Fundamentals of High-Frequency CMOS Analog Integrated Circuits

ERRATA

p. 17, footnote, last character: 4 $\rightarrow$ L

p. 21, Fig. 1.16 caption: t_{ox} = 5 nm $\rightarrow$ T_{ox} = 5 nm

p. 82, line 9: $V_{DS3} \geq (G_{GS3} - V_{TN})$ $\rightarrow$ $V_{DS3} \geq (V_{GS3} - V_{TN})$

p. 102, 9th line from top: (3.9) $\rightarrow$ (3.9a)

p. 116, 18th line from top: (3.3) $\rightarrow$ (3.2)

p. 117, 2nd line from top: (3.3b) $\rightarrow$ (3.33b)

p. 121, 12th line from bottom: (3.43(b)) $\rightarrow$ (3.43)

p. 123, 3th line from top: $\bar{g}_{ds} = \bar{g}_m Z$ $\rightarrow$ $\bar{g}_{ds} = \bar{g}_m$

p. 158, exp. (4.7): $\omega^2_{\max} = \frac{1}{LC}\sqrt{1+2r_L^2 C} - \frac{r_L^2}{L^2}$ $\rightarrow$ $\omega^2_{\max} = \frac{1}{LC}\sqrt{1+2r_L^2 \frac{C}{L} - \frac{r_L^2}{L^2}}$

p. 166, 10th line: = 1V (or V_{GS1}) =1.5V, $\rightarrow$ = 1V (or V_{GS1} = 1.5V),

p. 166, 14th line:

$$\left(\frac{W}{L}\right)_2 = \left(\frac{W}{L}\right)_1 \frac{(V_{GS1} - V_T)(1+\lambda_n.V_{DS1})}{(V_{GS2} - V_T)(1+\lambda_n.V_{DS2})} = ... \rightarrow$$

$$\left(\frac{W}{L}\right)_2 = \left(\frac{W}{L}\right)_1 \frac{(V_{GS1} - V_T)^2(1+\lambda_n.V_{DS1})}{(V_{GS2} - V_T)^2(1+\lambda_n.V_{DS2})} = ...$$

p. 167, Prob. 4.2., 2nd line: *Example 4.1.* $\rightarrow$ *Example 4.2.*

p. 168, 20th line: From (4.24) $\rightarrow$ From (4.24a)

p. 183, 7th line: p_{12} $\rightarrow$ s_{p12}
9th line: p_{11} $\rightarrow$ s_{p11}, p_{13} $\rightarrow$ s_{p13}

p. 187, 1st line: $g_m = \sqrt{2\mu_n C_{ox}(W/L)I_D}$ $\rightarrow$ $|A_{v2}(f_0)| = g_m \times 1257$

p. 217, 6th line: .. R_D can be considered as a part of the effective load resistance.

p. 218, 1st line: $g'_{m(S'D)(eff)} \quad \rightarrow \quad g'_{mSD(eff)}$

p. 239, exp. (5.1) : $L' = L + \dfrac{R_L^2}{\omega_{(\mathrm{Re})}^2 L} \quad \rightarrow \quad L' = L + \dfrac{r_L^2}{\omega_{(\mathrm{Re})}^2 L}$

p. 239, exp. (5.2) : $C' = \dfrac{C}{1 + \omega_{(\mathrm{Re})}^2 C^2 R_C^2} \quad \rightarrow \quad C' = \dfrac{C}{1 + \omega_{(\mathrm{Re})}^2 C^2 r_C^2}$

p. 240, last line: paralel to a capacitance equal to $C_o = (C_{gs}/2) + (C_{db}/2)$.

p. 243, 8th line: total capacitance → resonance capacitance

p. 247, exp. (5.14) : $\omega_{osc} = \omega_0 \sqrt{1 + r \cdot g_{ds} \dfrac{C_2}{C_1 + C_2}} \quad \rightarrow \quad \omega_{osc} = \omega_0 \sqrt{1 + r \cdot g_{ds} \dfrac{C_1}{C_1 + C_2}}$

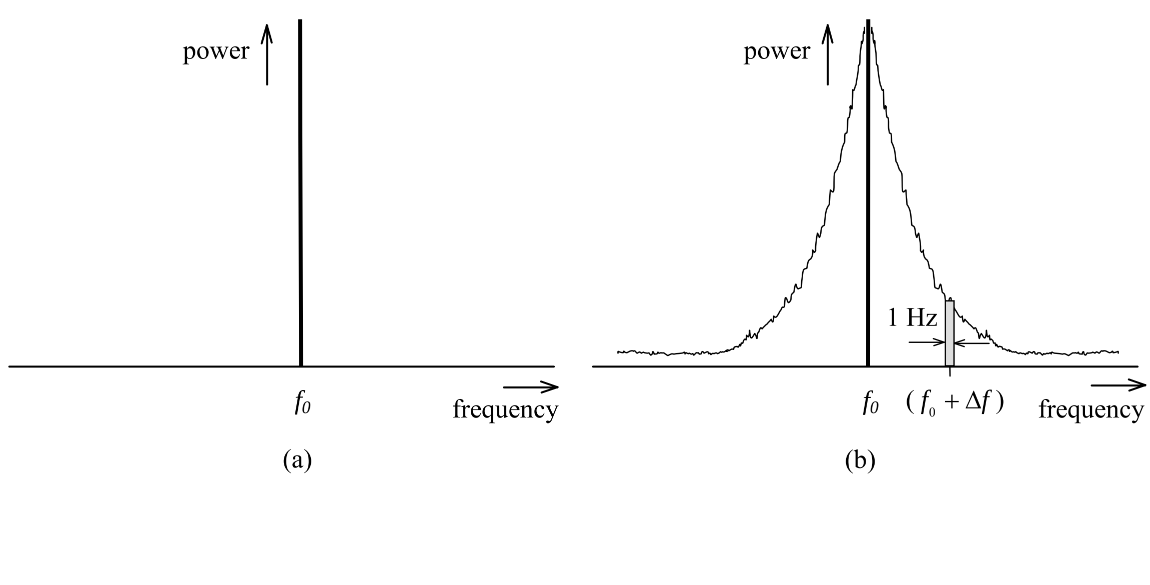
p. 247, exp. (5.15a) : $g_m \cong \dfrac{1}{r_{eff}} \dfrac{C_1 + C_2}{C} \quad \rightarrow \quad g_m \cong \dfrac{1}{R_{eff}} \dfrac{C_1 + C_2}{C}$

p. 247, exp. (5.15b) $g_m \cong k_s \dfrac{1}{r_{eff}} \dfrac{C_1 + C_2}{C} \rightarrow g_m \cong k_s \dfrac{1}{R_{eff}} \dfrac{C_1 + C_2}{C}$, $C = \dfrac{C_1 C_2}{C_1 + C_2}$

p. 250, par. 5, exp. (5.17) included: Paragraph to be deleted.

p. 255, exp. (5.20): $L(\Delta\omega) \rightarrow L(\Delta f)$

p. 256, Fig. 5.18



p. 257, 4th line from bottom: From Fig. 5.21 → From Fig. 5.20

p. 258: The following paragraph is to be inserted at the end of page 258:

As an example the phase noise simulation results for a differential negative resistance oscillator are given in Fig. 5.21. The curve (A) corresponds to $r_C = 0$. To improve the frequency stability as explained before, a resistance equal to r_L is included in series into the capacitor branch of the resonance circuit. The simulation result given with curve (B) exhibits an unexpected improvement, despite the decrease of the quality factor of the resonance circuit.

p. 300, 7th line: NRS → nrs