

SDS 901523C
\$9.25

DIAGNOSTIC PROGRAM MANUAL

SIGMA 5
CPU DIAGNOSTIC (AUTO)

PROGRAM NO. 704287C

March 1969

This Publication supersedes SDS 901523B
dated November 1968

LIST OF EFFECTIVE PAGES

Total number of pages is 272, as follows:

Page No.	Issue	Page No.	Issue
Title	Original		
A	Original		
i thru iv	Original		
1-1 thru 1-2	Original		
2-1 thru 2-4	Original		
3-1 thru 3-8	Original		
4-1 thru 4-116	Original		
5-1 thru 5-36	Original		
A-1 thru A-54	Original		
B-1 thru B-46	Original		

CONTENTS

Section	Title	Page
I	INTRODUCTION	1-1
	1-1 Scope of Manual	1-1
	1-2 Program Objectives	1-1
	1-3 General Specifications	1-1
II	OPERATING INSTRUCTIONS	2-1
	2-1 General	2-1
	2-2 Loading Procedure	2-1
	2-3 Operating Procedures	2-1
	2-4 Success Indications	2-1
	2-5 Error Indications	2-1
	2-6 Options	2-2
	2-7 Sense Switches	2-2
	2-8 Control Panel Interrupt	2-3
	2-9 I/O Compatibility	2-3
	2-10 Test Selection	2-3
	2-11 Restart Procedure	2-4
III	PROGRAM DESCRIPTION	3-1
	3-1 General	3-1
	3-2 Test Module	3-1
	3-3 Output Message Analysis	3-1
	3-4 Use of Printout for Troubleshooting	3-1
	3-5 Work With One Failing Test Module	3-3
	3-6 Extended Analysis	3-3
	3-7 Flowchart	3-4
IV	PROGRAM LISTING	4-1
V	CONCORDANCE LISTING	5-1
APPENDIX A		A-1
APPENDIX B		B-1

LIST OF ILLUSTRATIONS

Figure	Title	Page
2-1	Sample of Printout Showing No Errors	2-2
2-2	Sample of Printout Showing Errors	2-2
3-1	Auto Program, Simplified Flow Chart	3-2
3-2	Sample Auto Error Printout	3-3
3-3	Auto Program, Detailed Flow Chart	3-5

LIST OF TABLES

Table	Title	Page
1-1	General Specifications	1-1
1-2	Testing Prerequisites	1-1

LIST OF TABLES (Cont.)

Table	Title	Page
2-1	Switch Settings for Program Loading	2-1
2-2	Wait Locations.	2-2
2-3	Sense Switch Functions	2-3
2-4	Register Contents at Time of Interrupt	2-3
3-1	Sample Error Analysis Truth Table	3-4

RELATED PUBLICATIONS

<u>Publication Title</u>	<u>Publication No.</u>
Sigma Symbol and Meta Symbol Reference Manual, SDS Sigma Computers	900952
Sigma 5 Computer Reference Manual	900959
Sigma 5 Computer Technical Manual	901172
Sigma 5/7 CPU Format Converter and CPU Loader Documentation	901584

SECTION I
INTRODUCTION

1-1 SCOPE OF MANUAL

This manual describes the Auto CPU diagnostic program designed for the Sigma 5 computer manufactured by Scientific Data Systems, Santa Monica, California.

This manual is made up of four sections and two appendices. Section I is a general introduction to the Auto program. Section II contains program operating procedures. Section III is a detailed description of the program operation. Section IV contains the complete symbolic listing of the program as generated by the Sigma metasymbol assembler. Appendices A and B contain the T-charts for the multiply and divide instructions.

1-2 PROGRAM OBJECTIVES

The purpose of the Auto program is to detect and diagnose malfunctions of the Sigma 5 CPU pertaining to major instruction categories, such as load, store, branch, comparison, shift, and fixed-point arithmetic. Provisions are also incorporated for testing instruction interruptibility and I/O compatibility.

1-3 GENERAL SPECIFICATIONS

Table 1-1 lists the general specifications for this program.

Table 1-1. General Specifications

Computer configuration	Any Sigma 5 computer with card reader or paper tape reader for program input
Memory size	8K minimum (8192 words)
Optional equipment	Keyboard printer or line printer for optional printed output

Prerequisite tests are listed in table 1-2.

Table 1-2. Testing Prerequisites

Program	Prerequisite Program
Verify	None
Pattern	Verify
Auto	Verify, Pattern*
Suffix	Auto
Float	Auto
Interrupt	Auto
Memory Protect	Suffix

*For the Auto test to run, the block 0 register must be functioning correctly, as tested by the Pattern program.

SECTION II
OPERATING INSTRUCTIONS

2-1 GENERAL

The Auto diagnostic program employs a data-gathering technique for its operation. The program consists of a driver or control section, followed by test modules containing from 4 to 20 words of data prescribing a test. The driver program accesses each module in sequence, sets up the prescribed conditions, executes the specified instruction, and then tests the results for possible errors. A report of each test or error may be printed out or displayed on the control panel indicators.

2-2 LOADING PROCEDURE

Table 2-1 shows the control panel switch settings to be used for loading the program. After the switches have been set as indicated, the following must be done:

- a. Clear memory by simultaneously pressing the CPU RESET/CLEAR and SYS RESET/CLEAR pushbuttons.
- b. Set the UNIT ADDRESS switches to the address of the peripheral input device.
- c. Press the LOAD switch.
- d. Place the COMPUTE switch to RUN.

Table 2-1. Switch Settings For Program Loading

Switch	Setting
CONTROL MODE	LOCAL
WATCHDOG TIMER	NORMAL
INTERLEAVE SELECT	NORMAL
PARITY ERROR MODE	CONT
AUDIO	ON
CLOCK MODE	CONT
ADDR STOP	Off
SENSE	0

Upon being loaded with the switches set according to table 2-1, the program will automatically branch to the starting location and begin running. If SENSE switch 1 is on during loading, a wait will occur at X'291' and the count pulse interrupts will not be armed. To continue, reset SS1 and clear the wait.

2-3 OPERATING PROCEDURES

2-4 SUCCESS INDICATIONS

Provided no errors occur, the program will run continuously through all test modules. After completing the last module it will start over, making another pass, first printing out whether the floating point option is installed. A pass counter and error counter are maintained by the program. These may be examined by setting SENSE switch 3. After X'20' error-free passes, a message is output indicating that the real-time clocks are implemented.

After completing each test module, the program reads SS3, and makes a report if the switch is set. Reports are normally made via the keyboard printer, device address 001. However, if no device responds to a TIO to that address and SS4 is off, the program halts at location X'205', with the report information contained in registers 1 through 4. The registers contain the following information:

- R1 Present list address
- R2 Error count
- R3 Pass count (bits 0 through 15), module count (bits 16 through 31)
- R4 Instruction tested

Figure 2-1 shows a typical printout from the keyboard printer resulting from setting SS3 after the program has made a number of successful passes.

2-5 ERROR INDICATIONS

When running with the sense switches on 0, the program will halt upon detecting an error. Before halting, however, the error will be reported via the keyboard printer or line printer. If the printing device does not respond to a TIO, the program will merely halt at location X'205' with the alarm on. See page 5 of the program listing for an explanation of the contents of registers 1 through 8 after error halts.

A typical error printout is shown in figure 2-2. The halt-on-error feature may be disabled by setting SENSE switch 4. However, if the machine is operating in this mode and

```

          FLOATING POINT OPTION IS INSTALLED
          REAL TIME CLOCKS IN USE. TO DISABLE, CP INTERRUPT AND CLEAR R5

          AUTO ERROR DISPLAY
          LIST   ERRORS   PASSES   INST IDENTIFIER   IS   SHOULD BE   DIFF
          32400976 00000000 002100AB 92CE03E0

          Note: Printouts from A revision of program. Memory locations will change on subsequent revisions
          901523A.201
    
```

Figure 2-1 Sample of Printout Showing No Errors

```

          FLOATING POINT OPTION IS INSTALLED
          REAL TIME CLOCKS IN USE. TO DISABLE, CP INTERRUPT AND CLEAR R5

          AUTO ERROR DISPLAY
          LIST   ERRORS   PASSES   INST IDENTIFIER   IS   SHOULD BE   DIFF
          32401102 00000001 0078018B 25C00204 50000001 07300145 47300145 40000000
          32401102 00000002 0078018B 25C00204 6000000C 00000000 BCDEF01A BCDEF01A

          Note: Printouts from A revision of program. Memory locations will change on subsequent revisions
          901523A.202
    
```

Figure 2-2. Sample of Printout Showing Errors

no printout device is available, there will be no error indications except for brief flickers of the alarm indicator (which may be too fast to see when only one or a few modules are failing).

The error indications described in the previous paragraphs occur only for faults that happen as a result of executing the test instruction. If a spurious trap occurs at any other time during the operation of the control program, a wait is executed with the program halting at location X'403'. (See listing for procedure to follow.) If the wait is cleared, the program will resume testing with the current test module.

If a memory parity error occurs, the program is interrupted to location X'56'. The interrupt routine reads the memory fault indicators and leaves the result in register 4. A wait is then executed, causing the program to halt at location X'EE'. If the wait is cleared, the program will resume testing with the current test module.

Table 2-2 summarizes the various wait locations in the program.

Table 2-2. Wait Locations

Location (hex)	Reason for Wait
483	Erroneous trap
291	SS1 on when loading
EE	Memory fault interrupt
FB	Control panel interrupt
205	Report or error

2-6 OPTIONS

Several optional features are incorporated into the Auto program to give the operator a more flexible tool for diagnosing failures while maintaining a quick means of detecting faults with minimal operator intervention.

2-7 Sense Switches

The uses of SS3 and SS4 have already been mentioned; further control is provided through SS1 and SS2, which allow the operator to repeatedly loop on a single test. Table 2-3 summarizes the functions of all four switches.

Table 2-3. Sense Switch Functions

Switch	Function
SS1	Short loop: when SS1 is set, the program continuously repeats the same test module. A minimum of instructions are executed to set up the necessary register and memory areas. No testing of results or other sense switches takes place. If SS1 is on while the program is being loaded the count pulse interrupts will not be armed after X'20' error-free passes
SS2	Long loop: when SS2 is set and SS1 reset, the program repeats the same module. All testing of results takes place and other sense switches are read
SS3	Report: when SS3 is set, the program reports at the completion of each test not otherwise reported because of an error
SS4	Suppress error halt and report halt: when SS4 is set, the program will not halt on errors. Errors will still be reported via the keyboard printer, if it is available. Printing may be suppressed by turning the device off

2-8 Control Panel Interrupt

The control panel INTERRUPT button may be pressed any time while the program is running to change certain parameters in the program. When the button is pressed, the computer comes to a wait with address X'FB' in the instruction address register. The changes are made by entering information into any or all of the registers described in table 2-4, then reading out the instruction from the instruction address location and returning the COMPUTE switch to RUN.

Table 2-4. Register Contents at Time of Interrupt (Cont.)

Register	Contents
	output device is the keyboard printer. Setting a one in bit 0 changing the address in bits 16-31 causes all messages to be output on the line printer
R1	The memory address of the current or most recently completed test module Test selection: when the machine is returned to RUN, the program will begin testing with the module addressed by R1. The first three hex characters must be 324. The last five hex characters will be the test module address. The operator may insert any valid module address he wishes and set SS1 or SS2 to loop on that module
R5	Register bits 16-19, used to arm and enable the count pulse interrupts Counts pulse interrupt level selection: normally, the program automatically arms and enables the four count pulse interrupt levels upon making the twentieth pass. If no errors have occurred, the operator may suppress this feature by clearing R5 when the wait occurs for the control panel interrupt, or by loading the program with SS1 on. He may selectively disable only some of the count plus interrupts if he wishes. He may also reenale the levels later by again interrupting and changing R5 Bits other than 16-19 of R5 have no effect on interrupt

Table 2-4. Register Contents at Time of Interrupt

Register	Contents
R0	The IOP/device address of the unit used for report or error messages. The address is in bits 16-31 and is initially set to 1 when the program is loaded Device selection: the program tests bit 0 to determine whether to use the keyboard printer or the line printer output routines. This bit is initially set to zero, indicating that the

2-9 I/O COMPATIBILITY

Automatically implemented after 35 error-free passes.

2-10 TEST SELECTION

The operator may select any test module to begin running by using the control panel INTERRUPT as described in

paragraph 2-8 and table 2-4. He may likewise loop on a selected test by setting SS1 or SS2 before starting up again.

The operator may also loop on a particular test by setting SS1 or SS2 when that test is being reported either via the keyboard printer or by a report halt or error halt.

2-11 RESTART PROCEDURE

The program may be restarted from location X'100'. When loaded, the program inserts an unconditional branch to that location in address X'26' so that normally, restarting is possible by pressing the CPU RESET button and setting the COMPUTE switch to RUN.

SECTION III
PROGRAM DESCRIPTION

3-1 GENERAL

A simplified flow chart is given in figure 3-1 to illustrate the general philosophy of the program's operation. When loaded, the Auto program automatically branches to its starting location and begins running. Initialization takes place where parameters are set up and a branch instruction is inserted in location X'26' to facilitate restarting if the RESET button should be pressed.

The program accesses each test module in turn and sets up all the test conditions as prescribed by the module. The instruction contained in the module is executed and then SENSE switch 1 is tested to determine whether the short loop mode is in effect. If SS1 is set, the program repeats a minimum amount of the setup procedure for the same test module and again executes the instruction. No results are examined in the short loop mode.

After 30 error free passes an automatic short loop is initiated. This allows repetitive execution (100 times) of a test module with minimum setup and limits testing of results to memory, memory + 1, R12 and R13.

If not operating in the short loop (that is, with SS1 reset), the program proceeds to compare the results of the test with the expected results. The resultant contents of all registers and memory operands are prescribed by the test module. Other items are also tested, such as the instruction location, the location following the instruction, the indirect address location, and the program status doubleword.

When an error is detected or if SS3 is set, the program makes a report - normally via the keyboard printer. The reports may be switched over to a line printer if desired (see paragraph 2-8). When no printing device is available, the program makes its reports by executing a wait for the information stored in general registers 1 through 8.

After results have been checked and reports, if any, have been completed, SENSE switch 2 is read. If SS2 is set, the program goes through the entire setup, test, and report procedure for the same test module that it just finished. If SS2 is reset, the module pointer is updated so that a new test is performed on the next cycle.

3-2 TEST MODULE

Refer to the location X'444' (Table) in the program listing, section IV. Each test module is relocated to the previously cleared table area. The listing describes the meaning of each word. The term program status word 1 (PSW1) is somewhat misleading, since only bits 0 through 11 are used. Bits

12 through 31 are used as a linkage address so that the driver can prepare for any traps resulting from executing instructions.

3-3 OUTPUT MESSAGE ANALYSIS

See figure 3-2 for a sample Auto error printout. The headings on the printout correspond to the register contents after error halts (page 5, program listing, section IV).

<u>Printout Term</u>	<u>Description</u>
LIST	Present list address: 324xxxxx where 324 is LW, 4 and xxxxx is the first memory location of the test module
ERRORS	Total number of errors since initial load or last restart
PASSES	Bits 0-15 contain the number (in hexadecimal) of complete passes. Bits 16-31 contain the number of modules tested in the current pass
INST	Instruction under test
IDENTIFIER	Error identifier and address (see R5, page 5 of program listing, section IV)
IS	Erroneous result
SHOULD BE	Predetermined result
DIFF	Result of an exclusive Or of the contents of the erroneous result with the predetermined result

3-4 USE OF PRINTOUT FOR TROUBLESHOOTING

In figure 3-2 more errors are occurring than are shown. Since all the failing instructions (INST) are add word (AW), sufficient data is available to analyze the malfunction. Stop the printout by turning off the keyboard printer or cause a wait by setting SS4 to 0. The first and last digits of the Identifier column show that the majority of incorrect data is found in register C. Two failures of PSW1 occur at list addresses also having failures in register C, but these can be ignored, because they result from incorrect condition code settings (see DIFF), which depend on the contents of register C.

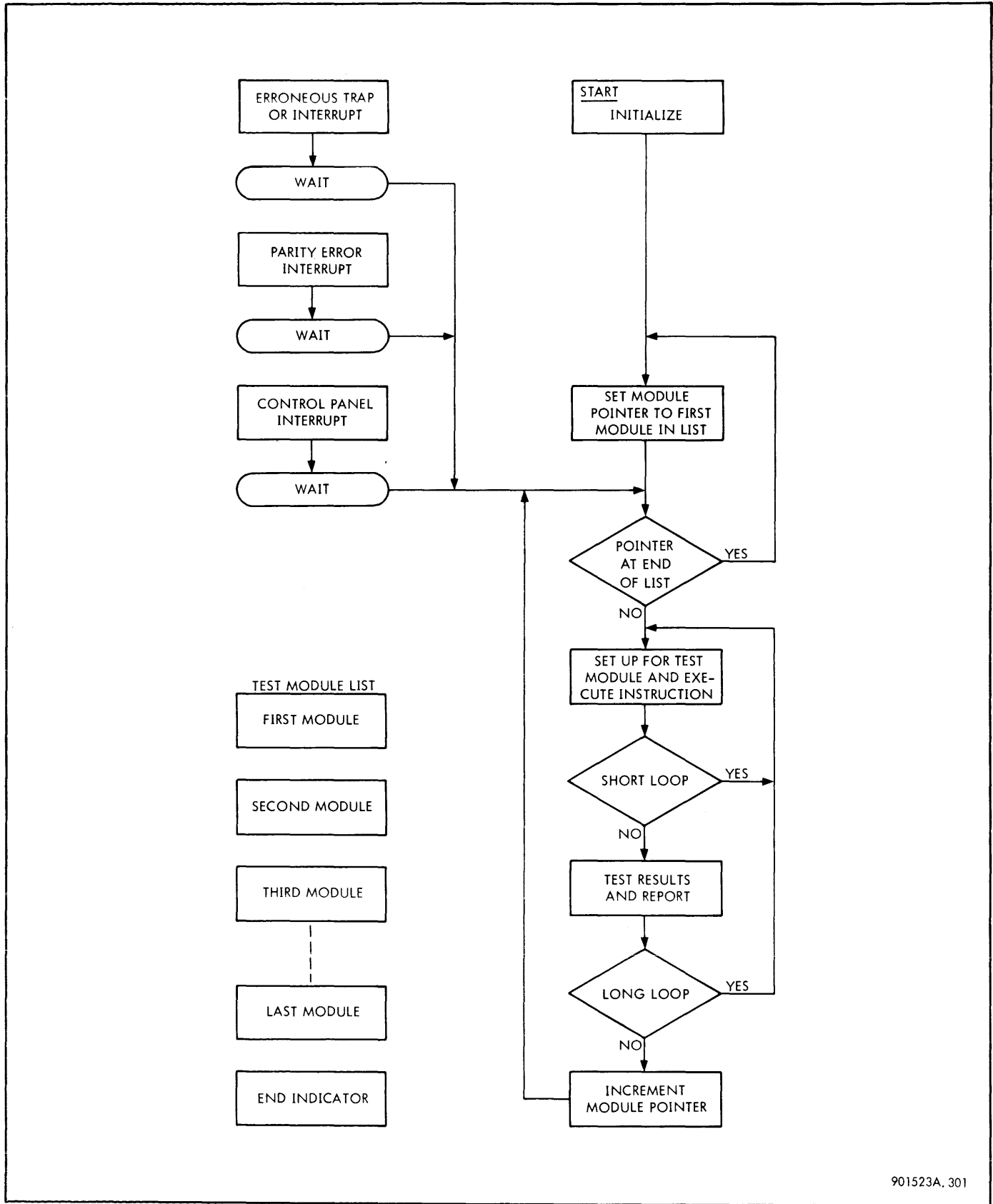


Figure 3-1. Auto Program, Simplified Flow Chart

AUTO ERROR DISPLAY							
LIST	ERRORS	PASSES	INST	IDENTIFIER	IS	SHOULD BE	DIFF
3240070C	00000001	00000054	30C00460	6000000C	51555554	55555554	04000000
32400714	00000002	00000055	30C00460	50000001	A7200167	87200167	20000000
32400714	00000003	00000055	30C00460	6000000C	04000000	00000000	04000000
3240071C	00000004	00000056	30C00460	50000001	A7200167	87200167	20000000
3240071C	00000005	00000056	30C00460	6000000C	04000000	00000000	04000000
32400724	00000006	00000057	30C00460	6000000C	FBFFFFFFE	FFFFFFFFE	04000000
32400734	00000007	00000059	30C00460	6000000C	40444444	44444444	04000000
3240073C	00000008	0000005A	30C00460	6000000C	40444443	44444443	04000000
3240075C	00000009	0000005E	30C00460	6000000C	40444444	44444444	04000000
3240076C	0000000A	00000060	30C00460	6000000C	8C888887	88888887	04000000
32400774	0000000B	00000061	30C00460	6000000C	8C888888	88888888	04000000
3240077C	0000000C	00000062	30C00460	6000000C	8C888888	88888888	04000000
3240078C	0000000D	00000064	30C00460	6000000C	C8CCCCC	CCCCCCCC	04000000

Figure 3-2. Sample Auto Error Printout

Since the program status word failures can be discounted, the causes of faulty list addresses must be determined. The first failing list (3240070C) is in test module AW05 (see page 82 of the program listing, section IV). The Comments column indicates specifically some of the equations being tested by this test module.

Analysis of the Is, Should Be, and Diff columns of the Auto error display of figure 3-2 shows that bit 5 is always different. Any comment in the AW05 program listing concerning bit position 5 should therefore be interpreted as meaningful.

Before going any further, the user should be aware of the logic equations involved in the add word process. The equations for the adder simplify to the following:

General Equation	Application of Equation for Bit 5
$S_n = PR_n \oplus K_n$	$S_5 = PR_5 \oplus K_5$
$PR_n = A_n \oplus D_n$	$PR_5 = A_5 \oplus D_5$
$G_n = A_n \cdot D_n$	$G_5 = A_5 \cdot D_5$

where n = Bit position

S = Sum

PR = Propagate

G = Generate

A = A-register

D = D-register

On the program listing, K05 is noted in the next to last comment preceding AW05 as being caused by the corresponding term (G06) of the last comment line. Since the numbers being added in this module are both X'AAAAAAAA', both A5 and D5 must be zeros, making PR5 = 0. S5, therefore, should be a one, and the generation of either G6, K5, or NPR5 should be suspect as being faulty.

The above determined, the user should proceed with testing as described in either paragraph 3-5 or 3-6.

3-5 WORK WITH ONE FAILING TEST MODULE

Select a failing test module and then address-stop at location X'164'. An execute instruction will be displayed, which will execute the add word instruction.

Use the single-clock feature to advance to phase 3 of the AW instruction. Obtain test points from the CPU logic equations and check the three suspected terms.

3-6 EXTENDED ANALYSIS

Analyze the next failing AW test module and prepare a truth table for various inputs. See table 3-1 for a sample truth table.

From the comments of each AW test module, fill in the table. Terms such as KI = 1 are defined preceding the AW01 test module.

After analyzing a few cases, a pattern will develop in the truth table. For every failure, K5 should be true. If it were actually false, the IS-S5 would be the result in each case. The approach given in paragraph 3-5 can be taken from this point or the logic module for K5 can be replaced.

Table 3-1. Sample Error Analysis Truth Table

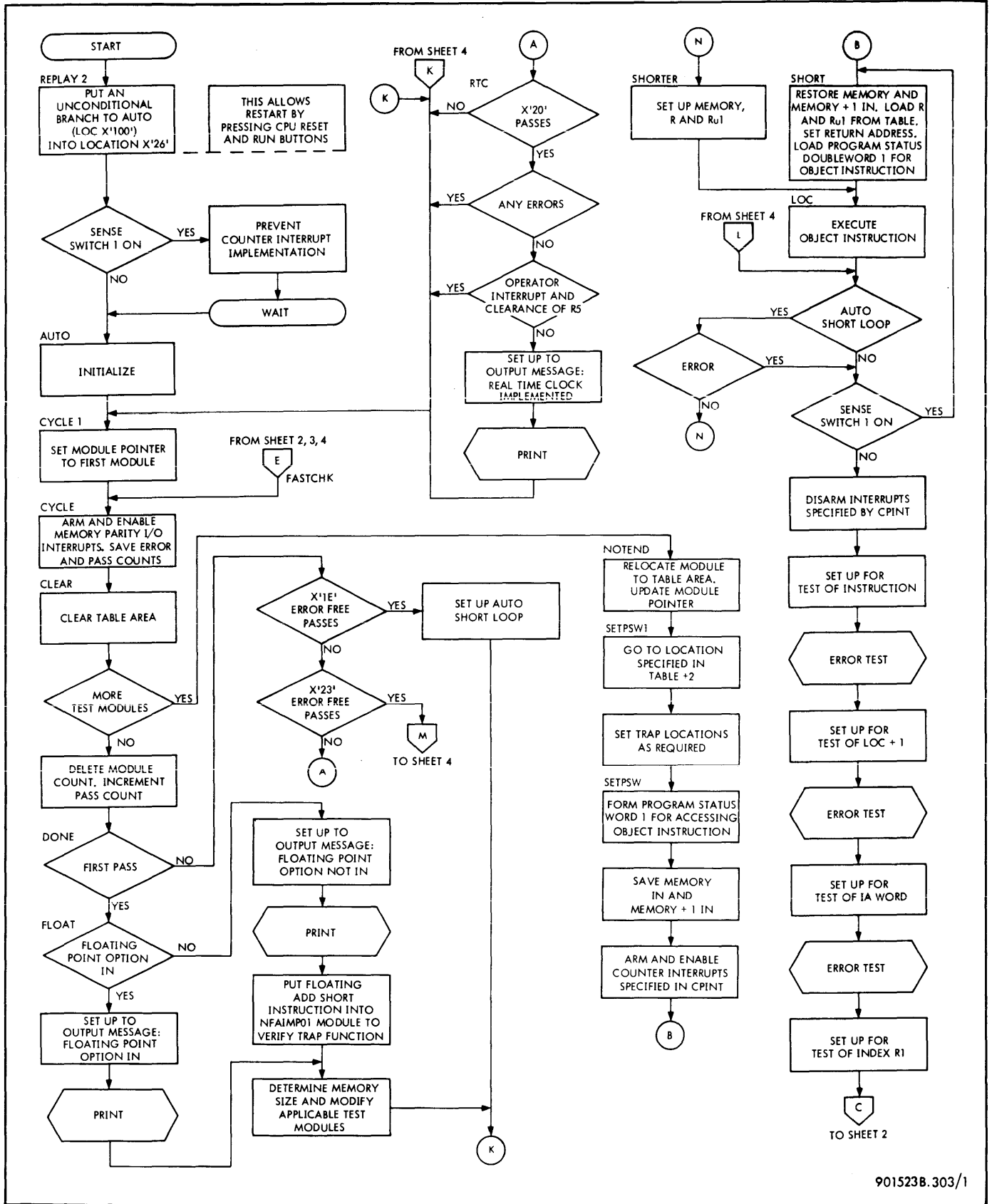
CASE	SHOULD BE				IS
	PR5	G6	K5	S5	S5
AW05	0	1	1	1	0
AW06	1	0	1	0	1
AW07	1	0	1	0	1

Table 3-1. Sample Error Analysis Truth Table (Cont.)

	SHOULD BE				IS
AW08	0	1	1	1	0
AW10	0	1	1	1	0

3-7 FLOWCHART

A detailed flowchart of the entire program (excluding test modules) is given in figure 3-3. Application of the flowchart to the program listing in section IV should provide the user with a clear understanding of program operation.



901523B.303/1

Figure 3-3. Auto Program, Detailed Flow Chart (Sheet 1 of 4)

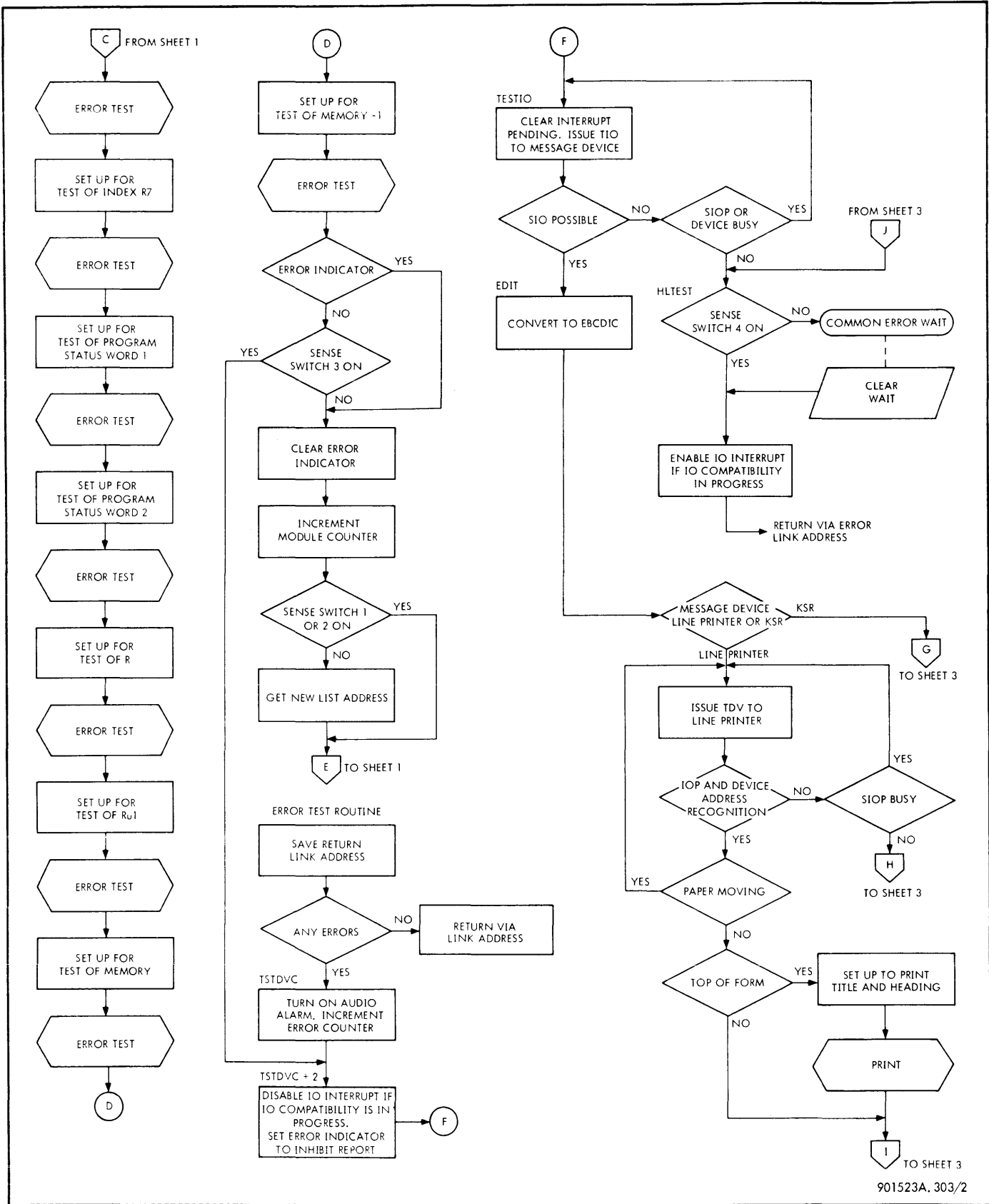


Figure 3-3. Auto Program, Detailed Flow Chart (Sheet 2 of 4)

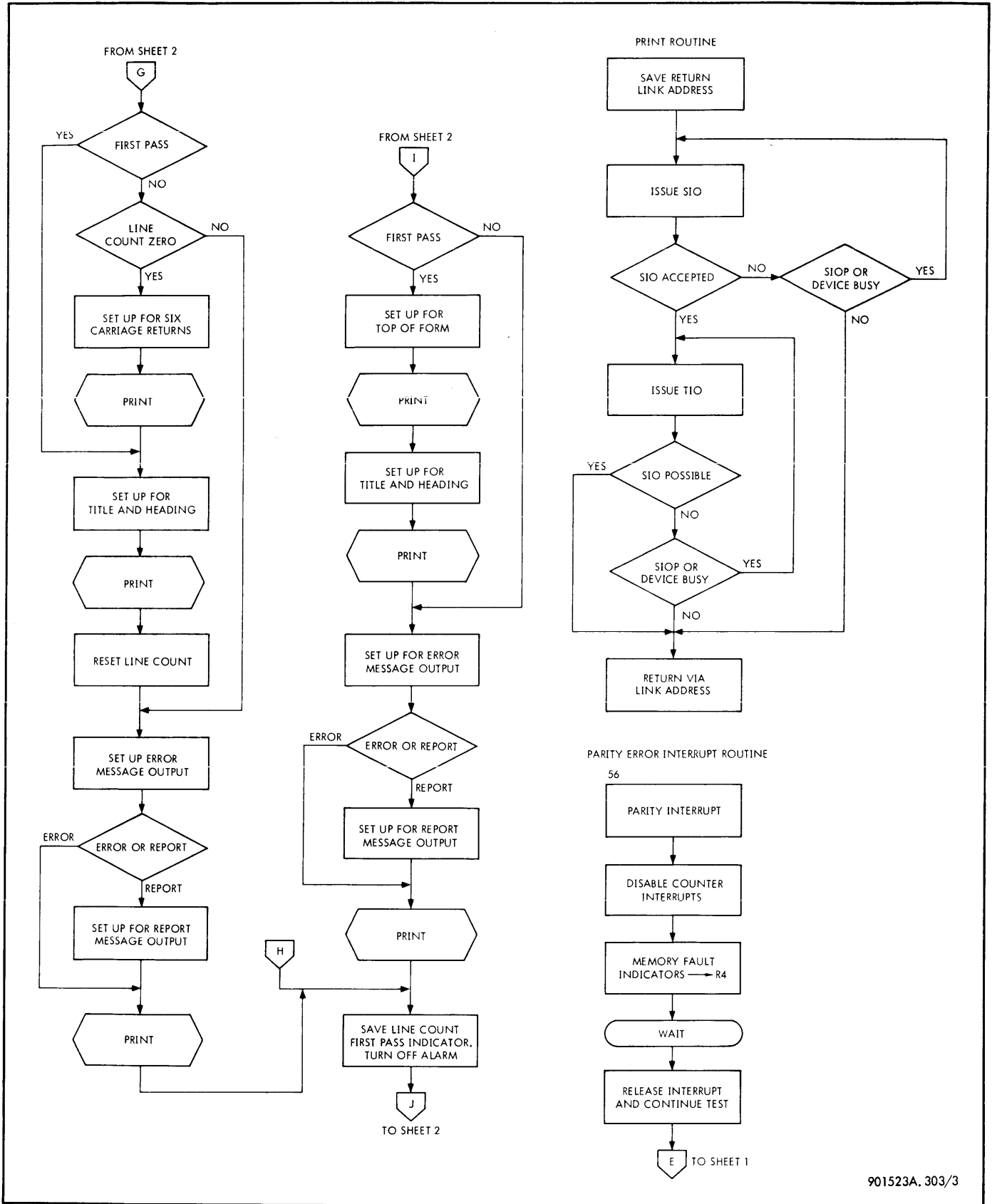


Figure 3-3. Auto Program, Detailed Flow Chart (Sheet 3 of 4)

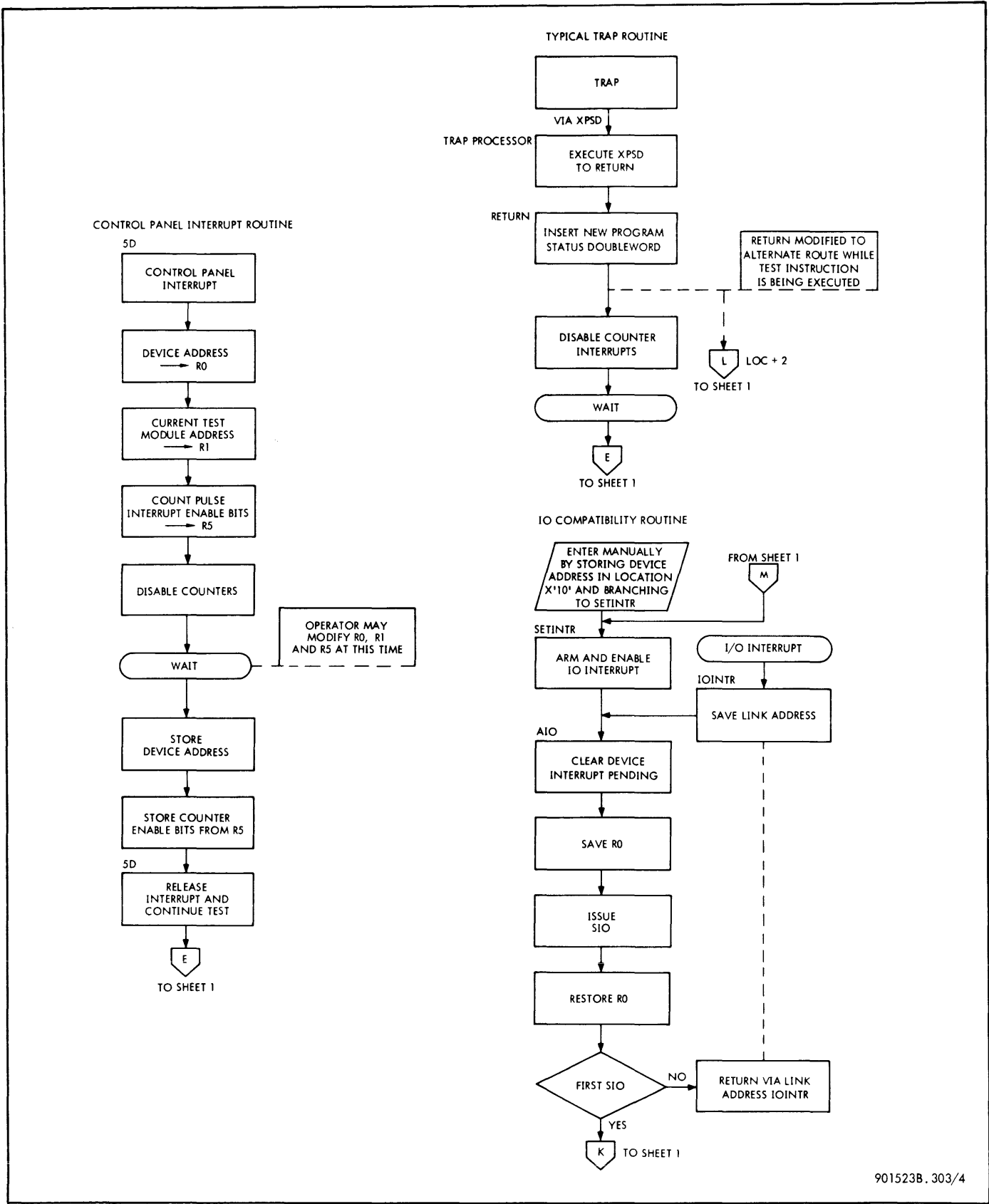


Figure 3-3. Auto Program, Detailed Flow Chart (Sheet 4 of 4)

SDS 901523

SECTION IV
PROGRAM LISTING

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37

REVISION C: CHANGES NOTED IN COL 71-72 BY - *C
 I/O COMPATIBILITY ROUTINE MODIFIED TO OPERATE ON COMPUTERS WITH *C
 ONLY ONE REGISTER PAGE. *C

REVISION B:
 A ROUTINE TO AUTOMATICALLY IMPLEMENT THE SHORT LOOP FOR 100
 PASSES OF EACH TEST MODULE, A TEST FOR TRAPS CORRECTLY REPORTING
 THE LOCATION TRAPPED FROM, ADDITIONAL TEST MODULES, IMPROVEMENT
 OF THE INITIALIZE ROUTINE, COMPUTATION OF NON-EXISTENT MEMORY
 TO AVOID REPORTING FALSE ERRORS AND AUTOMATIC IMPLEMENTATION OF
 THE I/O COMPATIBILITY TEST (AFTER 35 ERROR FREE PASSES) WERE
 THE MAJOR CHANGES INCORPORATED.

***** SEE PAGES FOUR THROUGH SIX FOR *****

***** LOADING AND OPERATING INSTRUCTIONS *****

SYSTEM SIG7FDP
 EQU 15

F
 FORMS THE ADDRESS FIELD SPECIFIECS HOW THE WORD IS DIVIDED AND
 HOW MANY BITS THERE WILL BE IN EACH PART OF THE WORD.
 EFFECTIVE AT ASSEMBLY TIME ONLY.

