

# Microsystem Design

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## ERRATA

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This file lists Errata that remain in the seventh and higher printings.

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- p. 41 This error is part of a “comedy of errors.” In the original version, the units of  $D_o$  were correctly listed as  $\text{cm}^2/\text{sec}$ . Then, for reasons unknown, I was persuaded that a factor of  $10^{-13}$  was missing, so I changed the units in the seventh and subsequent printings. Guess what! The units were correct as originally published. So please ignore the factor of  $10^{-13}$  in the heading of Table 3.4
- p. 55 The second sentence of the first paragraph has the references to Masks 1 and 2 reversed. The sentence should read: “The feature in the upper layer patterned with Mask 2 can be incorrectly placed with respect to the lower feature patterned with Mask 2.”
- p. 144 This error is the result of intellectual exuberance (and a lack of detailed thought). In the middle of the first full paragraph, it boldly states that “All linear transducers based on energy-conserving physical behavior such as electromagnetism and linear elastic behavior are reciprocal.” The problem is that the gyrator is not reciprocal, it is anti-reciprocal, with  $T_{EM} = -T_{ME}$ .
- pp. 234-235: The factor  $\sqrt{2/L}$  which appears as a prefactor in Eqs. 9.143 through 9.146 should be replaced by  $(2/L)$ , which can be demonstrated by substituting Eq. 9.142 into Eq. 9.137.
- p. 445 There is a minor numerical error in going from Eq. 16.39 to Eq. 16.40. The factor of 2 in the  $1/f$  term was omitted, so the correct numerator for the second term in Eq. 16.40 is  $1.44 \times 10^{-7}$ . This error has an obvious effect on the calculations that follow, increasing the minimum detectable temperature change to about 2 mK (Eq. 16.44) and, correspondingly, increasing the RMS noise calculated from Eq. 16.49 by  $\sqrt{2}$ .
- p. 511 There is a drafting error in Figure 19.14: The connection from the  $R_1-R_2$  node should be to the negative side of the  $V_{os2}$  source, which should be disconnected from ground.
- p. 511 There is a typographic error in Equation 19.14. The denominator term  $AR_1$  should be  $AR_2$ .