

# Comments and Corrections

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## Corrections to “Area-Efficient Low-Noise Low-Spur Architecture for an Analog PLL Working From a Low Frequency Reference”

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In [1], two equations were omitted, and one equation was misplaced during proofing. The correct equations in the second paragraph of Section I (page 331) should be as follows.

The 3-dB bandwidth  $\omega_{3\text{dB}}$  and damping factor  $\zeta$  of this response are given by [6]

$$\begin{aligned}\omega_{3\text{ dB}} &\approx \frac{K_v}{M} I_{\text{CP}} R_1 \\ \zeta &= \frac{1}{2} \sqrt{\frac{I_{\text{CP}} K_v C_1}{M}} R_1\end{aligned}$$

where  $I_{\text{CP}}$  is the charge-pump current and  $K_v$  is the voltage-controlled oscillator gain (in hertz per volt).

The correct equations in the first paragraph of Section II (page 332) should be as follows.

It can be shown that, with this loop filter, the 3-dB frequency and damping factor for the phase-locked loop are given by

$$\begin{aligned}\omega_{3\text{ dB}} &\approx \frac{K_v V_{DD}}{\alpha M} \frac{C_2}{C_1} \\ \zeta &\approx \frac{1}{2} \sqrt{\frac{K_v V_{DD} R_1}{\alpha M C_1}} C_2\end{aligned}$$

where  $V_{DD}$  is the amplitude of the UP/DOWN pulses.

We sincerely regret these editing errors and any inconvenience this may have caused to the readers.

## REFERENCES

- [1] X. Pu, A. Kumar, and K. Nagaraj, “Area-efficient low-noise low-spur architecture for an analog PLL working from a low frequency reference,” *IEEE Trans. Circuits Syst. II, Exp. Briefs*, vol. 59, no. 6, pp. 331–335, Jun. 2012.

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