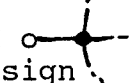


ERRATA FOR "CMOS ANALOG CIRCUIT DESIGN" (3rd printing)

Location	Error - Corrected Part in Quotes
Page xii, 3 Lines from bottom	state should be "stage"
Page 40, Equation 5	= should be "-", i.e. " $\phi_0 - \psi_0 = \dots$ "
Page 50, Line below Equation 5	Remove brackets " $\phi_s - \phi_F \geq 0$ "
Page 117, Equation 11	Delete minus sign
Page 117, Equation 12	" $\cong \beta(V_{GS} - V_T - V_{DS})$ "
Page 130, Example 3.6-1, Line 10	$10K(I_{D3})$ should be " $10\phi K(I_{D3})$ "
Page 134, Equation 1	" $V_{TO} = \phi_{GB} - \frac{q(NSS)}{(\epsilon_{OX}/TOX)} + \frac{(2q\epsilon_{si}NSUB[PHI])^{1/2}}{(\epsilon_{OX}/TOX)} + PHI $ "
Page 136, Line 2 from bottom	"20 Fairbanks, Irvine, CA 92718"
Page 147, After No. 9	"10. Repeat Examples 3.3-1 and 3.3-2, if the W/L ratio is $100\mu\text{m}/10\mu\text{m}$."
Page 148, No. 18	"19. Use SPICE2 to perform the following analyses on the circuit shown in Fig. P3.19: (a.) Plot N_{out} versus N_{in} for the nominal parameter set shown. (b.) Separately vary each parameter $\pm 10\%$ and repeat (a)."
Page 188, Paragraph beginning with "By measuring ..."	" $\log[C_j V_j]$ "
Page 191, last line on page	" $V_{T0} = -1 \text{ V}$, $\gamma = -1.2 \text{ V}^{1/2}$ "
Page 216, Equation 8 and 9	V_T should be in brackets in equation 8 and in first line of equation 9 (2 times).
Page 227, Equation 1	$\mu_{02} C_{OX2}$ should be $\frac{K_2'}{K_1'}$
Page 227, Line 2 below Eq. 1	$\mu_{01} C_{OX1}$
Page 230, Equation 12	V_T, μ_0, C_{OX} should be " V_T, K ", Should be " $\frac{i_o}{i_1}$ " instead of $\frac{I_o}{I_1}$
Page 238, 2nd line from bottom	W_2/L^2 should be " W_2/L_2 "
Page 245, Figure 5.5-6	Reference 5 should be "[4]"
Page 246, Figure 5.5-8	M2 should be added to the left of I_2 , M7 should be M1, and line should be fully connected above the resistor R_o . At the bottom right of the figure where it reads $\frac{250}{5}$ should be $\frac{20W_1}{L_1}$
Page 256, Figure P5.31	should read "for the case of Fig. 6.1-1(a)..."
Page 261, 4th paragraph, 4th line	Should add dot to Line beginning X 
Page 262, Figure 6.1-3	Should be a "+" sign instead of a " λ " sign
Page 273, equation on page	Line beginning with "voltage transfer...", first equation should be " $V = -1, 0$,"
Page 279, Figure 6.2-5, Line 2	Replace Fig. 6.2-6 with Fig. 6.2-2.
Page 280, Figure 6.2-6	
Page 282, Equation 15	Should read " $i_{out} = \frac{g_{m1}g_{m3}r_{p1}}{1+g_{m3}r_{p1}}$ "
Page 283, Figure 6.2-7, (a)	Add N_{gz} to left of C_1 .
Page 288, Figure 6.3-2	Next to last line, third equation should read " $V_{ss} = 0 \text{ volts}$,"
Page 292, Figure 8	Top part of first fraction should be " $g_{m1}(g_{ds2} + g_{ds3})$ ".
Page 295, Equation 23	Bottom part of first fractions should be " $I_{in}(s)$ ".