I FORM 4,28
 K FORM 4,4,4,20

0000000F

38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74

PROCS EFFECTIVE AT ASSEMBLY TIME ONLY

THIS INHIBITS
 PAGE
 DIRECTIVE
 TO PERMIT MAX. LINAGE/PAGE. *C

P SPECIFIES A DOUBLE WORD ADDRESS

CNAME
 PROC
 GEN,32 DA(AF(1))

J CONVERTS TO BYTE ADDRESS
 CNAME
 PROC
 GEN,8,24 AF(1),9A(AF(2))

FILL FILLS ALL LOCATIONS BETWEEN AF AND B WITH ZEROS.
 CNAME
 PROC
 DS ABSVAL(AF)-ABSVAL(B)
 GEN,32 0
 FIN
 PEND

PAGE

OPEN LCF1,AI,CI,LI,MI,SP,S,LCF,STCF
 CNAME X'24'
 S CNAME X'25'
 LCF CNAME X'70'
 STCF CNAME X'74'

00000000 PAGE

00000000 P

00000000 J

00000000 FILL

00000024 SF

00000025 S

00000070 LCF

00000074 STCF


```

SIGMA 5 CPU DIAGNOSTIC-AUTO  704287-51C00  MARCH 12,1969  3
75          31      EQU      1,7,4,3,17
76          PROC
77          LF      GEN,G1   AFA(1),NAME,CF(2),AF(2),AF(1)
78          PEND
79          00000002  LCF1   CNAME  X'121'
80          00000020  AI     CNAME  X'120'
81          00000021  CI     CNAME  X'121'
82          00000022  LI     CNAME  X'122'
83          00000023  MI     CNAME  X'123'
84          32      EQU      1,7,4,20
85          PROC
86          LF      GEN,G2   AFA(1),NAME,CF(2),AF(1)
87          PEND
88          *
89          * BIND = CAUSES THE LOCATION COUNTERS TO ADVANCE TO A WORD BOUNDARY THAT
90          * IS SPECIFIED IN THE ARGUMENT FIELD.
91          00000000  BIND   CNAME
92          PROC
93          XP      SET      AF-(ABSVAL(*)-((ABSVAL(*)/AF)*AF))          *B
94          DB      AF-(ABSVAL(*)-((ABSVAL(*)/AF)*AF))>0              *B
95          BRG     ABSVAL(*)+XP
96          FIN
97          PEND
98          *
99          *
100         01 00040  BRG     X'140'          *B
101         01 00040
102         *
103         *
104         * ***** LOADING OPTIONS
105         * SENSE SW1 SET= BYPASS AUTOMATIC IMPLEMENTATION OF REAL TIME
106         * CLOCKS. PROGRAM WILL COME TO A WAIT. RESET
107         * SENSE SWITCH 1. CLEAR THE WAIT.
108         * RESET= ENABLE RTC'S AFTER X'120' ERROR FREE PASSES
109         *
110         *

```

```

SIGMA 5 CPU DIAGNOSTIC-AUTO  704287-51C00  MARCH 12,1969  4
111         ***** I/O COMPATIBILITY
112         * THIS TEST IS DESIGNED TO TEST FOR CONFLICTS BETWEEN THE
113         * INTEGRAL IOP AND THE EXECUTION OF THE AUTO DIAGNOSTIC.
114         * THE TEST IS AUTOMATICALLY INITIATED AFTER 35 ERROR FREE PASSES
115         *
116         * TO DELETE THE TEST :
117         * 1. CP INTERRUPT
118         * 2. ENTER A NON-EXISTENT DEVICE ADDRESS IN LOCATION X'10'.
119         * 3. BRANCH TO ZIGAIN. SEE ADDRESS ON NEXT LINE
120         01 00040  000002D0  DATA  ZIGAIN          *B
121         * TO REINITIALIZE THE TEST:
122         * 1. CP INTERRUPT
123         * 2. ENTER DEVICE ADDRESS INTO LOCATION X'10'
124         * 3. BRANCH TO ZIGAIN. SEE ADDRESS ON NEXT LINE
125         01 00041  000002D0  DATA  ZIGAIN          *B
126         * (IF THE SELECTED DEVICE DOES NOT GENERATE AN INTERRUPT
127         * FOR ANY REASON, RESTART BY REPEATING STEP 3 )
128         *
129         *
130         * ***** OPERATING OPTIONS
131         *
132         * SS1      SET=SHORT LOOP
133         *          RESET=NORMAL OPERATION
134         *
135         * SS2      SET=LONG LOOP
136         *          RESET=NORMAL OPERATION
137         *
138         * SS3      SET=REPORT
139         *          RESET=NORMAL OPERATION
140         *
141         * SS4      SET=NO HALT ON ERRORS
142         *          RESET=HALT ON ERRORS AND AFTER REPORT
143         *
144         * ***** REGISTER CONTENTS AFTER HALT INITIATED BY:
145         * (WAIT AT X'1E8')
146         * REPORT
147         * BR

```

```

148 * ERROR
149 *
150 * R1 PRESENT LIST ADDRESS
151 * R2 ERROR COUNTER
152 * R3 PASS COUNTER (PASSES=0-15, MODULES=16-31)
153 * R4 INSTRUCTION
154 * R5 ERROR IDENTIFIER AND ADDRESS:
155 * 10000000 INSTRUCTION
156 * 20000000 LOCATION+1 OF THE EXECUTION LOCATION
157 * 30000000 INDIRECT ADDRESS
158 * 40000000 INDEX REGISTER X: X=1(NORMAL) OR 7(ONE)
159 * 50000000 PROGRAM STATUS WORD X: X=1 OR 2
160 * 60000000 REGISTER X: X=C(12)OR D(13)
161 * 70000000 MEMORY WORD IN LOCATION WXYZ (WXYZ=0-FFFF)
162 *
163 * R6 ERRONEOUS RESULT
164 * R7 PREDETERMINED RESULT
165 * R8 DIFFERENCE BETWEEN R6 AND R7
166 *
167 * ***** REGISTER CONTENTS AFTER HALT INITIATED BY:
168 * CONTROL PANEL INTERRUPT (WAIT AT X'F3')
169 * OR
170 * SPURIOUS TRAP (WAIT AT X'403')
171 *
172 * ***** R0 AND OR R5 MAY BE MODIFIED AFTER
173 * THE WAIT FROM CP INTERRUPT. R0 WILL
174 * SELECT THE MSG DEVICE AND R5 THE
175 * COUNT PULSE INTERRUPTS
176 * T=0 FOR KSR MSG= DEVICE ADDR
177 * T=8 FOR LINE PRINTER
178 * R0 T0000MSG T=0 FOR KSR MSG= DEVICE ADDR
179 * R1 3E40YYYY LW,4 OBJECT ADDRESS
180 * R2 ERROR COUNTER
181 * R3 XXXXZZZZ X=PASS COUNT Z= TEST COUNT
182 * R5 00000000 N= ACTIVE COUNTER INTERRUPTS
183 * BIT POSITION ACTIVATES COUNTER
184 * 16 1
185 * 17 2
186 * 18 3

```

```

185 * 19 4
186 *
187 *
188 * ORG X'40' TRAP LOCATIONS
189 *
190 * ***** THE TRAP LOCATIONS WILL NOT ALWAYS CONTAIN THE INSTRUCTION
191 * SHOWN IN THIS LISTING.
192 * ***** LOCATION #0 USUALLY CONTAINS :: XPSD,B RETURN (SAME AS L9C 47)
193 * ***** TRAP MODIFICATION IS USUALLY ACCOMPLISHED BY THE LPSD IN L9C 12B
194 * 01 00040 0F00005E VABTR XPSD,0 NAB NONALLOWED OPERATION
195 * 01 00041 0F000072 JIITR XPSD,0 JII UNIMPLEMENTED INSTRUCTION
196 * 01 00042 0F000078 SLTR XPSD,0 SL STACK LIMIT
197 * 01 00043 0F00007E FXPBTR XPSD,0 FXPB FIXED POINT OVERFLOW
198 * 01 00044 0F000084 FLFPTR XPSD,0 FLFP FLOATING POINT FAULT
199 * 01 00045 0F00008A DFTR XPSD,0 DF DECIMAL FAULT
200 * 01 00046 0F000090 WDTRTR XPSD,0 WDTR WATCHDOG TIMER RUNOUT
201 * 01 00047 0F800464 BRANCH XPSD,8 RETURN
202 * 01 00048 0F000096 CAL1TR XPSD,0 CAL1 CALL ONE
203 * 01 00049 0F0000AA CAL2TR XPSD,0 CAL2 CALL TWO
204 * 01 0004A 0F0000BE CAL3TR XPSD,0 CAL3 CALL THREE
205 * 01 0004B 0F0000D2 CAL4TR XPSD,0 CAL4 CALL FOUR
206 *
207 * FILL X'52' INTERRUPT LOCATIONS
208 * 01 0004C 00000000 A
209 * 01 0004D 00000000 A
210 * 01 0004E 00000000 A
211 * 01 0004F 00000000 A
212 * 01 00050 00000000 A
213 * 01 00051 00000000 A
214 * 01 00052 3310046E MTW,1 CNT1CP
215 * 01 00053 3310046F MTW,1 CNT2CP
216 * 01 00054 33100470 MTW,1 CNT3CP
217 * 01 00055 33100471 MTW,1 CNT4CP
218 * 01 00056 0F0000E6 XPSD,0 PARITY MEMORY PARITY
219 * 01 00057 00000000 A
220 * 01 00058 00000000 A
221 * 01 00059 00000000 A
222 * 01 0005A 00000000 A

```

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12,1969 7

213					PAGE			
214	01	0005C	0F8002DC		XPSD,8	10INTR	1/8 INTERRUPT LOCATION	*C
215	01	0005D	0F0000F0		XPSD,0	RESET	INTERRUPT BUTTON	
216				*			NON-ALLOWED OPERATION TRAP	
217					BOUND 8			
218	01	0005E	00000000 A	NAB	PZE			
219	01	0005F	00000000 A		PZE			
220	01	00060	00000062		PZE,0	#+2		
221	01	00061	00000000 A		PZE			
222	01	00062	0F000464	NABRET	XPSD,0	RETURN	NONALLOWED OPERATION	19=
223	01	00063	0F000464	MPVRET	XPSD,0	RETURN	MEMORY PROTECT VIOLATION	TRACC=1 19=
224	01	00064	0F000464	MVRET	XPSD,0	RETURN	MODE VIOLATION	TRACC=2 19=
225	01	00065	0F000464		XPSD,0	RETURN		
226	01	00066	0F000464	NEARET	XPSD,0	RETURN	NONEXISTANT ADDRESS	TRACC=4 19=
227	01	00067	0F000464		XPSD,0	RETURN		
228	01	00068	0F000464		XPSD,0	RETURN		
229	01	00069	0F000464		XPSD,0	RETURN		
230	01	0006A	0F000464	NEIRET	XPSD,0	RETURN	NONEXISTANT INSTRUCTION	TRACC=8 19=
231	01	0006B	0F000464		XPSD,0	RETURN		
232	01	0006C	0F000464		XPSD,0	RETURN		
233	01	0006D	0F000464		XPSD,0	RETURN		
234	01	0006E	0F000464		XPSD,0	RETURN		
235	01	0006F	0F000464		XPSD,0	RETURN		
236	01	00070	0F000464		XPSD,0	RETURN		
237	01	00071	0F000464		XPSD,0	RETURN		
238					PAGE			
239				*			UNIMPLIMENTED INSTRUCTION TRAP	
240					BOUND 8			
241	01	00072	00000000 A	UII	PZE			
242	01	00073	00000000 A		PZE			
243	01	00074	00000076		PZE,0	#+2		
244	01	00075	00000000 A		PZE			
245	01	00076	0F000464	UIIRET	XPSD,0	RETURN		
246				*			STACK LIMIT REACHED TRAP	
247					BOUND 8			
248	01	00078	00000000 A	SL	PZE			

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12,1969 8

249	01	00079	00000000 A		PZE			
250	01	0007A	0000007C		PZE,0	#+2		
251	01	00073	00000000 A		PZE			
252	01	0007C	0F000464	SLRET	XPSD,0	RETURN		
253					PAGE			
254				*			FIXED POINT ARITHMETIC OVERFLOW TRAP	
255					BOUND 8			
256	01	0007E	00000000 A	FXPB	PZE			
257	01	0007F	00000000 A		PZE			
258	01	00080	00000082		PZE,0	#+2		
259	01	00081	00000000 A		PZE			
260	01	00082	7020007E		LCF,2	FXPB		
261	01	00083	0F000464	FPBRET	XPSD,0	RETURN		
262				*			FLOATING POINT ARITHMETIC FAULT TRAP	
263					BOUND 8			
264	01	00084	00000000 A	FLPF	PZE			
265	01	00085	00000000 A		PZE			
266	01	00086	00000088		PZE,0	#+2		
267	01	00087	00000000 A		PZE			
268	01	00088	70200084		LCF,2	FLPF		
269	01	00089	0F000464	FPFRET	XPSD,0	RETURN		
270				*			DECIMAL ARITHMETIC FAULT TRAP	
271					BOUND 8			
272	01	0008A	00000000 A	DF	PZE			
273	01	0008B	00000000 A		PZE			
274	01	0008C	000000RE		PZE,0	#+2		
275	01	0008D	00000000 A		PZE			
276	01	0008E	7020008A		LCF,2	DF		
277	01	0008F	0F000464	DFRET	XPSD,0	RETURN		
278				*			WATCHDOG TIMER RUNOUT TRAP	
279					BOUND 8			
280	01	00090	00000000 A	WDTR	PZE			
281	01	00091	00000000 A		PZE			
282	01	00092	00000094		PZE,0	#+2		
283	01	00093	00000000 A		PZE			
284	01	00094	0F000464	WDTRET	XPSD,0	RETURN		
285					PAGE			

```

286
287
288 01 00096 00000000 A CAL1 BOUND B CALL 1 TRAP
289 01 00097 00000000 A PZE
290 01 00098 0000009A PZE
291 01 00099 00000000 A PZE,0 #+2
292 01 0009A 0F000464 C1RET XPSD,0 RETURN TRACC=0
293 01 0009B 0F000464 XPSD,0 RETURN TRACC=1 19=1
294 01 0009C 0F000464 XPSD,0 RETURN TRACC=2 19=1
295 01 0009D 0F000464 XPSD,0 RETURN TRACC=3 19=1
296 01 0009E 0F000464 XPSD,0 RETURN TRACC=4 19=1
297 01 0009F 0F000464 XPSD,0 RETURN TRACC=5 19=1
298 01 000A0 0F000464 XPSD,0 RETURN TRACC=6 19=1
299 01 000A1 0F000464 XPSD,0 RETURN TRACC=7 19=1
300 01 000A2 0F000464 XPSD,0 RETURN TRACC=8 19=1
301 01 000A3 0F000464 XPSD,0 RETURN TRACC=9 19=1
302 01 000A4 0F000464 XPSD,0 RETURN TRACC=10 19=1
303 01 000A5 0F000464 XPSD,0 RETURN TRACC=11 19=1
304 01 000A6 0F000464 XPSD,0 RETURN TRACC=12 19=1
305 01 000A7 0F000464 XPSD,0 RETURN TRACC=13 19=1
306 01 000A8 0F000464 XPSD,0 RETURN TRACC=14 19=1
307 01 000A9 0F000464 XPSD,0 RETURN TRACC=15 19=1
308
309
310
311 01 000AA 00000000 A CAL2 BOUND B CALL 2 TRAP
312 01 000AB 00000000 A PZE
313 01 000AC 000000AE PZE
314 01 000AD 00000000 A PZE,0 #+2
315 01 000AE 0F000464 C2RET XPSD,0 RETURN TRACC=0
316 01 000AF 0F000464 XPSD,0 RETURN TRACC=1 19=1
317 01 000B0 0F000464 XPSD,0 RETURN TRACC=2 19=1
318 01 000B1 0F000464 XPSD,0 RETURN TRACC=3 19=1
319 01 000B2 0F000464 XPSD,0 RETURN TRACC=4 19=1
320 01 000B3 0F000464 XPSD,0 RETURN TRACC=5 19=1
321 01 000B4 0F000464 XPSD,0 RETURN TRACC=6 19=1
322 01 000B5 0F000464 XPSD,0 RETURN TRACC=7 19=1

```

```

323 01 000B6 0F000464 XPSD,0 RETURN TRACC=8 19=1
324 01 000B7 0F000464 XPSD,0 RETURN TRACC=9 19=1
325 01 000B8 0F000464 XPSD,0 RETURN TRACC=10 19=1
326 01 000B9 0F000464 XPSD,0 RETURN TRACC=11 19=1
327 01 000BA 0F000464 XPSD,0 RETURN TRACC=12 19=1
328 01 000BB 0F000464 XPSD,0 RETURN TRACC=13 19=1
329 01 000BC 0F000464 XPSD,0 RETURN TRACC=14 19=1
330 01 000BD 0F000464 XPSD,0 RETURN TRACC=15 19=1
331
332
333
334 01 000BE 00000000 A CAL3 BOUND B CALL 3 TRAP
335 01 000BF 00000000 A PZE
336 01 000C0 000000C2 PZE
337 01 000C1 00000000 A PZE,0 #+2
338 01 000C2 0F000464 C3RET XPSD,0 RETURN TRACC=0
339 01 000C3 0F000464 XPSD,0 RETURN TRACC=1 19=1
340 01 000C4 0F000464 XPSD,0 RETURN TRACC=2 19=1
341 01 000C5 0F000464 XPSD,0 RETURN TRACC=3 19=1
342 01 000C6 0F000464 XPSD,0 RETURN TRACC=4 19=1
343 01 000C7 0F000464 XPSD,0 RETURN TRACC=5 19=1
344 01 000C8 0F000464 XPSD,0 RETURN TRACC=6 19=1
345 01 000C9 0F000464 XPSD,0 RETURN TRACC=7 19=1
346 01 000CA 0F000464 XPSD,0 RETURN TRACC=8 19=1
347 01 000CB 0F000464 XPSD,0 RETURN TRACC=9 19=1
348 01 000CC 0F000464 XPSD,0 RETURN TRACC=10 19=1
349 01 000CD 0F000464 XPSD,0 RETURN TRACC=11 19=1
350 01 000CE 0F000464 XPSD,0 RETURN TRACC=12 19=1
351 01 000CF 0F000464 XPSD,0 RETURN TRACC=13 19=1
352 01 000D0 0F000464 XPSD,0 RETURN TRACC=14 19=1
353 01 000D1 0F000464 XPSD,0 RETURN TRACC=15 19=1
354
355
356
357 01 000D2 00000000 A CAL4 BOUND B CALL 4 TRAP
358 01 000D3 00000000 A PZE
359 01 000D4 000000D6 PZE,0 #+2

```

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12, 1969 11

360	01	000D5	00000000 A		PZE			
361	01	000D6	0F000464	C*RET	XPSD,0	RETURN		TRACC=0
362	01	000D7	0F000464		XPSD,0	RETURN		TRACC=1 19=1
363	01	000D8	0F000464		XPSD,0	RETURN		TRACC=2 19=1
364	01	000D9	0F000464		XPSD,0	RETURN		TRACC=3 19=1
365	01	000DA	0F000464		XPSD,0	RETURN		TRACC=4 19=1
366	01	000DB	0F000464		XPSD,0	RETURN		TRACC=5 19=1
367	01	000DC	0F000464		XPSD,0	RETURN		TRACC=6 19=1
368	01	000DD	0F000464		XPSD,0	RETURN		TRACC=7 19=1
369	01	000DE	0F000464		XPSD,0	RETURN		TRACC=8 19=1
370	01	000DF	0F000464		XPSD,0	RETURN		TRACC=9 19=1
371	01	000E0	0F000464		XPSD,0	RETURN		TRACC=10 19=1
372	01	000E1	0F000464		XPSD,0	RETURN		TRACC=11 19=1
373	01	000E2	0F000464		XPSD,0	RETURN		TRACC=12 19=1
374	01	000E3	0F000464		XPSD,0	RETURN		TRACC=13 19=1
375	01	000E4	0F000464		XPSD,0	RETURN		TRACC=14 19=1
376	01	000E5	0F000464		XPSD,0	RETURN		TRACC=15 19=1
377					PAGE			
378				*				PARITY INTERRUPT SERVICE ROUTINE
379					BBOUND 8			
380	01	000E6	00000000 A	PARITY	PZE			
381	01	000E7	00000000 A		PZE			
382	01	000E8	000000EA		PZE,0	*+2		
383	01	000E9	00000000 A		PZE			
384	01	000EA	6C400010 A		RD,4	X'110'		RECORD PARITY ERROR PLANS
385	01	000EB	32500371		LW,5	CPINT		COUNT PULSE INTERRUPTS
386	01	000EC	6D501300 A		WD,5	X'1300'		ARM AND DISABLE
387	01	000ED	2E000000 A		WAIT,0	0		
388	01	000EE	0E30046A		LPSD,3	REPEAT		RELEASE PARITY INTERRUPT-REPEAT TEST
389				*				INTERUPT BUTT0N SERVICE ROUTINE
390					BBOUND 8			
391	01	000F0	00000000 A	RESET	PZE			
392	01	000F1	00000000 A		PZE			
393	01	000F2	000000F4		PZE,0	*+2		
394	01	000F3	07000000 A		DATA	X'07000000'		TURN ON INTERRUPT INHIBIT BITS
395	01	000F4	32500371		LW,5	CPINT		COUNT PULSE INTERRUPTS
396	01	000F5	6D501300 A		WD,5	X'1300'		ARM AND DISABLE

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12, 1969 12

397	01	000F6	32300474		LW,3	PASSES		RESET PASSES TO LAST SETTING
398	01	000F7	32200473		LW,2	ERRORS		RESET ERRORS TO LAST SETTING
399	01	000F8	3210011D		LW,1	SAVE		REINITIALIZE LOAD WITH LAST SETTING
400	01	000F9	3200037B		LW,0	TYPE		
401	01	000FA	2E000000 A		WAIT,0	0		
402	01	000FB	4B500391		AND,5	MASK+4		
403	01	000FC	35500371		STW,5	CPINT		
404	01	000FD	3500037B		STW,0	TYPE		DEVICE ADDR IF BIT=0 KSR; #1 LP
405	01	000FE	35500372		STW,5	CPINTM		
406	01	000FF	0E30046A		LPSD,3	REPEAT		RELEASE PANEL INTERRUPT-REPEAT TEST
407					PAGE			
408				*				AUT0-CONTROL
409					FILL	X'1100'		
410	01	00100	322003C0	AUT0	LW,2	ZER0		ERRORS
411	01	00101	323003C0		LW,3	ZER0		PASSES
412				*	REINITIATE	MDULES DEPENDENT ON	OPTIONS	*B
413	01	00102	321004E7		LW,1	LW03+1		LB *IA - LEGAL MEMORY ADDRESS *B
414	01	00103	35100D14		STW,1	ANLZ08+6		*B
415	01	00104	35100D15		STW,1	ANLZ08+7		*B
416	01	00105	32100332		LW,1	BEND		INST '3 END' BYPASS TEST MDULE *B
417	01	00106	35100D0F		STW,1	ANLZ08+1		BYPASS TEST MDULE ON FIRST PASS *B
418	01	00107	351008D3		STW,1	BAL05+1		BYPASS TEST MDULE ON FIRST PASS *B
419	01	00108	35101621		STW,1	NFAIMP01+1		BYPASS TEST MDULE ON FIRST PASS *B
420	01	00109	35300371		STW,3	CPINT		CLEAR RTC OPTION *B
421	01	0010A	35300331		STW,3	ITERATE		CLEAR SH0RT LOOP *B
422	01	0010B	32100368		LW,1	NEG51		
423	01	0010C	35100369		STW,1	LINE		INITIALIZE LINE COUNT
424	01	0010D	32100385		LW,1	NEG2		
425	01	0010E	35100363		STW,1	FIRST		RESET FIRST PASS COUNTER
426	01	0010F	32100356		LW,1	LOAD		INITIALIZE MDULE PBINTER, SET C=0
427	01	00110	324003C0	CYCLE	LW,4	ZER0		CLEAR TRANSFER REGISTER
428	01	00111	3510011D		STW,1	SAVE		SAVE 0LD PBINTER FOR RESET
429	01	00112	3540046D		STW,4	PSW2		INITIALIZE FOR EACH MDULE *B
430	01	00113	3250037C		LW,5	PCPINT		PARITY AND CONTROL PANAL INTERRUPTS
431	01	00114	6D501200 A		WD,5	X'1200'		ARM AND ENABLE
432	01	00115	35200473		STW,2	ERRORS		SAVE ERROR COUNTER IN MEMORY
433	01	00116	35300474		STW,3	PASSES		SAVE PASS COUNTER IN MEMORY

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 13

434	01	00117	32500358		LW,5	STORE	PREPARE TO CLEAR THE TABLE; SET I=0
435	01	00118	32600367		LW,6	NEG20	
436	01	00119	3550011A	CLEAR	STW,5	*+1	
437	01	0011A	35400444		STW,4	TABLE+1	STORE 0 INTO TABLE+1, I=0 TO 11
438	01	0011B	6550011C		BIR,5	*+1	I+1 INTO I
439	01	0011C	65600119		BIR,6	CLEAR	
440					PAGE		
441	01	0011D	32400488	SAVE	LW,4	LIST+C	PICK UP COUNT
442	01	0011E	69300122		BCS,3	NOTEND	TEST FOR MODULE END
443	01	0011F	4830035C		AND,3	*1015	DELETE MODULE COUNT
444	01	00120	20310000 A		AI,3	X'10000'	INCREMENT PASS COUNTER
445	01	00121	68000298		B	DONE	
446	01	00122	32500358	NOTEND	LW,5	STORE	PREPARE TO SET THE TABLE
447	01	00123	32600004 A		LW,6	4	
448	01	00124	35100126	MOVE	STW,1	FRM	SET LOAD
449	01	00125	35500127		STW,5	TO	SET STORE
450	01	00126	32400488	FRM	LW,4	LIST+C	LOAD VEHICAL
451	01	00127	35400444	TO	STW,4	TABLE+1	STORE VEHICAL
452	01	00128	65100129		BIR,1	*+1	C+1 INTO C
453	01	00129	6550012A		BIR,5	*+1	I+1 INTO I
454	01	0012A	65600124		BIR,6	MOVE	
455	01	0012B	35100126		STW,1	FRM	SET MODULE POINTER - NEXT MODULE
456					PAGE		
457				*			AUTO-EXECUTE
458	01	0012C	32100448		LW,1	TABLE+4	PICK UP INDEX
459	01	0012D	32400047		LW,4	XPSD	PICK UP RETURN VEHICAL
460	01	0012E	35400165		STW,4	LOC+1	SET LOC+1 OF 'EXECUTE INSTRUCTION'
461	01	0012F	35400040		STW,4	NABTR	SET RETURN FOR SLAVE MODE CASES
462	01	00130	32400446		LW,4	TABLE+2	PSW11
463	01	00131	4840035A		AND,4	LINKAD	SELECT LINK ADDRESS AND DELETE MS,MM
464	01	00132	3540046C		STW,4	PSW1	SET UP LINKAGE
465	01	00133	325003C0		LW,5	ZERO	CLEAR R5
466	01	00134	48400358		AND,4	CBND	CLEAR ADDRESS PORTION OF PSW1
467	01	00135	0E00046C		LPSD,0	PSW1	LINKAGE
468				** LINKAGE IS TO NEXT INSTRUCTION OR TO VARIOUS TRAP SETUP AREAS START-			
469				** ING AT LOC 18C			
470	01	00136	32400446	SETPSW	LW,4	TABLE+2	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 14

471	01	00137	48400358		AND,4	COND	CLEAR ADDRESS
472	01	00138	4840033D		EBR,4	LOCADD	SET ADDRESS TO LOC
473	01	00139	3540046C		STW,4	PSW1	
474	01	0013A	32400450		LW,4	TABLE+12	
475	01	0013B	35400460		STW,4	PSW2	
476	01	0013C	22200001 A		LI,2	1	
477	01	0013D	32400445		LW,4	TABLE+1	INSTRUCTION
478	01	0013E	35400459		STW,4	INST	
479	01	0013F	3250033B		LW,5	INDA	INDIRECT ADDRESS
480	01	00140	32700362		LW,7	BNE	SET HALF WORD (ODD MEMORY) INDEX
481	01	00141	3550045A		STW,5	IA	
482	01	00142	32800448		LW,8	TABLE+7	STORE EXPECTED MEMORY RESULT -
483	01	00143	3290044F		LW,9	TABLE+11	INTO A DOUBLEWORD BOUNDARY -
484	01	00144	35800180		STW,8	MEMOUT	FOR USE IN AUTOMATIC SHORT -
485	01	00145	35900181		STW,9	MEMOUT+1	LOOP
486	01	00146	32800449		LW,8	TABLE+5	PUTS EXPECTED REGISTER -
487	01	00147	3290044D		LW,9	TABLE+9	RESULTS INTO AREA FOR -
488	01	00148	35800182		STW,8	ROUTPUT	USE OF AUTOMATIC SHORT LOOP
489	01	00149	35900183		STW,9	ROUTPUT+1	
490	01	0014A	32800448		LW,8	TABLE+4	REGISTER OPERANDS ARE -
491	01	0014B	3290044C		LW,9	TABLE+8	MOVED TO AN AREA UTILIZED -
492	01	0014C	35800184		STW,8	RINPOT	BY THE AUTOMATIC SHORT LOOP
493	01	0014D	35900185		STW,9	RINPOT+1	
494	01	0014E	32600331		LW,6	ITERATE	DETERMINES IF AUTO SHORT LOOP
495	01	0014F	3280044A		LW,8	TABLE+6	MW1
496	01	00150	3290044E		LW,9	TABLE+10	MW+11
497	01	00151	32500371		LW,5	CPINT	COUNT PULSE INTERRUPTS
498	01	00152	60501200 A		WD,5	X'1200'	ARM AND ENABLE
499					PAGE		
500				* REGISTER 1 AND REG 7 ARE NOT RESTORED ON SHORT LOOP			
501				* IF THE ERROR IDENTIFIER IS - 4 - THEN THE PROGRAM SHOULD			
502				* BE RUN ON LONG LOOP OR MODIFIED TO RESTORE THE FAILING REGISTER			
503	01	00153	35800460	SHORT	STW,8	MEMORY	
504	01	00154	35900461		STW,9	MEMORY+1	
505	01	00155	32C00448		LW,12	TABLE+4	R
506	01	00156	32D0044C		LW,13	TABLE+8	RU1
507	01	00157	32F0033C		LW,15	LOC2AD	

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12, 1969 15

508	01	00158	35F00466		STW,15	RETURN+2	
509	01	00159	0E00046C	PREL3C	LPSD,0	PSW1	*B
510	01	0015A	11C001B2	FASTCHK	CD,12	R0UTPUT	*B
511	01	0015B	69300167		BNE	ERREXIT	*B
512	01	0015C	12C001B0		LD,12	MEM0UT	*B
513	01	0015D	11C00460		CD,12	MEM0RY	*B
514	01	0015E	68300161		BE	SH0RTER	*B
515	01	0015F	12C001B2		LD,12	R0UTPUT	*B
516	01	00160	68000167		B	ERREXIT	*B
517	01	00161	15800460	SH0RTER	STD,8	MEM0RY	*B
518	01	00162	12C001B4		LD,12	RINPUT	*B
519	01	00163	0E00046C		LPSD,0	PSW1	*B
520	01	00164	67000459	L0C	EXU	INST	*B
521	01	00165	0F800464		XPSD,8	RETURN	*B
522	01	00166	6460015A		BDR,6	FASTCHK	*B
523	01	00167	32600331	ERREXIT	LW,6	ITERATE	*B
524	01	00168	6C000000 A		RD,0	0	*B
525	01	00169	69800153		BCS,8	SH0RT	*B
526	01	0016A	6D501100 A		WD,5	X'1100'	*B
527	01	00169	32200473		LW,2	ERR0R5	*B
528					PAGE		
529							
530	01	0016C	35100458		STW,1	TEST+3	AUT0-TEST
531	01	0016D	32100382		LW,1	00DBALL	IX
532	01	0016E	35100466		STW,1	RETURN+2	SET RETURN FOR SPURIOUS TRAPS
533	01	0016F	3570045F		STW,7	TEST+7	SET RETURN TO RESET+2
534	01	00170	3210011D		LW,1	SAVE	SAVE HALF WORD INDEX
535	01	00171	35C0045C		STW,12	TEST+4	PICK UP PRESENT LIST ADDRESS
536	01	00172	35D0045D		STW,13	TEST+5	R
537	01	00173	3250036A		LW,5	INSTID	RUI
538	01	00174	32600459		LW,6	TEST+1	PICK UP INSTRUCTION IDENTIFIED
539	01	00175	32700445		LW,7	TABLE+1	INST(R)
540	01	00176	0F0001EA		XPSD,0	ERR0R	INST(0)
541	01	00177	3250036B		LW,5	XPSDID	TEST INSTRUCTION
542	01	00178	32600165		LW,6	L0C+1	PICK LOCATION+1 IDENTIFIER
543	01	00179	32700047		LW,7	XPSD	L0C+1(R)
544	01	0017A	0F0001EA		XPSD,0	ERR0R	L0C+1(0)
							TEST LOCATION+1

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12, 1969 16

545	01	00173	3250036C		LW,5	IAID	PICK UP INDIRECT ADDRESS IDENTIFIER
546	01	0017C	3260045A		LW,6	IA	IA(R)
547	01	0017D	3270033B		LW,7	INDA	IA(0)
548	01	0017E	0F0001EA		XPSD,0	ERR0R	TEST INDIRECT ADDRESS WORD
549					PAGE		
550	01	0017F	3250036D		LW,5	IXID	PICK UP INDEX IDENTIFIER
551	01	00180	3260045B		LW,6	TEST+3	IX(R)
552	01	00181	32700448		LW,7	TABLE+4	IX(0)
553	01	00182	0F0001EA		XPSD,0	ERR0R	TEXT INDEX R1
554	01	00183	48500361		E0R,5	SIX	SET INDEX 7 IDENTIFIER
555	01	00184	3260045F		LW,6	TEST+7	IX7(R)
556	01	00185	32700362		LW,7	BNE	IX7(0)
557	01	00186	0F0001EA		XPSD,0	ERR0R	TEST INDEX R7
558	01	00187	3250036E		LW,5	PSDWID	PICK UP PROGRAM STATUS IDENTIFIER
559	01	00188	32600464		LW,6	TEST+12	PSW1(R)
560	01	00189	32700447		LW,7	TABLE+3	PSW1(0)
561	01	0018A	0F0001EA		XPSD,0	ERR0R	TEST PSW1
562	01	00189	6550018C		BIR,5	*+1	INCREMENT PSOW IDENTIFIER
563	01	0018C	32600465		LW,6	TEST+13	PSW2(R)
564	01	0018D	32700451		LW,7	TABLE+13	PSW2(0)
565	01	0018E	0F0001EA		XPSD,0	ERR0R	TEST PSW2
566					PAGE		
567	01	0018F	3250036F		LW,5	REGID	PICK UP REGISTER IDENTIFIER
568	01	00190	48500360		E0R,5	CEE	SET REGISTER ADDRESS *(12)
569	01	00191	3260045C		LW,6	TEST+4	R(R)
570	01	00192	32700449		LW,7	TABLE+5	R(0)
571	01	00193	0F0001EA		XPSD,0	ERR0R	TEST REGISTER
572	01	00194	65500195		BIR,5	*+1	INCREMENT REGISTER IDENTIFIER
573	01	00195	3260045D		LW,6	TEST+5	RUI(R)
574	01	00196	3270044D		LW,7	TABLE+9	RUI(0)
575	01	00197	0F0001EA		XPSD,0	ERR0R	TEST REGISTER J 1
576	01	00198	32500370		LW,5	MEMID	PICK UP MEMORY IDENTIFIER
577	01	00199	32600460		LW,6	MEM0RY	MW(R)
578	01	0019A	3270044B		LW,7	TABLE+7	MW(0)
579	01	0019B	0F0001EA		XPSD,0	ERR0R	TEST MEMORY WORD
580	01	0019C	6550019D		BIR,5	*+1	INCREMENT MEMORY IDENTIFIER
581	01	0019D	32600461		LW,6	MEM0RY+1	MW+1(R)

```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969 17
582 01 0019E 3270044F LW,7 TABLE+11 MW+1(0)
583 01 0019F 0F0001EA XPSD,0 ERROR TEST MEMORY WORD + 1
584 01 001A0 325003C0 LW,5 ZERO SET IDENTIFIER FOR REPORT
585 01 001A1 324001AE LW,6 ERRIND
586 01 001A2 692001A5 BCS,2 0+3
587 01 001A3 6C000000 A RD,0 0 READ SENSE SWITCHES
588 01 001A4 692001F5 BCS,2 ZR SS3 # REPORT
589 01 001A5 326003C0 LW,6 BYTE
590 01 001A6 356001AE STW,6 ERRIND
591 01 001A7 6C000040 A END WD,0 X'40'
592 01 001A8 32200473 LW,2 ERRORS TURN OFF ALARM
593 * C(R2) WOULD EQUAL 1 IF OBJECT INST
594 01 001A9 653001AA BIR,3 0+1 WAS A BRANCH TO END
595 01 001AA 6C000000 A RD,0 0 INCREMENT MODULE COUNTER
596 01 001AB 69C00110 BCS,12 CYCLE READ SENSE SWITCHES
597 01 001AC 32100126 LW,1 FROM LOOP ON CURRENT TEST (SS1 OR 2)
598 01 001AD 0E00046A LPSD,0 MODULE RESTORE NEW LIST ADDRESS
599 01 001AE 00000000 A ERRIND DATA 0 UPDATE POINTER
600 PAGE 15
601 BBUND 8
602 01 001B0 00000000 A MEMOUT DATA 0,0 STORAGE OF DATA UTILIZED BY- *B
603 01 001B1 00000000 A RD,0 0 THE AUTOMATIC SHORT LOOP *B
604 01 001B2 00000000 A ROUTPUT DATA 0,0 *B
605 01 001B3 00000000 A RINPUT DATA 0,0 *B
606 01 001B4 00000000 A *
607 01 001B5 00000000 A *
608 01 001B6 3250035F * SIGNAL LW,5 19 SET XPSD FOR NAB TRAP
609 01 001B7 4850034E * RIGNAL EBR,5 NABXD SET 19=1
610 01 001B8 35500040 * STW,5 NABTR SET 19=0
611 01 001B9 48400346 * EBR,4 NABAD
612 01 001BA 35400060 * STW,4 NAB+2 SET PSW1 BITS 0-11 FOR NAB TRAP
613 01 001BB 68000136 * BCR,0 SETPSW SET PSW1 BITS 0-11 FOR JII TRAP
614 *
615 01 001BC 48400348 * UIISW EBR,4 UIIAD
616 01 001BD 35400074 * STW,4 UII+2
617 01 001BE 68000136 * BCR,0 SETPSW RETURN TO LONG

```

```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969 18
616 * SET PSW1 BITS 0-11 FOR SL TRAP
617 01 001BF 48400347 * SLSW EBR,4 SLAD
618 01 001C0 3540007A * STW,4 SL+2
619 01 001C1 68000136 * BCR,0 SETPSW
620 *
621 * THIS ROUTINE ALLOWS VERIFICATION OF A TRAP TO THE PROPER LOCATION *B
622 * AND THE RETURNED CBND CODE. IT DOES NOT VERIFY THE ADDRESS OF THE *B
623 * INSTRUCTION THAT TRAPPED. (SEE THE FOLLOWING ROUTINE) *B
624 01 001C2 48400344 * FXPBSW EBR,4 FXPAD
625 01 001C3 35400080 * STW,4 FXPB+2
626 01 001C4 4850038E * EBR,5 MASK+1 OP CODE FOR XPSD INST *B
627 01 001C5 485001C8 * EBR,5 FXPBA CREATES AN INST XPSD,0 FXPB *B
628 01 001C6 35500043 * STW,5 FXPTR TO TRAP LOCATION *B
629 01 001C7 68000136 * BCR,0 SETPSW
630 01 001C8 0000007E * FXPBA DATA FXPB ADDRESS OF TRAP PROCESSOR *B
631 * SET PSW1 BITS 0-11 FOR FLPF TRAP
632 01 001C9 48400343 * FLPF SW EBR,4 FLPFAD
633 01 001CA 35400086 * STW,4 FLPF+2
634 01 001CB 6800018D * BCR,0 UIISW+1
635 *
636 * THIS ROUTINE ALLOWS VERIFICATION OF THE PSDW BUT DOES NOT CHECK *B
637 * THAT THE INST CAUSED THE CORRECT TRAP TO OCCUR. (SEE ABOVE ROUTINE) *B
638 01 001CC 48500047 * FXPBSW EBR,5 BRANCH XPSD,8 RETURN *B
639 01 001CD 35500043 * STW,5 FXPTR TO TRAP LOCATION *B
640 01 001CE 68000136 * B SETPSW *B
641 *
642 01 001CF 3250035F * SI9CL1 LW,5 19 SET XPSD FOR CAL1
643 01 001D0 4850034A * RI9CL1 EBR,5 CAL1XD SET 19=1
644 01 001D1 35500048 * STW,5 CAL1TR SET 19=0
645 01 001D2 4840033E * EBR,4 CAL1AD
646 01 001D3 35400098 * STW,4 CAL1+2
647 01 001D4 68000136 * BCR,0 SETPSW
648 *
649 01 001D5 3250035F * SI9CL2 LW,5 19 SET XPSD FOR CAL2
650 01 001D6 4850034B * RI9CL2 EBR,5 CAL2XD SET 19=1
651 01 001D7 35500049 * STW,5 CAL2TR SET 19=0
652 01 001D8 4840033F * EBR,4 CAL2AD

```


SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 19

```

653 01 001D9 354000AC STW,4 CAL2+2
654 01 001DA 68000136 BCR,0 SETPSW
655 * SET XPSD FOR CAL3
656 01 001DB 3250035F S19CL3 LW,5 19 SET 19=1
657 01 001DC 4850034C R19CL3 EBR,5 CAL3XD SET 19=0
658 01 001DD 3550004A STW,5 CAL3TR
659 01 001DE 48400340 EBR,4 CAL3AD
660 01 001DF 354000C0 STW,4 CAL3+2
661 01 001EO 68000136 BCR,0 SETPSW
662 * SET XPSD FOR CAL4
663 01 001E1 3250035F S19CL4 LW,5 19
664 01 001E2 4850034D R19CL4 EBR,5 CAL4XD SET 19=1
665 01 001E3 3550004B STW,5 CAL4TR SET 19=0
666 01 001E4 48400341 EBR,4 CAL4AD
667 01 001E5 354000D4 STW,4 CAL4+2
668 01 001E6 68000136 BCR,0 SETPSW
669 ** STORE COND CODE INTO PSW1 IN (TABLE+3) THIS IS NECESSARY FOR TEST OF
670 ** FARWD WHICH ALWAYS READS THE SENSE SWITCHES. A FALSE ERROR MAY OCCUR
671 ** IF SENSE SWITCHES ARE CHANGED DURING THIS SETUP.
672 01 001E7 6C000000 A FARWD RD,0 0 READ SENSE SWITCHES
673 01 001E8 74000447 STCF TABLE+3
674 01 001E9 68000136 B SETPSW
675 PAGE
676 BBOUND 8
677 PAGE
678 * DECIMAL-ERROR
679 01 001EA 00000000 A ERROR PZE
680 01 001EB 00000000 A PZE
681 01 001EC 000001EE PZE,0 *+2
682 01 001ED 00000000 A PZE
683 01 001EE 32800006 A LW,8 6 PICK UP RESULT
684 01 001EF 48800007 A EBR,8 7 COMPARE WITH PREDETERMINED RESULT
685 01 001FO 693001F2 BCS,3 TSTDVC DIFF # 0
686 01 001F1 0E0001EA LPSD,0 ERROR
687 01 001F2 652001F3 TSTDVC BIR,2 *+1 INCREMENT ERROR COUNTER
688 01 001F3 35200473 STW,2 ERRORS KEEP A RUNNING COUNT
689 01 001F4 60000041 A WD,0 X'41' TURN ON AUDIO ALARM

```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 20

```

690 01 001F5 32B002E6 ZR LW,11 IBM
691 ** IBM HAS IO INTERRUPT BIT 1: IO COMPATIBILITY IS IN USE
692 01 001F6 6DB01500 A WD,11 X'1500' DISABLE IO INTERRUPT
693 01 001F7 32B0035D LW,11 603
694 01 001F8 35B001AE STW,11 ERRIND SET ERROR INDICATOR TO ALLOW RETURN
695 * TO BYPASS SS 3 SETTING
696 01 001F9 6E000000 A TESTIO AIO,0 0 CLEAR INTERRUPT PENDING
697 01 001FA CDB0037B TIO,11 *TYPE
698 01 001FB 68C00208 BCR,12 EDIT GO IF IO ADDR RECOG AND SIO POSSIBLE
699 01 001FC 684001F9 BCR,4 TESTIO REPEAT TIO IF SIO IS BUSY
700 01 001FD 688001FF BCR,8 *+2 SIO NOT CURRENTLY POSSIBLE
701 01 001FE 68000202 B HLTEST IO ADDRESS NOT RECOGNIZED
702 01 001FF 43B0035D AND,11 603 SAVE OPERATIONAL STATE BITS
703 01 00200 48B0035D EBR,11 603
704 01 00201 683001F9 BEZ TESTIO DEVICE BUSY
705 01 00202 6C000000 A HLTEST RD,0 0 READ SENSE SWITCHES
706 01 00203 69100205 BCS,1 N0HALT
707 01 00204 2E000000 A WAIT COMMON ERROR HALT
708 01 00205 32B002E6 N0HALT LW,11 IBM
709 01 00206 6DB01400 A WD,11 X'1400' ENABLE IO INTERRUPT
710 01 00207 0E0001EA LPSD,0 ERROR
711 *
712 * EDIT-LEVEL 3
713 01 00208 32C00359 EDIT LW,12 STRMG1 SET STORAGE WORD
714 01 00209 32900365 LW,9 NEG8
715 01 0020A 32A00005 A LW,10 5 TEST R5=0
716 01 0020B 6930020D BCS,3 REPORT+1 DISPLAY
717 01 0020C 32900383 REPORT LW,9 NEG4
718 01 0020D 32A00351 LW,10 LBADR SET REGISTER PICKUP
719 01 0020E 35A0020F STW,10 LDREG
720 01 0020F 3PA00001 A LDREG LW,10 1 PICK UP REGISTER 1 THRU 8(DIS) OR 4
721 01 00210 35A00476 STW,10 WBRD
722 01 00211 35900472 STW,9 CBUNT
723 01 00212 32F00385 LW,15 NEG2 SET WORD COUNT(M)=2
724 01 00213 32000352 LW,0 LWN SET N=-4,-4
725 01 00214 32A00354 LW,10 LWFR4 SET FRAME = F0F0F0F0, F0F0F0F0
726 01 00215 32B00338 LW,11 ANFR8 SET CHAR POSITIONS 1234,5678

```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00			MARCH 12, 1969	21	
727	01 00216	48900362	AND,9	ONE	TEST COUNT EVEN
728	01 00217	6930021C	BCS,3	ODD	
729	01 00218	32F00364	LW,15	NEG3	SET WORD COUNT(M)=3
730	01 00219	32000353	LW,0	LWN2	SET N=-2,-4,-2
731	01 0021A	32A00355	LW,10	LWFRM2	SET FRAME=4040F0F0,F0F0F0F0,F0F04040
732	01 0021B	32800339	LW,11	ANFR2	SET CHAR POSITIONS 12,3456,78
733	01 0021C	32E0033A	LW,14	ANMK	SET DIGIT +ICK = BITS 0-3, 4-7, ETC.
734	01 0021D	35000220	STW,0	SETN	SET NUMBER PICK UP
735	01 0021E	35A00221	STW,10	SETFRM	SET FRAME PICK UP
736	01 0021F	35C0023C	STW,12	STRWD	SET STORAGE LOCATION
737	01 00220	32000383	LW,0	NUMBER	SET NUMBER
738	01 00221	32000388	LW,13	FRAME	SET FRAME (FINAL CHAR-BYTE POSITION)
739	01 00222	35800237	STW,11	ANDF	SET FILTER
740	01 00223	35D00475	STW,13	WKB	SAVE FRAME
741	01 00224	35E0022C	STW,14	ANDM	SET MASK (ORIGINAL CHAR POSITION)
742	01 00225	32A0034F	LW,10	LWBIT	SET BIT PICK UP
743	01 00226	32C00383	LW,12	NEG4	SET BIT COUNT
744	01 00227	320003C0	LW,13	ZERO	SET CHAR GENERATOR TO ZERO
745				PAGE	
746	01 00228	35A0022A	STW,10	LWB	
747	01 00229	35A0022F	STW,10	LWBT	
748	01 0022A	3290037E	LW,9	BIT	PICK UP BIT 1,2,4,8
749	01 0022B	48900476	AND,9	WORD	(BIT)*(WORD)
750	01 0022C	4890038D	AND,9	MASK	(BIT)*(WORD)*(MASK)
751	01 0022D	6930022F	BCS,3	LWBT	LWBT IF WORD HAS BIT IN MASK POSITIO
752	01 0022E	0E000468	LPSD,0	BUMP	
753	01 0022F	3290037E	LW,9	BIT	PICK UP BIT
754	01 00230	48000009 A	EBR,13	9	MERGE BIT WITH CHAR BEING CONSTRUCTE
755	01 00231	65A00232	BIR,10	*+1	INCREMENT BIT PICK UP
756	01 00232	65C00228	BIR,12	BITS	CONTINUE CHAR CONSTRUCTION
757	01 00233	48D00394	AND,13	MASK*7	PICK OF BINARY 4 BIT CHAR
758	01 00234	48D00350	EBR,13	LWBYTE	CONSTRUCT BYTE PICK UP WORD
759	01 00235	35D00236	STW,13	LWBY	
760	01 00236	32D003C0	LW,13	BYTE	PICK UP CONVERTED BYTE
761	01 00237	48D00395	AND,13	FILTER	SELECT DESIRED BYTE
762	01 00238	48D00475	EBR,13	WKB	MERGE BYTE INTO CONVERTED WORD
763	01 00239	6580023A	BIR,11	*+1	INCREMENT CONVERTED BYTE POSITION

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00			MARCH 12, 1969	22	
764	01 0023A	65E00239	BIR,14	*+1	INCREMENT SELECTED CHAR POSITION
765	01 0023B	65000222	BIR,0	BYTES	TEST FOR N CHAR'S
766	01 0023C	35D0042F	STW,13	IMAGE+1	STORE CONVERTED WORD
767	01 0023D	32000220	LW,0	SETN	SET NUMBER PICK UP
768	01 0023E	32A00221	LW,10	SETFRM	SET FRAME PICK UP
769	01 0023F	32C0023C	LW,12	STRWD	PICK UP STORE WORD
770	01 00240	65000241	BIR,0	*+1	INCREMENT NUMBER PICK UP
771	01 00241	65A00243	BIR,10	*+1	INCREMENT FRAME PICK UP
772	01 00242	65C00243	BIR,12	*+1	INCREMENT STORE LOCATION
773	01 00243	65F0021D	BIR,15	WORDS	INCREMENT M - BRANCH IF M NOT ZERO
774	01 00244	32900472	LW,9	COUNT	SET COUNT
775	01 00245	32A0020F	LW,10	LDREG3	SET REGISTER PICK UP
776	01 00246	65A00247	BIR,10	*+1	INCREMENT REGISTER PICK UP
777	01 00247	6590020E	BIR,9	LDREG-1	BRANCH TO LDREG IF COUNT NOT ZERO
778				PAGE	
779					
780	01 00248	32F00369	LW,15	LINE	OUTPUT=LEVEL 3
781	01 00249	32E00363	LW,14	FIRST	LINE COUNT (-51)
782	01 0024A	3200037B	LW,0	TYPE	=-2 FIRST TIME
783	01 0024B	69100260	BLZ	LPR	TEST FOR OUTPUT DEVICE
784	01 0024C	65E00250	BIR,14	SKIP6	FIRST TIME THRU
785	01 0024D	65F00255	BIR,15	LINOUT	LINE COUNT NOT ZERO
786	01 0024E	320003D0	LW,0	PSIXCR	
787	01 0024F	0F000276	XPSD,0	PRINT	OUTPUT 6 CAR. RET.
788	01 00250	320003D1	LW,0	PTITLE	
789	01 00251	0F000276	XPSD,0	PRINT	NEW PAGE TITLE
790	01 00252	320003D2	LW,0	PHEAD	
791	01 00253	0F000276	XPSD,0	PRINT	NEW HEADING
792	01 00254	32F00368	LW,15	NESS1	RESET LINE COUNT
793	01 00255	320003D4	LW,0	PLONGL	SET UP DISPLAY PRINTOUT
794	01 00256	32A00005 A	LW,10	5	PICK UP IDENTIFIER
795	01 00257	69300259	BCS,3	IO	
796	01 00258	320003D3	LW,0	PSHRTL	SET UP RECORD PRINTOUT
797	01 00259	0F000276	XPSD,0	PRINT	
798	01 0025A	35F00369	STW,15	LINE	SAVE NEW LINE COUNT
799	01 0025B	35E00363	STW,14	FIRST	SAVE NEW FIRST PASS INDICATOR
800	01 0025C	6D00004D A	WD,0	X*40'	TURN OFF ALARM

