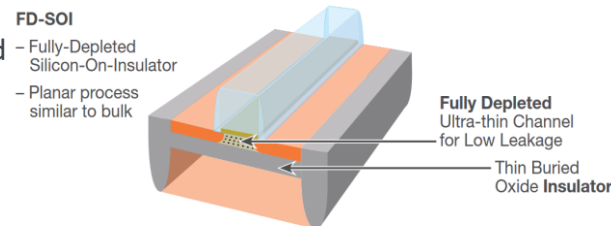


Forschungsarbeit / Masterthesis

Nowadays at times of 5G, IoT and autonomous driving systems and subsystems are becoming more and more important in the mmW-range. In order to shrink the size of those systems Globalfoundries delivers with his 22nm process a cutting-edge technology and is leading in performance in the CMOS domain.



source:
<https://www.globalfoundries.com/sites/default/files/product-briefs/pb-22fdx-soi-25-web.pdf>

Core of this thesis: **DESIDE YOURSELF!**

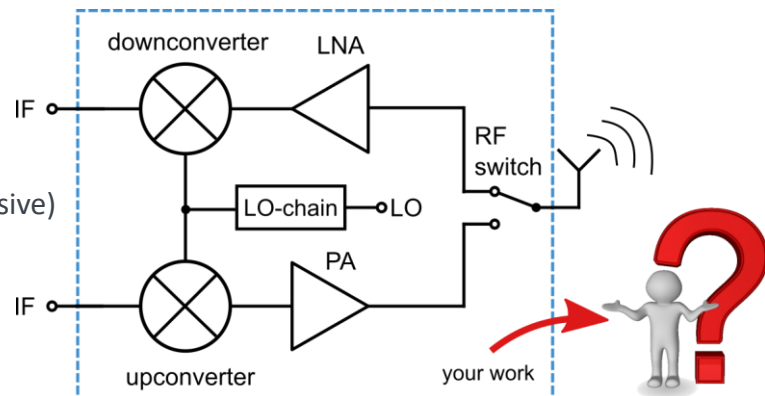
The topic of this thesis is totally up to you. You can design one or more components of a whole Transceiver system. Investigate the technology limits and decide witch topology of a mixer, power amplifier, low-noise amplifier, switch, multiplier is most suitable to achieve the best system performance!

Goals of this work

- design of at least one transceiver component
- make a system evaluation
- evaluation of different topologies (active and passive)
- investigation of the limits of this technology
- is the system performance reachable?

You are perfectly suited if:

- you are interested in integrated circuit-design
- you have a good knowledge in the RF/mmW domain
- you have already experience with developing tools like Cadence or ADS



If you are interested and need more information just feel free to contact me!

Language: German/English

