# zSeries Software Release 5B+5C

The latest zSeries release 5B+5C offers expanded testing capabilities in support of our updated hardware … providing you with new functionality.

## New Hardware



### z8820 – Controller Module

- Digital input/output and power controller
- 2 remote controller interfaces
- 2 DC Power Supplies +6 V at 3 A total for both channels
- 8 bi-directiona lDIOs per channel (16 total)



### z8612 – RF Downconverter

- 20 GHz Spectrum analyzer extension to z8653 VSA in zFind when connected with a z8653.
- Must be in same backplane trigger bus as z8653

## zSignal

zSignal Spectrum Analysis mode has been expanded and improved to support new hardware. It can also be used in BB/IF and RF without z8612. Spectrum Analysis mode has also been greatly improved and it is now able to use PC-based math to expand calculations. Spectrums are faster, have more options, and more associated math.
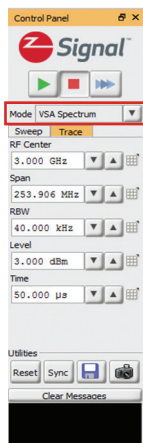


### VSA Spectrum

- Use to be the only mode
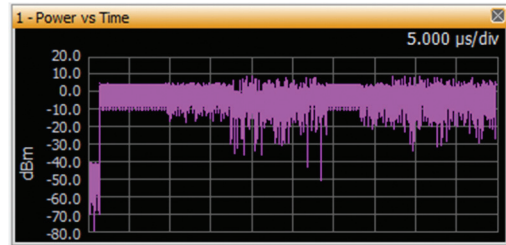- Spectrums are calculated on hardware taking a sweep of 1 GHz of less



### Spectrum Analysis

- PC runs the calculations at a very fast pace
- Spectrum analysis of the whole frequency domain

## zSignal VSA Spectrum Mode

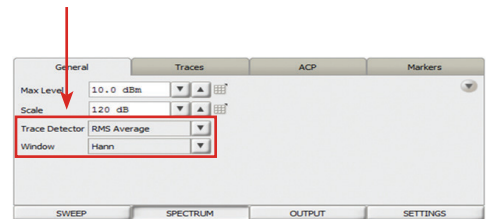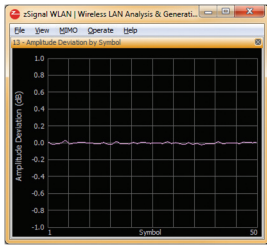Power vs. time measurement available





## zSignal- VSA Spectrum Analysis Mode

zSignal was expanded to include markers and ACP measurements. New testing capabilities such as harmonic testing and spurious emissions are available, taking full advantage of the new hardware. New VBW, trace detector and window controls.
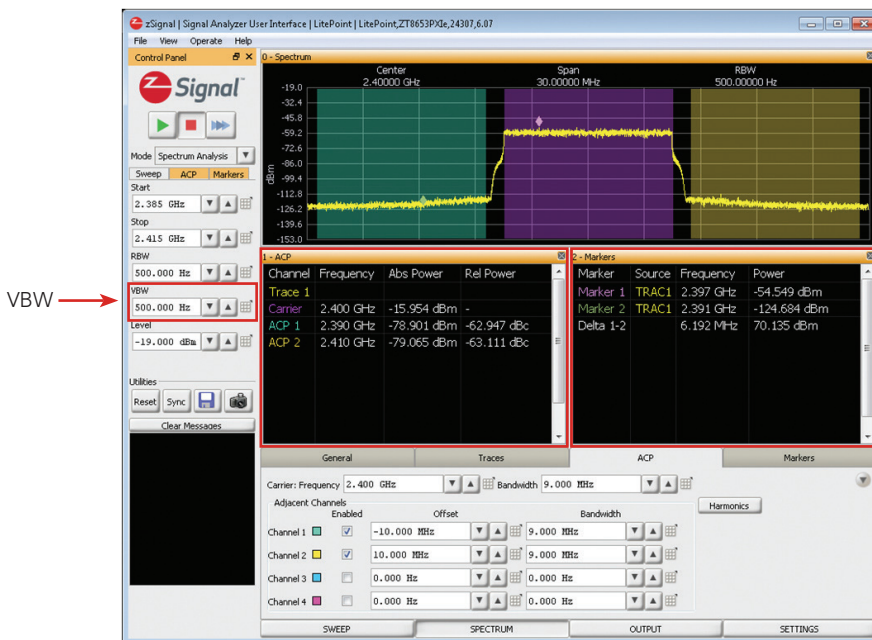


Trace Detector Window



VBW

## WLAN

**NEW** Amplitude vs. Symbol measurement display available requires amplitude tracking enabled. Measurements can be used to check PA gain drop.