SIGMA	5 CPU	DIAGNOSTIC-AUTO	704287-51C00	MARCH 12, 1969	23	
801	01	0025D	0E00025E	LPSD,0	GETOUT	
802				PAGE		
803				BOUND 8		
804	01	0025E	00300202	GETOUT	HLTEST	
805	01	0025F	00000000 A	PZE		
806	01	00260	CEB0037B	LPH	TD,11 *TYPE	
807	01	00261	68C00264	BCR,12	*+3	GO IF IOP AND DEVICE ADDR RECOG
808	01	00262	68400260	BCR,4	*-2	GO IF SIO BUSY
809	01	00263	6800025A	B	I0+1	I0 OPERATION NOT POSSIBLE
810	01	00264	35B00377	STW,11	TEMP	
811	01	00265	43B00376	AND,11	MOTION	PAPER IS MOVING
812	01	00266	69300260	BNEZ	LPH	LOOP TILL PAPER STOPS
813	01	00267	32B00377	LW,11	TEMP	
814	01	00268	43B00378	AND,11	TOP	CHECK FOR TOP OF FORM
815	01	00269	69300272	BNEZ	LPTOP	OUTPUT TITLE AND HEADING
816	01	0026A	69E00270	BTR,14	GETOP	GO TO TOP OF FORM IF FIRST PASS
817	01	0026B	320003D7	LW,0	LPERR	ERROR MSG CDA
818	01	0026C	32A00005 A	LW,10	5	PICK UP IDENTIFIER
819	01	0026D	6930026F	BCS,3	*+2	REPORT
820	01	0026E	320003D8	LW,0	LPREPRT	REPORT MSG CDA
821	01	0026F	68000259	B	I0	
822	01	00270	320003D5	GETOP	LPGETOP	GO TO TOP OF FORM
823	01	00271	0F000276	XPSD,0	PRINT	
824	01	00272	320003D6	LW,0	LPFORMAT	PRINT TITLE AND HEADING
825	01	00273	0F000276	XPSD,0	PRINT	
826	01	00274	68000268	B	LPMSG	
827				PAGE		
828				*		PRINT-LEVEL 4
829				BOUND 8		
830	01	00276	00000000 A	PRINT	PZE	
831	01	00277	00000000 A		PZE	
832	01	00278	0000027A		PZE,0	*+2
833	01	00279	00000000 A		PZE	
834	01	0027A	CCB0037B	BUSY	SIO,11 *TYPE	OUTPUT MSG
835	01	0027B	68C00283		BCR,12 DBNMSG	SIO ACCEPTED
836	01	0027C	6840027A		BCR,4 BUSY	SIO BUSY, REPEAT SIO
837	01	0027D	6880027F		BCR,8 *-2	GO IF SIO NOT ACCEPTED

SIGMA	5 CPU	DIAGNOSTIC-AUTO	704287-51C00	MARCH 12, 1969	24	
838	01	0027E	68000288	B	EXITI0	I0 ADDR NOT RECOGNIZED
839	01	0027F	43B0035D	AND,11	603	SAVE OPERATIONAL STATE BITS
840	01	00280	43B0035D	EOR,11	603	
841	01	00281	6830027A	BEZ	BUSY	DEVICE BUSY, REPEAT SIO
842	01	00282	68000288	B	EXITI0	DEVICE NOT OPERATIONAL OR UNAVAIL
843	01	00283	CDB0037B	DBNMSG	TIO,11 *TYPE	
844	01	00284	68C00288	BCR,12	EXITI0	
845	01	00285	68400283	BCR,4	DBNMSG	SIO BUSY
846	01	00286	68800288	BCR,8	*+2	ACCEPTABLE SIO NOT CURRENTLY PASS
847	01	00287	68000288	B	EXITI0	I0 ADDR NOT RECOGNIZED
848	01	00288	43B0035D	AND,11	603	SAVE OPERATIONAL STATE BITS
849	01	00289	43B0035D	EOR,11	603	
850	01	0028A	68300283	BEZ	DBNMSG	DEVICE BUSY, REPEAT TIO
851	01	0028B	0F000276	EXITI0	LPSD,0	PRINT
852	01	0028C	32200293	SETRPLY	LW,2	REPLAY
853	01	0028D	35200026 A	STW,2	38	BRANCH TO AUTO IS STORED INTO LOC+26
854	01	0028E	6C000000 A	RD,0	0	READ THE SENSE SWITCHES
855	01	0028F	68800100	BCR,8	AUTO	GO IF SS1 IS OFF
856				*****	PREVENT COUNTER INTERRUPT IMPLEMENTATION	*****
857	01	00290	2E000000 A	WAIT	0	TURN SENSE SWITCH 1 OFF
858	01	00291	322003C0	LW,2	ZERO	
859	01	00292	35200372	STW,2	CPINTH	
860	01	00293	68000100	REPLAY	B	AUTO
861				BOUND	8	
862				PAGE		
863				** TEST TO SEE IF	FLOATING POINT OPTION IS INSTALLED (FIRST PASS ONLY)	
864	01	00294	00000000 A	FLTRAP	DATA	0,0,FLNIN,0
	01	00295	00000000 A			
	01	00296	000002A0			
	01	00297	00000000 A			
865	01	00298	21310000 A	DBNE	CI,3	X'10000'
866	01	00299	6930032A		BNE	INITIATE
867	01	0029A	320002FA		LW,0	NIMP
868	01	0029B	35000041		STW,0	JUITR
869	01	0029C	32C003C1		LW,12	BYTE+1
870	01	0029D	3DC003C1	FLSAT	FAS,12	BYTE+1
871	01	0029E	320002FB		LW,0	PFL0ATP
						MSG FLOATING POINT OPTION IS IN

```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 25
872 01 0029F 680002A3 B FLPRINT
873 01 002AD 3200029D FLNIN LW,0 FLBAT COMES HERE IF TRAP OCCURRED AT X'2B1
874 01 002A1 35001621 STW,0 NFAIMPO1+1 ALLOW TEST OF TRAP EACH TIME
875 01 002A2 320002FC LW,0 PNFLBATP MSG FLOATING POINT NOT INSTALLED
876 01 002A3 0F000276 FLPRINT XPSD,0 PRINT OUTPUT THE SELECTED MSG
877 01 002A4 320002F9 LW,0 IMP
878 01 002A5 35000041 STW,0 UIITR RESTORE ORIG XPSD TO LOC #1
879 * TEST FOR NON-EXISTENT MEMORY. IF ANY, SETUP BAL AND ANLZ TESTS *B
880 01 002A6 32000318 LW,0 RETADDR MODIFY RETURN TO ENTER THIS - *B
881 01 002A7 35000466 STW,0 RETURN+2 ROUTINE WHEN A TRAP OCCURS *B
882 01 002A8 22100FFF A LI,1 4096 ADDRESS *B
883 01 002A9 82000001 A LW,0 *1 TRY TO FIND NEM *B
884 01 002AA 30100333 AW,1 MINCR ADD 4096 FOR NEXT *K *B
885 01 002AB 21120FFF A CI,1 X'20FFF' > POSSIBLE MEMORY SIZE *B
886 01 002AC 6830010F BE CYCLE=1 NO NON-EXISTENT MEMORY. *B
887 01 002AD 680002A9 B B=4 TRY NEXT *K *B
888 PAGE
889 *THE FOLLOWING ROUTINE IMPLEMENTS THE COUNT PULSE INTERRUPTS AFTER X'20
890 *PASSES WITHOUT ERROR
891 01 002AE 31300379 RTC CW,3 MAXCNT
892 01 002AF 6930010F BNE CYCLE=1
893 01 002B0 21200000 A CI,2 0
894 01 002B1 6930010F BNE CYCLE=1
895 01 002B2 32000372 LW,0 CPINTH
896 01 002B3 6830010F BEZ CYCLE=1 DO NOT OUTPUT MSG
897 01 002B4 32000309 LW,0 PRTMSG
898 01 002B5 0F000276 XPSD,0 PRINT
899 01 002B6 32000391 LW,0 MASK+4 BITS FOR COUNTER 1,2,3 AND 4
900 01 002B7 35000371 STW,0 CPINT STORED INTO CPINT
901 01 002B8 6800010F XRTC B CYCLE=1 RESUME WITH FIRST MODULE
902 PAGE
903 **
904 ** ENTER AT THIS POINT TO BEGIN IO COMPATIBILITY TEST
905 ** ENTER THE IO DEVICE ADDRESS IN MEMORY LOCATION X'10'.
906 **
907 01 002D0 BRG X'2D0' *B
01 002D0

```

```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 26
908 01 002D0 680002D1 ZIBAIN B B=1 *B
909 01 002D1 32E00010 A LW,14 16 DEVICE ADDR IN X'10' *B
910 01 002D2 35E002D4 STW,14 ZIBA SAVE *B
911 01 002D3 680002D5 B SETINTR *B
912 01 002D4 00000002 A ZIBA DATA Z NORMAL LINE PRINTER ADDR
913 01 002D5 22E00020 A SETINTR LI,14 X'2D'
914 01 002D6 35E002E6 STW,14 10H PUT IO INTERRUPT BIT IN 10H
915 01 002D7 6DE01200 A WD,14 X'1200' ARM AND ENABLE IO INTERRUPT
916 01 002D8 670002E0 EXU AIO AIO INST TO CLEAR ANY PENDING INTR *B
917 01 002D9 670002E2 EXU AIO+2 CDW ADDR *B
918 01 002DA 670002E3 EXU AIO+3 SIO *B
919 01 002D3 6800010F B CYCLE=1 START A NEW PASS *B
920 BOUND 8
921 01 002DC 0000010F IOINTR DATA CYCLE=1,0,AIO,0 ENTRY TO INTERRUPT ROUTINE
01 002DD 00000000 A
01 002DE 000002E0
01 002DF 00000000 A
922 01 002E0 6E000000 A AIO AIO,0 0 *B
923 01 002E1 350002E8 STW,0 SAVEO
924 01 002E2 320002E7 LW,0 PI9CBMP COMMAND DOUBLEWORD ADDRESS
925 *** CDW SPECIFIES A SIMPLE WRITE ORDER. OPERATOR MAY CHANGE ANY PART OF
926 *** THE CDW PROVIDED THE FIRST BK OF MEMORY IS NOT DISTURBED BY A READ
927 *** ORDER. CDW IS IN X'2AC' S X'2AD'
928 01 002E3 CC0002D4 SIO,0 *ZIBA *B
929 01 002E4 320002E8 LW,0 SAVEO RESTORE C(RO)
930 01 002E5 0E8002DC LPSD,11 IOINTR RETURN TO PROGRAM *C
931 01 002E6 00000000 A 10H DATA 0 CHANGED TO X'2D' FOR IO COMPAT.
932 01 002E7 00000175 PI9CBMP P IOCBMP CDA
933 01 002E8 00000000 A SAVEO DATA 0
934 PAGE
935 BOUND 8
936 01 002EA 05000381 IOCBMP GEN,8,24 5,8A(CBMP)+1 *B
937 01 002EB 50000031 A GEN,4,28 5,49 *B
938 01 002EC 31154040 A COMP TEXTC 'N IO BCEZ & ICE + BYTE COUNT
01 002ED 40404040 A IO COMPATIBILITY TEST IS IN PROGRESS'
01 002EE 40404040 A
01 002EF 4040C9D6 A

```

01	002F0	40C3D6D4	A						
01	002F1	D7C1E3C9	A						
01	002F2	C2C9D3C9	A						
01	002F3	E3E840E3	A						
01	002F4	C5E2E340	A						
01	002F5	C9E240C9	A						
01	002F6	D540D7D9	A						
01	002F7	D6C7D9C5	A						
01	002F8	E2E24040	A						
939	01	002F9	0F000072	IMP	XPSD,0	UII			
940	01	002FA	0F000294	NIMP	XPSD,0	FLTRAP			
941	01	002FB	0000017F	PFLBATP	P	FLBATP			
942	01	002FC	00000186	PNFLBATP	P	NFLBATP			
943					PAGE				
944					BBOUND	8			
945	01	002FE	05000C01	FLBATP	GEN,8,24	5,BA(FLM)+1			*B
946	01	002FF	0800002F	A	GEN,8,24	8,47			*B
947	01	00300	2F154040	FLM	TEXTC	'N	FLBATING POINT OPTION IS INSTALLED'		
	01	00301	40404040	A					
	01	00302	40404040	A					
	01	00303	4040C6D3	A					
	01	00304	D6C1E3C9	A					
	01	00305	D5C740D7	A					
	01	00306	D6C9D5E3	A					
	01	00307	40D6D7E3	A					
	01	00308	C9D6D540	A					
	01	00309	C9E240C9	A					
	01	0030A	D5E2E3C1	A					
	01	0030B	D3D3C5C4	A					
948					BBOUND	8			
949	01	0030C	05000C39	NFLBATP	GEN,8,24	5,BA(NFLM)+1			*B
950	01	0030D	08000030	A	GEN,8,24	8,48			*B
951	01	0030E	30154040	NFLM	TEXTC	'N	FLBATING POINT OPTION NOT INSTALLED'		
	01	0030F	40404040	A					
	01	00310	40404040	A					
	01	00311	4040C6D3	A					
	01	00312	D6C1E3C9	A					

01	00313	D5C740D7	A						
01	00314	D6C9D5E3	A						
01	00315	40D6D7E3	A						
01	00316	C9D6D540	A						
01	00317	D5D6E340	A						
01	00318	C9D5E2E3	A						
01	00319	C1D3D3C5	A						
01	0031A	C4404040	A						
952					BBOUND	4			
953	01	0031B	0000031C	RETADDR	DATA	8+1			*B
954					* TRAP CBMES HERE. IMPLEMENT TESTS				*B
955	01	0031C	32000382	LW,0	000BALL		RESTORE SPURIOUS TRAP CAPABILITY		*B
956	01	0031D	35000466	STW,0	RETURN+2		BAL,12 BRANCH		*B
957	01	0031E	32000885	LW,0	BAL01+1		PUT IN N9N-EXSISTENT MEMORY REF		*B
958	01	0031F	49000001	BR,0	1				*B
959	01	00320	350008D3	STW,0	BAL05+1				*B
960	01	00321	320004E7	LW,0	LW03+1		LW,12 *IA		*B
961	01	00322	49000001	BR,0	1		PUT IN N9N-EXSISTENT MEMORY REF		*B
962	01	00323	35000D14	STW,0	ANLZ08+6		MEMORY IN		*B
963	01	00324	35000D15	STW,0	ANLZ08+7		MEMORY OUT		*B
964	01	00325	32000D17	LW,0	ANLZ09+1		ANLZ,12 MEMORY		*B
965	01	00326	35000D0F	STW,0	ANLZ08+1		STORE INTO ANLZ08 TEST		*B
966	01	00327	6800010F	B	CYCLE-1		NEXT PASS		*B
967	01	00328	00230000	A	ICOUNT	DATA	X'230000'	35 ERROR FREE PASSES	
968	01	00329	001E0000	A	DATA	X'1E0000'	PASS COUNT OF 3		*B
969	01	0032A	31300329	INITIATE	CH,3	8-1	IMPLEMENT AUTO SHORT IF EQUAL		*B
970	01	0032B	69300334	BNE	COMPAT				*B
971	01	0032C	21200000	A	CI,2	0	CHECK FOR ERRORS		*B
972	01	0032D	6930010F	BNE	CYCLE-1		START ANOTHER PASS		*B
973	01	0032E	22100064	A	LI,1	100	ITERATION COUNT		*B
974	01	0032F	35100331	STW,1	ITERATE				*B
975	01	00330	6800010F	B	CYCLE-1		START A PASS UTILIZING THE AUTO-		*B
976							MATIC SHORT LOOP		*B
977	01	00331	00000000	A	ITERATE	DATA	0	ITERATION COUNT	*B
978	01	00332	680001A7	BEND	B	END	USED DURING INITIALIZE		*B
979	01	00333	00001000	A	INCR	DATA	4096	CONSTANT	*B
980	01	00334	49300002	A	COMPAT	BR,3	2	ERROR COUNT BRED WITH PASS COUNT	*B

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00			MARCH 12, 1969		29
981	01 00335	31300328	CW,3	10CBUNT	*B
982	01 00336	683002D5	BE	SETINTR	*B
983	01 00337	680002AE	B	RTC	*B
984					
985			PAGE		
986	01 00338	48000395	ANFR0	AND,13	FILTER
987	01 00339	48000397	ANFR2	AND,13	FILTER+2
988	01 0033A	4890038D	ANMK	AND,9	MASK
989	01 0033B	00000460	INDA	PZE,0	MEMORY
990	01 0033C	00000166	LBC2AD	PZE,0	L0C+2
991	01 0033D	00000164	L0CADD	PZE,0	L0C
992	01 0033E	0000009A	CAL1AD	PZE,0	CAL1+4
993	01 0033F	000000AE	CAL2AD	PZE,0	CAL2+4
994	01 00340	000000C2	CAL3AD	PZE,0	CAL3+4
995	01 00341	000000D6	CAL4AD	PZE,0	CAL4+4
996	01 00342	0000008E	DFAD	PZE,0	DF+4
997	01 00343	00000088	FLPFAD	PZE,0	FLPF+4
998	01 00344	00000082	FXP0AD	PZE,0	FXP0+4
999	01 00345	00000460	MEMAD	PZE,0	DA(MEMORY)
1000	01 00346	00000062	NABAD	PZE,0	NAB+4
1001	01 00347	0000007C	SLAD	PZE,0	SL+4
1002	01 00348	00000076	UIIAD	PZE,0	UII+4
1003	01 00349	00000094	WDTRAD	PZE,0	WDTR+4
1004	01 0034A	0F000096	CAL1XD	XPSD,0	CAL1
1005	01 0034B	0F0000AA	CAL2XD	XPSD,0	CAL2
1006	01 0034C	0F0000BE	CAL3XD	XPSD,0	CAL3
1007	01 0034D	0F0000D2	CAL4XD	XPSD,0	CAL4
1008	01 0034E	0F00005E	NABXD	XPSD,0	NAB
1009			PAGE		
1010	01 0034F	3290037E	LWBIT	LW,9	BIT
1011	01 00350	32D003C0	LWBYTE	LW,13	BYTE
1012	01 00351	32A00001 A	L0ADR	LW,10	1
1013	01 00352	32000383	LWN	LW,0	NUMBER
1014	01 00353	32000385	LWN2	LW,0	NUMBER+2
1015	01 00354	32D00388	LWFRM	LW,13	FRAME
1016	01 00355	32D0038A	LWFRM2	LW,13	FRAME+2
1017	01 00356	32A00488	L0AD	LW,4	LIST
					PICK UP MARCHING BITS
					SELECT BYTE
					PICK UP REGISTERS FOR OUTPUT
					PICK UP NUMBERS
					PICK UP FRAMES
					LOAD TRANSFER VEHICAL WITH DATA MODU

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00			MARCH 12, 1969		30
1018	01 00357	000001A7	RETEND	PZE,0	END
1019	01 00358	35400444	ST0RE	STW,4	TABLE
1020	01 00359	3500042F	STRM31	STW,13	IMAGE+1
1021			PAGE		
1022	01 0035A	FF3FFFFFF A	LINKAD	DATA	X'FF3FFFFFF'
1023	01 0035B	FFF00000 A	C0ND	DATA	X'FFF00000'
1024	01 0035C	FFF00000 A	M1015	DATA	X'FFF00000'
1025	01 0035D	70000000 A	603	GEN,4,28	7,0
1026	01 0035E	20000000 A	203	DATA	X'20000000'
1027	01 0035F	00400000 A	19	DATA	X'4000000'
1028	01 00360	0000000C A	CEE	DATA	12
1029	01 00361	00000006 A	SIX	DATA	6
1030	01 00362	00000001 A	9NE	DATA	1
1031	01 00363	FFFFFFFFE A	FIRST	DATA	-2
1032	01 00364	FFFFFFFFD A	NEG3	DATA	-3
1033	01 00365	FFFFFFFF8 A	NEG8	DATA	-8
1034	01 00366	FFFFFFFF4 A	NEG12	DATA	-12
1035	01 00367	FFFFFFFFEC A	NEG20	DATA	-20
1036	01 00368	FFFFFFFFCD A	NEG51	DATA	-51
1037	01 00369	FFFFFFFFCD A	LINE	DATA	-51
1038	01 0036A	10000000 A	INSTID	I	1,0
1039	01 0036B	20000165	XPSDID	I	2,L0C+1
1040	01 0036C	30000000 A	IAID	I	3,0
1041	01 0036D	40000001 A	IXID	I	4,1
1042	01 0036E	50000001 A	PSDWID	I	5,1
1043	01 0036F	60000000 A	REGID	I	6,0
1044	01 00370	70000460	MEMID	I	7,MEMORY
1045			PAGE		
1046			*CPINT	BECOMES	0000F000 AFTER X'20' ERROR FREE PASSES (SEE RTC)
1047	01 00371	00000000 A	CPINT	DATA	0
1048	01 00372	0000F000 A	CPINTM	DATA	X'F000'
1049	01 00373	40404040 A	SPACE	TEXT	' 12 SPACES
	01 00374	40404040 A			
	01 00375	40404040 A			
1050	01 00376	08000000 A	M0T10N	DATA	X'8000000'
1051	01 00377	00000000 A	TEMP	DATA	0
1052	01 00378	10000000 A	T0P	DATA	X'10000000'
					INSTRUCTION
					LOCATION+1
					INDIRECT ADDRESS
					INDEX
					PROGRAM STATUS DOUBLEWORD
					REGISTERS
					MEMORY WORDS

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12, 1969 31

1053	01	00379	00200000	A	MAXCNT	DATA	X'200000'	
1054	01	0037A	F1000000	A	PG0	DATA	X'F1000000'	
1055	01	0037B	00000001	A	TYPE	DATA	1	OUTPUT MSG DEVICE ADDR
1056	01	0037C	00000810	A	PCPINT	DATA	X'810'	
1057	01	0037D	00000020	A	ISINT	DATA	X'20'	
1058	01	0037E	11111111	A	BIT	DATA	X'11111111'	
1059	01	0037F	22222222	A		DATA	X'22222222'	
1060	01	00380	44444444	A		DATA	X'44444444'	
1061	01	00381	88888888	A		DATA	X'88888888'	
1062	01	00382	00000477		00DBALL	DATA	SPURTRAP	
1063						PAGE		
1064	01	00383	FFFFFFFC	A	NUMBER	DATA	-4	
1065	01	00384	FFFFFFFC	A		DATA	-4	
1066	01	00385	FFFFFFFE	A		DATA	-2	
1067	01	00386	FFFFFFFC	A		DATA	-4	
1068	01	00387	FFFFFFFE	A		DATA	-2	
1069	01	00388	F0F0F0F0	A	FRAME	DATA	X'F0F0F0F0'	2 WORDS
1070	01	00389	F0F0F0F0	A		DATA	X'F0F0F0F0'	
1071	01	0038A	4040F0F0	A		DATA	X'4040F0F0'	3 WORDS
1072	01	0038B	F0F0F0F0	A		DATA	X'F0F0F0F0'	
1073	01	0038C	F0F04040	A		DATA	X'F0F04040'	
1074	01	0038D	F0000000	A	MASK	DATA	X'F0000000'	
1075	01	0038E	0F000000	A		DATA	X'F0000000'	
1076	01	0038F	00F00000	A		DATA	X'F0000000'	
1077	01	00390	000F0000	A		DATA	X'F0000000'	
1078	01	00391	0000F000	A		DATA	X'F0000000'	
1079	01	00392	00000F00	A		DATA	X'F0000000'	
1080	01	00393	000000F0	A		DATA	X'F0000000'	
1081	01	00394	0000000F	A		DATA	X'F0000000'	
1082	01	00395	FF000000	A	FILTER	DATA	X'FF000000'	
1083	01	00396	00FF0000	A		DATA	X'FF000000'	
1084	01	00397	0000FF00	A		DATA	X'FF000000'	
1085	01	00398	000000FF	A		DATA	X'FF000000'	
1086	01	00399	FF000000	A		DATA	X'FF000000'	
1087	01	0039A	00FF0000	A		DATA	X'FF000000'	
1088	01	0039B	0000FF00	A		DATA	X'FF000000'	
1089	01	0039C	000000FF	A		DATA	X'FF000000'	

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12, 1969 32

1090	01	0039D	FF000000	A		DATA	X'FF000000'	
1091	01	0039E	00FF0000	A		DATA	X'FF000000'	
1092						3IND	64	TO PROVIDE A 64 WORD BOUNDARY *B REQUIRED FOR THE FORMAT ROUTINE
1093				**				
1094						PAGE		
1095	01	003C0	00000000	A	BYTE	DATA	0	0
1096	01	003C1	01010101	A		DATA	X'01010101'	1
1097	01	003C2	02020202	A		DATA	X'02020202'	2
1098	01	003C3	03030303	A		DATA	X'03030303'	3
1099	01	003C4	04040404	A		DATA	X'04040404'	4
1100	01	003C5	05050505	A		DATA	X'05050505'	5
1101	01	003C6	06060606	A		DATA	X'06060606'	6
1102	01	003C7	07070707	A		DATA	X'07070707'	7
1103	01	003C8	08080808	A		DATA	X'08080808'	8
1104	01	003C9	09090909	A		DATA	X'09090909'	9
1105	01	003CA	31313131	A		DATA	X'31313131'	A
1106	01	003CB	32323232	A		DATA	X'32323232'	B
1107	01	003CC	33333333	A		DATA	X'33333333'	C
1108	01	003CD	34343434	A		DATA	X'34343434'	D
1109	01	003CE	35353535	A		DATA	X'35353535'	E
1110	01	003CF	36363636	A		DATA	X'36363636'	F
1111						PAGE		
1112				*				COMMAND PAIRS
1113	01	003D0	000001E0	A	PSIXCR	P	SIXCR	
1114	01	003D1	000001EE	A	PTITLE	P	TITLE	
1115	01	003D2	000001EF	A	PHEAD	P	HEAD	
1116	01	003D3	000001F0	A	PSHRTL	P	SHRTL	
1117	01	003D4	000001F1	A	PLBNGL	P	LBNGL	
1118	01	003D5	000001F2	A	LPGBTBP	P	GBTBP	
1119	01	003D6	000001F7	A	LPFORMAT	P	FORMAT	
1120	01	003D7	000001F3	A	LPERR	P	PERR	
1121	01	003D8	000001F5	A	LPREPRT	P	PREPRT	
1122	01	003D9	000001F8	A	PRTCMSG	P	RTCMSG	
1123						BOUND B		
1124	01	003DA	0500102C	A	SIXCR	J	5,TTL	
1125	01	003DB	08000006	A		DATA	X'80000006'	
1126	01	003DC	0500102C	A	TITLE	J	5,TTL	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 33

1127	01	003DD	08000039 A		DATA	X'8000039'
1128	01	003DE	05001068	HEAD	J	5,H08
1129	01	003DF	08000050 A		DATA	X'8000050'
1130	01	003EO	05001088	SHRTL	J	5,IMAGE
1131	01	003E1	0800002C A		DATA	X'800002C'
1132	01	003E2	05001088	LONGL	J	5,IMAGE
1133	01	003E3	08000054 A		DATA	X'8000054'
1134					PAGE	
1135	01	003E4	030000E8	PGST0P	J	3,P08
1136	01	003E5	08000001 A		GEN,B,24	8,1
1137	01	003E6	010000CC	PERR	J	1,SPACE
1138	01	003E7	80000008 A		GEN,4,28	8,8 DC
1139	01	003E8	0100108C		J	1,IMAGE+1
1140	01	003E9	08000050 A		DATA	X'8000050'
1141	01	003EA	010000CC	PREPRT	J	1,SPACE
1142	01	003EB	80000008 A		GEN,4,28	8,8
1143	01	003EC	0100108C		J	1,IMAGE+1
1144	01	003ED	08000028 A		DATA	X'8000028'
1145	01	003EE	010000CC	PF0RMT	J	1,SPACE
1146	01	003EF	80000008 A		GEN,4,28	8,8
1147	01	003F0	01001034		J	1,TTL+2
1148	01	003F1	20000031 A		GEN,B,24	32,49 CC
1149	01	003F2	010000CC		J	1,SPACE
1150	01	003F3	80000008 A		GEN,4,28	8,11
1151	01	003F4	0100106C		J	1,H08+1
1152	01	003F5	0800004C A		GEN,B,24	X'8',X'4C'
1153					PAGE	
1154	01	003F6	05000FE1	RTCMSG	GEN,B,24	5,8A(MSG)+1
1155	01	003F7	08000048 A		GEN,B,24	8,75
1156				MSG	TEXTC	'N REAL TIME CLOCKS IN USE. TO DISABLE, 'B
1157	01	003F8	48154040 A			' CP INTERRUPT AND CLEAR R5' *B
	01	003F9	40404040 A			
	01	003FA	40404040 A			
	01	003FB	4040D9C5 A			
	01	003FC	C1D340E3 A			
	01	003FD	C9D4C540 A			
	01	003FE	C3D3D6C3 A			

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 34

01	003FF	D2E240C9 A				
01	00400	D540E4E2 A				
01	00401	C54340E3 A				
01	00402	D640C4C9 A				
01	00403	E2C1C2D3 A				
01	00404	C56840C3 A				
01	00405	D740C9D5 A				
01	00406	E3C5D9D9 A				
01	00407	E4D7E340 A				
01	00408	C1D5C440 A				
01	00409	C3D3C5C1 A				
01	0040A	D940D9F5 A				
1158				BOUND	4	
1159				PAGE		
1160	01	0040B	15151515 A	TTL	DATA	X'15151515'
1161	01	0040C	15151540 A		DATA	X'15151540'
1162	01	0040D	40404040 A		DATA	X'40404040'
1163	01	0040E	40404040 A		DATA	X'40404040'
1164	01	0040F	40404040 A		DATA	X'40404040'
1165	01	00410	40404040 A		DATA	X'40404040'
1166	01	00411	40404040 A		DATA	X'40404040'
1167	01	00412	40404040 A		DATA	X'40404040'
1168	01	00413	40404040 A		DATA	X'40404040'
1169	01	00414	404040C1 A		DATA	X'404040C1'
1170	01	00415	E4E3D640 A		DATA	X'E4E3D640'
1171	01	00416	C5D9D9D6 A		DATA	X'C5D9D9D6'
1172	01	00417	D940C4C9 A		DATA	X'D940C4C9'
1173	01	00418	E2D7D3C1 A		DATA	X'E2D7D3C1'
1174	01	00419	E8404040 A		DATA	X'E8404040'
1175				PAGE		
1176	01	0041A	15404040 A	H08	DATA	X'15404040'
1177	01	0041B	40D3C9E2 A		DATA	X'40D3C9E2'
1178	01	0041C	E3404040 A		DATA	X'E3404040'
1179	01	0041D	4040C5D9 A		DATA	X'4040C5D9'
1180	01	0041E	D9D6D9E2 A		DATA	X'D9D6D9E2'
1181	01	0041F	40404040 A		DATA	X'40404040'
1182	01	00420	D7C1E2E2 A		DATA	X'D7C1E2E2'

1183	01	00421	C5E24040 A		DATA	X'C5E24040'
1184	01	00422	404040C9 A		DATA	X'404040C9'
1185	01	00423	D5E2E340 A		DATA	X'D5E2E340'
1186	01	00424	4040C9C4 A		DATA	X'4040C9C4'
1187	01	00425	C5D5E3C9 A		DATA	X'C5D5E3C9'
1188	01	00426	C6C9C5D9 A		DATA	X'C6C9C5D9'
1189	01	00427	40404040 A		DATA	X'40404040'
1190	01	00428	C9E24040 A		DATA	X'C9E24040'
1191	01	00429	4040E2C8 A		DATA	X'4040E2C8'
1192	01	0042A	D6E4D3C4 A		DATA	X'D6E4D3C4'
1193	01	0042B	40C2C540 A		DATA	X'40C2C540'
1194	01	0042C	404040C4 A		DATA	X'404040C4'
1195	01	0042D	C9C6C615 A		DATA	X'C9C6C615'
1196					PAGE	
1197	01	0042E	40404015 A	IMAGE	DATA	X'40404015'
1198	01	0042F	00000000 A		FILL	**19
	01	00430	00000000 A			
	01	00431	00000000 A			
	01	00432	00000000 A			
	01	00433	00000000 A			
	01	00434	00000000 A			
	01	00435	00000000 A			
	01	00436	00000000 A			
	01	00437	00000000 A			
	01	00438	00000000 A			
	01	00439	00000000 A			
	01	0043A	00000000 A			
	01	0043B	00000000 A			
	01	0043C	00000000 A			
	01	0043D	00000000 A			
	01	0043E	00000000 A			
	01	0043F	00000000 A			
	01	00440	00000000 A			
	01	00441	00000000 A			
1199	01	00442	40404040 A	BLANK	DATA	X'40404040'
1200					PAGE	
1201					BOUND 8	

1202	01	00444		TABLE	RES	0	
1203	01	00444	00000000 A		DATA	0	NEG COUNT OF WORDS IN CURRENT MODULE
1204	01	00445	00000000 A		DATA	0	INSTRUCTION BEING TESTED
1205	01	00446	00000000 A		DATA	0	PSW1 IN
1206	01	00447	00000000 A		DATA	0	PSW1 OUT
1207	01	00448	00000000 A		DATA	0	R IN
1208	01	00449	00000000 A		DATA	0	R OUT
1209	01	0044A	00000000 A		DATA	0	MEMORY IN
1210	01	0044B	00000000 A		DATA	0	MEMORY OUT
1211	01	0044C	00000000 A		DATA	0	RUI IN
1212	01	0044D	00000000 A		DATA	0	RUI OUT
1213	01	0044E	00000000 A		DATA	0	MEMORY+1 IN
1214	01	0044F	00000000 A		DATA	0	MEMORY+1 OUT
1215	01	00450	00000000 A		DATA	0	PSW2 IN
1216	01	00451	00000000 A		DATA	0	PSW2 OUT
1217	01	00452	00000000 A		DATA	0	OLD PSW1 - USED ONLY FOR XPSD TEST
1218	01	00453	00000000 A		DATA	0	OLD PSW2 - USED ONLY FOR XPSD TEST
1219	01	00454	00000000 A		DATA	0	NEW PSW2 - USED ONLY FOR XPSD TEST
1220	01	00455	00000000 A		DATA	0	NEW PSW1 - USED ONLY FOR EPSD TEST
1221	01	00456	00000000 A		DATA	0,0	
	01	00457	00000000 A				
1222					PAGE		
1223	01	00458		TEST	RES	0	
1224	01	00458	00000000 A		FILL	**12	
	01	00459	00000000 A				
	01	0045A	00000000 A				
	01	0045B	00000000 A				
	01	0045C	00000000 A				
	01	0045D	00000000 A				
	01	0045E	00000000 A				
	01	0045F	00000000 A				
	01	00460	00000000 A				
	01	00461	00000000 A				
	01	00462	00000000 A				
	01	00463	00000000 A				
1225					PAGE		
1226	01	00464	00000000 A	RETURN	PZE		

```

1227 01 00465 00000000 A PZE
1228 01 00466 00000166 PZE,0 LOC+2
1229 01 00467 00000000 A PZE
1230 01 00468 00000231 BUMP PZE,0 BUMPER
1231 01 00469 00000000 A PZE
1232 01 0046A 00000110 REPEAT PZE,0 CYCLE
1233 01 0046B 00000000 A PZE
1234 01 0046C 00000000 A PSW1 PZE
1235 01 0046D 00000000 A PSW2 PZE
1236 01 0046E 00000000 A CNT1CP PZE
1237 01 0046F 00000000 A CNT2CP PZE
1238 01 00470 00000000 A CNT3CP PZE
1239 01 00471 00000000 A CNT4CP PZE
1240 01 00472 00000000 A COUNT PZE
1241 01 00473 00000000 A ERRORS PZE
1242 01 00474 00000000 A PASSES PZE
1243 01 00475 00000000 A WKB PZE
1244 01 00476 00000000 A WORD PZE
1245 01 003C0 ZER0 EQU BYTE
1246 01 00383 NEG4 EQU NUMBER
1247 01 00385 NEG2 EQU NUMBER+2
1248 01 00047 XPSD EQU BRANCH
1249 00000000 C EQU 0
1250 00000000 I EQU 0
1251 00000000 Y EQU 0
1252 01 00459 INST EQU TEST+1
1253 01 0045A IA EQU TEST+2
1254 01 00460 MEMORY EQU TEST+8
1255 01 003C0 CNT3Z EQU ZER0
1256 01 003C0 CNT4Z EQU ZER0
1257 01 0046A MODULE EQU REPEAT
1258 01 0046A PASS EQU REPEAT
1259 PAGE
1260 01 00477 0F000478 SPURTRAP XPSD,0 SPUR
1261 BOUND B
1262 01 00478 00000000 A SPUR PZE 0
1263 01 00479 00000000 A PZE 0
    
```

```

1264 01 0047A 0000047C PZE,0 0+2
1265 01 0047B 07000000 A DATA X'07000000' TURN ON INTR INH BITS
1266 01 0047C 32500371 LW,5 CPINT
1267 01 0047D 60501300 A WD,5 X'1300' ARM AND DISABLE COUNT PULSE INTRs.
1268 01 0047E 32300474 LW,3 PASSES RESET PASSES TO LAST SETTING
1269 01 0047F 32200473 LW,2 ERRORS RESET ERRORS TO LAST SETTING
1270 01 00480 32100110 LW,1 SAVE MODULE POINTER
1271 01 00481 32000378 LW,0 TYPE I/O ADDR
1272 01 00482 2E000000 A WAIT,0 0 ERROR HALT
1273 *
1274 01 00483 00000464 DATA RETURN ADDR FOR FOLLOWING COMMENT LINE *B
1275 * CHECK THE CONTENTS OF 'RETURN' TO DETERMINE THE LOCATION PLUS 1 OF *B
1276 * THE XPSD THAT WAS EXECUTED AS A RESULT OF A SPURIOUS TRAP.
1277 *
1278 01 00483 BRG 0-1 ELIMINATE ABOVE DATA STATEMENT *B
1279 01 00483 43500391 AND,5 MASK+4 SAVE ONLY BITS 16-19
1280 01 00484 35500371 STW,5 CPINT SELECTED INTERRUPTS
1281 01 00485 35000378 STW,0 TYPE SELECTED I/O ADDR
1282 01 00486 35500372 STW,5 CPINTM MASK FOR SELECTED INTERRUPTS
1283 01 00487 0E30046A LPSD,3 REPEAT RELEASE PANEL INTERRUPT-REPEAT TEST
1284 PAGE
1285 BBOUND B
1286 01 00488 LIST REG 0
1287 01 00488 FFFFFFFF A EXU01 DATA -6 EXU LOC+1 XPSD
1288 01 00489 67000165 EXU LOC+1
1289 01 0048A F0000136 K 15,0,0,SETPSW
1290 01 0048B F0000165 K 15,0,0,LOC+1
1291 01 0048C FFFFFFFF A DATA -1
1292 01 0048D FFFFFFFF A DATA -1
1293 01 0048E FFFFFFFC A EXU02 DATA -4 EXU BRANCH XPSD
1294 01 0048F 67000047 EXU BRANCH
1295 01 00490 00000136 DATA SETPSW
1296 01 00491 00000165 DATA LOC+1
1297 01 00492 FFFFFFFF A EXU03 DATA -8 EXU MEMORY LW
1298 01 00493 67000460 EXU MEMORY
1299 01 00494 93300136 K 9,3,3,SETPSW
    
```

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12, 1969 39

1300	01	00495	A3300166		K	10,3,3,L0C+2		
1301	01	00496	FFFFFFFF A		DATA	-1		
1302	01	00497	32C00460		LW,12	MEMBRY		
1303	01	00498	32C00460		LW,12	MEMBRY		
1304	01	00499	32C00460		LW,12	MEMBRY		
1305	01	0049A	FFFFFFFFA A	EXU04	DATA	-6	EXU X	BRANCH XPSD
1306	01	0049B	67020460		EXU	MEMBRY,1		
1307	01	0049C	F7300136		K	15,7,3,SETPSW		
1308	01	0049D	F7300165		K	15,7,3,L0C+1		
1309	01	0049E	FFFFFF3E7 A		DATA	BRANCH-MEMBRY		
1310	01	0049F	FFFFFF3E7 A		DATA	BRANCH-MEMBRY		
1311	01	004A0	FFFFFFF8 A	EXU05	DATA	-8	EXU *	BRANCH XPSD
1312	01	004A1	E7000460		EXU	*MEMBRY		
1313	01	004A2	00000136		K	0,0,0,SETPSW		
1314	01	004A3	00000165		K	0,0,0,L0C+1		
1315	01	004A4	00000001 A		DATA	1		
1316	01	004A5	00000001 A		DATA	1		
1317	01	004A6	00C20047		PZE,12	BRANCH,1		
1318	01	004A7	00C20047		PZE,12	BRANCH,1		
1319					PAGE			
1320	01	004A8	FFFFFFFF6 A	EXU06	DATA	-10	EXU *X	C1RET XPSD
1321	01	004A9	E7020460		EXU	*MEMBRY,1		
1322	01	004AA	00000136		K	0,0,0,SETPSW		
1323	01	004AB	00000165		K	0,0,0,L0C+1		
1324	01	004AC	0000FACE A		DATA	X'FACE'		
1325	01	004AD	0000FACE A		DATA	X'FACE'		
1326	01	004AE	000105CC		PZE,0	C1RET=X'FACE'		
1327	01	004AF	000105CC		PZE,0	C1RET=X'FACE'		
1328	01	004B0	0000DEAF A		DATA	X'DEAF'		
1329	01	004B1	0000DEAF A		DATA	X'DEAF'		
1330	01	004B2	FFFFFFF8 A	EXU07	DATA	-8	EXU	XPSD SLAVE MODE
1331	01	004B3	67000460		EXU	MEMBRY	MV	
1332	01	004B4	078001B6		KV	0,7,8,SIGNAB		
1333	01	004B5	27000065		K	2,7,0,MVRET+1		
1334	01	004B6	FFFFFFFF A		DATA	-1		
1335	01	004B7	FFFFFFFF A		DATA	-1		
1336	01	004B8	0F000464		XPSD,0	RETURN		

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12, 1969 40

1337	01	004B9	0F000464		XPSD,0	RETURN		
1338	01	004BA	FFFFFFFFA A	EXU08	DATA	-6	EXU NEI	SLAVE MODE (NEI=PRIV)
1339	01	004BB	6700000C A		EXU	12	MV	
1340	01	004BC	078001B6		K	0,7,11,SIGNAB		
1341	01	004BD	A730006D		K	10,7,3,NEIRET+3		
1342	01	004BE	0C000460		K	0,12,0,MEMBRY		
1343	01	004BF	0C000460		K	0,12,0,MEMBRY		
1344					PAGE			
1345	01	004C0	FFFFFFFC A	LCF01	DATA	-4	LCF 0	00 INT0 F7 = F7 BYTE 0
1346	01	004C1	70000460		LCF,0	MEMBRY		
1347	01	004C2	F7300136		K	15,7,3,SETPSW		
1348	01	004C3	F7300166		K	15,7,3,L0C+2		
1349	01	004C4	FFFFFFFC A	LCF02	DATA	-4	LCF 1	00 INT0 F7 = F0 BYTE 0
1350	01	004C5	70100460		LCF,1	MEMBRY		
1351	01	004C6	F7200136		K	15,7,2,SETPSW		
1352	01	004C7	F0200166		K	15,0,2,L0C+2		
1353	01	004C8	FFFFFFFC A	LCF03	DATA	-4	LCF 2	00 INT0 F7 = 07 BYTE 0
1354	01	004C9	70200460		LCF,2	MEMBRY		
1355	01	004CA	F7100136		K	15,7,1,SETPSW		
1356	01	004CB	07100166		K	0,7,1,L0C+2		
1357	01	004CC	FFFFFFFC A	LCF04	DATA	-4	LCF 3	00 INT0 F7 = 00 BYTE 0
1358	01	004CD	70300460		LCF,3	MEMBRY		
1359	01	004CE	F7300136		K	15,7,3,SETPSW		
1360	01	004CF	00300166		K	0,0,3,L0C+2		
1361	01	004D0	FFFFFFF8 A	LCF05	DATA	-8	LCF 3 *	5D INT0 A2 = 55 BYTE 0
1362	01	004D1	F030045A		LCF,3	+1A		
1363	01	004D2	A2200136		K	10,2,2,SETPSW		
1364	01	004D3	55200166		K	5,5,2,L0C+2		
1365	01	004D4	01234567 A		DATA	X'01234567'		
1366	01	004D5	01234567 A		DATA	X'01234567'		
1367	01	004D6	5D4E6F70 A		DATA	X'5D4E6F70'		
1368	01	004D7	5D4E6F70 A		DATA	X'5D4E6F70'		
1369					PAGE			
1370								
1371	01	004D8	FFFFFFFFA A		** TEST THAT -R CAN BE CLEARED. ANSWER OF ZERO			
1372	01	004D9	32C00460	LW01	DATA	-6		
1373	01	004DA	F7300136		LW,12	MEMBRY		
					K	15,7,3,SETPSW		

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 41

1374	01 004DB	C7300166		K	12,7,3,LBC+2	CC1 AND 2 UNAFFECTED CC3 AND 4 ZERO
1375	01 004DC	FFFFFFFF A		DATA	-1	R IN
1376	01 004DD	00000000 A		DATA	0	R BUT
1377						
1378	01 004DE	FFFFFFFF8 A	LW02	DATA	-8	
1379	01 004DF	32C00460		LW,12	MEMORY	
1380	01 004EO	37300136		K	3,7,3,SETPSW	
1381	01 004E1	17300166		K	1,7,3,LBC+2	
1382	01 004E2	FFFFFFFF A		DATA	-1	R IN
1383	01 004E3	FFFFFFFF A		DATA	-1	R BUT
1384	01 004E4	FFFFFFFF A		DATA	-1	M IN
1385	01 004E5	FFFFFFFF A		DATA	-1	M BUT
1386						
1387						
1388	01 004E6	FFFFFFFF4 A	LW03	DATA	-12	
1389	01 004E7	82C0045A		LW,12	+1A	
1390	01 004E8	C6200136		K	12,6,2,SETPSW	
1391	01 004E9	D6200166		K	13,6,2,LBC+2	
1392	01 004EA	00000000 A		DATA	0	
1393	01 004EB	FFFFFFFF A		DATA	-1	
1394	01 004EC	FFFFFFFF A		DATA	-1	
1395	01 004ED	FFFFFFFF A		DATA	-1	
1396	01 004EE	00000000 A		DATA	0	
1397	01 004EF	00000000 A		DATA	0	
1398	01 004F0	FFFFFFFF A		DATA	-1	
1399	01 004F1	FFFFFFFF A		DATA	-1	
1400				PAGE		
1401						
1402	01 004F2	FFFFFFFF8 A	LW04	DATA	-8	
1403	01 004F3	32C00460		LW,12	MEMORY	
1404	01 004F4	30000136		K	3,0,0,SETPSW	
1405	01 004F5	20000166		K	2,0,0,LBC+2	
1406	01 004F6	00000000 A		DATA	0	
1407	01 004F7	00000001 A		DATA	1	
1408	01 004F8	00000001 A		DATA	1	
1409	01 004F9	00000001 A		DATA	1	
1410	01 004FA	FFFFFFFF8 A	LW05	DATA	-8	

