

Volume Three | Number One

Storage requirements for a data exchange	2
I. Delgalvis, G. Davison	
Systems simulation with digital computers	14
K. Blake, G. Gordon	
A general purpose digital simulator and examples of its application	21
Part I — Description of the simulator	
R. Efron, G. Gordon	22
Part II — Simulation of a telephone intercept system	
C. R. Velasco	35
Part III — Digital simulation of urban traffic	
A. M. Blum	41
Part IV — Simulation of an integrated steel mill	
D. F. Boyd, H. S. Krasnow, A. C. R. Petit	51
A description of the SIMSCRIPT language	57
B. Dimsdale, H. M. Markowitz	
A character computer for high-level language interpretation	68
J. E. Meggitt	
Design of an integrated programming and operating system	
Part VI — Implementation on the 7040/44 data processing system	
B. White, J. Trimble	79
Algorithm for a gear-train problem	95
H. G. ApSimon	
A concordance generator	104
K. F. Scharfenberg, P. H. Smith, Jr., R. D. Villani	

**Contents of
Volume Three**

Volume Three | Number Two

The structure of SYSTEM/360

Part I — Outline of the logical structure	
G. A. Blaauw, F. P. Brooks, Jr.	119
Part II — System implementations	
W. Y. Stevens	136
Part III — Processing unit design considerations	
G. M. Amdahl	144

Part IV — Channel design considerations

A. Padegs

165

Part V — Multisystem organization

G. A. Blaauw

181

Volume Three | Number Two

A formal description of SYSTEM/360

A. D. Falkoff, K. E. Iverson, E. H. Sussenguth

198

Volume Three | Number Two | Errata

Page 132 The two midpage sentences starting "If the channel facilities . . ." should read, "If the i/o facilities are available, the instruction is accepted and the CPU continues its program. The channel independently proceeds with the specified i/o device." In Figure 8 explanation, "Bits 8 through 32 . . ." should read "Bits 8 through 31 . . ." and "changing check" should read "chaining check."

Page 133 Delete "or TEST I/O" in the sentence starting in the third line, "At the conclusion of . . ." Midpage, "The control command contains information . . ." should read "The control command designates information, . . ." In Figure 9 explanation, "Bit 36 causes an interruption." should read, "Bit 36 causes an interruption condition."

Page 134 In Table 2, the floating-point short, RR format, ADD N instruction should be designated "AER" instead of "ALR."

Page 154 In the sentence starting in the fifth line from the bottom, replace the semicolon by a period and delete the remainder of the sentence.

Volume Three | Number Three | Errata

Page 199, third line from bottom:

Sentence starting with "Thus line 40 . . ." should read, "Thus line 4 of IPL is followed by line 5 if $b = 2$, and by line 7 if $b \neq 2$."

Page 201, sixth line from bottom:

" $\epsilon^{A^2}(S) \equiv \dots$ " should read " $\epsilon^{A^2}(S) \equiv \dots$ "

Page 205, ninth line from the bottom:

" $\perp \alpha^4 / \omega^4 / I^0$ " should read " $\perp \alpha^4 / \omega^8 / I^0$ "

Page 211, lines 10 and 11:

"... lines 36-37 ..." should read "... line 35 ..."

Page 223, last character of tenth line from bottom:

"1" should read "8"

Page 241, EXC line c11:

"c15" should read "c13". (Entire line should read " $\rightarrow (c12, c13, c13)_n$ ".)

Page 248 (EXC):

line k21: branch to line k23 on ">" should read "<"

line k44: absolute value "j" should read floor " $\lfloor$ "

Page 249 (EXC):

line k46: branch to line k48 on "<" should read " $\leq$ "

line k63: branch to line k65 on "<" should read ">"

line k69: delete "ME" and "MER" from associated mnemonics

line k70: add "ME" and "MER" to associated mnemonics

Page 256, Table 5, lines 78 and 79, Results column:

" $\frac{1}{2}$ " should read "1"

Page 259 (foldout):

RESET defined operation, line 1: "0" should read " $(b \geq 2)$ ". (This eliminates a race condition, but renders line 10 of CP program redundant.)

MAC defined operation, line 3: entire line should read " $1: m_{11} \wedge j_0 < 2^{12}$ " and branch to line 5 on " $\geq$ " should read " $\neq$ ". The new variable m_{11} pertains to the multisystem feature.

Page 261 (foldout):

In the IOIE program, the conditional branch leaving line 15 should leave line 16.

In the CH^c program, line 21 should read,

"0: $C_{32}^c \wedge (0 = \perp \omega^{16} / C^c) \wedge \sim S_2^c \vee S_3^c$ "