



iGP: Smart City

iGP Module: LTE PHY Scanner

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An LTE PHY Scanner is crucial for LTE network planning and optimizing for better coverage, which normally done by Drive / Walk test providers.

An LTE PHY Scanner carries out LTE transmitter tests which can be divided into,

1. Power measurements(transmit power and output power dynamics),
2. Signal quality measurements (frequency error and modulation tests (EVM, carrier leakage, spectral flatness).
3. Spectrum measurements (spurious emissions, ACLR, spectrum emission mask, occupied bandwidth).

Key Tasks

1. Simulate different LTE PHY Rx blocks.
2. Building LTE PHY Rx blocks on a DSP using C language.
3. Decoding LTE PHY different signals.
4. LTE PHY packet decoding to get useful info like cell id.

Key Skills

1. Excellent Embedded C programming.
2. Excellent understanding of DSP algorithms.
3. Understanding of LTE PHY.