** TEST X-FER OF ONES TO ONES. NEGATIVE RESULT

** CHECK X-FER OF ONES TO ZEROS. INDIRECT ADDRESSING. NEG RESULT

** INSURE RUI NOT AFFECTED

** TEST SGTZ TERM BY LOADING A SINGLE BIT. SEQUENCE FROM BIT32 TO BIT01

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 42

1411	01 004FB	32C00460		LW,12	MEMORY	
1412	01 004FC	10000136		K	1,0,0,SETPSW	
1413	01 004FD	20000166		K	2,0,0,LBC+2	
1414	01 004FE	00000000 A		DATA	0	
1415	01 004FF	00000002 A		DATA	2	
1416	01 00500	00000002 A		DATA	2	
1417	01 00501	00000002 A		DATA	2	
1418	01 00502	FFFFFFFF8 A	LW06	DATA	-8	
1419	01 00503	32C00460		LW,12	MEMORY	
1420	01 00504	10000136		K	1,0,0,SETPSW	
1421	01 00505	20000166		K	2,0,0,LBC+2	
1422	01 00506	00000000 A		DATA	0	
1423	01 00507	00000004 A		DATA	4	
1424	01 00508	00000004 A		DATA	4	
1425	01 00509	00000004 A		DATA	4	
1426	01 0050A	FFFFFFFF8 A	LW07	DATA	-8	
1427	01 0050B	32C00460		LW,12	MEMORY	
1428	01 0050C	10000136		K	1,0,0,SETPSW	
1429	01 0050D	20000166		K	2,0,0,LBC+2	
1430	01 0050E	00000000 A		DATA	0	
1431	01 0050F	00000008 A		DATA	8	
1432	01 00510	00000008 A		DATA	8	
1433	01 00511	00000008 A		DATA	8	
1434				PAGE		
1435	01 00512	FFFFFFFF8 A	LW08	DATA	-8	
1436	01 00513	32C00460		LW,12	MEMORY	
1437	01 00514	10000136		K	1,0,0,SETPSW	
1438	01 00515	20000166		K	2,0,0,LBC+2	
1439	01 00516	00000000 A		DATA	0	
1440	01 00517	00000010 A		DATA	X'10'	
1441	01 00518	00000010 A		DATA	X'10'	
1442	01 00519	00000010 A		DATA	X'10'	
1443	01 0051A	FFFFFFFF8 A	LW09	DATA	-8	
1444	01 0051B	32C00460		LW,12	MEMORY	
1445	01 0051C	10000136		K	1,0,0,SETPSW	
1446	01 0051D	20000166		K	2,0,0,LBC+2	
1447	01 0051E	00000000 A		DATA	0	

1448	01	0051F	00000020	A	DATA	X'120'	
1449	01	00520	00000020	A	DATA	X'120'	
1450	01	00521	00000020	A	DATA	X'120'	
1451	01	00522	FFFFFFFF	A	LW10	DATA	-8
1452	01	00523	32C00460		LW,12	MEMORY	
1453	01	00524	10000136		K	1,0,0,SETPSW	
1454	01	00525	20000166		K	2,0,0,LBC+2	
1455	01	00526	00000000	A	DATA	0	
1456	01	00527	00000040	A	DATA	X'140'	
1457	01	00528	00000040	A	DATA	X'140'	
1458	01	00529	00000040	A	DATA	X'140'	
1459	01	0052A	FFFFFFFF	A	LW11	DATA	-8
1460	01	0052B	32C00460		LW,12	MEMORY	
1461	01	0052C	10000136		K	1,0,0,SETPSW	
1462	01	0052D	20000166		K	2,0,0,LBC+2	
1463	01	0052E	00000000	A	DATA	0	
1464	01	0052F	00000080	A	DATA	X'180'	
1465	01	00530	00000080	A	DATA	X'180'	
1466	01	00531	00000080	A	DATA	X'180'	
1467					PAGE		
1468	01	00532	FFFFFFFF	A	LW12	DATA	-8
1469	01	00533	32C00460		LW,12	MEMORY	
1470	01	00534	10000136		K	1,0,0,SETPSW	
1471	01	00535	20000166		K	2,0,0,LBC+2	
1472	01	00536	00000000	A	DATA	0	
1473	01	00537	00000100	A	DATA	X'100'	
1474	01	00538	00000100	A	DATA	X'100'	
1475	01	00539	00000100	A	DATA	X'100'	
1476	01	0053A	FFFFFFFF	A	LW13	DATA	-8
1477	01	0053B	32C00460		LW,12	MEMORY	
1478	01	0053C	10000136		K	1,0,0,SETPSW	
1479	01	0053D	20000166		K	2,0,0,LBC+2	
1480	01	0053E	00000000	A	DATA	0	
1481	01	0053F	00000200	A	DATA	X'200'	
1482	01	00540	00000200	A	DATA	X'200'	
1483	01	00541	00000200	A	DATA	X'200'	
1484	01	00542	FFFFFFFF	A	LW14	DATA	-8

1485	01	00543	32C00460		LW,12	MEMORY	
1486	01	00544	10000136		K	1,0,0,SETPSW	
1487	01	00545	20000166		K	2,0,0,LBC+2	
1488	01	00546	00000000	A	DATA	0	
1489	01	00547	00000400	A	DATA	X'1400'	
1490	01	00548	00000400	A	DATA	X'1400'	
1491	01	00549	00000400	A	DATA	X'1400'	
1492	01	0054A	FFFFFFFF	A	LW15	DATA	-8
1493	01	0054B	32C00460		LW,12	MEMORY	
1494	01	0054C	10000136		K	1,0,0,SETPSW	
1495	01	0054D	20000166		K	2,0,0,LBC+2	
1496	01	0054E	00000000	A	DATA	0	
1497	01	0054F	00000800	A	DATA	X'1800'	
1498	01	00550	00000800	A	DATA	X'1800'	
1499	01	00551	00000800	A	DATA	X'1800'	
1500					PAGE		
1501	01	00552	FFFFFFFF	A	LW16	DATA	-8
1502	01	00553	32C00460		LW,12	MEMORY	
1503	01	00554	10000136		K	1,0,0,SETPSW	
1504	01	00555	20000166		K	2,0,0,LBC+2	
1505	01	00556	00000000	A	DATA	0	
1506	01	00557	00001000	A	DATA	X'1000'	
1507	01	00558	00001000	A	DATA	X'1000'	
1508	01	00559	00001000	A	DATA	X'1000'	
1509	01	0055A	FFFFFFFF	A	LW17	DATA	-8
1510	01	0055B	32C00460		LW,12	MEMORY	
1511	01	0055C	10000136		K	1,0,0,SETPSW	
1512	01	0055D	20000166		K	2,0,0,LBC+2	
1513	01	0055E	00000000	A	DATA	0	
1514	01	0055F	00002000	A	DATA	X'2000'	
1515	01	00560	00002000	A	DATA	X'2000'	
1516	01	00561	00002000	A	DATA	X'2000'	
1517	01	00562	FFFFFFFF	A	LW18	DATA	-8
1518	01	00563	32C00460		LW,12	MEMORY	
1519	01	00564	10000136		K	1,0,0,SETPSW	
1520	01	00565	20000166		K	2,0,0,LBC+2	
1521	01	00566	00000000	A	DATA	0	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969

1522	01	00567	00004000	A		DATA	X'4000'
1523	01	00568	00004000	A		DATA	X'4000'
1524	01	00569	00004000	A		DATA	X'4000'
1525	01	0056A	FFFFFFFF	A	LW19	DATA	-8
1526	01	0056B	32C00460			LW,12	MEMORY
1527	01	0056C	10000136			K	1,0,0,SETPSW
1528	01	0056D	20000166			K	2,0,0,LBC+2
1529	01	0056E	00000000	A		DATA	0
1530	01	0056F	00008000	A		DATA	X'8000'
1531	01	00570	00008000	A		DATA	X'8000'
1532	01	00571	00008000	A		DATA	X'8000'
1533						PAGE	
1534	01	00572	FFFFFFFF	A	LW20	DATA	-8
1535	01	00573	32C00460			LW,12	MEMORY
1536	01	00574	10000136			K	1,0,0,SETPSW
1537	01	00575	20000166			K	2,0,0,LBC+2
1538	01	00576	00000000	A		DATA	0
1539	01	00577	00010000	A		DATA	X'10000'
1540	01	00578	00010000	A		DATA	X'10000'
1541	01	00579	00010000	A		DATA	X'10000'
1542	01	0057A	FFFFFFFF	A	LW21	DATA	-8
1543	01	0057B	32C00460			LW,12	MEMORY
1544	01	0057C	10000136			K	1,0,0,SETPSW
1545	01	0057D	20000166			K	2,0,0,LBC+2
1546	01	0057E	00000000	A		DATA	0
1547	01	0057F	00020000	A		DATA	X'20000'
1548	01	00580	00020000	A		DATA	X'20000'
1549	01	00581	00020000	A		DATA	X'20000'
1550	01	00582	FFFFFFFF	A	LW22	DATA	-8
1551	01	00583	32C00460			LW,12	MEMORY
1552	01	00584	10000136			K	1,0,0,SETPSW
1553	01	00585	20000166			K	2,0,0,LBC+2
1554	01	00586	00000000	A		DATA	0
1555	01	00587	00040000	A		DATA	X'40000'
1556	01	00588	00040000	A		DATA	X'40000'
1557	01	00589	00040000	A		DATA	X'40000'
1558	01	0058A	FFFFFFFF	A	LW23	DATA	-8

45

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969

1559	01	0058B	32C00460			LW,12	MEMORY
1560	01	0058C	10000136			K	1,0,0,SETPSW
1561	01	0058D	20000166			K	2,0,0,LBC+2
1562	01	0058E	00000000	A		DATA	0
1563	01	0058F	00080000	A		DATA	X'80000'
1564	01	00590	00080000	A		DATA	X'80000'
1565	01	00591	00080000	A		DATA	X'80000'
1566						PAGE	
1567	01	00592	FFFFFFFF	A	LW24	DATA	-8
1568	01	00593	32C00460			LW,12	MEMORY
1569	01	00594	10000136			K	1,0,0,SETPSW
1570	01	00595	20000166			K	2,0,0,LBC+2
1571	01	00596	00000000	A		DATA	0
1572	01	00597	00100000	A		DATA	X'100000'
1573	01	00598	00100000	A		DATA	X'100000'
1574	01	00599	00100000	A		DATA	X'100000'
1575	01	0059A	FFFFFFFF	A	LW25	DATA	-8
1576	01	0059B	32C00460			LW,12	MEMORY
1577	01	0059C	10000136			K	1,0,0,SETPSW
1578	01	0059D	20000166			K	2,0,0,LBC+2
1579	01	0059E	00000000	A		DATA	0
1580	01	0059F	00200000	A		DATA	X'200000'
1581	01	005A0	00200000	A		DATA	X'200000'
1582	01	005A1	00200000	A		DATA	X'200000'
1583	01	005A2	FFFFFFFF	A	LW26	DATA	-8
1584	01	005A3	32C00460			LW,12	MEMORY
1585	01	005A4	10000136			K	1,0,0,SETPSW
1586	01	005A5	20000166			K	2,0,0,LBC+2
1587	01	005A6	00000000	A		DATA	0
1588	01	005A7	00400000	A		DATA	X'400000'
1589	01	005A8	00400000	A		DATA	X'400000'
1590	01	005A9	00400000	A		DATA	X'400000'
1591	01	005AA	FFFFFFFF	A	LW27	DATA	-8
1592	01	005AB	32C00460			LW,12	MEMORY
1593	01	005AC	10000136			K	1,0,0,SETPSW
1594	01	005AD	20000166			K	2,0,0,LBC+2
1595	01	005AE	00000000	A		DATA	0

46

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 47

1596	01	005AF	00800000	A		DATA	X'800000'
1597	01	005B0	00800000	A		DATA	X'800000'
1598	01	005B1	00800000	A		DATA	X'800000'
1599						PAGE	
1600	01	005B2	FFFFFFF8	A	LW28	DATA	-8
1601	01	005B3	32C00460			LW,12	MEMORY
1602	01	005B4	10000136			K	1,0,0,SETPSW
1603	01	005B5	20000166			K	2,0,0,L8C+2
1604	01	005B6	00000000	A		DATA	0
1605	01	005B7	01000000	A		DATA	X'1000000'
1606	01	005B8	01000000	A		DATA	X'1000000'
1607	01	005B9	01000000	A		DATA	X'1000000'
1608	01	005BA	FFFFFFF8	A	LW29	DATA	-8
1609	01	005BB	32C00460			LW,12	MEMORY
1610	01	005BC	10000136			K	1,0,0,SETPSW
1611	01	005BD	20000166			K	2,0,0,L8C+2
1612	01	005BE	00000000	A		DATA	0
1613	01	005BF	02000000	A		DATA	X'2000000'
1614	01	005C0	02000000	A		DATA	X'2000000'
1615	01	005C1	02000000	A		DATA	X'2000000'
1616	01	005C2	FFFFFFF8	A	LW30	DATA	-8
1617	01	005C3	32C00460			LW,12	MEMORY
1618	01	005C4	10000136			K	1,0,0,SETPSW
1619	01	005C5	20000166			K	2,0,0,L8C+2
1620	01	005C6	00000000	A		DATA	0
1621	01	005C7	04000000	A		DATA	X'4000000'
1622	01	005C8	04000000	A		DATA	X'4000000'
1623	01	005C9	04000000	A		DATA	X'4000000'
1624	01	005CA	FFFFFFF8	A	LW31	DATA	-8
1625	01	005CB	32C00460			LW,12	MEMORY
1626	01	005CC	10000136			K	1,0,0,SETPSW
1627	01	005CD	20000166			K	2,0,0,L8C+2
1628	01	005CE	00000000	A		DATA	0
1629	01	005CF	08000000	A		DATA	X'8000000',X'8000000',X'8000000'
	01	005D0	08000000	A			
	01	005D1	08000000	A			
1630						PAGE	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 48

1631	01	005D2	FFFFFFF8	A	LW32	DATA	-8
1632	01	005D3	32C00460			LW,12	MEMORY
1633	01	005D4	10000136			K	1,0,0,SETPSW
1634	01	005D5	20000166			K	2,0,0,L8C+2
1635	01	005D6	00000000	A		DATA	0
1636	01	005D7	10000000	A		DATA	X'10000000',X'10000000',X'10000000'
	01	005D8	10000000	A			
	01	005D9	10000000	A			
1637	01	005DA	FFFFFFF8	A	LW33	DATA	-8
1638	01	005D3	32C00460			LW,12	MEMORY
1639	01	005DC	10000136			K	1,0,0,SETPSW
1640	01	005DD	20000166			K	2,0,0,L8C+2
1641	01	005DE	00000000	A		DATA	0
1642	01	005DF	20000000	A		DATA	X'20000000',X'20000000',X'20000000'
	01	005E0	20000000	A			
	01	005E1	20000000	A			
1643	01	005E2	FFFFFFF8	A	LW34	DATA	-8
1644	01	005E3	32C00460			LW,12	MEMORY
1645	01	005E4	10000136			K	1,0,0,SETPSW
1646	01	005E5	20000166			K	2,0,0,L8C+2
1647	01	005E6	00000000	A		DATA	0
1648	01	005E7	40000000	A		DATA	X'40000000',X'40000000',X'40000000'
	01	005E8	40000000	A			
	01	005E9	40000000	A			
1649						** TEST THAT BIT0 WILL INHIBIT SGTZ	
1650	01	005EA	FFFFFFF8	A	LW35	DATA	-8
1651	01	005EB	32C00460			LW,12	MEMORY
1652	01	005EC	30000136			K	3,0,0,SETPSW
1653	01	005ED	10000166			K	1,0,0,L8C+2
1654	01	005EE	00000000	A		DATA	0
1655	01	005EF	80000000	A		DATA	X'80000000'
1656	01	005F0	80000000	A		DATA	X'80000000'
1657	01	005F1	80000000	A		DATA	X'80000000'
1658						PAGE	
1659						** CONDITION CODE SETTINGS FOR '0R'	
1660						** CC3 CC4 RESULT IN R	
1661						** 0 0 ZERO	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 49

1662			** 0	1	NEGATIVE	
1663			** 1	0	POSITIVE	
1664	01 005F2	FFFFFFFFC A	BR01		DATA	-4
1665	01 005F3	49C00460		BR,12	MEMORY	
1666	01 005F4	37300136		K	3,7,3,SETPSW	
1667	01 005F5	07300166		K	0,7,3,L8C+2	
1668	01 005F6	FFFFFFFF8 A	BR02		DATA	-8
1669	01 005F7	49C00460		BR,12	MEMORY	
1670	01 005F8	07300136		K	0,7,3,SETPSW	
1671	01 005F9	17300166		K	1,7,3,L8C+2	
1672	01 005FA	ADA0A0A0 A		DATA	X'ADA0A0A0'	
1673	01 005FB	AAAAAAAA A		DATA	X'AAAAAAAA'	
1674	01 005FC	0A0A0A0A A		DATA	X'0A0A0A0A'	
1675	01 005FD	0A0A0A0A A		DATA	X'0A0A0A0A'	
1676	01 005FE	FFFFFFFF8 A	BR03		DATA	-8
1677	01 005FF	49C00460		BR,12	MEMORY	
1678	01 00600	07300136		K	15,7,3,SETPSW	
1679	01 00601	07300166		K	13,7,3,L8C+2	
1680	01 00602	0A0A0A0A A		DATA	X'0A0A0A0A'	
1681	01 00603	AAAAAAAA A		DATA	X'AAAAAAAA'	
1682	01 00604	ADA0A0A0 A		DATA	X'ADA0A0A0'	
1683	01 00605	ADA0A0A0 A		DATA	X'ADA0A0A0'	
1684				PAGE		
1685	01 00606	FFFFFFFF8 A	BR04		DATA	-8
1686	01 00607	49C00460		BR,12	MEMORY	
1687	01 00608	07300136		K	0,7,3,SETPSW	
1688	01 00609	27300166		K	2,7,3,L8C+2	
1689	01 0060A	05050505 A		DATA	X'05050505'	
1690	01 0060B	55555555 A		DATA	X'55555555'	
1691	01 0060C	50505050 A		DATA	X'50505050'	
1692	01 0060D	50505050 A		DATA	X'50505050'	
1693	01 0060E	FFFFFFFF8 A	BR05		DATA	-8
1694	01 0060F	49C00460		BR,12	MEMORY	
1695	01 00610	17300136		K	1,7,3,SETPSW	
1696	01 00611	27300166		K	2,7,3,L8C+2	
1697	01 00612	50505050 A		DATA	X'50505050'	
1698	01 00613	55555555 A		DATA	X'55555555'	

BR 0100 RESULT = 0

BR A010A RESULT = AA (EACH BYTE)

BR DATA0 RESULT = AA (EACH BYTE)

BR 05150 RESULT = 55 (EACH BYTE)

BR 50105 RESULT = 55 (EACH BYTE)

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 50

1699	01 00614	05050505 A		DATA	X'05050505'	
1700	01 00615	05050505 A		DATA	X'05050505'	
1701	01 00616	FFFFFFFF8 A	BR06		DATA	-8
1702	01 00617	49C00460		BR,12	MEMORY	
1703	01 00618	27300136		K	2,7,3,SETPSW	
1704	01 00619	17300166		K	1,7,3,L8C+2	
1705	01 0061A	FFFFFFFF A		DATA	-1	
1706	01 0061B	FFFFFFFF A		DATA	-1	
1707	01 0061C	FFFFFFFF A		DATA	-1	
1708	01 0061D	FFFFFFFF A		DATA	-1	
1709				PAGE		
1710	01 0061E	FFFFFFFF8 A	STW01		DATA	-8
1711	01 0061F	35C00460		STW,12	MEMORY	
1712	01 00620	07300136		K	0,7,3,SETPSW	
1713	01 00621	07300166		K	0,7,3,L8C+2	
1714	01 00622	FFFFFFFF A		DATA	-1	
1715	01 00623	FFFFFFFF A		DATA	-1	
1716	01 00624	00000000 A		DATA	0	
1717	01 00625	FFFFFFFF A		DATA	-1	
1718	01 00626	FFFFFFFF8 A	STW02		DATA	-8
1719	01 00627	35C00460		STW,12	MEMORY	
1720	01 00628	07300136		K	0,7,3,SETPSW	
1721	01 00629	07300166		K	0,7,3,L8C+2	
1722	01 0062A	00000000 A		DATA	0	
1723	01 0062B	00000000 A		DATA	0	
1724	01 0062C	FFFFFFFF A		DATA	-1	
1725	01 0062D	00000000 A		DATA	0	
1726				PAGE		
1727			**	CONDITION CODE SETTINGS FOR AND INSTRUCTION		
1728			** CC3	CC4 RESULT IN R		
1729			** 0	0	ZERS	
1730			** 0	1	NEGATIVE	
1731			** 1	0	POSITIVE	
1732	01 0062E	FFFFFFFF8 A	AND01		DATA	-8
1733	01 0062F	49C00460		AND,12	MEMORY	
1734	01 00630	07300136		K	15,7,3,SETPSW	
1735	01 00631	07300166		K	12,7,3,L8C+2	

BR FF1FF RESULT = FF (EACH BYTE)

ST0RE -1

ST0RE 0

AND 010 RESULT = 0

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 51

1736	01	00632	FFFFFFFF8 A	AND02	DATA	-8	AND C1A: RESULT = 8 (EACH HEX CHAR)
1737	01	00633	48C00460		AND,12	MEMORY	
1738	01	00634	77300136		K	7,7,3,SETPSW	
1739	01	00635	57300166		K	5,7,3,LBC+2	
1740	01	00636	CCCCCCCC A		DATA	X'CCCCCCCC'	
1741	01	00637	88888888 A		DATA	X'88888888'	
1742	01	00638	AAAAAAAA A		DATA	X'AAAAAAAA'	
1743	01	00639	AAAAAAAA A		DATA	X'AAAAAAAA'	
1744	01	0063A	FFFFFFFF8 A	AND03	DATA	-8	AND 915: RESULT = 1 (EACH HEX CHAR)
1745	01	00633	48C00460		AND,12	MEMORY	
1746	01	0063C	07300136		K	0,7,3,SETPSW	
1747	01	0063D	27300166		K	2,7,3,LBC+2	
1748	01	0063E	99999999 A		DATA	X'99999999'	
1749	01	0063F	11111111 A		DATA	X'11111111'	
1750	01	00640	55555555 A		DATA	X'55555555'	
1751	01	00641	55555555 A		DATA	X'55555555'	
1752					PAGE		
1753	01	00642	FFFFFFFF8 A	AND04	DATA	-8	AND 31A: RESULT = 2 (EACH HEX CHAR)
1754	01	00643	48C00460		AND,12	MEMORY	
1755	01	00644	37300136		K	3,7,3,SETPSW	
1756	01	00645	27300166		K	2,7,3,LBC+2	
1757	01	00646	33333333 A		DATA	X'33333333'	
1758	01	00647	22222222 A		DATA	X'22222222'	
1759	01	00648	AAAAAAAA A		DATA	X'AAAAAAAA'	
1760	01	00649	AAAAAAAA A		DATA	X'AAAAAAAA'	
1761	01	0064A	FFFFFFFF8 A	AND05	DATA	-8	AND 615: RESULT = 4 (EACH HEX CHAR)
1762	01	0064B	48C00460		AND,12	MEMORY	
1763	01	0064C	F7300136		K	15,7,3,SETPSW	
1764	01	0064D	E7300166		K	14,7,3,LBC+2	
1765	01	0064E	66666666 A		DATA	X'66666666'	
1766	01	0064F	44444444 A		DATA	X'44444444'	
1767	01	00650	55555555 A		DATA	X'55555555'	
1768	01	00651	55555555 A		DATA	X'55555555'	
1769	01	00652	FFFFFFFFA A	AND06	DATA	-6	AND C1R) WITH ITSELF: C1R) UNCHANGED
1770	01	00653	48C0000C A		AND,12	12	
1771	01	00654	73300136		K	7,3,3,SETPSW	
1772	01	00655	53300166		K	5,3,3,LBC+2	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 52

1773	01	00656	84214812 A		DATA	X'84214812'	
1774	01	00657	84214812 A		DATA	X'84214812'	
1775					PAGE		
1776					** CONDITION CODE SETTINGS FOR EOR		
1777					** CC3 CC4 RESULT IN R		
1778					** 0 0 ZERO		
1779					** 0 1 NEGATIVE		
1780					** 1 0 POSITIVE		
1781	01	00658	FFFFFFFF8 A	EBR01	DATA	-8	EBR C19: RESULT = 5 (EACH HEX CHAR)
1782	01	00659	48C00460		EBR,12	MEMORY	
1783	01	0065A	B7300136		K	11,7,3,SETPSW	
1784	01	0065B	A7300166		K	10,7,3,LBC+2	
1785	01	0065C	CCCCCCCC A		DATA	X'CCCCCCCC'	
1786	01	0065D	55555555 A		DATA	X'55555555'	
1787	01	0065E	99999999 A		DATA	X'99999999'	
1788	01	0065F	99999999 A		DATA	X'99999999'	
1789	01	00660	FFFFFFFF8 A	EBR02	DATA	-8	EBR 917: RESULT = E (EACH HEX CHAR)
1790	01	00661	48C00460		EBR,12	MEMORY	
1791	01	00662	B7300136		K	11,7,3,SETPSW	
1792	01	00663	97300166		K	9,7,3,LBC+2	
1793	01	00664	99999999 A		DATA	X'99999999'	
1794	01	00665	EEEEEEEE A		DATA	X'EEEEEEEE'	
1795	01	00666	77777777 A		DATA	X'77777777'	
1796	01	00667	77777777 A		DATA	X'77777777'	
1797					PAGE		
1798	01	00668	FFFFFFFF8 A	EBR03	DATA	-8	EBR 31A: RESULT = 9 (EACH HEX CHAR)
1799	01	00669	48C00460		EBR,12	MEMORY	
1800	01	0066A	37300136		K	3,7,3,SETPSW	
1801	01	0066B	17300166		K	1,7,3,LBC+2	
1802	01	0066C	33333333 A		DATA	X'33333333'	
1803	01	0066D	99999999 A		DATA	X'99999999'	
1804	01	0066E	AAAAAAAA A		DATA	X'AAAAAAAA'	
1805	01	0066F	AAAAAAAA A		DATA	X'AAAAAAAA'	
1806	01	00670	FFFFFFFF8 A	EBR04	DATA	-8	EBR 614: RESULT = 2 (EACH HEX CHAR)
1807	01	00671	48C00460		EBR,12	MEMORY	
1808	01	00672	17300136		K	1,7,3,SETPSW	
1809	01	00673	27300166		K	2,7,3,LBC+2	

```

1810 01 00674 66666666 A DATA X'66666666'
1811 01 00675 22222222 A DATA X'22222222'
1812 01 00676 44444444 A DATA X'44444444'
1813 01 00677 44444444 A DATA X'44444444'
1814 PAGE
1815 ** RP SHOULD NOT CHANGE. INTERRUPT INHIBITS SHOULD REMAIN SET
1816 01 00678 FFFFFFFE A FAPSD01 DATA -18
1817 01 00679 0F000452 XPSD,0 TABLE+14
1818 01 0067A F7300136 K 15,7,3,SETPSW PSW1 IN
1819 01 0067B 00000166 K 0,0,0,LBC+2 PSW1 OUT
1820 01 0067C 00000000 A DATA 0
1821 01 0067D 00000000 A DATA 0
1822 01 0067E 00000000 A DATA 0
1823 01 0067F 00000000 A DATA 0
1824 01 00680 00000000 A DATA 0
1825 01 00681 00000000 A DATA 0
1826 01 00682 00000000 A DATA 0
1827 01 00683 00000000 A DATA 0
1828 01 00684 07000000 A DATA X'7000000' PSW2 IN
1829 01 00685 07000000 A DATA X'7000000' PSW2 OUT
1830 01 00686 00000000 A DATA 0 TABLE+14
1831 01 00687 00000000 A DATA 0 TABLE+15
1832 01 00688 00000165 K 0,0,0,LBC+1 TABLE+16 LOADED INTO PSW1 BY XPSD
1833 01 00689 000000F0 A DATA X'F0' TABLE+17
1834 PAGE
1835 ** CHANGE RP AND INTERRUPT INHIBITS
1836 01 0068A FFFFFFF2 A FAPSD02 DATA -14
1837 01 0068B 0E800460 LPSD,B MEMORY
1838 01 0068C 30000136 K 3,0,0,SETPSW PSW1 IN
1839 01 0068D C7300166 K 12,7,3,LBC+2 PSW1 OUT
1840 01 0068E 00000000 A DATA 0
1841 01 0068F 00000000 A DATA 0
1842 01 00690 C7300165 K 12,7,3,LBC+1 MEMORY: LOADED INTO PSW1 BY LPSD
1843 01 00691 C7300165 K 12,7,3,LBC+1
1844 01 00692 00000000 A DATA 0
1845 01 00693 00000000 A DATA 0
1846 01 00694 0E0000A0 A DATA X'020000A0' MEMORY+1 : LOADED INTO PSW2 BY LPSD

```

```

1847 01 00695 020000A0 A DATA X'020000A0'
1848 01 00696 05000000 A DATA X'05000000' PSW2 IN
1849 01 00697 020000A0 A DATA X'020000A0' PSW2 OUT
1850 ** CHANGE RP AND INTERRUPT INHIBITS
1851 01 00698 FFFFFFF2 A FAPSD03 DATA -14
1852 01 00699 0E800460 LPSD,B MEMORY
1853 01 0069A C5100136 K 12,5,1,SETPSW
1854 01 0069B 32200166 K 3,2,2,LBC+2
1855 01 0069C 00000000 A DATA 0
1856 01 0069D 00000000 A DATA 0
1857 01 0069E 32200165 K 3,2,2,LBC+1 LOADED INTO PSW1 BY LPSD
1858 01 0069F 32200165 K 3,2,2,LBC+1
1859 01 006A0 00000000 A DATA 0
1860 01 006A1 00000000 A DATA 0
1861 01 006A2 05000050 A DATA X'5000050' LOADED INTO PSW2 BY LPSD
1862 01 006A3 05000050 A DATA X'5000050'
1863 01 006A4 020000A0 A DATA X'20000A0' PSW2 IN
1864 01 006A5 05000050 A DATA X'5000050' PSW2 OUT
1865 PAGE
1866 ** LOAD FIVE INTO RP
1867 01 006A6 FFFFFFF2 A LRPO1 DATA -14
1868 01 006A7 2F000460 LRP MEMORY
1869 01 006A8 00000136 K 0,0,0,SETPSW
1870 01 006A9 00000166 K 0,0,0,LBC+2
1871 01 006AA 00000000 A DATA 0
1872 01 006AB 00000000 A DATA 0
1873 01 006AC 00000050 A DATA X'50'
1874 01 006AD 00000050 A DATA X'50'
1875 01 006AE 00000000 A DATA 0
1876 01 006AF 00000000 A DATA 0
1877 01 006B0 00000000 A DATA 0
1878 01 006B1 00000000 A DATA 0
1879 01 006B2 000000A0 A DATA X'1A0' PSW2 IN
1880 01 006B3 00000050 A DATA X'50' PSW2 OUT
1881 ** LOAD A INTO REG POINTER FROM REG
1882 01 006B4 FFFFFFF2 A LRPO2 DATA -14
1883 01 006B5 2F000000 A LRP 12

```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969 55

```

1884 01 006B6 F7300136 K 15,7,3,SETPSW
1885 01 006B7 F7300166 K 15,7,3,LBC+2
1886 01 006B8 000000A0 A DATA X'AO'
1887 01 006B9 000000A0 A DATA X'AO'
1888 01 006BA 00000000 A DATA 0
1889 01 006BB 00000000 A DATA 0
1890 01 006BC 00000000 A DATA 0
1891 01 006BD 00000000 A DATA 0
1892 01 006BE 00000000 A DATA 0
1893 01 006BF 00000000 A DATA 0
1894 01 006C0 00000050 A DATA X'50' PSW2 IN
1895 01 006C1 000000A0 A DATA X'AO' PSW2 OUT
1896 PAGE
1897 ** INSURE THAT (R,CC) IS FALSE WHEN R28-31 ARE ONES AND CC1-4 ARE ZEROS
1898 01 006C2 FFFFFFFB A BCR01 DATA -8 BRANCH R FIELD=F CC=0
1899 01 006C3 68F00460 BCR,15 MEMORY
1900 01 006C4 07300136 K 0,7,3,SETPSW
1901 01 006C5 07300461 K 0,7,3,MEMORY+1
1902 01 006C6 00000000 A DATA 0
1903 01 006C7 00000000 A DATA 0
1904 01 006C8 0F000464 XPSD,0 RETURN
1905 01 006C9 0F000464 XPSD,0 RETURN
1906 ** INSURE THAT (R,CC) IS FALSE WHEN R28-31 ARE ZEROS AND CC1-4 ARE ONES
1907 01 006CA FFFFFFFA A BCR02 DATA -6 BRANCH R FIELD=0 CC=F
1908 01 006CB 6800000C A BCR,0 12
1909 01 006CC F0000136 K 15,0,0,SETPSW
1910 01 006CD F000000D A K 15,0,0,13
1911 01 006CE 0F000464 XPSD,0 RETURN
1912 01 006CF 0F000464 XPSD,0 RETURN
1913 * CHECK (R,CC) = R28,CC1
1914 01 006D0 FFFFFFFC A BCR03 DATA -4 NBRANCH R=CC= 8
1915 01 006D1 68800047 BCR,8 BRANCH
1916 01 006D2 80000136 K 8,0,0,SETPSW
1917 01 006D3 80000166 K 8,0,0,LBC+2
1918 PAGE
1919 * CHECK (R,CC) = R29,CC2
1920 01 006D4 FFFFFFFC A BCR04 DATA -4 NBRANCH R=CC= 4

```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969 56

```

1921 01 006D5 68400047 BCR,4 BRANCH
1922 01 006D6 40000136 K 4,0,0,SETPSW
1923 01 006D7 40000166 K 4,0,0,LBC+2
1924 * CHECK (R,CC) = R30,CC3
1925 01 006D8 FFFFFFFC A BCR05 DATA -4 NBRANCH R=CC= 2
1926 01 006D9 68200047 BCR,2 BRANCH
1927 01 006DA 20000136 K 2,0,0,SETPSW
1928 01 006DB 20000166 K 2,0,0,LBC+2
1929 * CHECK (R,CC) = R31,CC4
1930 01 006DC FFFFFFFC A BCR06 DATA -4 NBRANCH R=CC= 1
1931 01 006DD 68100047 BCR,1 BRANCH
1932 01 006DE 10000136 K 1,0,0,SETPSW
1933 01 006DF 10000166 K 1,0,0,LBC+2
1934 PAGE
1935 ** CHECK THAT CC3 BR 4 IS NOT SHORTED TO CC1 BR 2 ALSO
1936 ** CHECK THAT R28 BR 29 IS NOT SHORTED TO R30 BR 31
1937 01 006E0 FFFFFFFC A BCS01 DATA -4 N BRANCH R FIELD = C CC = 3
1938 01 006E1 69C00047 BCS,12 BRANCH
1939 01 006E2 30000136 K 3,0,0,SETPSW
1940 01 006E3 30000166 K 3,0,0,LBC+2
1941 ** CHECK THAT CC2 BR 4 IS NOT SHORTED TO CC1 BR 3 ALSO
1942 ** CHECK THAT R28 BR 30 IS NOT SHORTED TO R29 BR 31
1943 01 006E4 FFFFFFFC A BCS02 DATA -4 NBRANCH R FIELD = A CC = 5
1944 01 006E5 69A00047 BCS,10 BRANCH
1945 01 006E6 50000136 K 5,0,0,SETPSW
1946 01 006E7 50000166 K 5,0,0,LBC+2
1947 ** CHECK THAT A BRANCH CONDITION WILL OCCUR
1948 01 006E8 FFFFFFFB A BCS03 DATA -8
1949 01 006E9 69800460 BCS,8 MEMORY
1950 01 006EA 80000136 K 8,0,0,SETPSW
1951 01 006EB 80000461 K 8,0,0,MEMORY+1
1952 01 006EC 00000000 A DATA 0
1953 01 006ED 00000000 A DATA 0
1954 01 006EE 0F000464 XPSD,0 RETURN
1955 01 006EF 0F000464 XPSD,0 RETURN
1956 PAGE
1957

```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969

57

```

1958 *
1959 *
1960 *
1961 *
1962 *
1963 *
1964 *
1965 *
1966 *
1967 01 006F0 FFFFFFFC A AW01 DATA -4 AW KI=0,GI=0,RI=0,AI=0,DI=0
1968 01 006F1 30C00460 AW,12 MEMORY
1969 01 006F2 F7200136 K 15,7,2,SETPSW
1970 01 006F3 07200166 K 0,7,2,L8C+2
1971 01 006F4 FFFFFFFB A AW02 DATA -8 AW * KI=0,GI=0,RI=1,AI=1,DI=0
1972 01 006F5 80C0045A AW,12 +1A
1973 01 006F6 E7200136 K 14,7,2,SETPSW
1974 01 006F7 17200166 K 1,7,2,L8C+2
1975 01 006F8 FFFFFFFF A DATA -1
1976 01 006F9 FFFFFFFF A DATA -1
1977 01 006FA 00000000 A DATA 0
1978 01 006FB 00000000 A DATA 0
1979 01 006FC FFFFFFFB A AW03 DATA -8 AW KI=0,GI=0,RI=1,AI=0,DI=1
1980 01 006FD 30C00460 AW,12 MEMORY
1981 01 006FE 07200136 K 0,7,2,SETPSW
1982 01 006FF 17200166 K 1,7,2,L8C+2
1983 01 00700 00000000 A DATA 0
1984 01 00701 FFFFFFFF A DATA -1
1985 01 00702 FFFFFFFF A DATA -1
1986 01 00703 FFFFFFFF A DATA -1
1987 PAGE
1988 ** AW04 TESTS: K(EVEN BIT POSITION) = G(ODD BIT POSITION)
1989 ** EXAMPLE K04= G05
1990 01 00704 FFFFFFFB A AW04 DATA -8 AW X KJ=1 GJ=0,RI=0
1991 01 00705 30C2AF0B AW,12 MEMORY=X'155555',1 KK=0,GK=1
1992 01 00706 97200136 K 9,7,2,SETPSW KL=1,GL=0
1993 01 00707 57200166 K 5,7,2,L8C+2 KM=0,GM=1
1994 01 00708 55555555 A DATA X'55555555'

```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969

58

```

1995 01 00709 AAAAAAAAA A DATA X'AAAAAAAA'
1996 01 0070A 55555555 A DATA X'55555555'
1997 01 0070B 55555555 A DATA X'55555555'
1998 ** AW05 TESTS THE FOLLOWING TERMS: G0003= G00, G0407= G04, G0811 = G08
1999 ** G12-15 = G12, G1619, G16, G2023, G20, G2427, G24, G2831, G28, K00=G003
2000 ** K03= G0407, K07= G0811, K11= G1215, K15=G1619, K19=G2023, K23=G2427
2001 ** K27= G2831,
2002 ** K01, 05, 09, 13, 17, 21, 25, 29, (EQUALS GEN TERM ON NEXT LINE)
2003 ** G02, 06, 10, 14, 18, 22, 26, 30
2004 01 0070C FFFFFFFB A AW05 DATA -8 AW KJ=0,GJ=1,RI=0
2005 01 0070D 30C00460 AW,12 MEMORY KK=1,GK=0
2006 01 0070E 172001C2 K 1,7,2,FXPSW KL=0,GL=0
2007 01 0070F E7200166 K 14,7,2,L8C+2 KM=1,GM=0
2008 01 00710 AAAAAAAAA A DATA X'AAAAAAAA'
2009 01 00711 55555554 A DATA X'55555554'
2010 01 00712 AAAAAAAAA A DATA X'AAAAAAAA'
2011 01 00713 AAAAAAAAA A DATA X'AAAAAAAA'
2012 PAGE
2013 ** AW06 TESTS: G2831= G31,PR28,PR29,PR30, K00= PR00-PR15-K15
2014 ** K03= PR04-PR15,K15, K07= PR08-PR15,K15, K11= PR1215,K15
2015 ** K15= PR16-27,G2831, K19= PR20-27,G2831, K23= PR2427,G2831
2016 ** K04=PR05,PR06,PR07,K07, K05= PR06,PR07,K07, K06= PR07,K07
2017 ** K08= PR09,PR10,PR11,K11, K09= PR10,PR11,K11, K10= PR11,K11
2018 ** K12= PR13,PR14,PR15,K15, K13= PR14,PR15,K15, K14= PR15,K15
2019 ** K18= PR19,K19
2020 ** K20= PR21,PR22,PR23,K23, K21= PR22,PR23,K23, <22= PR23,K23
2021 ** K24= PR25,PR26,PR27,K27, K25= PR26,PR27,K27, <26= PR27,K27
2022 ** K28= PR29,PR30,G31, K29= PR30,G31
2023 01 00714 FFFFFFFB A AW06 DATA -8 AW KI=1,GI=0,RI=1(EXCEPT I=31)
2024 01 00715 30C00460 AW,12 MEMORY
2025 01 00716 772001C2 K 7,7,2,FXPSW
2026 01 00717 87200166 K 8,7,2,L8C+2
2027 01 00718 FFFFFFFF A DATA -1
2028 01 00719 00000000 A DATA 0
2029 01 0071A 00000001 A DATA 1
2030 01 0071B 00000001 A DATA 1
2031 01 0071C FFFFFFFB A AW07 DATA -8 AW KI=1,GI=0,RI=1(EXCEPT I=31)

```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 59

2032	01	0071D	30C00460		AW,12	MEMORY			
2033	01	0071E	072001C2		K	0,7,2,FXP8SW			
2034	01	0071F	87200166		K	8,7,2,L8C+2			
2035	01	00720	00000001 A		DATA	1			
2036	01	00721	00000000 A		DATA	0			
2037	01	00722	FFFFFFFF A		DATA	-1			
2038	01	00723	FFFFFFFF A		DATA	-1			
2039					PAGE				
2040	01	00724	FFFFFFFF8 A	AW08	DATA	-8			AW KI=1,GI=1,PRI=0(K31=0)
2041	01	00725	30C00460		AW,12	MEMORY			
2042	01	00726	072001C2		K	0,7,2,FXP8SW			
2043	01	00727	97200166		K	9,7,2,L8C+2			
2044	01	00728	FFFFFFFF A		DATA	-1			
2045	01	00729	FFFFFFFFE A		DATA	-2			
2046	01	0072A	FFFFFFFF A		DATA	-1			
2047	01	0072B	FFFFFFFF A		DATA	-1			
2048	01	0072C	FFFFFFFF8 A	AW09	DATA	-8			AW KI=0,GI=0,PRI=1
2049	01	0072D	30C00460		AW,12	MEMORY			
2050	01	0072E	972001C2		K	9,7,2,FXP8SW			
2051	01	0072F	17200166		K	1,7,2,L8C+2			
2052	01	00730	AAAAAAAA A		DATA	X'AAAAAAAA'			
2053	01	00731	FFFFFFFF A		DATA	-1			
2054	01	00732	55555555 A		DATA	X'55555555'			
2055	01	00733	55555555 A		DATA	X'55555555'			
2056	01	00734	FFFFFFFF8 A	AW10	DATA	-8			AW KJ=0,GJ=0,PRJ=0
2057	01	00735	30C00460		AW,12	MEMORY			KK=1,GK=0
2058	01	00736	072001C2		K	0,7,2,FXP8SW			KL=0,GL=1,
2059	01	00737	27200166		K	2,7,2,L8C+2			KM=0,GM=0,
2060	01	00738	22222222 A		DATA	X'22222222'			
2061	01	00739	44444444 A		DATA	X'44444444'			
2062	01	0073A	22222222 A		DATA	X'22222222'			
2063	01	0073B	22222222 A		DATA	X'22222222'			
2064	01	0073C	FFFFFFFF8 A	AW11	DATA	-8			AW KI=0,GJ=1,PRJ=0
2065	01	0073D	30C00460		AW,12	MEMORY			KK=1,GK=0,PRK=0
2066	01	0073E	F72001C2		K	15,7,2,FXP8SW			KL=1,GL=0,PRL=1
2067	01	0073F	E7200166		K	14,7,2,L8C+2			KM=1,GM=0,PRM=1
2068	01	00740	88888888 A		DATA	X'88888888'			

