADS Momentum, Cadence
- Understanding of RF-IC theory



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