Errata

Figure 32.2.3 of [P4].

By using,

$$V_{LOVDD} = \overline{B}V_{DD} = \frac{C_{DP} - C_{DN}}{C_{DP} + C_{DN}} \frac{V_{DD}}{2} + \frac{V_{DD}}{2},$$

where $V_{DD}$ is the supply voltage, the output bit average $\overline{B}$ of the $\Delta \Sigma$ front-end is converted from the domain $[0, 1]$ to $[0, V_{DD}]$.

The first term of the equation has been used for the output value $V_{OUT}$ in [P4], which is valid when $V_{REF} = V_{DD}/2$. Therefore, it is misleading and in the other publications only $\overline{B}$ is used.

Figure 15 of [P6].

In [P6], the datasheets of ADXL346, CMA3000-D01, and LIS3LV02DQ have been misinterpreted, and thus the calculated FOMs are incorrect. The recalculated FOMs are redrawn in the figure shown below. In addition, to clarify the interpretations, the bandwidths used in the calculations are also reported.

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1. 1-axis accelerometer
2. Operates mechanically in closed-loop
3. Analog accelerometer
4. Assumed that noise floor does not change when bandwidth and current consumption are decreased
5. Mechanical noise floor used in (19)
6. Mechanical bandwidth used in (19)