Page 302, Equation 7

Page 303, Equation 12

Page 303, 2nd line after Equation 13

Page 306

Page 307, start of 2nd paragraph 3rd line

Page 311, Figure 6.5-3 (a)

Page 328, Equation 2

Page 331, Equation 4

Page 331, Equation 4

Page 331, Equation 6

Page 347, 7th line of text

Page 378, Figure 8.2-5

Page 384, Equation 38

Page 384, Equation 39

Page 386, Figure 8.2-11 (b)

Page 387, lines 7 and 8

Page 392, number 5, equation

Page 400, the line after equation 28

Page 417, Figure 8.4-10, (d)

Page 422, Figure 8.4-12

Page 425, Figure 8.4-15

Page 459, Equation 5 & 6

Page 460, Paragraph under Equation 8, 7th line

Page 474, Table 9.2-2, line 14

Page 500, shaded area

Page 539, last paragraph line 8.

Page 542, Figure 10.2-7

Page 587, REFERENCES

Page 598, Equation 31

Page 600, 2nd diagram

Page 622, Second to last line of 2nd paragraph

Page 644, Line above equation 16

Page 625, Eq. 16

Page 626, Eq. 17

Page 632, Fig. 11.3-19b

Last section of equations should read " $a_n V_p \sin(n\omega t)$ "

Equation should read " $V_{out(max)} \approx V_{DD} + \frac{V_1^2}{2} \dots$ ".

"above, the maximum value of I_{out} is 0.95 mA."

Bulks of M2 and M4 should be reversed and connected to V_{DD} .

Line should read "ties is the use of **voltage** negative feedback."

Middle of diagram where it has R_1 should be " R_i ".

Between the brackets should read " $[1 + \lambda_1 \dots]$ ".

After \approx should read " $v_p - V_{T1} -$ "

The bottom part of the fraction in brackets should be " $K_1'(W_1/L_1)$ ".

After \approx should read " $v_p - V_{T1}$ ".

Should read "For M6, ignore the current necessary to charge the load capacitor and assume that $I_6 = I_7$ ".

$|p_1|$ and $|p_2|$ should be $|p_1'|$ and $|p_2'|$.

Delete space in last fraction bottom part of the fraction " C_{m11} ".

The number of the equation has no parenthesis.

The V's in the diagram should read " v_i " for the first two and V_z should be " v_0 ".

Subscript "1" of g_{m2} should italics.

The > sign should be " \geq ".

Should be Eqs. (27) and "(28)".

Add dot to line in diagram with C_1 and C_c .

Drain-gate of M14 should be connected.

Connect all gates of the 4 lower transistors.

In equations 5 and 6, both of the letters P should be lower case.

Line should read "of p_2' and $p_3' \dots$ "

Should read "*VIN 14 0 PULSE..... (Line beginning with * are ignored by SPICE)"

The number 307690 should read "307,690".

Should read " C_k " not C_{k+1} ".

Bottom of diagram (b) should read " V_{REF}' " ~~not~~ not V_{REF} .

There are two number 14s. Change second one to 15.

Delete part of equation with brackets.

Extend curves to the 3rd quadrant.

Should read "moves to the third quadrant."

Should read "voltages V_{TH} , V_C , and $V_S \dots$ "

Should read " $V_{in} < -2E_1$ "

$$M_{OUT} = -\left(\frac{R_F}{R_3} + \frac{R_F}{2R_1}\right) V_{in} - \left(\frac{R_F}{R_2}\right) E_2$$

Bottom 3 voltage sources should be reversed

Page 645, Equation 18

Page 656, ^{Prk}Number 7

Page 674, Equation 18

Page 690, 2nd to last line
above equation 15

Page 691,

Page 699, INDEX

Should read " $V_s(\mathbb{R})$ "

Add line at the end stating

"Assume $V_{J2} = -V_{I1}$."

After 2nd equal sign, top of fraction
should be " V_1 ".

Reference should be to "Eq. (10)"

All references to $\alpha\beta$ should be changed to
" $a\beta$ ". (4 places)

Under sensitivity in index is an
overprint. Should be "sensitivity, 240,
242, 244,".