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 60

2069	01	00741	44444443 A		DATA	X'44444443'			
2070	01	00742	88888888 A		DATA	X'88888888'			
2071	01	00743	88888888 A		DATA	X'88888888'			
2072					PAGE				
2073	01	00744	FFFFFFFF8 A	AW12	DATA	-8			AW KI=0,GJ=1,PRK=0
2074	01	00745	30C00460		AW,12	MEMORY			KK=0,GK=0,PRK=1
2075	01	00746	072001C2		K	0,7,2,FXP8SW			KL=1,GL=0,PRK=0
2076	01	00747	E7200166		K	14,7,2,L8C+2			KM=1,GM=0,PRK=1
2077	01	00748	DDDDDDDD A		DATA	X'DDDDDDDD'			
2078	01	00749	66666665 A		DATA	X'66666665'			
2079	01	0074A	88888888 A		DATA	X'88888888'			
2080	01	0074B	88888888 A		DATA	X'88888888'			
2081	01	0074C	FFFFFFFF8 A	AW13	DATA	-8			AW KJ=0,GJ=1,PRJ=0
2082	01	0074D	30C00460		AW,12	MEMORY			KK=0,GK=0,PRK=0
2083	01	0074E	F72001C2		K	15,7,2,FXP8SW			KL=0,GL=0,PRL=1
2084	01	0074F	E7200166		K	14,7,2,L8C+2			KM=1,GM=0,PRM=0
2085	01	00750	CCCCCCCC A		DATA	X'CCCCCCCC'			
2086	01	00751	77777776 A		DATA	X'77777776'			
2087	01	00752	AAAAAAAA A		DATA	X'AAAAAAAA'			
2088	01	00753	AAAAAAAA A		DATA	X'AAAAAAAA'			
2089	01	00754	FFFFFFFF8 A	AW14	DATA	-8			AW KI=0,GI=0,PRJ=0
2090	01	00755	30C00460		AW,12	MEMORY			PRK=1
2091	01	00756	772001C2		K	7,7,2,FXP8SW			PRK=1
2092	01	00757	27200166		K	2,7,2,L8C+2			PRK=1
2093	01	00758	22222222 A		DATA	X'22222222'			
2094	01	00759	77777777 A		DATA	X'77777777'			
2095	01	0075A	55555555 A		DATA	X'55555555'			
2096	01	0075B	55555555 A		DATA	X'55555555'			
2097	01	0075C	FFFFFFFF8 A	AW15	DATA	-8			AW KJ=0,GJ=0,PRJ=0
2098	01	0075D	30C00460		AW,12	MEMORY			KK=1,GK=0,PRK=0
2099	01	0075E	772001C2		K	7,7,2,FXP8SW			KL=1,GL=0,PRL=1
2100	01	0075F	27200166		K	2,7,2,L8C+2			KM=0,GM=1,PRM=0
2101	01	00760	33333333 A		DATA	X'33333333'			
2102	01	00761	44444444 A		DATA	X'44444444'			
2103	01	00762	11111111 A		DATA	X'11111111'			
2104	01	00763	11111111 A		DATA	X'11111111'			
2105					PAGE				

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969 61

2106	01	00764	FFFFFFFF A	AW16	DATA	-8	AW	KJ=0,3J=0,PRJ=0
2107	01	00765	30C00460		AW,12	MEMORY	KK=0,GK=0,PRK=1	
2108	01	00766	072001C2		K	0,7,2,FXP0SW	KL=1,GL=0,PL=0	
2109	01	00767	27200166		K	2,7,2,L0C+2	KM=0,GM=1,PRM=0	
2110	01	00768	11111111 A		DATA	X'11111111'		
2111	01	00769	66666666 A		DATA	X'66666666'		
2112	01	0076A	55555555 A		DATA	X'55555555'		
2113	01	0076B	55555555 A		DATA	X'55555555'		
2114	01	0076C	FFFFFFFF A	AW17	DATA	-8	AW	KI=1,3J=1,PRJ=0 (x31=0)
2115	01	0076D	30C00460		AW,12	MEMORY	GK=0 PRK=1	
2116	01	0076E	772001C2		K	7,7,2,FXP0SW	GL=0,PRL=1	
2117	01	0076F	97200166		K	9,7,2,L0C+2	GM=0,PRM=1	
2118	01	00770	DDDDDDDD A		DATA	X'DDDDDDDD'		
2119	01	00771	88888888 A		DATA	X'88888888'		
2120	01	00772	AAAAAAAA A		DATA	X'AAAAAAAA'		
2121	01	00773	AAAAAAAA A		DATA	X'AAAAAAAA'		
2122	01	00774	FFFFFFFF A	AW18	DATA	-8	AW	KJ=1,3J=0,PRJ=0
2123	01	00775	30C00460		AW,12	MEMORY	KK=1,GK=0,PRK=1	
2124	01	00776	F72001C2		K	15,7,2,FXP0SW	KL=1,GL=0,PRL=1	
2125	01	00777	57200166		K	5,7,2,L0C+2	KM=0,GM=1,PRM=1	
2126	01	00778	55555555 A		DATA	X'55555555'		
2127	01	00779	88888888 A		DATA	X'88888888'		
2128	01	0077A	33333333 A		DATA	X'33333333'		
2129	01	0077B	33333333 A		DATA	X'33333333'		
2130	01	0077C	FFFFFFFF A	AW19	DATA	-8	AW	KJ=1,3J=0,PRJ=0
2131	01	0077D	30C00460		AW,12	MEMORY	KK=1,GK=0,PK=01	
2132	01	0077E	072001C2		K	0,7,2,FXP0SW	KL=0,GL=1,PL=00	
2133	01	0077F	57200166		K	5,7,2,L0C+2	KM=0,GM=0,PM=00	
2134	01	00780	66666666 A		DATA	X'66666666'		
2135	01	00781	88888888 A		DATA	X'88888888'		
2136	01	00782	22222222 A		DATA	X'22222222'		
2137	01	00783	22222222 A		DATA	X'22222222'		
2138					PAGE			
2139	01	00784	FFFFFFFF A	AW20	DATA	-8	AW	KI=1,3J=0,PRJ=0
2140	01	00785	30C00460		AW,12	MEMORY	KK=0,GK=1	
2141	01	00786	272001C2		K	2,7,2,FXP0SW	KL=0,GL=0	
2142	01	00787	57200166		K	5,7,2,L0C+2	KM=0,GM=0	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969 62

2143	01	00788	AAAAAAAA A		DATA	X'AAAAAAAA'		
2144	01	00789	88888888 A		DATA	X'88888888'		
2145	01	0078A	AAAAAAAA A		DATA	X'AAAAAAAA'		
2146	01	0078B	AAAAAAAA A		DATA	X'AAAAAAAA'		
2147	01	0078C	FFFFFFFF A	AW21	DATA	-8	AW	KK=1,3J=1,PRJ=1
2148	01	0078D	30C00460		AW,12	MEMORY	KL=1 PRL=1	
2149	01	0078E	072001C2		K	0,7,2,FXP0SW		
2150	01	0078F	17200166		K	1,7,2,L0C+2		
2151	01	00790	88888888 A		DATA	X'88888888'		
2152	01	00791	CCCCCCCC A		DATA	X'CCCCCCCC'		
2153	01	00792	11111111 A		DATA	X'11111111'		
2154	01	00793	11111111 A		DATA	X'11111111'		
2155	01	00794	FFFFFFFF A	AW22	DATA	-8	AW	KL=1,GM=1,PRJ=1
2156	01	00795	30C00460		AW,12	MEMORY	PRK=1	
2157	01	00796	072001C2		K	0,7,2,FXP0SW		
2158	01	00797	17200166		K	1,7,2,L0C+2		
2159	01	00798	DDDDDDDD A		DATA	X'DDDDDDDD'		
2160	01	00799	EEEEEEEE A		DATA	X'EEEEEEEE'		
2161	01	0079A	11111111 A		DATA	X'11111111'		
2162	01	0079B	11111111 A		DATA	X'11111111'		
2163	01	0079C	FFFFFFFF A	AW23	DATA	-8	AW	KI=0,GI=0,PRJ=1
2164	01	0079D	30C00460		AW,12	MEMORY	PRK=1	
2165	01	0079E	072001C2		K	0,7,2,FXP0SW	PRL=1	
2166	01	0079F	17200166		K	1,7,2,L0C+2		
2167	01	007A0	88888888 A		DATA	X'88888888'		
2168	01	007A1	EEEEEEEE A		DATA	X'EEEEEEEE'		
2169	01	007A2	66666666 A		DATA	X'66666666'		
2170	01	007A3	66666666 A		DATA	X'66666666'		
2171					PAGE			
2172	01	007A4	FFFFFFFF A	AW24	DATA	-8	AW	KK=1,3L=1,PRJ=1
2173	01	007A5	30C00460		AW,12	MEMORY		
2174	01	007A6	072001C2		K	0,7,2,FXP0SW		
2175	01	007A7	17200166		K	1,7,2,L0C+2		
2176	01	007A8	AAAAAAAA A		DATA	X'AAAAAAAA'		
2177	01	007A9	CCCCCCCC A		DATA	X'CCCCCCCC'		
2178	01	007AA	22222222 A		DATA	X'22222222'		
2179	01	007AB	22222222 A		DATA	X'22222222'		

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 63

2180	01	007AC	FFFFFFFF A	AW25	DATA	-8	AW	KI=0,G1=0,PRJ=1
2181	01	007AD	30C00460		AW,12	MEMORY	PRK=1	
2182	01	007AE	072001C2		K	0,7,2,FXPBSW		
2183	01	007AF	17200166		K	1,7,2,L9C+2		
2184	01	007B0	88888888 A		DATA	X'88888888'		
2185	01	007B1	CCCCCCCC A		DATA	X'CCCCCCCC'		
2186	01	007B2	44444444 A		DATA	X'44444444'		
2187	01	007B3	44444444 A		DATA	X'44444444'		
2188					** AW26 TESTS:	G1215= G14*PR12*PR13, G2831= G30*PR28*PR29		
2189					** K00=	PR00-11,G1215, K03=PR04-11,G1215, K07= PR0811,G1215		
2190					** K0=	PR01*PR02*PR03*K03, K01= PR02*PR03*K03, K02= PR03*K03		
2191					** K12=	PR13*G14, K16= PR17*PR18*PR19*K19, K17= PR18*PR19*K19		
2192					** K28=	PR29*G30		
2193	01	007B4	FFFFFFFF A	AW26	DATA	-8	AW	KI=1(EXCEPT K14,K30,K31)
2194	01	007B5	30C00460		AW,12	MEMORY	TEST ALL CARRY(K) TERMS GATED	
2195	01	007B6	072001C2		K	0,7,2,FXPBSW	BY G14 AND G30.	
2196	01	007B7	A7200166		K	10,7,2,L9C+2		
2197	01	007B8	FFFFFFFF A		DATA	X'FFFFFFFF'		
2198	01	007B9	00010000 A		DATA	X'10000'		
2199	01	007BA	00020002 A		DATA	X'20002'		
2200	01	007BB	00020002 A		DATA	X'20002'		
2201					PAGE			
2202					** AW27 TESTS:	G1215= G13*PR12, G2831= G29*PR28		
2203	01	007BC	FFFFFFFF A	AW27	DATA	-8	AW	KI=1(EXCEPT K13,K29-K31)
2204	01	007BD	30C00460		AW,12	MEMORY	TEST ALL G13,G29 TERMS	
2205	01	007BE	F72001C2		K	15,7,2,FXPBSW		
2206	01	007BF	A7200166		K	10,7,2,L9C+2		
2207	01	007C0	FFFFFFFF A		DATA	X'FFFFFFFF'		
2208	01	007C1	00020000 A		DATA	X'20000'		
2209	01	007C2	00040004 A		DATA	X'40004'		
2210	01	007C3	00040004 A		DATA	X'40004'		
2211					PAGE			
2212	01	007C4	FFFFFFFF A	AW28	DATA	-8	AW	KI=1(EXCEPT K12,K28-K31)
2213	01	007C5	30C00460		AW,12	MEMORY	TEST G12,G28 TERMS	
2214	01	007C6	F72001C2		K	15,7,2,FXPBSW		
2215	01	007C7	A7200166		K	10,7,2,L9C+2		
2216	01	007C8	FFFFFFFF A		DATA	X'FFFFFFFF'		

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 64

2217	01	007C9	00040000 A		DATA	X'40000'		
2218	01	007CA	00080008 A		DATA	X'80008'		
2219	01	007CB	00080008 A		DATA	X'80008'		
2220					** AW29 TESTS:	G0811= G11*PR08*PR09*PR10, G2427= G27*PR24*PR25*PR26		
2221					** K00=	PR00-PR07,G0811, K03= PR0407,G0811, K15= PR16-23,G2427		
2222					** K19=	PR2023,G2427, K08= PR09*PR10*G11, K09= PR10*G11		
2223					** K24=	PR25*PR26*G27, K25= PR26*G27		
2224	01	007CC	FFFFFFFF A	AW29	DATA	-8	AW	29=1,(EXCEPT K11,K27-K31)
2225	01	007CD	30C00460		AW,12	MEMORY	TEST G11,G27 TERMS	
2226	01	007CE	F72001C2		K	15,7,2,FXPBSW		
2227	01	007CF	A7200166		K	10,7,2,L9C+2		
2228	01	007D0	FFF7FFF0 A		DATA	X'FFF7FFF0'		
2229	01	007D1	00080000 A		DATA	X'80000'		
2230	01	007D2	00100010 A		DATA	X'100010'		
2231	01	007D3	00100010 A		DATA	X'100010'		
2232					PAGE			
2233					** AW30 TESTS:	G0811= G10*PR08*PR09, G2427= G24*PR24*PR25, K24=PR25*G26		
2234	01	007D4	FFFFFFFF A	AW30	DATA	-8	AW	KI=1(EXCEPT K10,K26-K31)
2235	01	007D5	30C00460		AW,12	MEMORY	TEST G10,G26	
2236	01	007D6	F72001C2		K	15,7,2,FXPBSW		
2237	01	007D7	A7200166		K	10,7,2,L9C+2		
2238	01	007D8	FFF7FFF0 A		DATA	X'FFF7FFF0'		
2239	01	007D9	00100000 A		DATA	X'100000'		
2240	01	007DA	00200020 A		DATA	X'200020'		
2241	01	007DB	00200020 A		DATA	X'200020'		
2242					** AW31 TESTS:	G0811= G09*PR08, G2427= G25*PR24		
2243	01	007DC	FFFFFFFF A	AW31	DATA	-8	AW	KI=1(EXCEPT K9,K25-K31)
2244	01	007DD	30C00460		AW,12	MEMORY	TEST G9,G25	
2245	01	007DE	072001C2		K	0,7,2,FXPBSW		
2246	01	007DF	A7200166		K	10,7,2,L9C+2		
2247	01	007E0	FFF7FFF0 A		DATA	X'FFF7FFF0'		
2248	01	007E1	00200000 A		DATA	X'200000'		
2249	01	007E2	00400040 A		DATA	X'400040'		
2250	01	007E3	00400040 A		DATA	X'400040'		
2251					PAGE			
2252	01	007E4	FFFFFFFF A	AW32	DATA	-8	AW	KI=1(EXCEPT K8,K24-K31)
2253	01	007E5	30C00460		AW,12	MEMORY	TEST G8,G24	

SIGMA 5 CPU DIAGNOSTIC-AUTB 704287-51C00 MARCH 12, 1969 65

2254	01	007E6	F72001C2	K	15,7,2,FXP8SW
2255	01	007E7	A7200166	K	10,7,2,L8C+2
2256	01	007E8	FFBFFF80 A	DATA	X'FFBFFF80'
2257	01	007E9	00400000 A	DATA	X'400000'
2258	01	007EA	00800080 A	DATA	X'800080'
2259	01	007EB	00800080 A	DATA	X'800080'
2260				** AW33 TESTS:	G0407= G07,PRO4,PRO5,PRO6, G2023= G23,PR20,PR21,PR22
2261				** K20=	PR0003,G0407, K15= PR1619,G2023, K4= PRO5,PRO6,G07, K5=PRO6,G07
2262				** K20=	PR21,PR22,G23, K21= PR22,G23
2263	01	007EC	FFFFFFF8 A	AW33 DATA	-8 AW K1=1(EXCEPT K7,K23-K31)
2264	01	007ED	30C00460	AW,12 MEMORY	TEST G7,G23
2265	01	007EE	672001C2	K	6,7,2,FXP8SW
2266	01	007EF	A7200166	K	10,7,2,L8C+2
2267	01	007F0	FF7FFF00 A	DATA	X'FF7FFF00'
2268	01	007F1	00800000 A	DATA	X'800000'
2269	01	007F2	01000100 A	DATA	X'1000100'
2270	01	007F3	01000100 A	DATA	X'1000100'
2271				** AW34 TESTS:	G0407= G06,PRO4,PRO5, G2023= G22,PR20,PR21, K4=PRO5,G06
2272				** K20=	G22,PR21
2273	01	007F4	FFFFFFF8 A	AW34 DATA	-8 AW * K1=1(EXCEPT K6,K22-K31)
2274	01	007F5	80C0045A	AW,12	+1A TEST G6,G22
2275	01	007F6	572001C2	K	5,7,2,FXP8SW
2276	01	007F7	A7200166	K	10,7,2,L8C+2
2277	01	007F8	FEFFFE00 A	DATA	X'FEFFFE00'
2278	01	007F9	01000000 A	DATA	X'1000000'
2279	01	007FA	02000200 A	DATA	X'2000200'
2280	01	007FB	02000200 A	DATA	X'2000200'
2281				PAGE	
2282				** AW35 TESTS:	G0407= G05,PRO4, G2023= PR20,G21
2283	01	007FC	FFFFFFF8 A	AW35 DATA	-8 AW K1=1(EXCEPT K5,K21-K31)
2284	01	007FD	30C00460	AW,12 MEMORY	TEST G5,G21
2285	01	007FE	A72001C2	K	4,7,2,FXP8SW
2286	01	007FF	A7200166	K	10,7,2,L8C+2
2287	01	00800	FDFFFC00 A	DATA	X'FDFFFC00'
2288	01	00801	02000000 A	DATA	X'2000000'
2289	01	00802	04000400 A	DATA	X'4000400'
2290	01	00803	04000400 A	DATA	X'4000400'

SIGMA 5 CPU DIAGNOSTIC-AUTB 704287-51C00 MARCH 12, 1969 66

2291	01	00804	FFFFFFF8 A	AW36 DATA	-8 AW K1=1(EXCEPT K4,K20-K31)
2292	01	00805	30C00460	AW,12 MEMORY	TEST G4,G20
2293	01	00806	072001C2	K	0,7,2,FXP8SW
2294	01	00807	A7200166	K	10,7,2,L8C+2
2295	01	00808	F3FFF800 A	DATA	X'F3FFF800'
2296	01	00809	04000000 A	DATA	X'4000000'
2297	01	0080A	08000800 A	DATA	X'8000800'
2298	01	0080B	08000800 A	DATA	X'8000800'
2299				** AW37 TESTS:	G1619= G19,PR16,PR17,PR18, K16= PR17,PR18,G19
2300				** K17=	PR18,G19
2301	01	0080C	FFFFFFF8 A	AW37 DATA	-8 AW K15,K16,K17,K18=1
2302	01	0080D	30C00460	AW,12 MEMORY	TEST G19
2303	01	0080E	B72001C2	K	11,7,2,FXP8SW
2304	01	0080F	27200166	K	2,7,2,L8C+2
2305	01	00810	0000F000 A	DATA	X'F000'
2306	01	00811	00010000 A	DATA	X'10000'
2307	01	00812	00001000 A	DATA	X'1000'
2308	01	00813	00001000 A	DATA	X'1000'
2309				PAGE	
2310				** AW38 TESTS:	G1619= G18,PR16,PR17, K16= PR17,G18
2311	01	00814	FFFFFFF8 A	AW38 DATA	-8 AW K15,K16,K17=1
2312	01	00815	30C00460	AW,12 MEMORY	TEST G18
2313	01	00816	F72001C2	K	15,7,2,FXP8SW
2314	01	00817	27200166	K	2,7,2,L8C+2
2315	01	00818	0000E000 A	DATA	X'E000'
2316	01	00819	00010000 A	DATA	X'10000'
2317	01	0081A	00002000 A	DATA	X'2000'
2318	01	0081B	00002000 A	DATA	X'2000'
2319				** AW39 TESTS:	G1619= PR16,G17
2320	01	0081C	FFFFFFF8 A	AW39 DATA	-8 AW K15,K16=1
2321	01	0081D	30C00460	AW,12 MEMORY	TEST G17
2322	01	0081E	072001C2	K	0,7,2,FXP8SW
2323	01	0081F	27200166	K	2,7,2,L8C+2
2324	01	00820	0000C000 A	DATA	X'C000'
2325	01	00821	00010000 A	DATA	X'10000'
2326	01	00822	00004000 A	DATA	X'4000'
2327	01	00823	00004000 A	DATA	X'4000'


```

2328      PAGE
2329      ** AW40 TESTS: G1215= G15.PR12.PR13.PR14, K12= G15.PR13.PR14
2330      ** K13= G15.PR14
2331 01 00824 FFFFFFFF A AW40 DATA -8 AW TEST G15
2332 01 00825 30C00460 AW,12 MEMORY
2333 01 00826 072001C2 K 0,7,2,FXP0SW
2334 01 00827 27200166 K 2,7,2,L0C+2
2335 01 00828 OFFF0000 A DATA X'FFFF0000'
2336 01 00829 10000000 A DATA X'10000000'
2337 01 0082A 00010000 A DATA X'10000'
2338 01 0082B 00010000 A DATA X'10000'
2339 01 0082C FFFFFFFF A AW41 DATA -8 AW TEST OVERFLOW TRAP - T0 +
2340 01 0082D 30C00460 AW,12 MEMORY
2341 01 0082E 073001C2 K 0,7,3,FXP0SW
2342 01 0082F E7300084 K 14,7,3,FXP0RET+1
2343 01 00830 89ABEF17 A DATA X'89ABEF17'
2344 01 00831 70FF0579 A DATA X'70FF0579'
2345 01 00832 E7531662 A DATA X'E7531662'
2346 01 00833 E7531662 A DATA X'E7531662'
2347 01 00834 FFFFFFFF A AW42 DATA -8 AW TEST OVERFLOW TRAP + T0 -
2348 01 00835 30C00460 AW,12 MEMORY
2349 01 00836 073001CC K 0,7,3,FXP0PSDW CHECK RETURNED PSDW *B
2350 01 00837 57300164 K 5,7,3,L0C *B
2351 01 00838 61754221 A DATA X'61754221'
2352 01 00839 80000000 A DATA X'80000000'
2353 01 0083A 1E8ABDDF A DATA X'1E8ABDDF'
2354 01 00833 1E8ABDDF A DATA X'1E8ABDDF'
2355      PAGE
2356      ** TEST G00-03=G03.PR00.PR01.PR02 ,K0=PR01.PR02.33, K1=PR02.G03
2357 01 0083C FFFFFFFF A AW43 DATA -12
2358 01 0083D 30C00460 AW,12 MEMORY
2359 01 0083E 77300136 K 7,7,3,SETPSW
2360 01 0083F 87300166 K 8,7,3,L0C+2
2361 01 00840 F0000000 A DATA X'F0000000'
2362 01 00841 00000000 A DATA 0
2363 01 00842 10000000 A DATA X'10000000'
2364 01 00843 10000000 A DATA X'10000000'

```

```

2365 01 00844 FFFFFFFF A DATA -1,-1,100,100
2365 01 00845 FFFFFFFF A
2365 01 00846 00000064 A
2365 01 00847 00000064 A
2366      ** N0 OVERFLOW (-)+(+) T0 (+)
2367      ** TEST G0003= G02.PR00.PR01, K0=PR01.G02
2368 01 00848 FFFFFFFF A AW44 DATA -12
2369 01 00849 30C00461 AW,12 MEMORY+1
2370 01 0084A 07300136 K 0,7,3,SETPSW
2371 01 0084B 87300166 K 8,7,3,L0C+2
2372 01 0084C E0000000 A DATA X'E0000000'
2373 01 0084D 00000000 A DATA 0
2374 01 0084E 00000000 A DATA 0,0,8,8,X'20000000',X'20000000'
2374 01 0084F 00000000 A
2374 01 00850 00000008 A
2374 01 00851 00000008 A
2374 01 00852 20000000 A
2374 01 00853 20000000 A
2375      PAGE
2376      ** TEST G0003= G01.PR00 N0 OVERFLOW (+)(-) T0 (+)
2377 01 00854 FFFFFFFF A AW45 DATA -12
2378 01 00855 30C00461 AW,13 MEMORY+1
2379 01 00856 07300136 K 0,7,3,SETPSW
2380 01 00857 87300166 K 8,7,3,L0C+2
2381 01 00858 00000001 A DATA 1,1,100,100,X'40000000',0,X'C0000000',X'C0000000'
2381 01 00859 00000001 A
2381 01 0085A 00000064 A
2381 01 0085B 00000064 A
2381 01 0085C 40000000 A
2381 01 0085D 00000000 A
2381 01 0085E C0000000 A
2381 01 0085F C0000000 A
2382      ** TEST N0 OVERFLOW (-)+(+) T0 (-)
2383 01 00860 FFFFFFFF A AW46 DATA -8
2384 01 00861 30C00460 AW,12 MEMORY
2385 01 00862 07300136 K 0,7,3,SETPSW
2386 01 00863 17300166 K 1,7,3,L0C+2

```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969

69

```

2387 01 00864 FFFFFFF9C A DATA -100,-90,10,10
      01 00865 FFFFFFFA6 A
      01 00866 0000000A A
      01 00867 0000000A A

2388
2389 01 00868 FFFFFFFF8 A AW47 DATA -8
2390 01 00869 30C00460 AW,12 MEMORY
2391 01 0086A 07300136 K 0,7,3,SETPSW
2392 01 0086B 17300166 K 1,7,3,L0C+2
2393 01 0086C 0000000A A DATA 10,-90,-100,-100
      01 0086D FFFFFFFA6 A
      01 0086E FFFFFFF9C A
      01 0086F FFFFFFF9C A

2394
2395 01 00870 FFFFFFFF8 A SW01 PAGE DATA -8 SW
2396 01 00871 38C00460 SW,12 MEMORY
2397 01 00872 77300136 K 7,7,3,SETPSW
2398 01 00873 87300166 K 8,7,3,L0C+2
2399 01 00874 FFFFFFFF A DATA -1
2400 01 00875 00000000 A DATA 0
2401 01 00876 FFFFFFFF A DATA -1
2402 01 00877 FFFFFFFF A DATA -1
2403 01 00878 FFFFFFFF A SW02 DATA -4 SW *
2404 01 00879 88C0045A SW,12 +1A
2405 01 0087A F73001C2 K 15,7,3,FXP0SW
2406 01 0087B 87300166 K 8,7,3,L0C+2
2407 01 0087C FFFFFFFF8 A SW03 DATA -8 SW
2408 01 0087D 38C00460 SW,12 MEMORY
2409 01 0087E 273001C2 K 2,7,3,FXP0SW
2410 01 0087F 57300084 K 5,7,3,FP0RET+1
2411 01 00880 7FFFFFFF A DATA X'7FFFFFFF'
2412 01 00881 80000000 A DATA X'80000000'
2413 01 00882 FFFFFFFF A DATA -1
2414 01 00883 FFFFFFFF A DATA -1
2415
2416 01 00884 FFFFFFFFA A SW04 PAGE DATA -6 SW
2417 01 00885 38C0000C A SW,12 12

```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969

70

```

2418 01 00886 773001C2 K 7,7,3,FXP0SW
2419 01 00887 87300166 K 8,7,3,L0C+2
2420 01 00888 80000000 A DATA X'80000000'
2421 01 00889 00000000 A DATA 0
2422 01 0088A FFFFFFFF8 A SW05 DATA -8 SW PRI=1
2423 01 0088B 38C00460 SW,12 MEMORY TEST KM=1
2424 01 0088C 00000136 K 0,0,0,SETPSW
2425 01 0088D 50000166 K 5,0,0,L0C+2
2426 01 0088E 7FFFFFFF A DATA X'7FFFFFFF'
2427 01 0088F 80000000 A DATA X'80000000'
2428 01 00890 FFFFFFFF A DATA -1
2429 01 00891 FFFFFFFF A DATA -1
2430
2431 01 00892 FFFFFFFF8 A SW06 PAGE DATA -8 SW TEST <31 WITH RR16-PR31
2432 01 00893 38C00460 SW,12 MEMORY
2433 01 00894 073001C2 K 0,7,3,FXP0SW
2434 01 00895 27300166 K 2,7,3,L0C+2
2435 01 00896 0000FFFF A DATA X'FFFF'
2436 01 00897 00010000 A DATA X'10000'
2437 01 00898 FFFFFFFF A DATA -1
2438 01 00899 FFFFFFFF A DATA -1
2439
2440
2441 01 0089A FFFFFFFF8 A ** S/PH10 = FUBIR,PH1,NBRPH9; BRPH9 = FUBIR,PH1,NS0; S0=1 THUS S/PH10 = 1
      BIR01 DATA -8 BRANCH
2442 01 0089B 65C00460 BIR,12 MEMORY
2443 01 0089C F7300136 K 15,7,3,SETPSW
2444 01 0089D F7300461 K 15,7,3,MEMORY+1
2445 01 0089E FFFFFFFF A DATA -2
2446 01 0089F FFFFFFFF A DATA -1
2447 01 008A0 0F000464 XPSD,0 RETURN
2448 01 008A1 0F000464 XPSD,0 RETURN
2449
2450 01 008A2 FFFFFFFFA A ** S0=0 THUS BRPH9 IS TRUE
      BIR02 DATA -6 NBRANCH
2451 01 008A3 65C00460 BIR,12 BRANCH
2452 01 008A4 00000136 K 0,0,0,SETPSW
2453 01 008A5 00000166 K 0,0,0,L0C+2
2454 01 008A6 FFFFFFFF A DATA -1

```

SIGMA 5 CPU DIAGNOSTIC-AUTB 704287-51C00 MARCH 12, 1969 71

```

2455 01 008A7 00000000 A DATA 0
2456 PAGE
2457 ** S/PH10 IS TRUE FROM FUBDR,PH1,SGTZ
2458 01 008A8 FFFFFFFF A BDR01 DATA -6 BRANCH
2459 01 008A9 64C00047 BDR,12 BRANCH
2460 01 008AA 00000136 K 0,0,0,SETPSW
2461 01 008AB 00000048 K 0,0,0,BRANCH+1
2462 01 008AC 00000002 A DATA 2
2463 01 008AD 00000001 A DATA 1
2464 ** S/PH10 IS FALSE BECAUSE SGTZ IS FALSE
2465 01 008AE FFFFFFFF A BDR02 DATA -6 NBRANCH
2466 01 008AF 64C00047 BDR,12 BRANCH
2467 01 008B0 00000136 K 0,0,0,SETPSW
2468 01 008B1 00000166 K 0,0,0,L8C+2
2469 01 008B2 FFFFFFFF A DATA -1
2470 01 008B3 FFFFFFFF A DATA -2
2471 PAGE
2472 01 008B4 FFFFFFFF A BAL01 DATA -6 BAL C BRANCH
2473 01 008B5 64C00047 BAL,12 BRANCH
2474 01 008B6 F7300136 K 15,7,3,SETPSW
2475 01 008B7 F7300048 K 15,7,3,BRANCH+1
2476 01 008B8 08C00000 A K 0,8,12,0
2477 01 008B9 00000165 DATA L8C+1
2478 01 008BA FFFFFFFF A BAL02 DATA -10 BAL D X MEMORY
2479 01 008BB 6AD325B3 BAL,13 MEMORY-X'DEAD',1
2480 01 008BC 01300136 K 0,1,3,SETPSW
2481 01 008BD 01300461 K 0,1,3,MEMORY+1
2482 01 008BE 0000DEAD A DATA X'DEAD'
2483 01 008BF 0000DEAD A DATA X'DEAD'
2484 01 008C0 0F000464 XPSD,0 RETURN
2485 01 008C1 0F000464 XPSD,0 RETURN
2486 01 008C2 11112222 A DATA X'11112222'
2487 01 008C3 00000165 DATA L8C+1
2488 01 008C4 FFFFFFFF A BAL03 DATA -8 BAL D * MEMORY
2489 01 008C5 EAC0045A BAL,12 *1A
2490 01 008C6 00000136 DATA SETPSW
2491 01 008C7 00000461 DATA MEMORY+1

```

SIGMA 5 CPU DIAGNOSTIC-AUTB 704287-51C00 MARCH 12, 1969 72

```

2492 01 008C8 FFFFFFFF A DATA -1
2493 01 008C9 00000165 DATA L8C+1
2494 01 008CA 0F000464 XPSD,0 RETURN
2495 01 008CB 0F000464 XPSD,0 RETURN
2496 01 008CC FFFFFFFF A BAL04 DATA -6 BAL C *X BRANCH
2497 01 008CD EAC20460 BAL,12 *MEMORY,1
2498 01 008CE F7300136 K 15,7,3,SETPSW
2499 01 008CF F7300048 K 15,7,3,BRANCH+1
2500 01 008D0 00000047 DATA BRANCH
2501 01 008D1 00000165 DATA L8C+1
2502 PAGE
2503 ** BAL TO NONEXISTENT MEMORY. C(R) WILL BE MODIFIED AND TRAP WILL OCCUR
2504 * ON FIRST PASS THE INST IS B END. IF NON-EXISTENT MEMORY IS *B
2505 * PRESENT A BAL,12 ----- WILL BE INSERTED. *B
2506 01 008D2 FFFFFFFF A BAL05 DATA -6
2507 01 008D3 6AC1FFFF A BAL,12 X'1FFFF'
2508 01 008D4 80000186 K 11,0,0,SIGNAB
2509 01 008D5 F0000067 K 15,0,0,NEARET+1
2510 01 008D6 00000000 A DATA 0
2511 01 008D7 00000165 DATA L8C+1
2512 PAGE
2513 01 008D8 FFFFFFFF A LH01 DATA -8 LH HW 0 SE=1 1-1,1-0
2514 01 008D9 52C00460 LH,12 MEMORY
2515 01 008DA 70200136 K 7,0,2,SETPSW
2516 01 008DB 50200166 K 5,0,2,L8C+2
2517 01 008DC FFFF0000 A DATA X'FFF0000'
2518 01 008DD FFFFFFFF A DATA -1
2519 01 008DE FFFF3210 A DATA X'FFF3210'
2520 01 008DF FFFF3210 A DATA X'FFF3210'
2521 01 008E0 FFFFFFFF A LH02 DATA -8 LH HW 0 SE=1 1-0,0-1
2522 01 008E1 52C00460 LH,12 MEMORY
2523 01 008E2 E0300136 K 14,0,3,SETPSW
2524 01 008E3 00300166 K 13,0,3,L8C+2
2525 01 008E4 00007FFF A DATA X'7FFF'
2526 01 008E5 FFFF8000 A DATA X'FFF8000'
2527 01 008E6 80000000 A DATA X'80000000'
2528 01 008E7 80000000 A DATA X'80000000'

```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00				MARCH 12, 1969				73
2529	01	008E8	FFFFFFFF A	LH03	DATA	-8	LH * HW 0	SE=0 0-1,1-1
2530	01	008E9	D2C0045A		LH,12	+1A		
2531	01	008EA	F7300136		K	15,7,3,SETPSW		
2532	01	008EB	E7300166		K	14,7,3,L8C+2		
2533	01	008EC	FFFFFFFF A		DATA	-1		
2534	01	008ED	00007FFF A		DATA	X'7FFF'		
2535	01	008EE	7FFF0000 A		DATA	X'7FFF0000'		
2536	01	008EF	7FFF0000 A		DATA	X'7FFF0000'		
2537					PAGE			
2538	01	008F0	FFFFFFFF A	LH04	DATA	-6	LH HW 0	SE=0 0-0,0-1
2539	01	008F1	52C0000C A		LH,12	12		
2540	01	008F2	30300136		K	3,0,3,SETPSW		
2541	01	008F3	00300166		K	0,0,3,L8C+2		
2542	01	008F4	0000FFFF A		DATA	X'FFFF'		
2543	01	008F5	00000000 A		DATA	0		
2544	01	008F6	FFFFFFFF A	LH05	DATA	-6	LH x HW 1	SE=0 0-1,0-0
2545	01	008F7	52CE000C A		LH,12	12,7		
2546	01	008F8	77300136		K	7,7,3,SETPSW		
2547	01	008F9	67300166		K	6,7,3,L8C+2		
2548	01	008FA	FFFE0001 A		DATA	X'FFFE0001'		
2549	01	008FB	00000001 A		DATA	1		
2550					PAGE			
2551	01	008FC	FFFFFFFF A	LH06	DATA	-8	LH x HW 1	SE=0 0-0,1-1
2552	01	008FD	52C30461		LH,12	MEMBRY=X'FFFF',1		
2553	01	008FE	70300136		K	7,0,3,SETPSW		
2554	01	008FF	60300166		K	6,0,3,L8C+2		
2555	01	00900	0001FFFF A		DATA	X'1FFFF'		
2556	01	00901	00007FFF A		DATA	X'7FFF'		
2557	01	00902	00007FFF A		DATA	X'7FFF'		
2558	01	00903	00007FFF A		DATA	X'7FFF'		
2559	01	00904	FFFFFFFF4 A	LH07	DATA	-12	LH *X HW=1	SE=1 1-1,0-1
2560	01	00905	D2D20460		LH,13	*MEMBRY,1		
2561	01	00906	F7300136		K	15,7,3,SETPSW		
2562	01	00907	D7300166		K	13,7,3,L8C+2		
2563	01	00908	000006A3 A		DATA	2*(MEMBRY-CYCLE)+3		
2564	01	00909	000006A3 A		DATA	2*(MEMBRY-CYCLE)+3		
2565	01	0090A	00000110		DATA	CYCLE		

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00				MARCH 12, 1969				74
2566	01	0090B	00000110		DATA	CYCLE		
2567	01	0090C	FFFFFFFF A		DATA	-1		
2568	01	0090D	FFFF8000 A		DATA	X'FFFF8000'		
2569	01	0090E	00008000 A		DATA	X'8000'		
2570	01	0090F	00008000 A		DATA	X'8000'		
2571	01	00910	FFFFFFFF4 A	LH08	DATA	-12	LH *X HW=1	SE=1 1-0,1-0
2572	01	00911	D2D20460		LH,13	*MEMBRY,1		
2573	01	00912	03300136		K	0,3,3,SETPSW		
2574	01	00913	13300166		K	1,3,3,L8C+2		
2575	01	00914	00000235		DATA	HA(CLEAR)+3		
2576	01	00915	00000235		DATA	HA(CLEAR)+3		
2577	01	00916	00000347 A		DATA	MEMBRY-CLEAR		
2578	01	00917	00000347 A		DATA	MEMBRY-CLEAR		
2579	01	00918	00000000 A		DATA	0		
2580	01	00919	FFFFFFFF A		DATA	-1		
2581	01	0091A	1234FFFF A		DATA	X'1234FFFF'		
2582	01	0091B	1234FFFF A		DATA	X'1234FFFF'		
2583					PAGE			
2584	01	0091C	FFFFFFFF8 A	LB01	DATA	-8	LB B 0 0-0,1-0	
2585	01	0091D	72C00460		LB,12	MEMBRY		
2586	01	0091E	F7200136		K	15,7,2,SETPSW		
2587	01	0091F	E7200166		K	14,7,2,L8C+2		
2588	01	00920	00000000 A		DATA	0		
2589	01	00921	000000FF A		DATA	X'FF'		
2590	01	00922	FF000000 A		DATA	X'FF000000'		
2591	01	00923	FF000000 A		DATA	X'FF000000'		
2592	01	00924	FFFFFFFF8 A	LB02	DATA	-8	LB B 0 0-0,0-1	
2593	01	00925	72C00460		LB,12	MEMBRY		
2594	01	00926	F7300136		K	15,7,3,SETPSW		
2595	01	00927	C7300166		K	12,7,3,L8C+2		
2596	01	00928	000000FF A		DATA	X'FF'		
2597	01	00929	00000000 A		DATA	0		
2598	01	0092A	00FFFFFF A		DATA	X'FFFFFF'		
2599	01	0092B	00FFFFFF A		DATA	X'FFFFFF'		
2600	01	0092C	FFFFFFFF8 A	LB03	DATA	-8	LB X B 0 0-1,0-0	
2601	01	0092D	72C20480		LB,12	MEMBRY+X'20',1		
2602	01	0092E	F7300136		K	15,7,3,SETPSW		

SIGMA 5 CPU DIAGNOSTIC-AUTB 704287-51C00 MARCH 12, 1969 75

2603	01	0092F	C7300166		K	12,7,3,L8C+2	
2604	01	00930	FFFFFF80	A	DATA	X'FFFFFF80'	
2605	01	00931	00000000	A	DATA	0	
2606	01	00932	00FFFFFF	A	DATA	X'FFFFFF'	
2607	01	00933	00FFFFFF	A	DATA	X'FFFFFF'	
2608	01	00934	FFFFFFF8	A	DATA	-8	LB * BYTE 0=1,1-1
2609	01	00935	F2C0045A		LB,12	*1A	
2610	01	00936	00200136		K	0,0,2,SETPSW	
2611	01	00937	20200166		K	2,0,2,L8C+2	
2612	01	00938	FFFFFFF8	A	DATA	-1	
2613	01	00939	000000FF	A	DATA	X'FF'	
2614	01	0093A	FF000000	A	DATA	X'FF000000'	
2615	01	0093B	FF000000	A	DATA	X'FF000000'	
2616					PAGE		
2617	01	0093C	FFFFFFF8	A	DATA	-8	LB * B 0 0=1,0-1,1-1
2618	01	0093D	F2C0045A		LB,12	*1A	
2619	01	0093E	37300136		K	3,7,3,SETPSW	
2620	01	0093F	27300166		K	2,7,3,L8C+2	
2621	01	00940	FFFFFFF8	A	DATA	-1	
2622	01	00941	000000A2	A	DATA	X'1A2'	
2623	01	00942	A2FFFFFF	A	DATA	X'A2FFFFFF'	
2624	01	00943	A2FFFFFF	A	DATA	X'A2FFFFFF'	
2625	01	00944	FFFFFFF6	A	DATA	-10	LB X B 2
2626	01	00945	72D2046A		LB,13	PASS,1	
2627	01	00946	50300136		K	5,0,3,SETPSW	
2628	01	00947	60300166		K	6,0,3,L8C+2	
2629	01	00948	FFFFFFDA	A	DATA	4*(MEMBRY-PASS)+2	
2630	01	00949	FFFFFFDA	A	DATA	4*(MEMBRY-PASS)+2	
2631	01	0094A	FFFF89FF	A	DATA	X'FFFF89FF'	
2632	01	0094B	FFFF89FF	A	DATA	X'FFFF89FF'	
2633	01	0094C	FFFFFFF8	A	DATA	-1	
2634	01	0094D	00000089	A	DATA	X'89'	
2635	01	0094E	FFFFFFFA	A	DATA	-6	LB X B 1
2636	01	0094F	72C3800D		LB,12	12+X'18001',1	
2637	01	00950	15200136		K	1,5,2,SETPSW	
2638	01	00951	25200166		K	2,5,2,L8C+2	
2639	01	00952	FF99FFFD	A	DATA	X'FF99FFFD'	

SIGMA 5 CPU DIAGNOSTIC-AUTB 704287-51C00 MARCH 12, 1969 76

2640	01	00953	00000099	A	DATA	X'99'	
2641	01	00954	FFFFFFF8	A	DATA	-8	LB X B 3
2642	01	00955	72C20460		LB,12	MEMBRY,1	
2643	01	00956	01300136		K	0,1,3,SETPSW	
2644	01	00957	21300166		K	2,1,3,L8C+2	
2645	01	00958	00000003	A	DATA	3	
2646	01	00959	000000FF	A	DATA	X'FF'	
2647	01	0095A	FFFFFFF8	A	DATA	-1	
2648	01	0095B	FFFFFFF8	A	DATA	-1	
2649					PAGE		
2650	01	0095C	FFFFFFF4	A	DATA	-12	LB * IX
2651	01	0095D	F2CE0460		LB,12	*MEMBRY,7	
2652	01	0095E	10000136		K	1,0,0,SETPSW	
2653	01	0095F	20000166		K	2,0,0,L8C+2	
2654	01	00960	FFFFFFF8	A	DATA	-1,X'127',MEMBRY+1, MEMBRY+1,X'F027F2F3',X'F027F2F3'	
		01	00961	00000027	A		
		01	00962	00000461	A		
		01	00963	00000461	A		
		01	00964	F027F2F3	A		
		01	00965	F027F2F3	A		
2655	01	00966	F027F2F3	A	DATA	X'F027F2F3',X'F027F2F3'	
		01	00967	F027F2F3	A		
2656					PAGE		
2657	01	00968	FFFFFFF6	A	DATA	-10	LD RE ME
2658	01	00969	12C00460		LD,12	MEMBRY	
2659	01	0096A	F7300136		K	15,7,3,SETPSW	
2660	01	0096B	C7300166		K	12,7,3,L8C+2	
2661	01	0096C	FFFFFFF8	A	DATA	-1	
2662	01	0096D	00000000	A	DATA	0	
2663	01	0096E	00000000	A	DATA	0	
2664	01	0096F	00000000	A	DATA	0	
2665	01	00970	FFFFFFF8	A	DATA	-1	
2666	01	00971	00000000	A	DATA	0	
2667	01	00972	FFFFFFF4	A	DATA	-12	LD * RE ME
2668	01	00973	92C0045A		LD,12	*1A	
2669	01	00974	77300136		K	7,7,3,SETPSW	
2670	01	00975	57300166		K	5,7,3,L8C+2	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969

77

2671	01	00976	00000000 A		DATA	0		
2672	01	00977	FFFFFFFF A		DATA	-1		
2673	01	00978	FFFFFFFF A		DATA	-1		
2674	01	00979	FFFFFFFF A		DATA	-1		
2675	01	0097A	00000000 A		DATA	0		
2676	01	0097B	FFFFFFFF A		DATA	-1		
2677	01	0097C	FFFFFFFF A		DATA	-1		
2678	01	0097D	FFFFFFFF A		DATA	-1		
2679	01	0097E	FFFFFFFF A	LD03	DATA	-12		LD X RE ME
2680	01	0097F	12C20048		LD,12	BRANCH+1,1		
2681	01	00980	07300136		K	0,7,3,SETPSW		
2682	01	00981	27300166		K	2,7,3,LBC+2		
2683	01	00982	0000020C A		DATA	(MEMBRY-BRANCH+1)/2		
2684	01	00983	00000000 A		DATA	0		
2685	01	00984	00000000 A		DATA	0		
2686	01	00985	00000000 A		DATA	0		
2687	01	00986	ACEBEDAD A		DATA	X'ACEBEDAD'		
2688	01	00987	BEADFADE A		DATA	X'BEADFADE'		
2689	01	00988	BEADFADE A		DATA	X'BEADFADE'		
2690	01	00989	BEADFADE A		DATA	X'BEADFADE'		
2691					PAGE			
2692	01	0098A	FFFFFFFF A	LD04	DATA	-12		LD * RE ME
2693	01	0098B	92C0045A		LD,12	+1A		
2694	01	0098C	F7300136		K	15,7,3,SETPSW		
2695	01	0098D	D7300166		K	13,7,3,LBC+2		
2696	01	0098E	0000020C A		DATA	(MEMBRY-BRANCH+1)/2		
2697	01	0098F	F234ABCD A		DATA	X'F234ABCD'		
2698	01	00990	F234ABCD A		DATA	X'F234ABCD'		
2699	01	00991	F234ABCD A		DATA	X'F234ABCD'		
2700	01	00992	F2397572 A		DATA	X'F2397572'		
2701	01	00993	1E2783F9 A		DATA	X'1E2783F9'		
2702	01	00994	1E2783F9 A		DATA	X'1E2783F9'		
2703	01	00995	1E2783F9 A		DATA	X'1E2783F9'		
2704	01	00996	FFFFFFFF A	LD05	DATA	-12		LD R0 M0
2705	01	00997	12D00461		LD,13	MEMBRY+1		
2706	01	00998	D7300136		K	13,7,3,SETPSW		
2707	01	00999	E7300166		K	14,7,3,LBC+2		

