802.16e Mobile WiMAX Toolkit

Overview

SeaSolve's WiMAX Toolkit provides a set of individual, reconfigurable LabVIEW VIs for various downlink and uplink tests. The tests perform analysis and generation of IEEE 802.16e PHY (physical layer) RF transmission parameters.

The test VIs can be integrated into the manufacturing process or can be utilized in the design validation of 16e WiMAX devices.

The toolkits are designed to be used as .dll/.llb libraries for testing the receiver and transmitter performance of the WiMAX device. APIs are optimized for execution time / functionality and are best suited to be used in a Production/ Manufacturing Test Environment.

WiMAX Toolkit VIs

Configuration VIs help to configure the RFSA for Power Spectral and Time Domain **Measurements**

Acquisition VIs return the waveform acquired by the RFSA for Power Spectral and Time Domain Measurements.

Measurement VIs include EVM, PSD, CFO, Spectral Flatness, BER and Receiver Sensitivity VIs that aid the testing process

Transmitter Test Configuration

- Attenuation level
- Reference level
- Hardware settings
- Trigger voltage levels
- Channel of Operation

Receiver Test Configuration

- Power level
- Hardware settings
- Channel of Operation
- Number of packets for transmission

Supported Tests

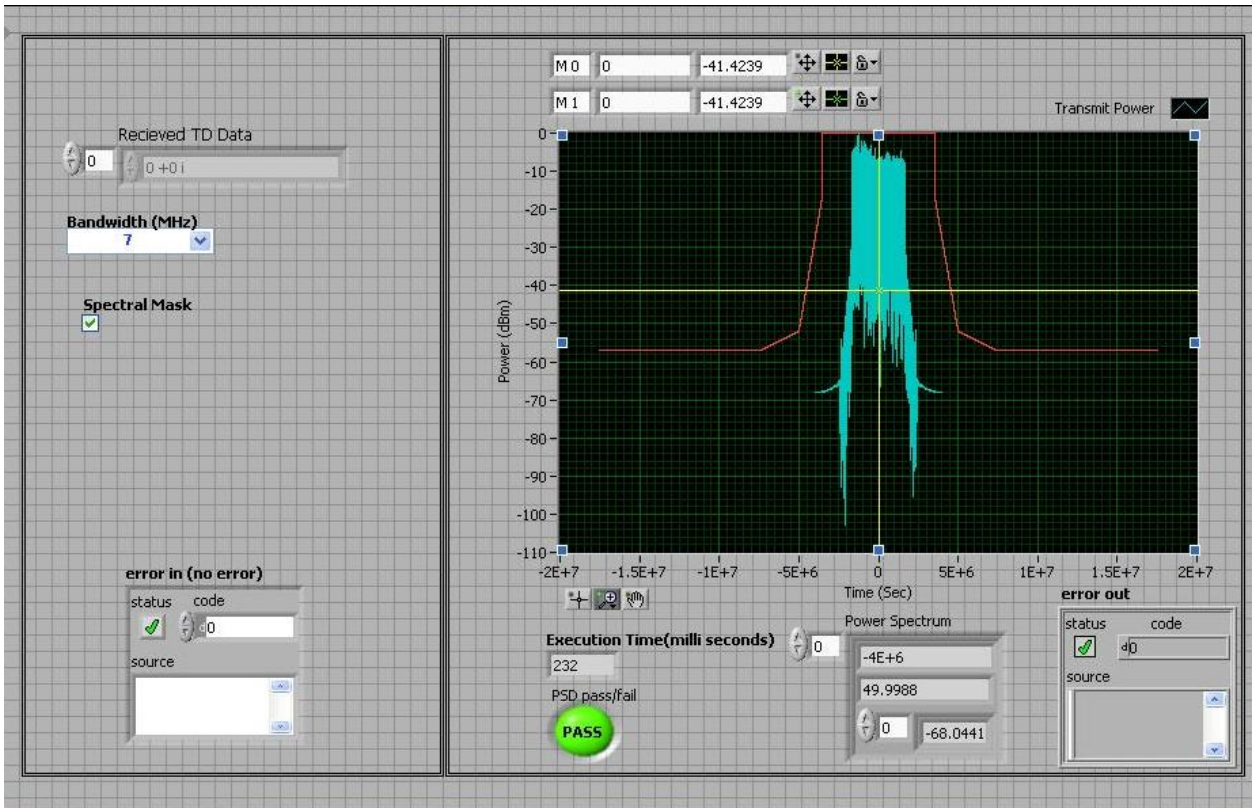
Transmitter Tests

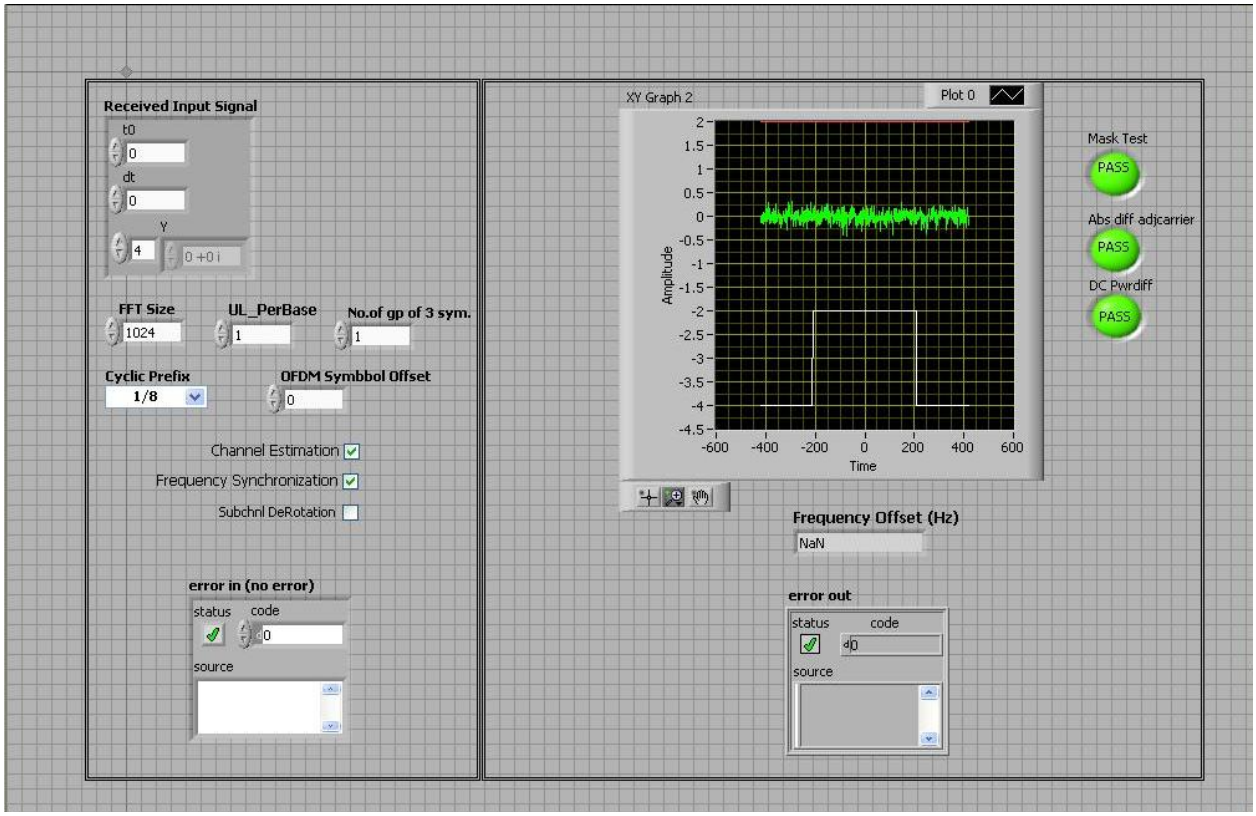
- Spectrum PSD Mask
- Error Vector Magnitude
- Transmit Center Frequency Tolerance
- Spectral Flatness

Receiver Tests

- Receiver Sensitivity
- BER

Snapshots





Block Diagram