## Cellular

Cellular gives the ability to add a second component carrier: CC2

WCDMA Crest Factor Reduction is available in Cellular Waveform Creator. It can help reduce output peak-to-average ratio and avoid high EVM and high adjacent channel leakage ratio (ACLR). Other new controls in Waveform Creator are MCS, PN seed and data type.
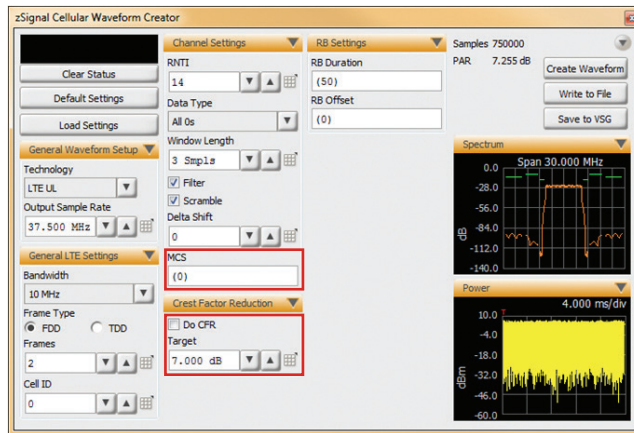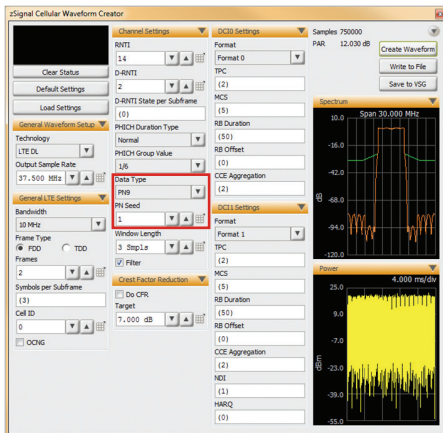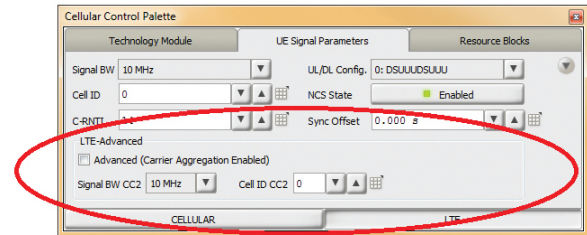
## LabVIEW

**NEW** LO Synth Drivers for z8801 8 GHz PXI Local Oscillator
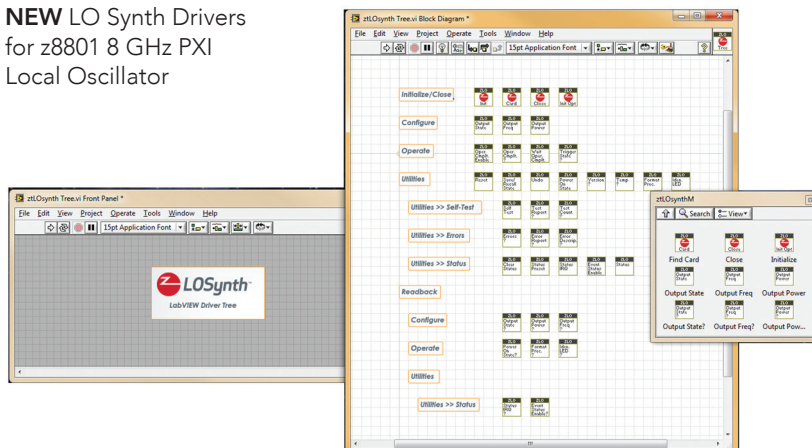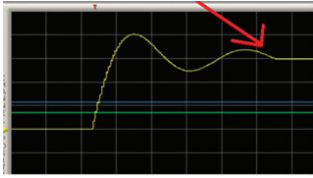
## zScript

z5211 AWG PA now has the option to enable a ripple shape. Ripple enabling is designed to give more realistic results. The ripple's length, maximum overshoot and frequency are configurable.

## EVM Improvement

EVM of <-50 dBm for 802.11ax is achieved by improving the tester performance. New VSA second auto-level mode (applies less headroom) and VSG linearization produce better and more consistent EVM performance.