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969

78

2708	01	0099A	ABCDEF01 A		DATA	X'ABCDEF01'		
2709	01	0099B	ABCDEF01 A		DATA	X'ABCDEF01'		
2710	01	0099C	543210FE A		DATA	X'543210FE'		
2711	01	0099D	543210FE A		DATA	X'543210FE'		
2712	01	0099E	12345678 A		DATA	X'12345678'		
2713	01	0099F	543210FE A		DATA	X'543210FE'		
2714	01	009A0	EDCBA987 A		DATA	X'EDCBA987'		
2715	01	009A1	EDCBA987 A		DATA	X'EDCBA987'		
2716					PAGE			
2717	01	009A2	FFFFFFFF A	LD06	DATA	-12		LD X R0 ME
2718	01	009A3	12D2CCA2		LD,13	MEMBRY-2+X'9BDF',1		
2719	01	009A4	27300136		K	2,7,3,SETPSW		
2720	01	009A5	17300166		K	1,7,3,LBC+2		
2721	01	009A6	135793DF A		DATA	X'135793DF'		
2722	01	009A7	135793DF A		DATA	X'135793DF'		
2723	01	009A8	ECA86420 A		DATA	X'ECA86420'		
2724	01	009A9	ECA86420 A		DATA	X'ECA86420'		
2725	01	009AA	2468ACE0 A		DATA	X'2468ACE0'		
2726	01	009AB	ECA86420 A		DATA	X'ECA86420'		
2727	01	009AC	D397531F A		DATA	X'D397531F'		
2728	01	009AD	D397531F A		DATA	X'D397531F'		
2729	01	009AE	FFFFFFFF A	LD07	DATA	-12		LD * R0 ME
2730	01	009AF	92D0045A		LD,13	+1A		
2731	01	009B0	07300136		K	0,7,3,SETPSW		
2732	01	009B1	27300166		K	2,7,3,LBC+2		
2733	01	009B2	FFFFFFFF A		DATA	-3		
2734	01	009B3	FFFFFFFF A		DATA	-3		
2735	01	009B4	00000000 A		DATA	0		
2736	01	009B5	00000000 A		DATA	0		
2737	01	009B6	FFFFFFFF A		DATA	-1		
2738	01	009B7	00000000 A		DATA	0		
2739	01	009B8	00000001 A		DATA	1		
2740	01	009B9	00000001 A		DATA	1		
2741					PAGE			
2742	01	009BA	FFFFFFFF A	LD08	DATA	-12		LD M0
2743	01	009BB	12C00461		LD,12	MEMBRY+1		
2744	01	009BC	97300136		K	9,7,3,SETPSW		

SIGMA 5 CPU DIAGNOSTIC-AUT8 704287-51C00 MARCH 12,1969 79

2745	01	0098D	A7300166		K	10,7,3,L0C+2			
2746	01	0098E	EDCBA987	A	DATA	X'EDCBA987'			
2747	01	0098F	12345678	A	DATA	X'12345678'			
2748	01	009C0	12345678	A	DATA	X'12345678'			
2749	01	009C1	12345678	A	DATA	X'12345678'			
2750	01	009C2	6543210F	A	DATA	X'6543210F'			
2751	01	009C3	9ABCDEF0	A	DATA	X'9ABCDEF0'			
2752	01	009C4	9ABCDEF0	A	DATA	X'9ABCDEF0'			
2753	01	009C5	9ABCDEF0	A	DATA	X'9ABCDEF0'			
2754	01	009C6	FFFFFFFF	A	LD09	DATA	-12	LD	RE RE
2755	01	009C7	12C00008	A	LD,12	B			
2756	01	009C8	70000136		K	7,0,0,SETPSW			
2757	01	009C9	60000166		K	6,0,0,L0C+2			
2758	01	009CA	12345678	A	DATA	X'12345678'			
2759	01	009CB	0FEDCBA9	A	DATA	X'0FEDCBA9'			
2760	01	009CC	0FEDCBA9	A	DATA	X'0FEDCBA9'			
2761	01	009CD	0FEDCBA9	A	DATA	X'0FEDCBA9'			
2762	01	009CE	9ABCDEF0	A	DATA	X'9ABCDEF0'			
2763	01	009CF	87654321	A	DATA	X'87654321'			
2764	01	009D0	87654321	A	DATA	X'87654321'			
2765	01	009D1	87654321	A	DATA	X'87654321'			
2766					PAGE				
2767	01	009D2	FFFFFFFF	A	LD10	DATA	-12	LD	RB RE
2768	01	009D3	12D00008	A	LD,13	B			
2769	01	009D4	10000136		K	1,0,0,SETPSW			
2770	01	009D5	20000166		K	2,0,0,L0C+2			
2771	01	009D6	13579BDF	A	DATA	X'13579BDF'			
2772	01	009D7	13579BDF	A	DATA	X'13579BDF'			
2773	01	009D8	02468ACE	A	DATA	X'02468ACE'			
2774	01	009D9	02468ACE	A	DATA	X'02468ACE'			
2775	01	009DA	ECA86420	A	DATA	X'ECA86420'			
2776	01	009DB	02468ACE	A	DATA	X'02468ACE'			
2777	01	009DC	ECA86420	A	DATA	X'ECA86420'			
2778	01	009DD	ECA86420	A	DATA	X'ECA86420'			
2779	01	009DE	FFFFFFFF	A	LD11	DATA	-12	LD	RE RB
2780	01	009DF	12C00009	A	LD,12	9			
2781	01	009E0	10000136		K	1,0,0,SETPSW			

SIGMA 5 CPU DIAGNOSTIC-AUT8 704287-51C00 MARCH 12,1969 80

2782	01	009E1	20000166		K	2,0,0,L0C+2			
2783	01	009E2	ABCDEF01	A	DATA	X'ABCDEF01'			
2784	01	009E3	12347956	A	DATA	X'12347956'			
2785	01	009E4	12347956	A	DATA	X'12347956'			
2786	01	009E5	12347956	A	DATA	X'12347956'			
2787	01	009E6	10345768	A	DATA	X'10345768'			
2788	01	009E7	ACDEFB29	A	DATA	X'ACDEFB29'			
2789	01	009E8	ACDEFB29	A	DATA	X'ACDEFB29'			
2790	01	009E9	ACDEFB29	A	DATA	X'ACDEFB29'			
2791					PAGE				
2792	01	009EA	FFFFFFFF	A	LD12	DATA	-12	LD	RB RB
2793	01	009EB	12D00009	A	LD,13	9			
2794	01	009EC	00000136		K	0,0,0,SETPSW			
2795	01	009ED	20000166		K	2,0,0,L0C+2			
2796	01	009EE	11111111	A	DATA	X'11111111'			
2797	01	009EF	11111111	A	DATA	X'11111111'			
2798	01	009F0	5A891233	A	DATA	X'5A891233'			
2799	01	009F1	5A891233	A	DATA	X'5A891233'			
2800	01	009F2	33445566	A	DATA	X'33445566'			
2801	01	009F3	5A891233	A	DATA	X'5A891233'			
2802	01	009F4	FFFFFFFF	A	DATA	-1			
2803	01	009F5	FFFFFFFF	A	DATA	-1			
2804	01	009F6	FFFFFFFF	A	LD13	DATA	-12	LD	*,IX
2805	01	009F7	92CE0460		LD,12	*MEMORY,7			
2806	01	009F8	00000136		K	0,0,0,SETPSW			
2807	01	009F9	20000166		K	2,0,0,L0C+2			
2808	01	009FA	FFFFFFFF	A	DATA	-1, MEMORY-1, MEMORY-1, MEMORY-1, -1, -16, -16, -16			
		01	009FB	0000045F					
		01	009FC	0000045F					
		01	009FD	0000045F					
		01	009FE	FFFFFFFF	A				
		01	009FF	FFFFFFFF	A				
		01	00A00	FFFFFFFF	A				
		01	00A01	FFFFFFFF	A				
2809					PAGE				
2810					** LW WITH INDEXING				
2811	01	00A02	FFFFFFFF	A	LWIX	DATA	-12		

2812	01	00A03	32CE000C	A	LW,12	12,7		
2813	01	00A04	00000136	A	K	0,0,0,SETPSW		
2814	01	00A05	10000166	A	K	1,0,0,L0C+2		
2815	01	00A06	00000000	A	DATA	0,-1,1,1,-1,-1,MEMORY,MEMORY		
		01	00A07	FFFFFFFF	A			
		01	00A08	00000001	A			
		01	00A09	00000001	A			
		01	00A0A	FFFFFFFF	A			
		01	00A0B	FFFFFFFF	A			
		01	00A0C	00000460	A			
		01	00A0D	00000460	A			
2816					** LW WITH INDEXING AND IA			
2817	01	00A0E	FFFFFFFF	A	LWIXIA	DATA	-12	
2818	01	00A0F	5202045A	A	LW,13	1A,1		
2819	01	00A10	00000136	A	K	0,0,0,SETPSW		
2820	01	00A11	20000166	A	K	2,0,0,L0C+2		
2821	01	00A12	00000001	A	DATA	1,1,0,0,-1,4,4,4		
		01	00A13	00000001	A			
		01	00A14	00000000	A			
		01	00A15	00000000	A			
		01	00A16	FFFFFFFF	A			
		01	00A17	00000004	A			
		01	00A18	00000004	A			
		01	00A19	00000004	A			
2822					PAGE			
2823	01	00A1A	FFFFFFFF	A	DATA	-6	LI	SE=1 1-0,1-0
2824	01	00A1B	22C9FFFF	A	LI,12	X'9FFFF'		
2825	01	00A1C	F7300136	A	K	15,7,3,SETPSW		
2826	01	00A1D	D7300166	A	K	13,7,3,L0C+2		
2827	01	00A1E	00000000	A	DATA	0		
2828	01	00A1F	FFF9FFFF	A	DATA	X'FFF9FFFF'		
2829	01	00A20	FFFFFFFF	A	LI02	DATA	-6	LI SE=0 0-1,0-1
2830	01	00A21	22C40001	A	LI,12	X'40001'		
2831	01	00A22	07300136	A	K	0,7,3,SETPSW		
2832	01	00A23	E7300166	A	K	2,7,3,L0C+2		
2833	01	00A24	FFFFFFFF	A	DATA	-1		
2834	01	00A25	00040001	A	DATA	X'40001'		

2835	01	00A26	FFFFFFFF	A	LI03	DATA	-6	LI SE=1 1-1,0-0
2836	01	00A27	22C80000	A	LI,12	X'80000'		
2837	01	00A28	F7300136	A	K	15,7,3,SETPSW		
2838	01	00A29	D7300166	A	K	13,7,3,L0C+2		
2839	01	00A2A	FFF00000	A	DATA	X'FFF00000'		
2840	01	00A2B	FFF80000	A	DATA	X'FFF80000'		
2841	01	00A2C	FFFFFFFF	A	LI04	DATA	-6	LI SE=0 0-0 1-1
2842	01	00A2D	22C7FFFF	A	LI,12	X'7FFFF'		
2843	01	00A2E	F7300136	A	K	15,7,3,SETPSW		
2844	01	00A2F	E7300166	A	K	14,7,3,L0C+2		
2845	01	00A30	000FFFFF	A	DATA	X'FFFFF'		
2846	01	00A31	0007FFFF	A	DATA	X'7FFFF'		
2847	01	00A32	FFFFFFFF	A	LI05	DATA	-6	LI *
2848	01	00A33	A2C00460	A	LI,12	*MEMORY		
2849	01	00A34	17300186	A	K	1,7,3,S19NA0		
2850	01	00A35	97300063	A	K	9,7,3,NEIRET+1		
2851	01	00A36	FFFFFFFF	A	DATA	-1		
2852	01	00A37	FFFFFFFF	A	DATA	-1		
2853					PAGE			
2854	01	00A38	FFFFFFFF	A	LS01	DATA	-10	
2855	01	00A39	4AC00460	A	LS,12	MEMORY		PH1 : C(S) = EW+RU1 = 18181818
2856	01	00A3A	F7300136	A	K	15,7,3,SETPSW		
2857	01	00A3B	D7300166	A	K	13,7,3,L0C+2		PH3 : C(S) = R+NRU1 = 81818181
2858	01	00A3C	C3C3C3C3	A	DATA	X'C3C3C3C3'		
2859	01	00A3D	99999999	A	DATA	X'99999999'		PH4 : C(S) = PH1+PH3 = 99999999
2860	01	00A3E	3C3C3C3C	A	DATA	X'3C3C3C3C'		
2861	01	00A3F	3C3C3C3C	A	DATA	X'3C3C3C3C'		
2862	01	00A40	5A5A5A5A	A	DATA	X'5A5A5A5A'		
2863	01	00A41	5A5A5A5A	A	DATA	X'5A5A5A5A'		
2864	01	00A42	FFFFFFFF	A	LS02	DATA	-10	
2865	01	00A43	4AC00460	A	LS,12	MEMORY		PH1 : C(S) = EW+RU1 = 81818181
2866	01	00A44	07300136	A	K	0,7,3,SETPSW		
2867	01	00A45	17300166	A	K	1,7,3,L0C+2		PH3 : C(S) = R+NRU1 = 18181818
2868	01	00A46	3C3C3C3C	A	DATA	X'3C3C3C3C'		
2869	01	00A47	99999999	A	DATA	X'99999999'		PH4 : C(S) = PH1+PH3 = 99999999
2870	01	00A48	C3C3C3C3	A	DATA	X'C3C3C3C3'		
2871	01	00A49	C3C3C3C3	A	DATA	X'C3C3C3C3'		

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00				MARCH 12, 1969		83
2872	01	00A4A	A5A5A5A5 A	DATA	X'A5A5A5A5'	
2873	01	00A4B	A5A5A5A5 A	DATA	X'A5A5A5A5'	
2874	01	00A4C	FFFFFFFF6 A	LS03	DATA	-10
2875	01	00A4D	4AC00460	LS,12	MEMBRY	PH1 : C(S) = EW+RU1 = 24242424
2876	01	00A4E	F7300136	K	15,7,3,SETPSW	
2877	01	00A4F	E7300166	K	14,7,3,L8C+2	PH3 : C(S) = R+NRU1 = 42424242
2878	01	00A50	5A5A5A5A A	DATA	X'5A5A5A5A'	
2879	01	00A51	66666666 A	DATA	X'66666666'	PH4 : C(S) = PH1+PH3 = 66666666
2880	01	00A52	A5A5A5A5 A	DATA	X'A5A5A5A5'	
2881	01	00A53	A5A5A5A5 A	DATA	X'A5A5A5A5'	
2882	01	00A54	3C3C3C3C A	DATA	X'3C3C3C3C'	
2883	01	00A55	3C3C3C3C A	DATA	X'3C3C3C3C'	
2884				PAGE		
2885	01	00A56	FFFFFFFF6 A	LS04	DATA	-10
2886	01	00A57	4AC00460	LS,12	MEMBRY	PH1 : C(S) = EW+RU1 = 42424242
2887	01	00A58	07300136	K	0,7,3,SETPSW	
2888	01	00A59	27300166	K	2,7,3,L8C+2	PH3 : C(S) = R+NRU1 = 24242424
2889	01	00A5A	A5A5A5A5 A	DATA	X'A5A5A5A5'	
2890	01	00A5B	66666666 A	DATA	X'66666666'	PH4 : C(S) = PH1+PH3 = 66666666
2891	01	00A5C	5A5A5A5A A	DATA	X'5A5A5A5A'	
2892	01	00A5D	5A5A5A5A A	DATA	X'5A5A5A5A'	
2893	01	00A5E	C3C3C3C3 A	DATA	X'C3C3C3C3'	
2894	01	00A5F	C3C3C3C3 A	DATA	X'C3C3C3C3'	
2895				** BDD R	FIELD CAUSING R AND RU1 TO BE THE SAME. ALSO USES R AS EW	
2896	01	00A60	FFFFFFFFA A	LS05	DATA	-6
2897	01	00A61	4AD0000C A	LS,13	12	PH1 : C(S) = EW+RU1 = 0
2898	01	00A62	37300136	K	3,7,3,SETPSW	
2899	01	00A63	07300166	K	0,7,3,L8C+2	PH3 : C(S) = R+NRU1 = 0
2900	01	00A64	FFFFFFFFF A	DATA	-1	
2901	01	00A65	FFFFFFFFF A	DATA	-1	PH4 : C(S) = PH1+PH3 = 0
2902				PAGE		
2903	01	00A66	FFFFFFFFA A	LCF06	DATA	-6
2904	01	00A67	70320041	LCF,3	BRANCH-6,1	LCF 3 X 10 INTO E7 = 10 BYTE 1
2905	01	00A68	E7300136	K	14,7,3,SETPSW	
2906	01	00A69	17300166	K	1,7,3,L8C+2	
2907	01	00A6A	1117FF2D A	DATA	X'1117FF2D'	
2908	01	00A63	1117FF2D A	DATA	X'1117FF2D'	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00				MARCH 12, 1969		84
2909	01	00A6C	FFFFFFFF4 A	LCF07	DATA	-12
2910	01	00A6D	F0320460	LCF,3	*MEMBRY,1	LCF 3 *X FF INTO 00 = F7 BYTE 3
2911	01	00A6E	00300136	K	0,0,3,SETPSW	
2912	01	00A6F	F7300166	K	15,7,3,L8C+2	
2913	01	00A70	00000123	DATA	BA(BRANCH)+7	
2914	01	00A71	00000123	DATA	BA(BRANCH)+7	
2915	01	00A72	00000419 A	DATA	MEMBRY=BRANCH	
2916	01	00A73	00000419 A	DATA	MEMBRY=BRANCH	
2917	01	00A74	4537FE21 A	DATA	X'4537FE21'	
2918	01	00A75	4537FE21 A	DATA	X'4537FE21'	
2919	01	00A76	000000FF A	DATA	X'FF'	
2920	01	00A77	000000FF A	DATA	X'FF'	
2921	01	00A78	FFFFFFFF8 A	LCF08	DATA	-8
2922	01	00A79	70320119	LCF,3	CLEAR,1	LCF 3 X 56 INTO A1 = 56 BYTE 2
2923	01	00A7A	A1300136	K	10,1,3,SETPSW	
2924	01	00A7B	56300166	K	5,6,3,L8C+2	
2925	01	00A7C	00000D1E A	DATA	4*(MEMBRY-CLEAR)+2	
2926	01	00A7D	00000D1E A	DATA	4*(MEMBRY-CLEAR)+2	
2927	01	00A7E	12345678 A	DATA	X'12345678'	
2928	01	00A7F	12345678 A	DATA	X'12345678'	
2929	01	00A80	FFFFFFFFF A	LCF09	DATA	-8
2930	01	00A81	70C00460	LCF,12	MEMBRY	
2931	01	00A82	00000136	K	0,0,0,SETPSW	
2932	01	00A83	00000166	K	0,0,0,L8C+2	
2933	01	00A84	00000000 A	DATA	0,0,-1,-1	
	01	00A85	00000000 A			
	01	00A86	FFFFFFFFF A			
	01	00A87	FFFFFFFFF A			
2934				PAGE		
2935	01	00A88	FFFFFFFFC A	LCFI01	DATA	-4
2936	01	00A89	020000FF A	LCFI,0	X'FF'	LCFI 0 FF INTO 00 IS 00
2937	01	00A8A	00000136	DATA	SETPSW	
2938	01	00A8B	00000166	DATA	L8C+2	
2939	01	00A8C	FFFFFFFFC A	LCFI02	DATA	-4
2940	01	00A8D	02300000 A	LCFI,3	0	LCFI 3 00 INTO F7 IS 00
2941	01	00A8E	F7300136	K	15,7,3,SETPSW	
2942	01	00A8F	00300166	K	0,0,3,L8C+2	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969 85

2943	01	0DA90	FFFFFFFFC A	LCFI03	DATA	-4	LCFI 2 57 INTO AO IS 50
2944	01	0DA91	02200057 A		LCFI,2	X'157'	
2945	01	0DA92	A0200136		K	10,0,2,SETPSW	
2946	01	0DA93	50200166		K	5,0,2,L8C+2	
2947	01	0DA94	FFFFFFFFC A	LCFI04	DATA	-4	LCFI 1 D9 INTO 26 IS 21
2948	01	0DA95	021000D9 A		LCFI,1	X'D9'	
2949	01	0DA96	26100136		K	2,6,1,SETPSW	
2950	01	0DA97	21100166		K	2,1,1,L8C+2	LCFI 3 FF INTO 00 IS FF INDEX
2951	01	0DA98	FFFFFFFFB A	LCFI05	DATA	-8	
2952	01	0DA99	023000FF A		LCFI,3	X'FF',1	
2953	01	0DA9A	00000136		DATA	SETPSW	
2954	01	0DA9B	F7000166		K	15,7,0,L8C+2	
2955	01	0DA9C	12345678 A		DATA	X'12345678'	
2956	01	0DA9D	12345678 A		DATA	X'12345678'	
2957	01	0DA9E	9ABCDEF0 A		DATA	X'9ABCDEF0'	
2958	01	0DA9F	9ABCDEF0 A		DATA	X'9ABCDEF0'	
2959	01	0DAA0	FFFFFFFFC A	LCFI06	DATA	-4	LCFI *
2960	01	0DAA1	82300460		LCFI,3	*MEMORY	
2961	01	0DAA2	77300186		K	7,7,3,S19NA0	
2962	01	0DAA3	F7300068		K	15,7,3,NETRET+1	
2963	01	0DAA4	FFFFFFFFC A	LCFI07	DATA	-4	
2964	01	0DAA5	02120011 A		LCFI,1	X'20011'	
2965	01	0DAA6	80000136		K	8,0,0,SETPSW	
2966	01	0DAA7	81000166		K	8,1,0,L8C+2	
2967					PAGE		
2968	01	0DAA8	FFFFFFFFB A	LAH01	DATA	-8	LAH
2969	01	0DAA9	33C00460		LAH,12	*MEMORY	
2970	01	0DAAA	F7300136		K	15,7,3,SETPSW	
2971	01	0DAAB	87300166		K	8,7,3,L8C+2	
2972	01	0DAAC	FFFFFFFFF A		DATA	-1	
2973	01	0DAAD	00000000 A		DATA	0	
2974	01	0DAAE	00000000 A		DATA	0	
2975	01	0DAAF	00000000 A		DATA	0	
2976	01	0DA80	FFFFFFFFB A	LAH02	DATA	-8	LAH X
2977	01	0DA81	35C20461		LAH,12	*MEMORY+1,1	
2978	01	0DA82	17300136		K	1,7,3,SETPSW	
2979	01	0DA83	27300166		K	2,7,3,L8C+2	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969 86

2980	01	0DA84	FFFFFFFFF A		DATA	-1	
2981	01	0DA85	00000001 A		DATA	1	
2982	01	0DA86	FFFFFFFFF A		DATA	-1	
2983	01	0DA87	FFFFFFFFF A		DATA	-1	
2984	01	0DA88	FFFFFFFFB A	LAH03	DATA	-8	LAH * SF NTRAP
2985	01	0DA89	88C0045A		LAH,12	*1A	
2986	01	0DA8A	37200136		K	3,7,2,SETPSW	
2987	01	0DA8B	57200166		K	5,7,2,L8C+2	
2988	01	0DA8C	7FFFFFFFF A		DATA	X'7FFFFFFFF'	
2989	01	0DA8D	80000000 A		DATA	X'80000000'	
2990	01	0DA8E	80000000 A		DATA	X'80000000'	
2991	01	0DA8F	80000000 A		DATA	X'80000000'	
2992					PAGE		
2993	01	0DAC0	FFFFFFFF4 A	LAH04	DATA	-12	LAH *X SF TRAP
2994	01	0DAC1	83020461		LAH,13	*MEMORY+1,1	
2995	01	0DAC2	F73001C2		K	15,7,3,FXP8SW	
2996	01	0DAC3	D7300088		K	13,7,3,FP8RET+1	
2997	01	0DAC4	0000046A		DATA	REPEAT	
2998	01	0DAC5	0000046A		DATA	REPEAT	
2999	01	0DAC6	80000000 A		DATA	X'80000000'	
3000	01	0DAC7	80000000 A		DATA	X'80000000'	
3001	01	0DAC8	F8BCA972 A		DATA	X'F8BCA972'	
3002	01	0DAC9	80000000 A		DATA	X'80000000'	
3003	01	0DACA	FFFFFFFF6 A		DATA	*MEMORY-REPEAT	
3004	01	0DACB	FFFFFFFF6 A		DATA	*MEMORY-REPEAT	
3005	01	0DACC	FFFFFFFFB A	LAH05	DATA	-8	LAH
3006	01	0DACD	33C00460		LAH,12	*MEMORY	
3007	01	0DACE	07300136		K	0,7,3,SETPSW	
3008	01	0DACF	27300166		K	2,7,3,L8C+2	
3009	01	0DA00	00000000 A		DATA	0	
3010	01	0DA01	7FFFFFFFF A		DATA	X'7FFFFFFFF'	
3011	01	0DA02	80000001 A		DATA	X'80000001'	
3012	01	0DA03	80000001 A		DATA	X'80000001'	
3013					PAGE		
3014					** INSURE THAT PROBEBVER/H IS DISABLED BY FANT		
3015	01	0DA04	FFFFFFFFB A	LAH01	DATA	-8	LAH
3016	01	0DA05	53C00460		LAH,12	*MEMORY	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 87

3017	01	00AD6	07300136		K	0,7,3,SETPSW		
3018	01	00AD7	27300166		K	2,7,3,L0C+2		
3019	01	00AD8	FFFFFFFF A		DATA	-1		
3020	01	00AD9	00008000 A		DATA	X'8000'		
3021	01	00ADA	8000FFFF A		DATA	X'8000FFFF'		
3022	01	00ADB	8000FFFF A		DATA	X'8000FFFF'		
3023	01	00ADC	FFFFFFFF A	LAHQ2	DATA	=8		LAH X
3024	01	00ADD	5B33FFF6 A		LAHQ2	MEMORY-REPEAT,1		
3025	01	00ADE	37300136		K	3,7,3,SETPSW		
3026	01	00ADF	07300166		K	0,7,3,L0C+2		
3027	01	00AEO	000008D5		DATA	HA(REPEAT)+1		
3028	01	00AE1	00000000 A		DATA	0		
3029	01	00AE2	FFFF0000 A		DATA	X'FFFF0000'		
3030	01	00AE3	FFFF0000 A		DATA	X'FFFF0000'		
3031	01	00AE4	FFFFFFFF A	LAHQ3	DATA	=8		LAH 8
3032	01	00AE5	D3C0045A		LAHQ3	+1A		
3033	01	00AE6	17300136		K	1,7,3,SETPSW		
3034	01	00AE7	27300166		K	2,7,3,L0C+2		
3035	01	00AE8	FFFFFFFF A		DATA	-1		
3036	01	00AE9	00000001 A		DATA	1		
3037	01	00AEA	FFFF0000 A		DATA	X'FFFF0000'		
3038	01	00AEB	FFFF0000 A		DATA	X'FFFF0000'		
3039					PAGE			
3040	01	00AEC	FFFFFFFF A	LAD01	DATA	-12		LAD RE
3041	01	00AED	19C00460		LAD,12	MEMORY		
3042	01	00AEE	17300136		K	1,7,3,SETPSW		
3043	01	00AEF	27300166		K	2,7,3,L0C+2		
3044	01	00AF0	9ABCDEF0 A		DATA	X'9ABCDEF0'		
3045	01	00AF1	7FFFFFFFF A		DATA	X'7FFFFFFFF'		
3046	01	00AF2	80000000 A		DATA	X'80000000'		
3047	01	00AF3	80000000 A		DATA	X'80000000'		
3048	01	00AF4	12345678 A		DATA	X'12345678'		
3049	01	00AF5	FFFFFFFF A		DATA	-1		
3050	01	00AF6	00000001 A		DATA	1		
3051	01	00AF7	00000001 A		DATA	1		
3052	01	00AF8	FFFFFFFF A	LAD02	DATA	-12		LAD MB RE
3053	01	00AF9	19C00461		LAD,12	MEMORY+1		

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 88

3054	01	00AF9	37300136		K	3,7,3,SETPSW		
3055	01	00AF3	07300166		K	0,7,3,L0C+2		
3056	01	00AFC	FFFFFFFF A		DATA	-1		
3057	01	00AFD	00000000 A		DATA	0		
3058	01	00AFE	00000000 A		DATA	0		
3059	01	00AFF	00000000 A		DATA	0		
3060	01	00B00	FFFFFFFF A		DATA	-1		
3061	01	00B01	00000000 A		DATA	0		
3062	01	00B02	00000000 A		DATA	0		
3063	01	00B03	00000000 A		DATA	0		
3064					PAGE			
3065	01	00B04	FFFFFFFF A	LAD03	DATA	-12		LAD X RE
3066	01	00B05	19C2046A		LAD,12	REPEAT,1		
3067	01	00B06	37300136		K	3,7,3,SETPSW		
3068	01	00B07	27300166		K	2,7,3,L0C+2		
3069	01	00B08	FFFFFFFF A		DATA	(MEMORY-REPEAT)/2		
3070	01	00B09	6789ABCD A		DATA	X'6789ABCD'		
3071	01	00B0A	98765432 A		DATA	X'98765432'		
3072	01	00B0B	98765432 A		DATA	X'98765432'		
3073	01	00B0C	FFFFFFFF A		DATA	-1		
3074	01	00B0D	EF012346 A		DATA	X'EF012346'		
3075	01	00B0E	10FEDCBA A		DATA	X'10FEDCBA'		
3076	01	00B0F	10FEDCBA A		DATA	X'10FEDCBA'		
3077	01	00B10	FFFFFFFF A	LAD04	DATA	-12		LAD * RE 9F NTRAP
3078	01	00B11	98C0045A		LAD,12	+1A		
3079	01	00B12	27200136		K	2,7,2,SETPSW		
3080	01	00B13	57200166		K	5,7,2,L0C+2		
3081	01	00B14	76543210 A		DATA	X'76543210'		
3082	01	00B15	80000000 A		DATA	X'80000000'		
3083	01	00B16	80000000 A		DATA	X'80000000'		
3084	01	00B17	80000000 A		DATA	X'80000000'		
3085	01	00B18	12345678 A		DATA	X'12345678'		
3086	01	00B19	00000000 A		DATA	0		
3087	01	00B1A	00000000 A		DATA	0		
3088	01	00B1B	00000000 A		DATA	0		
3089					PAGE			
3090	01	00B1C	FFFFFFFF A	LAD05	DATA	-12		LAD RE 9F TRAP

SIGMA 5 CPU DIAGNOSTIC-AUTB 704287-51C00 MARCH 12, 1969 89

3091	01	0081D	13C00460		LAD,12	MEMORY		
3092	01	0081E	073001C2		K	0,7,3,FXPSW		
3093	01	0081F	57300084		K	5,7,3,FP0RET+1		
3094	01	00820	00000000	A	DATA	0		
3095	01	00821	80000000	A	DATA	X'80000000'		
3096	01	00822	80000000	A	DATA	X'80000000'		
3097	01	00823	80000000	A	DATA	X'80000000'		
3098	01	00824	FFFFFFFF	A	DATA	-1		
3099	01	00825	00000000	A	DATA	0		
3100	01	00826	00000000	A	DATA	0		
3101	01	00827	00000000	A	DATA	0		
3102	01	00828	FFFFFFFF	A	LAD06	DATA	-12	LAD R0
3103	01	00829	13D00460		LAD,13	MEMORY		
3104	01	0082A	87300136		K	11,7,3,SETPSW		
3105	01	0082B	A7300166		K	10,7,3,LBC+2		
3106	01	0082C	92345678	A	DATA	X'92345678'		
3107	01	0082D	92345678	A	DATA	X'92345678'		
3108	01	0082E	80000000	A	DATA	X'80000000'		
3109	01	0082F	80000000	A	DATA	X'80000000'		
3110	01	00830	00BAD8ED	A	DATA	X'BAD8ED'		
3111	01	00831	7FFFFFFF	A	DATA	X'7FFFFFFF'		
3112	01	00832	00000001	A	DATA	1		
3113	01	00833	00000001	A	DATA	1		
3114					PAGE			
3115	01	00834	FFFFFFFF	A	LAD07	DATA	-12	LAD R0
3116	01	00835	13D00460		LAD,13	MEMORY		
3117	01	00836	A7300136		K	10,7,3,SETPSW		
3118	01	00837	A7300166		K	10,7,3,LBC+2		
3119	01	00838	CCCCCCCC	A	DATA	X'CCCCCCCC'		
3120	01	00839	CCCCCCCC	A	DATA	X'CCCCCCCC'		
3121	01	0083A	7FFFFFFF	A	DATA	X'7FFFFFFF'		
3122	01	0083B	7FFFFFFF	A	DATA	X'7FFFFFFF'		
3123	01	0083C	BCDEFA98	A	DATA	X'BCDEFA98'		
3124	01	0083D	7FFFFFFF	A	DATA	X'7FFFFFFF'		
3125	01	0083E	FFFFFFFF	A	DATA	-1		
3126	01	0083F	FFFFFFFF	A	DATA	-1		
3127					PAGE			

SIGMA 5 CPU DIAGNOSTIC-AUTB 704287-51C00 MARCH 12, 1969 90

3128	01	00840	FFFFFFFF	A	LCW01	DATA	-8	LCW
3129	01	00841	3AC00460		LCW,12	MEMORY		
3130	01	00842	87300136		K	8,7,3,SETPSW		
3131	01	00843	97300166		K	9,7,3,LBC+2		
3132	01	00844	12345678	A	DATA	X'12345678'		
3133	01	00845	E8CD431E	A	DATA	X'E8CD431E'		
3134	01	00846	1732BCE2	A	DATA	X'1732BCE2'		
3135	01	00847	1732BCE2	A	DATA	X'1732BCE2'		
3136	01	00848	FFFFFFFF	A	LCW02	DATA	-8	LCW SF NTRAP
3137	01	00849	3AC00460		LCW,12	MEMORY		
3138	01	0084A	07200136		K	0,7,2,SETPSW		
3139	01	0084B	57200166		K	5,7,2,LBC+2		
3140	01	0084C	7FFFFFFF	A	DATA	X'7FFFFFFF'		
3141	01	0084D	80000000	A	DATA	X'80000000'		
3142	01	0084E	80000000	A	DATA	X'80000000'		
3143	01	0084F	80000000	A	DATA	X'80000000'		
3144	01	00850	FFFFFFFA	A	LCW03	DATA	-6	LCW REGISTER TO REGISTER
3145	01	00851	3AC0000C	A	LCW,12	12		
3146	01	00852	27300136		K	2,7,3,SETPSW		
3147	01	00853	17300166		K	1,7,3,LBC+2		
3148	01	00854	12345678	A	DATA	X'12345678'		
3149	01	00855	EDCBA988	A	DATA	X'EDCBA988'		
3150	01	00856	FFFFFFFF	A	LCW04	DATA	-8	LCW X SF TRAP
3151	01	00857	3AC20464		LCW,12	RETURN,1		
3152	01	00858	F73001C2		K	15,7,3,FXPSW		
3153	01	00859	D7300084		K	13,7,3,FP0RET+1		
3154	01	0085A	FFFFFFFC	A	DATA	MEMORY-RETURN		
3155	01	0085B	80000000	A	DATA	X'80000000'		
3156	01	0085C	80000000	A	DATA	X'80000000'		
3157	01	0085D	80000000	A	DATA	X'80000000'		
3158					PAGE			
3159	01	0085E	FFFFFFFF	A	LCW05	DATA	-8	LCW * ZER0
3160	01	0085F	BAC0045A		LCW,12	+1A		
3161	01	00860	77300136		K	7,7,3,SETPSW		
3162	01	00861	07300166		K	0,7,3,LBC+2		
3163	01	00862	FFFFFFF	A	DATA	-1		
3164	01	00863	00000000	A	DATA	0		

SIGMA 5 CPU DIAGNOSTIC-AUT8 704287-51C00 MARCH 12,1969 91

3165	01	00B64	00000000	A	DATA	0			
3166	01	00B65	00000000	A	DATA	0			
3167	01	00B66	FFFFFFFF8	A	DATA	-8	LCW06		LCW
3168	01	00B67	3AC00460		LCW#12	MEMBRY			
3169	01	00B68	07300136		K	0,7,3,SETPSW			
3170	01	00B69	27300166		K	2,7,3,L8C+2			
3171	01	00B6A	00000000	A	DATA	0			
3172	01	00B6B	7FFFFFFF	A	DATA	X'7FFFFFFF'			
3173	01	00B6C	80000001	A	DATA	X'80000001'			
3174	01	00B6D	80000001	A	DATA	X'80000001'			
3175					PAGE				
3176	01	00B6E	FFFFFFFF8	A	DATA	-8	LCH01		LCH ME
3177	01	00B6F	5AC00460		LCH#12	MEMBRY			
3178	01	00B70	07300136		K	0,7,3,SETPSW			
3179	01	00B71	17300166		K	1,7,3,L8C+2			
3180	01	00B72	FFFFFFFF	A	DATA	-1			
3181	01	00B73	FFFFEDCC	A	DATA	X'FFFFEDCC'			
3182	01	00B74	12345678	A	DATA	X'12345678'			
3183	01	00B75	12345678	A	DATA	X'12345678'			
3184	01	00B76	FFFFFFFF8	A	DATA	-8	LCH02		LCH X ME
3185	01	00B77	5AC2046A		LCH#12	REPEAT,1			
3186	01	00B78	07300136		K	0,7,3,SETPSW			
3187	01	00B79	27300166		K	2,7,3,L8C+2			
3188	01	00B7A	FFFFFFFFC	A	DATA	2*(MEMBRY-REPEAT)			
3189	01	00B7B	0000789B	A	DATA	X'789B'			
3190	01	00B7C	87654321	A	DATA	X'87654321'			
3191	01	00B7D	87654321	A	DATA	X'87654321'			
3192	01	00B7E	FFFFFFFF8	A	DATA	-8	LCH03		LCH * ME
3193	01	00B7F	DAC0045A		LCH#12	*1A			
3194	01	00B80	37300136		K	3,7,3,SETPSW			
3195	01	00B81	07300166		K	0,7,3,L8C+2			
3196	01	00B82	FFFFFFFF	A	DATA	-1			
3197	01	00B83	00000000	A	DATA	0			
3198	01	00B84	0000FFFF	A	DATA	X'FFFF'			
3199	01	00B85	0000FFFF	A	DATA	X'FFFF'			
3200	01	00B86	FFFFFFFF8	A	DATA	-8	LCH04		LCH X ME
3201	01	00B87	5AC20047		LCH#12	BRANCH,1			

SIGMA 5 CPU DIAGNOSTIC-AUT8 704287-51C00 MARCH 12,1969 92

3202	01	00B88	37300136		K	3,7,3,SETPSW			
3203	01	00B89	17300166		K	1,7,3,L8C+2			
3204	01	00B8A	00000833	A	DATA	2*(MEMBRY-BRANCH)+1			
3205	01	00B8B	FFFFB9AC	A	DATA	X'FFFFB9AC'			
3206	01	00B8C	FFFF7654	A	DATA	X'FFFF7654'			
3207	01	00B8D	FFFF7654	A	DATA	X'FFFF7654'			
3208					PAGE				
3209	01	00B8E	FFFFFFFF8	A	DATA	-8	LCH05		LCH X ME
3210	01	00B8F	5AC2046A		LCH#12	REPEAT,1			
3211	01	00B90	37300136		K	3,7,3,SETPSW			
3212	01	00B91	27300166		K	2,7,3,L8C+2			
3213	01	00B92	FFFFFFFFE	A	DATA	2*(MEMBRY-REPEAT)+1			
3214	01	00B93	00007FFF	A	DATA	X'7FFF'			
3215	01	00B94	00008001	A	DATA	X'8001'			
3216	01	00B95	00008001	A	DATA	X'8001'			
3217					PAGE				
3218	01	00B96	FFFFFFFF4	A	DATA	-12	LCD01		LCD RE
3219	01	00B97	1AC00460		LCD#12	MEMBRY			
3220	01	00B98	17300136		K	1,7,3,SETPSW			
3221	01	00B99	27300166		K	2,7,3,L8C+2			
3222	01	00B9A	BBBBBBBB	A	DATA	X'BBBBBBBB'			
3223	01	00B9B	7FFFFFFF	A	DATA	X'7FFFFFFF'			
3224	01	00B9C	80000000	A	DATA	X'80000000'			
3225	01	00B9D	80000000	A	DATA	X'80000000'			
3226	01	00B9E	CCCCCCCC	A	DATA	X'CCCCCCCC'			
3227	01	00B9F	FFFFFFFF	A	DATA	-1			
3228	01	00BA0	00000001	A	DATA	1			
3229	01	00BA1	00000001	A	DATA	1			
3230	01	00BA2	FFFFFFFF4	A	DATA	-12	LCD02		LCD X RE
3231	01	00BA3	1AC2046A		LCD#12	REPEAT,1			
3232	01	00BA4	27300136		K	2,7,3,SETPSW			
3233	01	00BA5	17300166		K	1,7,3,L8C+2			
3234	01	00BA6	FFFFFFFF8	A	DATA	(MEMBRY-REPEAT)/2			
3235	01	00BA7	80000000	A	DATA	X'80000000'			
3236	01	00BA8	7FFFFFFF	A	DATA	X'7FFFFFFF'			
3237	01	00BA9	7FFFFFFF	A	DATA	X'7FFFFFFF'			
3238	01	00BAA	2347689E	A	DATA	X'2347689E'			

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969

93

3239	01	00B8B	00000001 A		DATA	1	
3240	01	00BAC	FFFFFFFF A		DATA	-1	
3241	01	00BAD	FFFFFFFF A		DATA	-1	
3242					PAGE		
3243	01	00BAE	FFFFFFFF A	LCD03	DATA	-12	LCD * RE
3244	01	00BAF	9AC0045A		LCD,12	*1A	
3245	01	00BB0	37300136		K	3,7,3,SETPSW	
3246	01	00BB1	07300166		K	0,7,3,L8C+2	
3247	01	00BB2	FFFFFFFF A		DATA	-1	
3248	01	00BB3	00000000 A		DATA	0	
3249	01	00BB4	00000000 A		DATA	0	
3250	01	00BB5	00000000 A		DATA	0	
3251	01	00BB6	FFFFFFFF A		DATA	-1	
3252	01	00BB7	00000000 A		DATA	0	
3253	01	00BB8	00000000 A		DATA	0	
3254	01	00BB9	00000000 A		DATA	0	
3255					PAGE		
3256	01	00BBA	FFFFFFFF A	LCD04	DATA	-12	LCD RE OF NTRAP
3257	01	00BBB	1AC00460		LCD,12	MEMORY	
3258	01	00BBC	27200136		K	2,7,2,SETPSW	
3259	01	00BBD	57200166		K	5,7,2,L8C+2	
3260	01	00BBE	FFFFFFFF A		DATA	-1	
3261	01	00BBF	80000000 A		DATA	X'80000000'	
3262	01	00BC0	80000000 A		DATA	X'80000000'	
3263	01	00BC1	80000000 A		DATA	X'80000000'	
3264	01	00BC2	FFFFFFFF A		DATA	-1	
3265	01	00BC3	00000000 A		DATA	0	
3266	01	00BC4	00000000 A		DATA	0	
3267	01	00BC5	00000000 A		DATA	0	
3268	01	00BC6	FFFFFFFF A	LCD05	DATA	-12	LCD RO OF TRAP
3269	01	00BC7	1AD00460		LCD,13	MEMORY	
3270	01	00BC8	973001C2		K	9,7,3,FXPSW	
3271	01	00BC9	07300084		K	13,7,3,FPRET+1	
3272	01	00BCA	FEEDBEAD A		DATA	X'FEEDBEAD'	
3273	01	00BCB	FEEDBEAD A		DATA	X'FEEDBEAD'	
3274	01	00BCC	80000000 A		DATA	X'80000000'	
3275	01	00BCD	80000000 A		DATA	X'80000000'	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969

94

3276	01	00BCE	FFFFFFFF A		DATA	-1	
3277	01	00BCF	80000000 A		DATA	X'80000000'	
3278	01	00BD0	00000000 A		DATA	0	
3279	01	00BD1	00000000 A		DATA	0	
3280	01	00BD2	FFFFFFFF A	LCD06	DATA	-10	LCD REGISTER TO REGISTER
3281	01	00BD3	1AC0000C A		LCD,12	12	
3282	01	00BD4	F7300136		K	15,7,3,SETPSW	
3283	01	00BD5	A7300166		K	10,7,3,L8C+2	
3284	01	00BD6	FFFFFFFF A		DATA	-1	
3285	01	00BD7	00000000 A		DATA	0	
3286	01	00BD8	00000000 A		DATA	0	
3287	01	00BD9	00000000 A		DATA	0	
3288	01	00BDA	FFFFFFFF A		DATA	-1	
3289	01	00BDB	00000001 A		DATA	1	
3290					PAGE		
3291	01	00BDC	FFFFFFFF A	STH01	DATA	-8	STH
3292	01	00BDD	55C00460		STH,12	MEMORY	
3293	01	00BDE	F7300136		K	15,7,3,SETPSW	
3294	01	00BDF	87300166		K	11,7,3,L8C+2	
3295	01	00BE0	FFFF8000 A		DATA	X'FFFF8000'	
3296	01	00BE1	FFFF8000 A		DATA	X'FFFF8000'	
3297	01	00BE2	FFFFFFFF A		DATA	-1	
3298	01	00BE3	8000FFFF A		DATA	X'8000FFFF'	
3299	01	00BE4	FFFFFFFF A	STH02	DATA	-8	STH X
3300	01	00BE5	55C3C461		STH,12	MEMORY-X'3FFF',1	
3301	01	00BE6	67300136		K	6,7,3,SETPSW	
3302	01	00BE7	27300166		K	2,7,3,L8C+2	
3303	01	00BE8	00007FFF A		DATA	X'7FFF'	
3304	01	00BE9	00007FFF A		DATA	X'7FFF'	
3305	01	00BEA	12345678 A		DATA	X'12345678'	
3306	01	00BE3	12347FFF A		DATA	X'12347FFF'	
3307	01	00BEC	FFFFFFFF A	STH03	DATA	-8	STH *
3308	01	00BED	05C0045A		STH,12	*1A	
3309	01	00BEE	A7300136		K	10,7,3,SETPSW	
3310	01	00BEF	E7300166		K	14,7,3,L8C+2	
3311	01	00BF0	0000FFFF A		DATA	X'FFFF'	
3312	01	00BF1	0000FFFF A		DATA	X'FFFF'	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969 95

