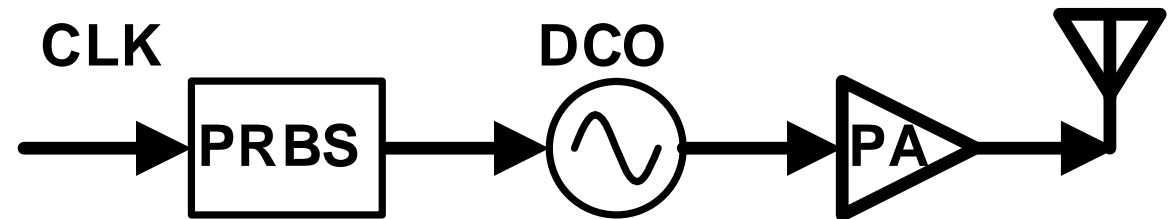


Design of high-speed modulated DCO for FSK transmitter in 65nm CMOS

Background

In an FSK transmitter, the DCO is used to generate the carrier frequencies, which is modulated by the baseband data. The requirement of the DCO for the modulation is the wide output swing and low power consumption.



Tasks

The student's task is the design of high-speed DCO:

- Literature research on CPFSK transmitter, DCO design at 60 GHz, phase noise, and high-speed switch
- IC Design of high-speed switch and DCO (tuning range up to 7 GHz)
- Layout and EM simulation

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