

# Comments and Corrections

## Errata for “A TDC-Free Mostly-Digital FDC-PLL Frequency Synthesizer With a 2.8–3.5 GHz DCO”

Several errors were made by IEEE during the typesetting process of [1] through no fault of the authors. Although the authors made IEEE aware of these errors prior to publication of [1], an oversight by IEEE prevented three of the errors from being corrected. The errors corrupted the Equations (1), Fig. 11, and Table I in [1], corrected versions of which are as follows:

$$L_{PI}(z) = K_P + K_I \frac{1}{1-z^{-1}}, \quad L_{LPF}(z) = \prod_{i=0}^3 \frac{\lambda_i}{1-(1-\lambda_i)z^{-1}} \quad (1)$$

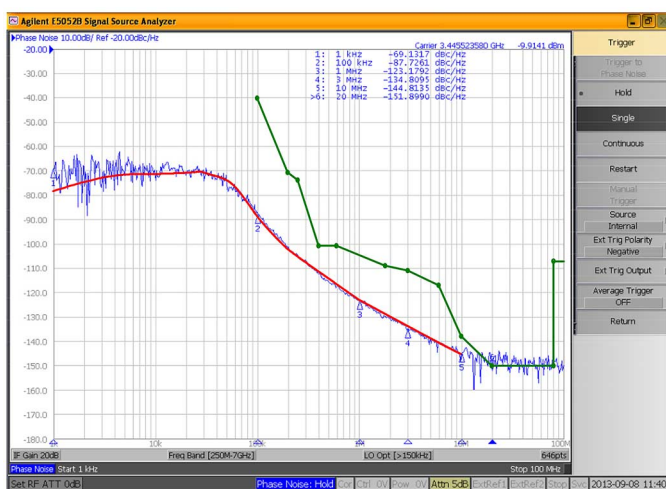


Fig. 11. Representative measured FDC-PLL phase noise spectrum, the corresponding phase spectrum predicted by the theoretical results, and the GSM phase noise mask.

Manuscript received August 05, 2015; accepted August 05, 2015. Date of publication August 20, 2015; date of current version August 27, 2015.

Color versions of one or more of the figures in this paper are available online at <http://ieeexplore.ieee.org>.

Digital Object Identifier 10.1109/JSSC.2015.2465572

TABLE I  
SUPPLY VOLTAGES AND MEASURED CURRENT CONSUMPTION OF THE VARIOUS FDC-PLL CIRCUIT BLOCKS

Circuit	Supply Voltage	Current
Digitally Controlled Oscillator	1.0 V	9.84 mA
Fine-Bank FCE Flip Flops	1.0 V	0.13 mA
DLC, DCO input encoder and $\Delta\Sigma$ modulator	1.0 V	2.04 mA
Charge Pump, PFD, and ADC	1.2 V	1.85 mA
Divider	1.0 V	0.36 mA
Bias Generator	1.2 V	0.96 mA
Crystal Oscillator Buffer	1.2 V	0.65 mA
Divider Buffer and Output Buffer	1.0 V	4.41 mA

## REFERENCES

- [1] C. Venerus and I. Galton, “A TDC-free mostly-digital FDC-PLL frequency synthesizer with a 2.8–3.5 GHz DCO,” *IEEE J. Solid-State Circuits*, vol. 50, no. 2, pp. 450–463, Feb. 2015.