3313	01	00BF2	00000000 A		DATA	0			
3314	01	00BF3	FFFFFF00 A		DATA	X'FFFFFF00'			
3315	01	00BF4	FFFFFFF8 A	STH04	DATA	-8		STH	
3316	01	00BF5	55C00460		STH,12	MEMORY			
3317	01	00BF6	37300136		K	3,7,3,SETPSW			
3318	01	00BF7	77300166		K	7,7,3,L8C+2			
3319	01	00BF8	80001234 A		DATA	X'80001234'			
3320	01	00BF9	80001234 A		DATA	X'80001234'			
3321	01	00BFA	56781234 A		DATA	X'56781234'			
3322	01	00BFB	12341234 A		DATA	X'12341234'			
3323					PAGE				
3324	01	00BFC	FFFFFFF8 A	STH05	DATA	-8		STH	
3325	01	00BFD	55C00460		STH,12	MEMORY,7			
3326	01	00BFE	97300136		K	9,7,3,SETPSW			
3327	01	00BFF	D7300166		K	13,7,3,L8C+2			
3328	01	00C00	FFFEF379 A		DATA	X'FFFEF379'			
3329	01	00C01	FFFEF379 A		DATA	X'FFFEF379'			
3330	01	00C02	67921113 A		DATA	X'67921113'			
3331	01	00C03	6792F379 A		DATA	X'6792F379'			
3332	01	00C04	FFFFFFF8 A	STH06	DATA	-8		STH	
3333	01	00C05	55C00460		STH,12	MEMORY			
3334	01	00C06	07300136		K	0,7,3,SETPSW			
3335	01	00C07	47300166		K	4,7,3,L8C+2			
3336	01	00C08	7FFF1692 A		DATA	X'7FFF1692'			
3337	01	00C09	7FFF1692 A		DATA	X'7FFF1692'			
3338	01	00C0A	00000000 A		DATA	0			
3339	01	00C0B	16920000 A		DATA	X'16920000'			
3340					PAGE				
3341	01	00C0C	FFFFFFF8 A	STB01	DATA	-8		STB	BYTE 0
3342	01	00C0D	75C00460		STB,12	MEMORY			
3343	01	00C0E	F7300136		K	15,7,3,SETPSW			
3344	01	00C0F	F7300166		K	15,7,3,L8C+2			
3345	01	00C10	12345678 A		DATA	X'12345678'			
3346	01	00C11	12345678 A		DATA	X'12345678'			
3347	01	00C12	FFFFFFF8 A		DATA	-1			
3348	01	00C13	78FFFFFF A		DATA	X'78FFFFFF'			
3349	01	00C14	FFFFFFF8 A	STB02	DATA	-8		STB	x BYTE 1

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969 96

3350	01	00C15	75C20440		STB,12	MEMORY=X'120',1			
3351	01	00C16	E7300136		K	14,7,3,SETPSW			
3352	01	00C17	E7300166		K	14,7,3,L8C+2			
3353	01	00C18	00000081 A		DATA	X'81'			
3354	01	00C19	00000081 A		DATA	X'81'			
3355	01	00C1A	FFFFFFF8 A		DATA	-1			
3356	01	00C1B	FF81FFFF A		DATA	X'FF81FFFF'			
3357	01	00C1C	FFFFFFFA A	STB03	DATA	-6		STB	x BYTE 2
3358	01	00C1D	75C20048 A		STB,12	12-X'1FFC4',1			
3359	01	00C1E	D7300136		K	13,7,3,SETPSW			
3360	01	00C1F	D7300166		K	13,7,3,L8C+2			
3361	01	00C20	FFFFFF12 A		DATA	X'FFFFFF12'			
3362	01	00C21	FFFF1212 A		DATA	X'FFFF1212'			
3363	01	00C22	FFFFFFF8 A	STB04	DATA	-8		STB	BYTE 3
3364	01	00C23	75C28FCB		STB,12	MEMORY=X'17495',1			
3365	01	00C24	C7300136		K	12,7,3,SETPSW			
3366	01	00C25	C7300166		K	12,7,3,L8C+2			
3367	01	00C26	6375D257 A		DATA	X'6375D257'			
3368	01	00C27	6375D257 A		DATA	X'6375D257'			
3369	01	00C28	FFFFFFF8 A		DATA	-1			
3370	01	00C29	FFFFFFF5 A		DATA	X'FFFFFFF5'			
3371					PAGE				
3372	01	00C2A	FFFFFFF8 A	STB05	DATA	-8		STB	BYTE 0 ZERO
3373	01	00C2B	F5C0045A		STB,12	*1A			
3374	01	00C2C	F7300136		K	15,7,3,SETPSW			
3375	01	00C2D	F7300166		K	15,7,3,L8C+2			
3376	01	00C2E	000000FF A		DATA	X'FF'			
3377	01	00C2F	000000FF A		DATA	X'FF'			
3378	01	00C30	00000000 A		DATA	0			
3379	01	00C31	FF000000 A		DATA	X'FF000000'			
3380					PAGE				
3381	01	00C32	FFFFFFF4 A	STD01	DATA	-12		STD	
3382	01	00C33	15C00460		STD,12	MEMORY			
3383	01	00C34	B7300136		K	11,7,3,SETPSW			
3384	01	00C35	B7300166		K	11,7,3,L8C+2			
3385	01	00C36	80000000 A		DATA	X'80000000'			
3386	01	00C37	80000000 A		DATA	X'80000000'			

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 97

3387	01	00C38	7FFFFFFF A		DATA	X'7FFFFFFF'		
3388	01	00C39	80000000 A		DATA	X'80000000'		
3389	01	00C3A	00000000 A		DATA	0		
3390	01	00C3B	00000000 A		DATA	0		
3391	01	00C3C	FFFFFFFF A		DATA	-1		
3392	01	00C3D	00000000 A		DATA	0		
3393	01	00C3E	FFFFFFFF A	STD02	DATA	-12		STD X
3394	01	00C3F	15C2023C		STD,12	MEMORY-548,1		
3395	01	00C40	A7300136		K	10,7,3,SETPSW		
3396	01	00C41	A7300166		K	10,7,3,LBC+2		
3397	01	00C42	00000112 A		DATA	274		
3398	01	00C43	00000112 A		DATA	274		
3399	01	00C44	FFFFFFFF A		DATA	-1		
3400	01	00C45	00000112 A		DATA	274		
3401	01	00C46	FFFFFFFF A		DATA	-1		
3402	01	00C47	FFFFFFFF A		DATA	-1		
3403	01	00C48	00000000 A		DATA	0		
3404	01	00C49	FFFFFFFF A		DATA	-1		
3405					PAGE			
3406	01	00C4A	FFFFFFFF A	STD03	DATA	-12		STD * R0
3407	01	00C4B	9500045A		STD,13	*1A		
3408	01	00C4C	97300136		K	9,7,3,SETPSW		
3409	01	00C4D	97300166		K	9,7,3,LBC+2		
3410	01	00C4E	12345678 A		DATA	X'12345678'		
3411	01	00C4F	12345678 A		DATA	X'12345678'		
3412	01	00C50	ECBD129E A		DATA	X'ECBD129E'		
3413	01	00C51	9ABCDEF0 A		DATA	X'9ABCDEF0'		
3414	01	00C52	9ABCDEF0 A		DATA	X'9ABCDEF0'		
3415	01	00C53	9ABCDEF0 A		DATA	X'9ABCDEF0'		
3416	01	00C54	56782349 A		DATA	X'56782349'		
3417	01	00C55	9ABCDEF0 A		DATA	X'9ABCDEF0'		
3418	01	00C56	FFFFFFFF A	STD04	DATA	-12		STD M0
3419	01	00C57	15C00461		STD,12	MEMORY+1		
3420	01	00C58	87300136		K	8,7,3,SETPSW		
3421	01	00C59	87300166		K	8,7,3,LBC+2		
3422	01	00C5A	00000000 A		DATA	0		
3423	01	00C5B	00000000 A		DATA	0		

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 98

3424	01	00C5C	FFFFFFFF A		DATA	-1		
3425	01	00C5D	00000000 A		DATA	0		
3426	01	00C5E	00000001 A		DATA	1		
3427	01	00C5F	00000001 A		DATA	1		
3428	01	00C60	FFFFFFFFE A		DATA	-2		
3429	01	00C61	00000001 A		DATA	1		
3430					PAGE			
3431	01	00C62	FFFFFFFF6 A	STS01	DATA	-10		
3432	01	00C63	47C00460		STS,12	MEMORY		PH1:C(S) = EW+NRJ1 = FFFF0000
3433	01	00C64	F7300136		K	15,7,3,SETPSW		
3434	01	00C65	F7300166		K	15,7,3,LBC+2		PH3:C(S) = RR+RJ1 = 0000FFFF
3435	01	00C66	0000FFFF A		DATA	X'FFFF'		
3436	01	00C67	0000FFFF A		DATA	X'FFFF'		PH4:C(S) = PH1+PH3 = FFFFFFFF
3437	01	00C68	FFFF0000 A		DATA	X'FFFF0000'		
3438	01	00C69	FFFFFFFF A		DATA	-1		
3439	01	00C6A	0000FFFF A		DATA	X'FFFF'		
3440	01	00C6B	0000FFFF A		DATA	X'FFFF'		
3441				** USE 0DD R FIELD AND EVEN R AS THE EW				
3442	01	00C6C	FFFFFFFF6 A	STS02	DATA	-10		
3443	01	00C6D	47D0000C A		STS,13	12		PH1:C(S) = EW+NRJ1 = 0000FFFF
3444	01	00C6E	07300136		K	0,7,3,SETPSW		
3445	01	00C6F	07300166		K	0,7,3,LBC+2		PH3:C(S) = RR+RJ1 = FFFF0000
3446	01	00C70	0000FFFF A		DATA	X'FFFF'		
3447	01	00C71	FFFFFFFF A		DATA	-1		PH4:C(S) = PH1+PH3 = FFFFFFFF
3448	01	00C72	00000000 A		DATA	0		
3449	01	00C73	00000000 A		DATA	0		
3450	01	00C74	FFFF0000 A		DATA	X'FFFF0000'		
3451	01	00C75	FFFF0000 A		DATA	X'FFFF0000'		
3452					PAGE			
3453	01	00C76	FFFFFFFF8 A	STCF01	DATA	-8		STFC BYTE 0
3454	01	00C77	74000460		STCF,0	MEMORY		
3455	01	00C78	F7300136		K	15,7,3,SETPSW		
3456	01	00C79	F7300166		K	15,7,3,LBC+2		
3457	01	00C7A	00000000 A		DATA	0		
3458	01	00C7B	00000000 A		DATA	0		
3459	01	00C7C	00000000 A		DATA	0		
3460	01	00C7D	F7000000 A		DATA	X'F7000000'		

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969 99

3461	01	00C7E	FFFFFFFF	A	STCF02	DATA	-8		STFC X	BYTE 1
3462	01	00C7F	74F2006A			STCF,15	NEIRET,1			
3463	01	00C80	E6200136			K	14,6,2,SETPSW			
3464	01	00C81	E6200166			K	14,6,2,L8C+2			
3465	01	00C82	0000FD9	A		DATA	4*(MEMORY-NEIRET)+1			
3466	01	00C83	0000FD9	A		DATA	4*(MEMORY-NEIRET)+1			
3467	01	00C84	00000000	A		DATA	0			
3468	01	00C85	00E60000	A		DATA	X'E60000'			
3469	01	00C86	FFFFFFFF	A	STCF03	DATA	-8		STFC *X	BYTE 2
3470	01	00C87	F432045A			STCF,3	*1A,1			
3471	01	00C88	D5300136			K	13,5,3,SETPSW			
3472	01	00C89	D5300166			K	13,5,3,L8C+2			
3473	01	00C8A	00000002	A		DATA	2			
3474	01	00C8B	00000002	A		DATA	2			
3475	01	00C8C	FFFFFFFF	A		DATA	-1			
3476	01	00C8D	FFFFD5FF	A		DATA	X'FFFFD5FF'			
3477	01	00C8E	FFFFFFFF	A	STCF04	DATA	-8		STFC X	BYTE 3
3478	01	00C8F	74120460			STCF,1	MEMORY,1			
3479	01	00C90	34300136			K	3,4,3,SETPSW			
3480	01	00C91	34300166			K	3,4,3,L8C+2			
3481	01	00C92	00000003	A		DATA	3			
3482	01	00C93	00000003	A		DATA	3			
3483	01	00C94	FFFFFFFF	A		DATA	-1			
3484	01	00C95	FFFFFF34	A		DATA	X'FFFFFF34'			
3485						PAGE				
3486	01	00C96	FFFFFFFF	A	XW01	DATA	-8		XW RESULT IN R IS ZER0	
3487	01	00C97	46C00460			XW,12	MEMORY			
3488	01	00C98	F7300136			K	15,7,3,SETPSW			
3489	01	00C99	C7300166			K	12,7,3,L8C+2			
3490	01	00CA0	FFFFFFFF	A		DATA	-1			
3491	01	00CA1	00000000	A		DATA	0			
3492	01	00CA2	00000000	A		DATA	0			
3493	01	00CA3	FFFFFFFF	A		DATA	-1			
3494	01	00CA4	FFFFFFFF	A	XW02	DATA	-8		XW RESULT IN R IS P35	
3495	01	00CA5	46C00460			XW,12	MEMORY			
3496	01	00CA6	37300136			K	3,7,3,SETPSW			
3497	01	00CA7	27300166			K	2,7,3,L8C+2			

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969 100

3498	01	00CA2	FFFFFFFF	A		DATA	MEMORY-REPEAT			
3499	01	00CA3	7FFFFFFFF	A		DATA	X'7FFFFFFFF'			
3500	01	00CA4	7FFFFFFFF	A		DATA	X'7FFFFFFFF'			
3501	01	00CA5	FFFFFFFF	A		DATA	MEMORY-REPEAT			
3502	01	00CA6	FFFFFFFF	A	XW03	DATA	-8		XW RESULT IN R IS NEG	
3503	01	00CA7	46C00460			XW,12	MEMORY			
3504	01	00CA8	27300136			K	2,7,3,SETPSW			
3505	01	00CA9	17300166			K	1,7,3,L8C+2			
3506	01	00CAA	00000000	A		DATA	0			
3507	01	00CA3	FFFFFFFF	A		DATA	-1			
3508	01	00CAC	FFFFFFFF	A		DATA	-1			
3509	01	00CAD	00000000	A		DATA	0			
3510	01	00CAE	FFFFFFFF	A	XW04	DATA	-10		XW REGISTER IS REGISTER. RESULT NEG.	
3511	01	00CAF	46C00000	A		XW,12	13			
3512	01	00CB0	07300136			K	0,7,3,SETPSW			
3513	01	00CB1	17300166			K	1,7,3,L8C+2			
3514	01	00CB2	00000001	A		DATA	1			
3515	01	00CB3	FFFFFFFF	A		DATA	-1			
3516	01	00CB4	00000000	A		DATA	0			
3517	01	00CB5	00000000	A		DATA	0			
3518	01	00CB6	FFFFFFFF	A		DATA	-1			
3519	01	00CB7	00000001	A		DATA	1			
3520						PAGE				
3521	01	00CB8	FFFFFFFF	A	INT01	DATA	-10		INT	
3522	01	00CB9	63C00460			INT,12	MEMORY			
3523	01	00CBA	77300136			K	7,7,3,SETPSW			
3524	01	00CBB	17300166			K	1,7,3,L8C+2			
3525	01	00CBC	FFFFFFFF	A		DATA	-1			
3526	01	00CBD	00000234	A		DATA	X'234'			
3527	01	00CBE	12345678	A		DATA	X'12345678'			
3528	01	00CBF	12345678	A		DATA	X'12345678'			
3529	01	00CC0	FFFFFFFF	A		DATA	-1			
3530	01	00CC1	00005678	A		DATA	X'5678'			
3531	01	00CC2	FFFFFFFF	A	INT02	DATA	-10		INT	
3532	01	00CC3	63C00460			INT,12	MEMORY			
3533	01	00CC4	07300136			K	0,7,3,SETPSW			
3534	01	00CC5	F7300166			K	15,7,3,L8C+2			

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969 101

3535	01	00CC6	0000289 A	DATA	MEMORY=END	
3536	01	00CC7	0000EDC A	DATA	X'EDC'	
3537	01	00CC8	FEDCBA98 A	DATA	X'FEDCBA98'	
3538	01	00CC9	FEDCBA98 A	DATA	X'FEDCBA98'	
3539	01	00CCA	12345678 A	DATA	X'12345678'	
3540	01	00CCB	0000BA98 A	DATA	X'BA98'	
3541	01	00CCC	FFFFFFFF6 A	DATA	=10	
3542	01	00CCD	69D00460	INT03	INT,13	INT ODD REG
3543	01	00CCE	77300136	K	7,7,3,SETPSW	
3544	01	00CCF	87300166	K	8,7,3,LBC+2	
3545	01	00CD0	FFFFFFFF A	DATA	-1	
3546	01	00CD1	FFFFFFFF A	DATA	-1	
3547	01	00CD2	89ABCDEF A	DATA	X'89ABCDEF'	
3548	01	00CD3	89ABCDEF A	DATA	X'89ABCDEF'	
3549	01	00CD4	FFFFFFFF A	DATA	-1	
3550	01	00CD5	0000CDEF A	DATA	X'CDEF'	
3551				PAGE		
3552	01	00CD6	FFFFFFFF6 A	ANLZ01	DATA	-8
3553	01	00CD7	44C00460	ANLZ,12	MEMORY	ANLZ HALFWORD *X PKS= FAB10,NFAIM,NANLZ,PRE3 S/MRD/2 = PREOPER,PRE/12 PREOPER IS QUALIFIED WITH NANLZ BRPH5= ANLZ,PRE3
3554				*		
3555				*		
3556				*		
3557	01	00CD8	F7300136	K	16,7,3,SETPSW	
3558	01	00CD9	67300166	K	6,7,3,LBC+2	
3559	01	00CDA	0000034F	DATA	HA(END)+1	
3560	01	00CDB	0000056F A	DATA	ABSVAL(HA(CYCLE))+ABSVAL(HA(END)+1)	
3561	01	00CDC	D2F2046A	LH,15	*REPEAT,1	
3562	01	00CDD	D2F2046A	LH,15	*REPEAT,1	
3563	01	00CDE	FFFFFFFF6 A	ANLZ02	DATA	-8
3564	01	00CDF	44C2046A	ANLZ,12	REPEAT,1	ANLZ X WORD *
3565	01	00CE0	77300136	K	7,7,3,SETPSW	
3566	01	00CE1	A7300166	K	10,7,3,LBC+2	
3567	01	00CE2	FFFFFFFF6 A	DATA	MEMORY-REPEAT	
3568	01	00CE3	00000460	DATA	MEMORY	
3569	01	00CE4	8530045A	STW,3	*IA	
3570	01	00CE5	8530045A	STW,3	*IA	
3571	01	00CE6	FFFFFFFF6 A	ANLZ03	DATA	-8
						ANLZ * BYTE *X

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969 102

3572	01	00CE7	44C0045A	ANLZ,12	*IA	
3573	01	00CE8	77300136	K	7,7,3,SETPSW	
3574	01	00CE9	27300166	K	2,7,3,LBC+2	
3575	01	00CEA	00000143 A	DATA	X'143'	
3576	01	00CEB	000012C3	DATA	BA(MEMORY)+X'143'	
3577	01	00CEC	F102045A	CB,0	*IA,1	
3578	01	00CED	F102045A	CB,0	*IA,1	
3579	01	00CEE	FFFFFFFF6 A	ANLZ04	DATA	-8
3580	01	00CEF	44C00460	ANLZ,12	MEMORY	ANLZ DOUBLEWORD X
3581	01	00CF0	07300136	K	0,7,3,SETPSW	
3582	01	00CF1	C7300166	K	12,7,3,LBC+2	
3583	01	00CF2	00000725 A	DATA	X'725'	
3584	01	00CF3	00000955	DATA	DA(MEMORY+1)+X'725'	
3585	01	00CF4	13420461	LAD,4	MEMORY+1,1	
3586	01	00CF5	13420461	LAD,4	MEMORY+1,1	
3587				PAGE		
3588	01	00CF6	FFFFFFFF6 A	ANLZ05	DATA	-8
3589	01	00CF7	44C00460	ANLZ,12	MEMORY	ANLZ IMMEDIATE WORD *X
3590	01	00CF8	07300136	K	0,7,3,SETPSW	
3591	01	00CF9	B7300166	K	11,7,3,LBC+2	
3592	01	00CFA	00001234 A	DATA	X'1234'	
3593	01	00CFB	00001234 A	DATA	X'1234'	
3594	01	00CFC	A2C0045A	L1,12	*IA,1	
3595	01	00CFD	A2C0045A	L1,12	*IA,1	
3596				* S/PRETR = PRE1,NANLZ		
3597	01	00CFE	FFFFFFFF6 A	ANLZ06	DATA	-8
3598	01	00CF7	44C00460	ANLZ,12	MEMORY	ANLZ ILLEGAL FAMILY (IMMEDIATE-BYTE)
3599	01	00D00	07300136	K	0,7,3,SETPSW	
3600	01	00D01	17300166	K	1,7,3,LBC+2	
3601	01	00D02	FFFFFFFF A	DATA	-1	
3602	01	00D03	FFFFFFFF A	DATA	-1	
3603	01	00D04	61700752 A	MBS,7	X'752'	
3604	01	00D05	61700752 A	MBS,7	X'752'	
3605	01	00D06	FFFFFFFF6 A	ANLZ07	DATA	-8
3606	01	00D07	44C00460	ANLZ,12	MEMORY	ANLZ PRIV INST IN SLAVE MODE DOUBLEWORD, DIRECT ADDRESSING
3607	01	00D08	07900136	K	0,7,9,SETPSW	
3608	01	00D09	C7900165	K	12,7,9,LBC+1	

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12,1969 103

```

3609 01 00D0A 00000000 A DATA 0
3610 01 00D0B 00000232 GEN DA(RETURN)
3611 01 00D0C 0F000464 XPSD,0 RETURN
3612 01 00D0D 0F000464 XPSD,0 RETURN
3613 PAGE
3614 * ON FIRST PASS THE INST IS B END. IF NON-EXISTENT MEMORY IS *B
3615 * PRESENT AN ANLZ,12 MEMORY INSTRUCTION WILL BE INSERTED *B
3616 01 00D0E FFFFFFFF A ANLZ08 DATA -8
3617 01 00D0F 44C00460 ANLZ,12 MEMORY
3618 01 00D10 07300136 K 0,7,3,SETPSW
3619 01 00D11 07300164 K 0,7,3,L8C
3620 01 00D12 00000000 A DATA 0
3621 01 00D13 00000000 A DATA 0
3622 01 00D14 B2C00000 A LW,12 *0 CHANGED TO LW,12 *(NON-EXISTENT**B
3623 01 00D15 B2C00000 A LW,12 *0 MEMEMORY) AFTER ONE PASS *B
3624
3625 * S/MRQ/1 = FABRANCH*PRE/12*ANLZ
3626 * S/RW = FUBDR*PRE3*ANLZ
3626 01 00D16 FFFFFFFF A ANLZ09 DATA -10 ANALYZE A BRANCH THAT WILL BRANCH
3627 01 00D17 44C00460 ANLZ,12 MEMORY
3628 01 00D18 00000136 K 0,0,0,SETPSW
3629 01 00D19 A0000166 K 10,0,0,L8C+2
3630 01 00D1A 00000002 A DATA 2
3631 01 00D1B 00001001 A DATA X'1001'
3632 01 00D1C E4CE0000 A DATA X'E4CE0000' BDR,12 *13,7
3633 01 00D1D E4CE0000 A DATA X'E4CE0000'
3634 01 00D1E 00001000 A DATA X'1000'
3635 01 00D1F 00001000 A DATA X'1000'
3636 01 00D20 FFFFFFFF A ANLZ10 DATA -8 ANALYZE A BRANCH THAT WONT BRANCH
3637 01 00D21 44C00460 ANLZ,12 MEMORY
3638 01 00D22 00000136 K 0,0,0,SETPSW
3639 01 00D23 A0000166 K 10,0,0,L8C+2
3640 01 00D24 00000000 A DATA 0,1
3641 01 00D25 00000001 A DATA X'E4CE0000' BDR,12 *12,7
3642 01 00D26 E4CE0000 A DATA X'E4CE0000'
3643 PAGE
3644 ** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,

```

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12,1969 104

```

3645 ** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS
3646 * PXS = FASEL*PRE3*NO,7*ANLZ
3647 01 00D28 FFFFFFFF A ANLZ11 DATA -12
3648 01 00D29 44C00460 ANLZ,12 MEMORY
3649 01 00D2A F7300136 K 15,7,3,SETPSW
3650 01 00D2B 87300166 K 8,7,3,L8C+2
3651 01 00D2C 00000000 A DATA 0
3652 01 00D2D 00000466 DATA RETURN+2
3653 01 00D2E 44C00466 LS,12 RETURN+2
3654 01 00D2F 44C00466 LS,12 RETURN+2
3655 01 00D30 FFFFFFFF A DATA -1
3656 01 00D31 FFFFFFFF A DATA -1
3657 01 00D32 0F000464 XPSD,0 RETURN
3658 01 00D33 0F000464 XPSD,0 RETURN
3659 ** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,
3660 ** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS
3661 * PXS = FJEXU*PRE3*ANLZ
3662 * BRP10 = FJEXU*PRE3*ANLZ
3663 01 00D34 FFFFFFFF A ANLZ12 DATA -12
3664 01 00D35 44C00460 ANLZ,12 MEMORY
3665 01 00D36 00000136 K 0,0,0,SETPSW
3666 01 00D37 80000166 K 8,0,0,L8C+2
3667 01 00D38 00000000 A DATA 0
3668 01 00D39 00000460 DATA MEMORY
3669 01 00D3A 67000460 EXU MEMORY
3670 01 00D3B 67000460 EXU MEMORY
3671 01 00D3C FFFFFFFF A DATA -1,-1
3672 01 00D3D FFFFFFFF A
3673 01 00D3E 0F000464 XPSD,0 RETURN
3674 01 00D3F 0F000464 XPSD,0 RETURN
3675 PAGE
3676 ** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,
3677 ** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS
3678 * PXS = FARWD*PRE3*ANLZ
3678 01 00D40 FFFFFFFF A ANLZ13 DATA -12
3679 01 00D41 44C00460 ANLZ,12 MEMORY
3680 01 00D42 00000136 K 0,0,0,SETPSW

```

```

3681 01 00D43 80000166 K 8,0,0,LBC+2
3682 01 00D44 FFFFFFFF A DATA -1
3683 01 00D45 00000041 A DATA X'41'
3684 01 00D46 60C00041 A WD,12 X'41'
3685 01 00D47 60C00041 A WD,12 X'41'
3686 01 00D48 5A5A5A5A A DATA X'5A5A5A5A'
3687 01 00D49 5A5A5A5A A DATA X'5A5A5A5A'
3688 01 00D4A 0F000464 XPSD,0 RETURN
3689 01 00D4B 0F000464 XPSD,0 RETURN
3690
3691
3692
3693
3694 01 00D4C FFFFFFFF A ANLZ14 DATA -12
3695 01 00D4D 44C00460 ANLZ,12 MEMORY
3696 01 00D4E 00000136 K 0,0,0,SETPSW
3697 01 00D4F 80000166 K 8,0,0,LBC+2
3698 01 00D50 00000000 A DATA 0
3699 01 00D51 00000047 DATA BRANCH
3700 01 00D52 37C00047 HW,12 BRANCH
3701 01 00D53 37C00047 HW,12 BRANCH
3702 01 00D54 5A5A5A5A A DATA X'5A5A5A5A'
3703 01 00D55 5A5A5A5A A DATA X'5A5A5A5A'
3704 01 00D56 0F000464 XPSD,0 RETURN
3705 01 00D57 0F000464 XPSD,0 RETURN
3706
3707
3708
3709
3710 01 00D58 FFFFFFFF A ANLZ15 DATA -12
3711 01 00D59 44C00460 ANLZ,12 MEMORY
3712 01 00D5A 00000136 K 0,0,0,SETPSW
3713 01 00D5B 80000166 K 8,0,0,LBC+2
3714 01 00D5C FFFFFFFC18 A DATA -1000
3715 01 00D5D 00000460 DATA MEMORY
3716 01 00D5E 46D00460 XW,13 MEMORY
3717 01 00D5F 46D00460 XW,13 MEMORY

```

** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,
** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS
* PXS = FAMDB.PRE3.NANLZ.NFAIM
* BRPH3 = FAMDB.PRE/34.NBRPH5.NANLZ
* S/RW = FUXW.PRE3.NANLZ

```

3718 01 00D60 5A5A5A5A A DATA X'5A5A5A5A'
3719 01 00D61 5A5A5A5A A DATA X'5A5A5A5A'
3720 01 00D62 0F000464 XPSD,0 RETURN
3721 01 00D63 0F000464 XPSD,0 RETURN
3722
3723
3724
3725 01 00D64 FFFFFFFF A ANLZ16 DATA -12
3726 01 00D65 44C00460 ANLZ,12 MEMORY
3727 01 00D66 00000136 K 0,0,0,SETPSW
3728 01 00D67 80000166 K 8,0,0,LBC+2
3729 01 00D68 000003EB A DATA 1000
3730 01 00D69 00000047 DATA BRANCH
3731 01 00D6A 6AD00047 BAL,13 BRANCH
3732 01 00D6B 6AD00047 BAL,13 BRANCH
3733 01 00D6C 5A5A5A5A A DATA X'5A5A5A5A'
3734 01 00D6D 5A5A5A5A A DATA X'5A5A5A5A'
3735 01 00D6E 0F000464 XPSD,0 RETURN
3736 01 00D6F 0F000464 XPSD,0 RETURN
3737
3738
3739
3740
3741
3742 01 00D70 FFFFFFFF A ANLZ17 DATA -12
3743 01 00D71 44C00460 ANLZ,12 MEMORY
3744 01 00D72 00000136 K 0,0,0,SETPSW
3745 01 00D73 80000166 K 8,0,0,LBC+2
3746 01 00D74 FFFFFFFE A DATA -2
3747 01 00D75 00000047 DATA BRANCH
3748 01 00D76 65C00047 BIR,12 BRANCH
3749 01 00D77 65C00047 BIR,12 BRANCH
3750 01 00D78 5A5A5A5A A DATA X'5A5A5A5A'
3751 01 00D79 5A5A5A5A A DATA X'5A5A5A5A'
3752 01 00D7A 0F000464 XPSD,0 RETURN
3753 01 00D7B 0F000464 XPSD,0 RETURN
3754

```

** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,
** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS
* ANALYZE A BIR THAT WILL BRANCH
* S/RW = FUBIR.PRE3.NANLZ

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 107

```

3755 ** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS
3756 * ANALYZE A BR THAT WILL NOT BRANCH
3757 01 00D7C FFFFFFF4 A ANLZ18 DATA -12
3758 01 00D7D 44C00460 ANLZ,12 MEMBRY
3759 01 00D7E 00000136 K 0,0,0,SETPSW
3760 01 00D7F 80000166 R 8,0,0,L0C+2
3761 01 00D80 00000001 A DATA 1
3762 01 00D81 00000047 DATA BRANCH
3763 01 00D82 65C00047 BIR,12 BRANCH
3764 01 00D83 65C00047 BIR,12 BRANCH
3765 01 00D84 5A5A5A5A A DATA X'5A5A5A5A'
3766 01 00D85 5A5A5A5A A DATA X'5A5A5A5A'
3767 01 00D86 0F000464 XPSD,0 RETURN
3768 01 00D87 0F000464 XPSD,0 RETURN
3769 PAGE
3770 ** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,
3771 ** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS
3772 * BRPH3 = FUSF,PRE3,NANLZ,023
3773 01 00D88 FFFFFFF4 A ANLZ19 DATA -12
3774 01 00D89 44C00460 ANLZ,12 MEMBRY
3775 01 00D8A 00000136 K 0,0,0,SETPSW
3776 01 00D8B 80000166 K 8,0,0,L0C+2
3777 01 00D8C 00000064 A DATA 100
3778 01 00D8D 00000177 A DATA X'177'
3779 01 00D8E 24D00177 A SF,13 X'177'
3780 01 00D8F 24D00177 A SF,13 X'177'
3781 01 00D90 5A5A5A5A A DATA X'5A5A5A5A'
3782 01 00D91 5A5A5A5A A DATA X'5A5A5A5A'
3783 01 00D92 0F000464 XPSD,0 RETURN
3784 01 00D93 0F000464 XPSD,0 RETURN
3785 ** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,
3786 ** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS
3787 * BRPH3 = FAPSD,PRE3,NANLZ,N07
3788 01 00D94 FFFFFFF4 A ANLZ20 DATA -12
3789 01 00D95 44C00460 ANLZ,12 MEMBRY
3790 01 00D96 00000136 K 0,0,0,SETPSW
3791 01 00D97 C0000166 K 12,0,0,L0C+2

```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 108

```

3792 01 00D98 00000165 DATA L0C+1
3793 01 00D99 00000006 A DATA 6
3794 01 00D9A 0E00000C A LPSD,0 12
3795 01 00D9B 0E00000C A LPSD,0 12
3796 01 00D9C 00000000 A DATA 0
3797 01 00D9D 00000000 A DATA 0
3798 01 00D9E 0F000464 XPSD,0 RETURN
3799 01 00D9F 0F000464 XPSD,0 RETURN
3800 PAGE
3801 ** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,
3802 ** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS
3803 * PXS = FAMDS,NFALM,PRE3,NANLZ
3804 01 00DA0 FFFFFFF4 A ANLZ21 DATA -12
3805 01 00DA1 44C00460 ANLZ,12 MEMBRY
3806 01 00DA2 00000136 K 0,0,0,SETPSW
3807 01 00DA3 A0000166 K 10,0,0,L0C+2
3808 01 00DA4 FFFFFFFF A DATA -1
3809 01 00DA5 0001FFFF A DATA X'1FFFF'
3810 01 00DA6 A5D0000C A S,13 *12
3811 01 00DA7 A5D0000C A S,13 *12
3812 01 00DA8 5A5A5A5A A DATA X'5A5A5A5A'
3813 01 00DA9 5A5A5A5A A DATA X'5A5A5A5A'
3814 01 00DAA 0F000464 XPSD,0 RETURN
3815 01 00DAB 0F000464 XPSD,0 RETURN
3816 ** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,
3817 ** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS
3818 * BRPH6 = FAST/M,PRE3,N0J0,NANLZ
3819 01 00DAC FFFFFFF4 A ANLZ22 DATA -12
3820 01 00DAD 44C00460 ANLZ,12 MEMBRY
3821 01 00DAE 10000136 K 1,0,0,SETPSW
3822 01 00DAF 80000166 K 8,0,0,L0C+2
3823 01 00DB0 00000000 A DATA 0
3824 01 00DB1 00000047 DATA BRANCH
3825 01 00DB2 2A000047 L4,13 BRANCH
3826 01 00DB3 2A000047 L4,13 BRANCH
3827 01 00DB4 00000000 A DATA 0,0
3827 01 00DB5 00000000 A

```

```

3828 01 00DB6 0F000464 XPSD,0 RETURN
3829 01 00DB7 0F000464 XPSD,0 RETURN
3830 PAGE
3831 ** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,
3832 ** BRPH3, BRPH6, AND BRPHIO. REFERENCE PHASE SEQUENCE CHARTS
3833 * PXS * PUNWAIT,PRE3,NANLZ
3834 01 00DB8 FFFFFFF4 A ANLZ23 DATA -12
3835 01 00DB9 44C00460 ANL2,12 MEMORY
3836 01 00DBA 73300136 K 7,3,3,SETPSW
3837 01 00DBB 83300166 K 8,3,3,LBC+2
3838 01 00DBC 00000000 A DATA 0,100
3839 01 00DBD 00000064 A
3840 01 00DBE 2E000064 A WAIT 100
3841 01 00DBF 2E000064 A WAIT 100
3842 01 00DC0 FFFFFFFF A DATA -1,-1
3843 01 00DC1 FFFFFFFF A
3844 01 00DC2 0F000464 XPSD,0 RETURN
3845 01 00DC3 0F000464 XPSD,0 RETURN
3846 * BRPRE4 = (LI+LCFI)*PREL1+NANLZ+NCO
3847 01 00DC4 FFFFFFF8 A ANLZ24 DATA -8
3848 01 00DC5 44C00460 ANL2,12 MEMORY
3849 01 00DC6 07300136 K 0,7,3,SETPSW
3850 01 00DC7 97300166 K 9,7,3,LBC+2
3851 01 00DC8 00000001 A DATA 1
3852 01 00DC9 00000001 A DATA 1
3853 01 00DCA 023000FF A LCFI,3 X'FF'
3854 01 00DCB 023000FF A LCFI,3 X'FF'
3855 PAGE
3856 ** CONDITION CODE SETTINGS FOR CI,CB,CH,CW
3857 ** CC2 CC3 CC4
3858 ** - 0 0 OPERANDS EQUAL
3859 ** - 0 1 REGISTER WORD < EFFECTIVE WORD
3860 ** - 1 0 REGISTER WORD > EFFECTIVE WORD
3861 ** 0 - - LOGICAL PRODUCT OF THE TWO OPERANDS IS ZERO
3862 ** 1 - - LOGICAL PRODUCT OF THE TWO OPERANDS IS NONZERO
3863 ** COMPARE C(R) > C(EW). LOGIC PROD ZERO
3864 ** CHECK THAT SO.NFACOMP DOES NOT INHIBIT SGTZ (SICC3) ALSO
    
```

```

3863 ** CHECK THAT SO.NFACOMP DOES NOT S/CC4
3864 01 00DCC FFFFFFF8 A CW01 DATA -8
3865 01 00DCD 31C00460 CW,12 MEMORY
3866 01 00DCE F7300136 K 15,7,3,SETPSW
3867 01 00DCF A7300166 K 10,7,3,LBC+2
3868 01 00DD0 40000000 A DATA X'40000000'
3869 01 00DD1 40000000 A DATA X'40000000'
3870 01 00DD2 BFFFFFFF A DATA X'BFFFFFFF'
3871 01 00DD3 BFFFFFFF A DATA X'BFFFFFFF'
3872 ** COMPARE C(R) < C(EW). LOGIC PROD NEZ
3873 ** CHECK THAT SOO.FACOMP HOLD SGTZ FALSE INHIBITING SETTINGS CC3
3874 ** CHECK THAT SOO.FACOMP CAUSES S/CC4
3875 01 00DD4 FFFFFFF8 A CW02 DATA -8
3876 01 00DD5 31C00460 CW,12 MEMORY
3877 01 00DD6 07300136 K 0,7,3,SETPSW
3878 01 00DD7 57300166 K 5,7,3,LBC+2
3879 01 00DD8 FFFFFFFE A DATA -2
3880 01 00DD9 FFFFFFFE A DATA -2
3881 01 00DDA 7FFFFFFF A DATA X'7FFFFFFF'
3882 01 00DDB 7FFFFFFF A DATA X'7FFFFFFF'
3883 ** COMPARE EQUALS. LOGIC PRODUCT ZERO (OPERANDS BOTH ZERO)
3884 01 00DDC FFFFFFFC A CW03 DATA -4
3885 01 00DDD 31C00460 CW,12 MEMORY
3886 01 00DDE F7300136 K 15,7,3,SETPSW
3887 01 00DDF 87300166 K 8,7,3,LBC+2
3888 PAGE
3889 ** R > EW. HALFWORD ZERO BEING COMPARED. LOGICAL PRODUCT NEZ
3890 01 00DE0 FFFFFFF8 A CH01 DATA -8 CH
3891 01 00DE1 51C00460 CH,12 MEMORY
3892 01 00DE2 F7300136 K 15,7,3,SETPSW
3893 01 00DE3 C7300166 K 12,7,3,LBC+2
3894 01 00DE4 FFFF8000 A DATA X'FFF8000'
3895 01 00DE5 FFFF8000 A DATA X'FFF8000'
3896 01 00DE6 8000F739 A DATA X'8000F739'
3897 01 00DE7 8000F739 A DATA X'8000F739'
3898 ** R=EW HALFWORD ONE BEING COMPARED. LOGICAL PRODUCT NEZ
3899 01 00DE8 FFFFFFF8 A CH02 DATA -8 CH X
    
```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 111

```

3900 01 00DE9 51CE0460 CH,12 MEMORY,7
3901 01 00DEA 77300136 K 7,7,3,SETPSW
3902 01 00DEB 47300166 K 4,7,3,L8C+2
3903 01 00DEC 00007F32 A DATA X'7F32'
3904 01 00DED 00007F32 A DATA X'7F32'
3905 01 00DEE 123E7F32 A DATA X'123E7F32'
3906 01 00DEF 123E7F32 A DATA X'123E7F32'
3907
3908 01 00DF0 FFFFFFFF A ** EW > R: HW ZERO BEING COMPARED. LOGICAL PRODUCT EZ
3909 01 00DF1 51C00460 CH03 DATA -8
3910 01 00DF2 07300136 CH,12 MEMORY
3911 01 00DF3 27300166 K 0,7,3,SETPSW
3912 01 00DF4 42008200 A K 2,7,3,L8C+2
3913 01 00DF5 42008200 A DATA X'42008200'
3914 01 00DF6 71140200 A DATA X'42008200'
3915 01 00DF7 71140200 A DATA X'71140200'
3916 PAGE
3917 01 00DF8 FFFFFFFF A CB01 DATA -8 CB BYTE 0
3918 01 00DF9 71C00460 CB,12 MEMORY
3919 01 00DFA 77300136 K 7,7,3,SETPSW
3920 01 00DFB 07300166 K 0,7,3,L8C+2
3921 01 00DFC FFFFFFF0 A DATA X'FFFFFF00'
3922 01 00DFD FFFFFFF0 A DATA X'FFFFFF00'
3923 01 00DFE 00FFFFFF A DATA X'FFFFFF'
3924 01 00DF7 00FFFFFF A DATA X'FFFFFF'
3925 01 00E00 FFFFFFFF A CB02 DATA -8 CB BYTE 1
3926 01 00E01 71C20440 CB,12 MEMORY-X'120',1
3927 01 00E02 77300136 K 7,7,3,SETPSW
3928 01 00E03 57300166 K 5,7,3,L8C+2
3929 01 00E04 00000081 A DATA X'81'
3930 01 00E05 00000081 A DATA X'81'
3931 01 00E06 FFFFFFFF A DATA X'FFFFFFF'
3932 01 00E07 FFFFFFFF A DATA X'FFFFFFF'
3933 01 00E08 FFFFFFFF A CB03 DATA -8 CB BYTE 0
3934 01 00E09 71C00460 CB,12 MEMORY
3935 01 00E0A 37300136 K 3,7,3,SETPSW
3936 01 00E0B 47300166 K 4,7,3,L8C+2

```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 112

```

3937 01 00E0C 000000FF A DATA X'FF'
3938 01 00E0D 000000FF A DATA X'FF'
3939 01 00E0E FFECCDD A DATA X'FFECCDD'
3940 01 00E0F FFECCDD A DATA X'FFECCDD'
3941 01 00E10 FFFFFFFF A CB04 DATA -8 CB X BYTE 1
3942 01 00E11 71C2ECC2 CB,12 MEMORY-X'1159E',1
3943 01 00E12 F7300136 K 15,7,3,SETPSW
3944 01 00E13 C7300166 K 12,7,3,L8C+2
3945 01 00E14 12345679 A DATA X'12345679'
3946 01 00E15 12345679 A DATA X'12345679'
3947 01 00E16 26793355 A DATA X'26793355'
3948 01 00E17 26793355 A DATA X'26793355'
3949 PAGE
3950 01 00E18 FFFFFFFF A CB05 DATA -8 CB *X BYTE 2
3951 01 00E19 F1C2045A CB,12 *1A,1
3952 01 00E1A 07300136 K 0,7,3,SETPSW
3953 01 00E1B 47300166 K 4,7,3,L8C+2
3954 01 00E1C 00000002 A DATA 2
3955 01 00E1D 00000002 A DATA 2
3956 01 00E1E FFFF02FF A DATA X'FFF02FF'
3957 01 00E1F FFFF02FF A DATA X'FFF02FF'
3958 01 00E20 FFFFFFFF A CB06 DATA -8 CB BYTE 3
3959 01 00E21 71C22310 CB,12 MEMORY-X'10950',1
3960 01 00E22 07300136 K 0,7,3,SETPSW
3961 01 00E23 47300166 K 4,7,3,L8C+2
3962 01 00E24 ABC76543 A DATA X'ABC76543'
3963 01 00E25 ABC76543 A DATA X'ABC76543'
3964 01 00E26 54389A43 A DATA X'54389A43'
3965 01 00E27 54389A43 A DATA X'54389A43'
3966 01 00E28 FFFFFFFF A CB07 DATA -8 CB BYTE 2
3967 01 00E29 71CE0460 CB,12 MEMORY,7
3968 01 00E2A 77300136 K 7,7,3,SETPSW
3969 01 00E2B 17300166 K 1,7,3,L8C+2
3970 01 00E2C 00000059 A DATA X'59'
3971 01 00E2D 00000059 A DATA X'59'
3972 01 00E2E 58A65754 A DATA X'58A65754'
3973 01 00E2F 58A65754 A DATA X'58A65754'

```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 113

3974	01	00E30	FFFFFFFF8 A	CB08	DATA	-8	CB	BYTE 0
3975	01	00E31	71C00460		CB,12	MEMORY		
3976	01	00E32	77300136		K	7,7,3,SETPSW		
3977	01	00E33	27300166		K	2,7,3,L8C+2		
3978	01	00E34	FFFFFFFFBC A		DATA	X'FFFFFFFFBC'		
3979	01	00E35	FFFFFFFFBC A		DATA	X'FFFFFFFFBC'		
3980	01	00E36	43210567 A		DATA	X'43210567'		
3981	01	00E37	43210567 A		DATA	X'43210567'		
3982					PAGE			
3983				** SIGN	EXTEND '0'	C(R) > EW	LOGIC PRODUCT NEZ	
3984	01	00E38	FFFFFFFFA A	CI01	DATA	-6		
3985	01	00E39	21C7FFFD A		CI,12	X'7FFFD'		
3986	01	00E3A	07300136		K	0,7,3,SETPSW		
3987	01	00E3B	67300166		K	6,7,3,L8C+2		
3988	01	00E3C	0007FFFE A		DATA	X'7FFFE'		
3989	01	00E3D	0007FFFE A		DATA	X'7FFFE'		
3990				** SIGN	EXTEND '1'	C(R) < EW	LP = ZERO	
3991	01	00E3E	FFFFFFFFA A	CI02	DATA	-6		
3992	01	00E3F	21C80000 A		CI,12	X'80000'		
3993	01	00E40	F7300136		K	15,7,3,SETPSW		
3994	01	00E41	A7300166		K	10,7,3,L8C+2		
3995	01	00E42	0007FFFF A		DATA	X'7FFFF'		
3996	01	00E43	0007FFFF A		DATA	X'7FFFF'		
3997					PAGE			
3998	01	00E44	FFFFFFFF4 A	CD01	DATA	-12	CD	
3999	01	00E45	11C00460		CD,12	MEMORY		
4000	01	00E46	F7300136		K	15,7,3,SETPSW		
4001	01	00E47	C7300166		K	12,7,3,L8C+2		
4002	01	00E48	12345678 A		DATA	X'12345678'		
4003	01	00E49	12345678 A		DATA	X'12345678'		
4004	01	00E4A	12345678 A		DATA	X'12345678'		
4005	01	00E4B	12345678 A		DATA	X'12345678'		
4006	01	00E4C	9ABCDEF0 A		DATA	X'9ABCDEF0'		
4007	01	00E4D	9ABCDEF0 A		DATA	X'9ABCDEF0'		
4008	01	00E4E	9ABCDEF0 A		DATA	X'9ABCDEF0'		
4009	01	00E4F	9ABCDEF0 A		DATA	X'9ABCDEF0'		
4010	01	00E50	FFFFFFFF4 A	CD02	DATA	-12	CD X	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 114

