



iGP: Smart City

iGP Module: All Digital PLL Supporting BLE for IoT

Lead Supervisor: Dr. Maged Ghoneima

Frequency synthesizer is a critical block in RF transceivers, traditional analog techniques is limiting both the area & power reduction in deep sub-micron nodes that is targeting IOT applications. In this project we are going to implement an all-digital PLL that will be used for the LO generation for Bluetooth low energy transceiver. This ADPLL should meet all the BLE requirements. Also it will be used as GFSK modulator in direct PLL modulation scheme.