4011	01	00E51	11C35770		CD,12	MEMORY-X'ACF0',1		
4012	01	00E52	07300136		K	0,7,3,SETPSW		
4013	01	00E53	27300166		K	2,7,3,L8C+2		
4014	01	00E54	12345678 A		DATA	X'12345678'		
4015	01	00E55	12345678 A		DATA	X'12345678'		
4016	01	00E56	12345678 A		DATA	X'12345678'		
4017	01	00E57	12345678 A		DATA	X'12345678'		
4018	01	00E58	9ABCDEF1 A		DATA	X'9ABCDEF1'		
4019	01	00E59	9ABCDEF1 A		DATA	X'9ABCDEF1'		
4020	01	00E5A	9ABCDEF0 A		DATA	X'9ABCDEF0'		
4021	01	00E5B	9ABCDEF0 A		DATA	X'9ABCDEF0'		
4022					PAGE			
4023	01	00E5C	FFFFFFFF4 A	CD03	DATA	-12	CD *	
4024	01	00E5D	91C0045A		CD,12	+1A		
4025	01	00E5E	77300136		K	7,7,3,SETPSW		
4026	01	00E5F	57300166		K	5,7,3,L8C+2		
4027	01	00E60	76543210 A		DATA	X'76543210'		
4028	01	00E61	76543210 A		DATA	X'76543210'		
4029	01	00E62	76543210 A		DATA	X'76543210'		
4030	01	00E63	76543210 A		DATA	X'76543210'		
4031	01	00E64	FDECBA98 A		DATA	X'FDECBA98'		
4032	01	00E65	FDECBA98 A		DATA	X'FDECBA98'		
4033	01	00E66	FDECBA99 A		DATA	X'FDECBA99'		
4034	01	00E67	FDECBA99 A		DATA	X'FDECBA99'		
4035	01	00E68	FFFFFFFF4 A	CD04	DATA	-12	CD	
4036	01	00E69	11D00460		CD,13	MEMORY		
4037	01	00E6A	F7300136		K	15,7,3,SETPSW		
4038	01	00E6B	D7300166		K	13,7,3,L8C+2		
4039	01	00E6C	ADDEBCAD A		DATA	X'ADDEBCAD'		
4040	01	00E6D	ADDEBCAD A		DATA	X'ADDEBCAD'		
4041	01	00E6E	76543210 A		DATA	X'76543210'		
4042	01	00E6F	76543210 A		DATA	X'76543210'		
4043	01	00E70	76543210 A		DATA	X'76543210'		
4044	01	00E71	76543210 A		DATA	X'76543210'		
4045	01	00E72	76543211 A		DATA	X'76543211'		
4046	01	00E73	76543211 A		DATA	X'76543211'		
4047					PAGE			


```

4048          ** OPERANDS EQUAL
4049 01 00E74 FFFFFFFF A CS01 DATA -10
4050 01 00E75 45C00460 CS,12 MEMORY PH1: C(S)= EW+RUI = A5A5A5A5
4051 01 00E76 F7300136 K 15,7,3,SETPSW
4052 01 00E77 C7300166 K 12,7,3,LBC+2 PH3: C(S)= R+RUI = A5A5A5A5
4053 01 00E78 A5A5A5A5 A DATA X'A5A5A5A5'
4054 01 00E79 A5A5A5A5 A DATA X'A5A5A5A5' PH4: C(S)= PH3-PH1 = 00000000
4055 01 00E7A FFFFFFFF A DATA -1
4056 01 00E7B FFFFFFFF A DATA -1
4057 01 00E7C A5A5A5A5 A DATA X'A5A5A5A5'
4058 01 00E7D A5A5A5A5 A DATA X'A5A5A5A5'
4059          ** R < EW
4060 01 00E7E FFFFFFFF A CS02 DATA -10
4061 01 00E7F 45C00460 CS,12 MEMORY PH1: C(S)= EW+RUI = A5A5A5A5
4062 01 00E80 07300136 K 0,7,3,SETPSW
4063 01 00E81 17300166 K 1,7,3,LBC+2
4064 01 00E82 5A5A5A5A A DATA X'5A5A5A5A'
4065 01 00E83 5A5A5A5A A DATA X'5A5A5A5A' PH4: C(S)= PH3-PH1 = B4B4B4B5
4066 01 00E84 A5A5A5A5 A DATA X'A5A5A5A5'
4067 01 00E85 A5A5A5A5 A DATA X'A5A5A5A5'
4068 01 00E86 FFFFFFFF A DATA -1
4069 01 00E87 FFFFFFFF A DATA -1
4070          ** R > EW
4071 01 00E88 FFFFFFFF A CS03 DATA -10
4072 01 00E89 45C00460 CS,12 MEMORY PH1: C(S)= EW+RUI = 5A5A0000
4073 01 00E8A 07300136 K 0,7,3,SETPSW
4074 01 00E8B 27300166 K 2,7,3,LBC+2 PH3: C(S)= R+RUI = A5A50000
4075 01 00E8C A5A5A5A5 A DATA X'A5A5A5A5'
4076 01 00E8D A5A5A5A5 A DATA X'A5A5A5A5' PH4: C(S)= PH3-PH1 = 4B4B0000
4077 01 00E8E 5A5A5A5A A DATA X'5A5A5A5A'
4078 01 00E8F 5A5A5A5A A DATA X'5A5A5A5A'
4079 01 00E90 FFFF0000 A DATA X'FFF00000'
4080 01 00E91 FFFF0000 A DATA X'FFF00000'
4081          PAGE
4082          ** C(R) < EW+ C(RU1)=EW
4083 01 00E92 FFFFFFFF A CLR01 DATA -10
4084 01 00E93 39C00460 CLR,12 MEMORY

```

```

4085 01 00E94 F7300136 K 15,7,3,SETPSW
4086 01 00E95 47300166 K 4,7,3,LBC+2
4087 01 00E96 00000000 A DATA 0
4088 01 00E97 00000000 A DATA 0
4089 01 00E98 00000000 A DATA 0
4090 01 00E99 00000000 A DATA 0
4091 01 00E9A FFFFFFFF A DATA -1
4092 01 00E9B FFFFFFFF A DATA -1
4093          ** C(R)=EW+ C(RU1) < EW
4094 01 00E9C FFFFFFFF A CLR02 DATA -6
4095 01 00E9D 39C00460 CLR,12 MEMORY
4096 01 00E9E F7300136 K 15,7,3,SETPSW
4097 01 00E9F 17300166 K 1,7,3,LBC+2
4098 01 00FA0 FFFFFFFF A DATA -1
4099 01 00EA1 FFFFFFFF A DATA -1
4100          ** C(R) > EW+ C(RU1) < EW+
4101 01 00EA2 FFFFFFFF A CLR03 DATA -10
4102 01 00EA3 39C00460 CLR,12 MEMORY
4103 01 00EA4 07300136 K 0,7,3,SETPSW
4104 01 00EA5 67300166 K 6,7,3,LBC+2
4105 01 00EA6 00000001 A DATA 1
4106 01 00EA7 00000001 A DATA 1
4107 01 00EA8 00000000 A DATA 0
4108 01 00EA9 00000000 A DATA 0
4109 01 00EAA FFFFFFFF A DATA -1
4110 01 00EAB FFFFFFFF A DATA -1
4111          PAGE
4112          ** C(R) < EW+ C(RU1) > EW+
4113 01 00EAC FFFFFFFF A CLR04 DATA -10
4114 01 00EAD 39C00460 CLR,12 MEMORY
4115 01 00EAE 07300136 K 0,7,3,SETPSW
4116 01 00EAF 97300166 K 9,7,3,LBC+2
4117 01 00EB0 FFFFFFFF A DATA -1
4118 01 00EB1 FFFFFFFF A DATA -1
4119 01 00EB2 00000000 A DATA 0
4120 01 00EB3 00000000 A DATA 0
4121 01 00EB4 00000001 A DATA 1

```

```

4122 01 00E85 00000001 A DATA 1
4123 01 00E85 00000001 A ** USE ODD R FIELD. C(R)=C(RU1)>EW.
4124 01 00E86 FFFFFFFF A CLRO5 DATA -10
4125 01 00E87 39D00460 CLR#13 MEMORY
4126 01 00E88 07300136 K 0,7,3,SETPSW
4127 01 00E89 A7300166 K 10,7,3,LBC+2
4128 01 00E8A FFFFFFFF A DATA -1
4129 01 00E8B FFFFFFFF A DATA -1
4130 01 00E8C 00000000 A DATA 0
4131 01 00E8D 00000000 A DATA 0
4132 01 00E8E 00000001 A DATA 1
4133 01 00E8F 00000001 A DATA 1
4134 PAGE
4135 ** R > M+1. R < M
4136 01 00EC0 FFFFFFFF A CLM01 DATA -12
4137 01 00EC1 19C00460 CLM#12 MEMORY
4138 01 00EC2 07300136 K 0,7,3,SETPSW
4139 01 00EC3 97300166 K 9,7,3,LBC+2
4140 01 00EC4 00000000 A DATA 0
4141 01 00EC5 00000000 A DATA 0
4142 01 00EC6 00000001 A DATA 1
4143 01 00EC7 00000001 A DATA 1
4144 01 00EC8 FFFFFFFF A DATA -1
4145 01 00EC9 FFFFFFFF A DATA -1
4146 01 00ECA FFFFFFFF A DATA -1
4147 01 00ECB FFFFFFFF A DATA -1
4148 ** USE ODD MEMORY LBC. SHOULD STILL FETCH EVEN LBC AND ODD LBC
4149 ** R < M+1. R > M
4150 01 00ECC FFFFFFFF A CLM02 DATA -12
4151 01 00ECD 19D00461 CLM#13 MEMORY+1
4152 01 00ECE 97300136 K 9,7,3,SETPSW
4153 01 00ECF 67300166 K 6,7,3,LBC+2
4154 01 00ED0 FFFFFFFF A DATA -1
4155 01 00ED1 FFFFFFFF A DATA -1
4156 01 00ED2 FFFFFFFF A DATA -1
4157 01 00ED3 FFFFFFFF A DATA -1
4158 01 00ED4 00000000 A DATA 0
    
```

```

4159 01 00ED5 00000000 A DATA 0
4160 01 00ED6 00000001 A DATA 1
4161 01 00ED7 00000001 A DATA 1
4162 PAGE
4163 ** CHECK OVERFLOW NB TRAP
4164 01 00ED8 FFFFFFFF A MTHW01 DATA -6 MTW
4165 01 00ED9 33F0000C A MTHW#15 12
4166 01 00EDA 072001C2 K 0,7,2,FXP8SW
4167 01 00EDB E7200166 K 14,7,2,LBC+2
4168 01 00EDC 80000000 A DATA X'80000000'
4169 01 00EDD 7FFFFFFF A DATA X'7FFFFFFF'
4170 01 00EDE FFFFFFFF A MTHW02 DATA -6 MTW
4171 01 00EDF 3300000C A MTHW#0 12
4172 01 00EE0 07300136 K 0,7,3,SETPSW
4173 01 00EE1 17300166 K 1,7,3,LBC+2
4174 01 00EE2 80000000 A DATA X'80000000'
4175 01 00EE3 80000000 A DATA X'80000000'
4176 01 00EE4 FFFFFFFF A MTHW03 DATA -8 MTW X
4177 01 00EE5 33D211EA MTHW#13 MEMORY-X'1F276',1
4178 01 00EE6 77300136 K 7,7,3,SETPSW
4179 01 00EE7 87300166 K 8,7,3,LBC+2
4180 01 00EE8 0001F276 A DATA X'1F276'
4181 01 00EE9 0001F276 A DATA X'1F276'
4182 01 00EEA 00000003 A DATA 3
4183 01 00EEB 00000000 A DATA 0
4184 PAGE
4185 ** CHECK OVERFLOW TRAP
4186 01 00EEC FFFFFFFF A MTHW04 DATA -8 MTW *
4187 01 00EED B310045A MTHW#1 +1A
4188 01 00EEE 073001C2 K 0,7,3,FXP8SW
4189 01 00EEF 57300084 K 5,7,3,FPBRET+1
4190 01 00EF0 00000000 A DATA 0
4191 01 00EF1 00000000 A DATA 0
4192 01 00EF2 7FFFFFFF A DATA X'7FFFFFFF'
4193 01 00EF3 80000000 A DATA X'80000000'
4194 01 00EF4 FFFFFFFF A MTHW05 DATA -8 MTW
4195 01 00EF5 33700460 MTHW#7 MEMORY
    
```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 119

4196	01	00EF6	F7300136		K	15,7,3,SETPSW		
4197	01	00EF7	17300166		K	1,7,3,LBC+2		
4198	01	00EF8	FFFFFFFF A		DATA	-1		
4199	01	00EF9	FFFFFFFF A		DATA	-1		
4200	01	00EFA	FFFFFFFF A		DATA	X'FFFFFFFF'		
4201	01	00EFB	FFFFFFFF A		DATA	-1		
4202					PAGE			
4203	01	00EFC	FFFFFFFF A	MTH01	DATA	-6	MTH	
4204	01	00EFD	5300000C A		MTH,0	12		
4205	01	00EFE	07300136		K	0,7,3,SETPSW		
4206	01	00EFF	27300166		K	2,7,3,LBC+2		
4207	01	00F00	00010000 A		DATA	X'10000'		
4208	01	00F01	00010000 A		DATA	X'10000'		
4209	01	00F02	FFFFFFFF A	MTH02	DATA	-8	MTH X	
4210	01	00F03	5323C01C		MTH,2	MEMORY-X'4444',1		
4211	01	00F04	77300136		K	7,7,3,SETPSW		
4212	01	00F05	87300166		K	8,7,3,LBC+2		
4213	01	00F06	00008889 A		DATA	X'8889'		
4214	01	00F07	00008889 A		DATA	X'8889'		
4215	01	00F08	7FFFFFFE A		DATA	X'7FFFFFFE'		
4216	01	00F09	7FFF0000 A		DATA	X'7FFF0000'		
4217				** CHECK	OVERFLOW	NO TRAP		
4218	01	00FOA	FFFFFFFF A	MTH03	DATA	-8	MTH *	
4219	01	00F0B	D3E2045A		MTH,14	*IA,1		
4220	01	00F0C	172001C2		K	1,7,2,FXP8SW		
4221	01	00F0D	E7200166		K	14,7,2,LBC+2		
4222	01	00F0E	00000001 A		DATA	1		
4223	01	00F0F	00000001 A		DATA	1		
4224	01	00F10	FFFF8000 A		DATA	X'FFFF8000'		
4225	01	00F11	FFFF7FFE A		DATA	X'FFFF7FFE'		
4226				** CHECK	OVERFLOW	TRAP		
4227	01	00F12	FFFFFFFF A	MTH04	DATA	-8	MTH X	
4228	01	00F13	53320460		MTH,3	MEMORY,1		
4229	01	00F14	273001C2		K	2,7,3,FXP8SW		
4230	01	00F15	57300084		K	5,7,3,FP8RET+1		
4231	01	00F16	00000001 A		DATA	1		
4232	01	00F17	00000001 A		DATA	1		

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 120

4233	01	00F18	7FFF7FFF A		DATA	X'7FFF7FFF'		
4234	01	00F19	7FFF8002 A		DATA	X'7FFF8002'		
4235					PAGE			
4236	01	00F1A	FFFFFFFF A	MTH05	DATA	-8	MTH X(X=0)	
4237	01	00F1B	53920460		MTH,9	MEMORY,1		
4238	01	00F1C	F7300136		K	15,7,3,SETPSW		
4239	01	00F1D	97300166		K	9,7,3,LBC+2		
4240	01	00F1E	00000000 A		DATA	0		
4241	01	00F1F	00000000 A		DATA	0		
4242	01	00F20	FFF979AB A		DATA	X'FFF979AB'		
4243	01	00F21	FFF279AB A		DATA	X'FFF279AB'		
4244					PAGE			
4245	01	00F22	FFFFFFFF A	MTB01	DATA	-8	MTB	BYTE 0
4246	01	00F23	73000460		MTB,0	MEMORY		
4247	01	00F24	F7300136		K	15,7,3,SETPSW		
4248	01	00F25	07300166		K	0,7,3,LBC+2		
4249	01	00F26	00000000 A		DATA	0		
4250	01	00F27	00000000 A		DATA	0		
4251	01	00F28	00FFFFFF A		DATA	X'FFFFFF'		
4252	01	00F29	00FFFFFF A		DATA	X'FFFFFF'		
4253	01	00F2A	FFFFFFFF A	MTB02	DATA	-8	MTB X	BYTE 1
4254	01	00F2B	73C20460		MTB,12	MEMORY,1		
4255	01	00F2C	F7300136		K	15,7,3,SETPSW		
4256	01	00F2D	A7300166		K	10,7,3,LBC+2		
4257	01	00F2E	00000001 A		DATA	1		
4258	01	00F2F	00000001 A		DATA	1		
4259	01	00F30	F0F5F300 A		DATA	X'F0F5F300'		
4260	01	00F31	F0F1F300 A		DATA	X'F0F1F300'		
4261	01	00F32	FFFFFFFF A	MTB03	DATA	-8	MTB *X	BYTE 2
4262	01	00F33	F342045A		MTB,4	*IA,1		
4263	01	00F34	07300136		K	0,7,3,SETPSW		
4264	01	00F35	A7300166		K	10,7,3,LBC+2		
4265	01	00F36	00000002 A		DATA	2		
4266	01	00F37	00000002 A		DATA	2		
4267	01	00F38	F0F9FF03 A		DATA	X'F0F9FF03'		
4268	01	00F39	F0F90303 A		DATA	X'F0F90303'		
4269	01	00F3A	FFFFFFFF A	MTB04	DATA	-8	MTH X	BYTE 3

SIGMA 5 CPU DIAGNOSTIC-AUTB 704287-51C00			MARCH 12, 1969		121
4270	01	00F3B	73820460	MTB,11	MEMORY,1
4271	01	00F3C	77300136	K	7,7,3,SETPSW
4272	01	00F3D	87300166	K	8,7,3,L8C+2
4273	01	00F3E	00000003 A	DATA	3
4274	01	00F3F	00000003 A	DATA	3
4275	01	00F40	FFFFFF05 A	DATA	X'FFFFFF05'
4276	01	00F41	FFFFFF00 A	DATA	-256
4277				PAGE	
4278	01	00F42	FFFFFFFA A	MTB05	DATA -6
4279	01	00F43	738E000C A	MTB,8	DATA 12,7
4280	01	00F44	77300136	K	7,7,3,SETPSW
4281	01	00F45	87300166	K	8,7,3,L8C+2
4282	01	00F46	FF08FFFF A	DATA	X'FF08FFFF'
4283	01	00F47	FF00FFFF A	DATA	X'FF00FFFF'
4284	01	00F48	FFFFFFFA A	MTB06	DATA -6
4285	01	00F49	7352014C A	MTB,5	DATA 12-X'1FE0',1
4286	01	00F4A	07300136	K	0,7,3,SETPSW
4287	01	00F4B	87300166	K	8,7,3,L8C+2
4288	01	00F4C	FFFFFF802 A	DATA	X'FFFFFF802'
4289	01	00F4D	FFFF0002 A	DATA	X'FFFF0002'
4290	01	00F4E	FFFFFFFA A	MTB07	DATA -6
4291	01	00F4F	73A0000C A	MTB,10	DATA 12
4292	01	00F50	37300136	K	3,7,3,SETPSW
4293	01	00F51	87300166	K	8,7,3,L8C+2
4294	01	00F52	06123457 A	DATA	X'6123457'
4295	01	00F53	00123457 A	DATA	X'123457'
4296	01	00F54	FFFFFFFA A	MTB08	DATA -6
4297	01	00F55	7360000C A	MTB,6	DATA 12
4298	01	00F56	57300136	K	5,7,3,SETPSW
4299	01	00F57	27300166	K	2,7,3,L8C+2
4300	01	00F58	00000000 A	DATA	0
4301	01	00F59	06000000 A	DATA	X'6000000'
4302				PAGE	
4303	01	00F5A	FFFFFFF8 A	AH01	DATA -8
4304	01	00F5B	50C00460	AH,12	MEMORY
4305	01	00F5C	673001C2	K	6,7,3,FXP8SW
4306	01	00F5D	97300166	K	9,7,3,L8C+2

SIGMA 5 CPU DIAGNOSTIC-AUTB 704287-51C00			MARCH 12, 1969		122
4307	01	00F5E	FFFF7654 A	DATA	X'FFFF7654'
4308	01	00F5F	FFFFFFF7 A	DATA	X'FFFFFFF7'
4309	01	00F60	89A30000 A	DATA	X'89A30000'
4310	01	00F61	89A30000 A	DATA	X'89A30000'
4311	01	00F62	FFFFFFF8 A	AH02	DATA -8
4312	01	00F63	50CE0460	AH,12	MEMORY,7
4313	01	00F64	573001C2	K	5,7,3,FXP8SW
4314	01	00F65	27300166	K	2,7,3,L8C+2
4315	01	00F66	7FFFDCBB A	DATA	X'7FFFDCBB'
4316	01	00F67	7FFFFFFF A	DATA	X'7FFFFFFF'
4317	01	00F68	23452344 A	DATA	X'23452344'
4318	01	00F69	23452344 A	DATA	X'23452344'
4319	01	00F6A	FFFFFFF8 A	AH03	DATA -8
4320	01	00F6B	00CE045A	AH,12	*1A,7
4321	01	00F6C	072001C2	K	0,7,2,FXP8SW
4322	01	00F6D	E7200166	K	14,7,2,L8C+2
4323	01	00F6E	80000000 A	DATA	X'80000000'
4324	01	00F6F	7FFFFFFF A	DATA	X'7FFFFFFF'
4325	01	00F70	7FFFFFFF A	DATA	X'7FFFFFFF'
4326	01	00F71	7FFFFFFF A	DATA	X'7FFFFFFF'
4327	01	00F72	FFFFFFFA A	AH04	DATA -6
4328	01	00F73	50C0000C A	AH,12	DATA 12
4329	01	00F74	273001C2	K	2,7,3,FXP8SW
4330	01	00F75	57300084	K	5,7,3,FP8RET+1
4331	01	00F76	7FFF8001 A	DATA	X'7FFF8001'
4332	01	00F77	80000000 A	DATA	X'80000000'
4333				PAGE	
4334	01	00F78	FFFFFFFA A	A101	DATA -6
4335	01	00F79	20C70000 A	A1,12	DATA X'70000'
4336	01	00F7A	773001C2	K	7,7,3,FXP8SW
4337	01	00F7B	17300166	K	1,7,3,L8C+2
4338	01	00F7C	80000000 A	DATA	X'80000000'
4339	01	00F7D	80070000 A	DATA	X'80070000'
4340	01	00F7E	FFFFFFFA A	A102	DATA -6
4341	01	00F7F	20C80000 A	A1,12	DATA X'80000'
4342	01	00F80	173001C2	K	1,7,3,FXP8SW
4343	01	00F81	E7300084	K	14,7,3,FP8RET+1

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00				MARCH 12, 1969		123
4344	01	00F82	80000000 A	DATA	X'80000000'	
4345	01	00F83	7FF80000 A	DATA	X'7FF80000'	
4346	01	00F84	FFFFFFFC A	AI03	-4	AI *
4347	01	00F85	A0C0045A	AI,12	+1A	
4348	01	00F86	173001B7	K	1,7,3,R19NA6	
4349	01	00F87	97300063	K	9,7,3,NABRET+1	
4350				PAGE		
4351	01	00F88	FFFFFFF4 A	AD01	-12	AD
4352	01	00F89	10C00460	AD,12	MEMORY	
4353	01	00F8A	773001C2	K	7,7,3,FXP8SW	
4354	01	00F8B	87300166	K	8,7,3,L8C+2	
4355	01	00F8C	FFFFFFF4 A	DATA	-1	
4356	01	00F8D	00000000 A	DATA	0	
4357	01	00F8E	00000000 A	DATA	0	
4358	01	00F8F	00000000 A	DATA	0	
4359	01	00F90	FFFFFFF4 A	DATA	-1	
4360	01	00F91	00000000 A	DATA	0	
4361	01	00F92	00000001 A	DATA	1	
4362	01	00F93	00000001 A	DATA	1	
4363	01	00F94	FFFFFFF4 A	AD02	-12	AD X 8F TRAP
4364	01	00F95	10C20462	AD,12	MEMORY+2,1	
4365	01	00F96	273001C2	K	2,7,3,FXP8SW	
4366	01	00F97	57300084	K	5,7,3,FPBRET+1	
4367	01	00F98	7FFFFFFF A	DATA	X'7FFFFFFF'	
4368	01	00F99	80000000 A	DATA	X'80000000'	
4369	01	00F9A	00000000 A	DATA	0	
4370	01	00F9B	00000000 A	DATA	0	
4371	01	00F9C	FFFFFFF4 A	DATA	-1	
4372	01	00F9D	00000000 A	DATA	0	
4373	01	00F9E	00000001 A	DATA	1	
4374	01	00F9F	00000001 A	DATA	1	
4375				PAGE		
4376	01	00FA0	FFFFFFF4 A	AD03	-12	AD * 8F NTRAP
4377	01	00FA1	90C0045A	AD,12	+1A	
4378	01	00FA2	172001C2	K	1,7,2,FXP8SW	
4379	01	00FA3	E7200166	K	14,7,2,L8C+2	
4380	01	00FA4	87654321 A	DATA	X'87654321'	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00				MARCH 12, 1969		124	
4381	01	00FA5	7FFFFFFF A	DATA	X'7FFFFFFF'		
4382	01	00FA6	F89ABCDE A	DATA	X'F89ABCDE'		
4383	01	00FA7	F89ABCDE A	DATA	X'F89ABCDE'		
4384	01	00FA8	0FEDCBA9 A	DATA	X'0FEDCBA9'		
4385	01	00FA9	FFFFFFF4 A	DATA	-1		
4386	01	00FAA	F0123456 A	DATA	X'F0123456'		
4387	01	00FAB	F0123456 A	DATA	X'F0123456'		
4388				PAGE			
4389	01	00FAC	FFFFFFF4 A	AD04	-12	AD MB TRAP	
4390	01	00FAD	10C00461	AD,12	MEMORY+1		
4391	01	00FAE	F73001C2	K	15,7,3,FXP8SW		
4392	01	00FAF	17300166	K	1,7,3,L8C+2		
4393	01	00FB0	83759624 A	DATA	X'83759624'		
4394	01	00FB1	F5D02CDA A	DATA	X'F5D02CDA'		
4395	01	00FB2	725A96B5 A	DATA	X'725A96B5'		
4396	01	00FB3	725A96B5 A	DATA	X'725A96B5'		
4397	01	00FB4	F65219AC A	DATA	X'F65219AC'		
4398	01	00FB5	2FA47D20 A	DATA	X'2FA47D20'		
4399	01	00FB6	39526374 A	DATA	X'39526374'		
4400	01	00FB7	39526374 A	DATA	X'39526374'		
4401				** CHECK	THAT BVERFLW OF LSW DOES NOT CAUSE AN OVRFLW		
4402	01	00FB8	FFFFFFF4 A	AD05	-12		
4403	01	00FB9	10C00460	AD,12	MEMORY		
4404	01	00FBA	07300136	K	0,7,3,SETPSW		
4405	01	00FBB	27300166	K	2,7,3,L8C+2		
4406	01	00FBC	00000000 A	DATA	0,0,0,0,X'40000000',X'80000000'		
				01	00FBD	00000000 A	
				01	00FBE	00000000 A	
				01	00FBF	00000000 A	
				01	00FC0	40000000 A	
				01	00FC1	80000000 A	
4407	01	00FC2	40000000 A	DATA	X'40000000',X'40000000'		
				01	00FC3	40000000 A	
4408				PAGE			
4409				** CHECK	K15= PR16-31.K31, K19= PR20-31.K31, <23>PR24-31.<31		
4410				** K27 =	PR2831.<K31		
4411	01	00FC4	FFFFFFF4 A	AD06	-12		

```

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12,1969 125
 4412 01 00FC5 10C00460 AD,12 MEMORY
 4413 01 00FC6 07300136 K 0,7,3,SETPSW
 4414 01 00FC7 27300166 K 2,7,3,L8C+2
 4415 01 00FC8 00000000 A DATA 0,X'10000',X'FFFF',X'FFFF'
      01 00FC9 00010000 A
      01 00FCA 0000FFFF A
      01 00FCB 0000FFFF A
 4416 01 00FCC 80000000 A DATA X'80000000',0,X'80000000',X'80000000'
      01 00FCD 00000000 A
      01 00FCE 80000000 A
      01 00FCF 80000000 A
 4417
 4418
 4419
 4420 01 00FD0 FFFFFFFF A
 4421 01 00FD1 66C00460
 4422 01 00FD2 273001C2
 4423 01 00FD3 57300084
 4424 01 00FD4 2375694B A
 4425 01 00FD5 2375694B A
 4426 01 00FD6 7235641C A
 4427 01 00FD7 95AACD67 A
 4428 01 00FD8 FFFFFFFF A
 4429 01 00FD9 66C26DEB
 4430 01 00FDA F73001C2
 4431 01 00FD3 A7300166
 4432 01 00FDC F3219675 A
 4433 01 00FDD F3219675 A
 4434 01 00FDE 691ABCDE A
 4435 01 00FDF 5C3C5353 A
 4436 01 00FE0 FFFFFFFF A
 4437 01 00FE1 E6C0045A
 4438 01 00FE2 773001C2
 4439 01 00FE3 87300166
 4440 01 00FE4 00000007 A
 4441 01 00FE5 00000007 A
 4442 01 00FE6 FFFFFFFF A

PAGE
** CHECK THAT AWM GENERATES PROBE OVER TO CHECK FOR OVERFLOW AND CAUSE
** A TRAP
AWM01 DATA -8 AWM OF TRAP
AWM,12 MEMORY
K 2,7,3,FXP8SW
K 5,7,3,FPBRET+1
DATA X'2375694B'
DATA X'2375694B'
DATA X'7235641C'
DATA X'95AACD67'
AWM02 DATA -8 AWM X
AWM,12 MEMORY=X'19675',1
K 15,7,3,FXP8SW
K 10,7,3,L8C+2
DATA X'F3219675'
DATA X'F3219675'
DATA X'691ABCDE'
DATA X'5C3C5353'
AWM03 DATA -8 AWM *
AWM,12 *IA
K 7,7,3,FXP8SW
K 8,7,3,L8C+2
DATA 7
DATA 7
DATA -7

```

```

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12,1969 126
 4443 01 00FE7 00000000 A
 4444
 4445
 4446 01 00FE8 FFFFFFFF A
 4447 01 00FE9 E6CE045A
 4448 01 00FEA F0000136
 4449 01 00FEB 20000166
 4450 01 00FEC 00000007 A
      01 00FED 00000007 A
      01 00FEE 00000460
      01 00FEF 00000460
      01 00FF0 FFFFFFFF A
      01 00FF1 FFFFFFFF A
      01 00FF2 00000001 A
      01 00FF3 00000008 A
 4451
 4452 01 00FF4 FFFFFFFF A SH01 PAGE
      DATA -8 SH 3F NTRAP
 4453 01 00FF5 58C00460 SH,12 MEMORY
 4454 01 00FF6 072001C2 K 0,7,2,FXP8SW
 4455 01 00FF7 E7200166 K 14,7,2,L8C+2
 4456 01 00FF8 80003946 A DATA X'80003946'
 4457 01 00FF9 7FFFFFFF A DATA X'7FFFFFFF'
 4458 01 00FFA 3947F261 A DATA X'3947F261'
 4459 01 00FFB 3947F261 A DATA X'3947F261'
 4460 01 00FFC FFFFFFFF A SH02 DATA -8 SH X 0F TRAP
 4461 01 00FFD 58CE0460 SH,12 MEMORY,7
 4462 01 00FFE 773001C2 K 7,7,3,FXP8SW
 4463 01 00FFF 57300084 K 5,7,3,FPBRET+1
 4464 01 01000 7FFF8375 A DATA X'7FFF8375'
 4465 01 01001 80002834 A DATA X'80002834'
 4466 01 01002 7FFF8841 A DATA X'7FFF8841'
 4467 01 01003 7FFF8841 A DATA X'7FFF8841'
 4468 01 01004 FFFFFFFF A SH03 DATA -8 SH *X
 4469 01 01005 D8CE045A SH,12 *IA,7
 4470 01 01006 07300136 K 0,7,3,SETPSW
 4471 01 01007 87300166 K 8,7,3,L8C+2
 4472 01 01008 00000000 A DATA 0

```

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12,1969 127

4473	01	01009	00000000 A		DATA	0			
4474	01	0100A	FFFF0000 A		DATA	X'FFFF0000'			
4475	01	0100B	FFFF0000 A		DATA	X'FFFF0000'			
4476					PAGE				
4477	01	0100C	FFFFFFF4 A	SD01	DATA	-12		SD	
4478	01	0100D	18C00460		SD,12	MEMORY			
4479	01	0100E	07300136		K	0,7,3,SETPSW			
4480	01	0100F	17300166		K	1,7,3,L8C+2			
4481	01	01010	37562981 A		DATA	X'37562981'			
4482	01	01011	FFFFFFF4 A		DATA	-1			
4483	01	01012	37562981 A		DATA	X'37562981'			
4484	01	01013	37562981 A		DATA	X'37562981'			
4485	01	01014	854BA76C A		DATA	X'854BA76C'			
4486	01	01015	FFFFFFF4 A		DATA	-1			
4487	01	01016	854BA76D A		DATA	X'854BA76D'			
4488	01	01017	854BA76D A		DATA	X'854BA76D'			
4489	01	01018	FFFFFFF4 A	SD02	DATA	-12		SD	9F TRAP
4490	01	01019	98C0045A		SD,12	*1A			
4491	01	0101A	173001C2		K	1,7,3,FXP8SW			
4492	01	0101B	E7300084		K	14,7,3,FP8RET+1			
4493	01	0101C	80000000 A		DATA	X'80000000'			
4494	01	0101D	7FFFFFFF A		DATA	X'7FFFFFFF'			
4495	01	0101E	00000000 A		DATA	0			
4496	01	0101F	00000000 A		DATA	0			
4497	01	01020	00000000 A		DATA	0			
4498	01	01021	FFFFFFF4 A		DATA	-1			
4499	01	01022	00000001 A		DATA	1			
4500	01	01023	00000001 A		DATA	1			
4501					PAGE				
4502	01	01024	FFFFFFF4 A	SD03	DATA	-12		SD	X
4503	01	01025	18C35770		SD,12	MEMORY-X'ACFO',1			
4504	01	01026	573001C2		K	5,7,3,FXP8SW			
4505	01	01027	A7300166		K	10,7,3,L8C+2			
4506	01	01028	12345678 A		DATA	X'12345678'			
4507	01	01029	00000000 A		DATA	0			
4508	01	0102A	12345678 A		DATA	X'12345678'			
4509	01	0102B	12345678 A		DATA	X'12345678'			

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12,1969 128

4510	01	0102C	9ABCDEF1 A		DATA	X'9ABCDEF1'			
4511	01	0102D	00000001 A		DATA	1			
4512	01	0102E	9ABCDEF0 A		DATA	X'9ABCDEF0'			
4513	01	0102F	9ABCDEF0 A		DATA	X'9ABCDEF0'			
4514	01	01030	FFFFFFF4 A	SD04	DATA	-12		SD	MB 9F TRAP
4515	01	01031	18C00461		SD,12	MEMORY+1			
4516	01	01032	F73001C2		K	15,7,3,FXP8SW			
4517	01	01033	57300084		K	5,7,3,FP8RET+1			
4518	01	01034	798436AB A		DATA	X'798436AB'			
4519	01	01035	F54ABF33 A		DATA	X'F54ABF33'			
4520	01	01036	84397777 A		DATA	X'84397777'			
4521	01	01037	84397777 A		DATA	X'84397777'			
4522	01	01038	E319C566 A		DATA	X'E319C566'			
4523	01	01039	EC87B211 A		DATA	X'EC87B211'			
4524	01	0103A	F6921355 A		DATA	X'F6921355'			
4525	01	0103B	F6921355 A		DATA	X'F6921355'			
4526					PAGE				
4527					** LOGICAL SHIFT LEFT 8F 31. CHECKS THAT ALL SET AND RESET INPUTS				
4528					** EXCEPTING BIT 0 AND 31 WORK PROPERLY				
4529	01	0103C	FFFFFFF6 A	S001	DATA	-10			
4530	01	0103D	25C0001F A		S,12	31			
4531	01	0103E	F7300136		K	15,7,3,SETPSW			
4532	01	0103F	77300166		K	7,7,3,L8C+2			
4533	01	01040	00000001 A		DATA	1,X'80000000',-1,-1,-1,-1			
		01 01041	80000000 A						
		01 01042	FFFFFFF4 A						
		01 01043	FFFFFFF4 A						
		01 01044	FFFFFFF4 A						
		01 01045	FFFFFFF4 A						
4534					** ARITH SHIFT LEFT. VERIFIES BIT 0 AND EVEN PARITY. SHIFT 9F 8				
4535	01	01046	FFFFFFF6 A	S002	DATA	-10			
4536	01	01047	25C00408 A		S,12	X'408'			
4537	01	01048	80000136		K	8,0,0,SETPSW			
4538	01	01049	40000166		K	4,0,0,L8C+2			
4539	01	0104A	C3A53C5A A		DATA	X'C3A53C5A',X'A53C5A00',0,0,-1,-1			
		01 0104B	A53C5A00 A						
		01 0104C	00000000 A						

```

01 0104D 00000000 A
01 0104E FFFFFFFF A
01 0104F FFFFFFFF A
4540
4541 01 01050 FFFFFFFF A
4542 01 01051 25C00121 A
4543 01 01052 C0000136
4544 01 01053 00000166
4545 01 01054 00000000 A
01 01055 00000002 A
01 01056 FFFFFFFF A
01 01057 FFFFFFFF A
01 01058 00000001 A
01 01059 00000000 A

4546
4547
4548 01 0105A FFFFFFFF A
4549 01 0105B 25C0010C A
4550 01 0105C 07300136
4551 01 0105D C7300166
4552 01 0105E 85C35A3C A
01 0105F 35A3C3CA A
01 01060 00000000 A
01 01061 00000000 A
01 01062 3CA5C35A A
01 01063 5C35A000 A

4553
4554 01 01064 FFFFFFFF A
4555 01 01065 25C00210 A
4556 01 01066 00000136
4557 01 01067 40000166
4558 01 01068 3CA5C35A A
01 01069 C35A3CA5 A
01 0106A 00000000 A
01 0106B 00000000 A
01 0106C 0000FFFF A
01 0106D 0000FFFF A

** LOGICAL SHIFT LEFT DOUBLE. CHECK B REG INPUTS. SHIFT OF 33 BITS
S003 DATA -10
S,12 X'121'
K 12,0,0,SETPSW
K 0,0,0,LBC+2
DATA 0,2,-1,-1,1,0

PAGE
** LOGICAL SHIFT LEFT DOUBLE. PARITY ODD. SHIFT OF 12 BITS
S004 DATA -10
S,12 X'10C'
K 0,7,3,SETPSW
K 12,7,3,LBC+2
DATA X'85C35A3C',X'35A3C3CA',0,0,X'3CA5C35A',X'5C35A000'

** CYCLICAL SHIFT LEFT SINGLE. SHIFT 16 BITS
S005 DATA -10
S,12 X'210'
K 0,0,0,SETPSW
K 4,0,0,LBC+2
DATA X'3CA5C35A',X'35A3C3CA',0,0,X'FFFF',X'FFFF'

```

```

4559
4560 01 0106E FFFFFFFF A
4561 01 0106F 25D00210 A
4562 01 01070 00000136
4563 01 01071 40000166
4564 01 01072 A5A5C3C3 A
01 01073 A5A5C3C3 A
01 01074 FFFFFFFF A
01 01075 FFFFFFFF A
01 01076 C53AA3C5 A
01 01077 A3C5C53A A

4565
4566
4567 01 01078 FFFFFFFF A
4568 01 01079 25C00320 A
4569 01 0107A F7300136
4570 01 0107B 77300166
4571 01 0107C EDB77BDE A
01 0107D A53C5AC3 A
01 0107E 00000000 A
01 0107F 00000000 A
01 01080 A53C5AC3 A
01 01081 EDB77BDE A

4572
4573
4574 01 01082 FFFFFFFF A
4575 01 01083 25C0033F A
4576 01 01084 07300136
4577 01 01085 47300166
4578 01 01086 5A5A5A5A A
01 01087 2D2D2D2D A
01 01088 00000000 A
01 01089 00000000 A
01 0108A 5A5A5A5A A
01 0108B 2D2D2D2D A

4579
4580

** CYCLICAL SHIFT LEFT SINGLE. ODD REGISTER. SHIFT 16 BITS
S006 DATA -10
S,13 X'210'
K 0,0,0,SETPSW
K 4,0,0,LBC+2
DATA X'A5A5C3C3',X'A5A5C3C3',-1,-1,X'C53AA3C5',X'A3C5C53A'

PAGE
** CYCLICAL LEFT SHIFT DOUBLE. SWAP R WITH RJ1 (32 BIT SHIFT)
S007 DATA -10
S,12 X'320'
K 15,7,3,SETPSW
K 7,7,3,LBC+2
DATA X'EDB77BDE',X'A53C5AC3',0,0,X'A53C5AC3',X'EDB77BDE'

** CYCLICAL LEFT SHIFT DOUBLE. SHIFT OF MAX COUNT (EQUIVALENT TO SHIFT
** RIGHT CYCLICAL BY 1 BIT)
S008 DATA -10
S,12 X'33F'
K 0,7,3,SETPSW
K 4,7,3,LBC+2
DATA X'5A5A5A5A',X'2D2D2D2D',0,0,X'5A5A5A5A',X'2D2D2D2D'

PAGE
** LOGICAL SHIFT RIGHT. ODD REGISTER. TEST SET OF ODD BITS. SHIFT OF 31

```



```

SIGMA 5 CPU DIAGNOSTIC-AUTB 704287-51C00 MARCH 12,1969 131
4581 01 0108C FFFFFFFF A S009 DATA -10
4582 01 0108D 25D00061 A S,13 X'61'
4583 01 0108E F7300136 K 15,7,3,SETPSW
4584 01 0108F 37300166 K 3,7,3,L8C+2
4585 01 01090 00000000 A DATA 0,0,0,0,X'80000000',1
01 01091 00000000 A
01 01092 00000000 A
01 01093 00000000 A
01 01094 80000000 A
01 01095 00000001 A

4586 01 01096 FFFFFFFF A ** LOGICAL SHIFT RIGHT. TEST SET OF EVEN BIT POSITIONS. SHIFT OF 30
4587 01 01097 25C00062 A S010 DATA -6
4588 01 01098 00000136 S,12 X'62'
4589 01 01098 00000136 K 0,0,0,SETPSW
4590 01 01099 00000166 K 0,0,0,L8C+2
4591 01 0109A 80000000 A DATA X'80000000',2
01 0109B 00000002 A

4592 01 0109C FFFFFFFF A ** ARITH SHIFT RIGHT. FILL WITH ONES. SHIFT OF 12 BITS
4593 01 0109D 25C00474 A S011 DATA -6
4594 01 0109E 00000136 S,12 X'474'
4595 01 0109F 00000166 DATA SETPSW,L8C+2,X'A5A5A5A5',X'FFFA5A5A'
01 010A0 A5A5A5A5 A
01 010A1 FFFA5A5A A

4596 PAGE
4597 ** ARITH SHIFT RIGHT. FILL WITH ZEROS. DOUBLE REG. SHIFT OF 34 BITS
4598 ** CHECKS SET OF ODD 8 REG BITS
4599 01 010A2 FFFFFFFF A S012 DATA -10
4600 01 010A3 25C0055E A S,12 X'55E'
4601 01 010A4 00000136 DATA SETPSW,L8C+2,5,0,7,7,0,1
01 010A5 00000166
01 010A6 00000005 A
01 010A7 00000000 A
01 010A8 00000007 A
01 010A9 00000007 A
01 010AA 00000000 A
01 010AB 00000001 A

```

```

SIGMA 5 CPU DIAGNOSTIC-AUTB 704287-51C00 MARCH 12,1969 132
4602 ** ARITH SHIFT RIGHT. FILL WITH ONES. DOUBLE REG. SHIFT OF 31 BITS
4603 01 010AC FFFFFFFF A S013 DATA -10
4604 01 010AD 25C00561 A S,12 X'561'
4605 01 010AE 00000136 DATA SETPSW,L8C+2,X'C3C3C3C3',-1,0,0,X'80005AC3'
01 010AF 00000166
01 010B0 C3C3C3C3 A
01 010B1 FFFFFFFF A
01 010B2 00000000 A
01 010B3 00000000 A
01 010B4 80005AC3 A
4606 01 010B5 B7878787 A DATA X'B7878787'
4607 ** CIRCULAR RIGHT SHIFT SINGLE REG. 13 BITS
4608 01 010B6 FFFFFFFF A S014 DATA -6
4609 01 010B7 25C00273 A S,12 X'273'
4610 01 010B8 00000136 DATA SETPSW,L8C+2,X'A5A5A5A5',X'D2D2D2D2'
01 010B9 00000166
01 010BA A5A5A5A5 A
01 010BB D2D2D2D2 A

4611 PAGE
4612 ** CIRCULAR RIGHT SHIFT SINGLE REGISTER. 13 BITS
4613 01 010BC FFFFFFFF A S015 DATA -6
4614 01 010BD 25C00273 A S,12 X'273'
4615 01 010BE 00000136 DATA SETPSW,L8C+2,X'A5A5A5A5',X'D2D2D2D2'
01 010BF 00000166
01 010C0 A5A5A5A5 A
01 010C1 D2D2D2D2 A

4616 ** CIRCULAR RIGHT SHIFT DOUBLE REGISTER 13 BITS
4617 01 010C2 FFFFFFFF A S016 DATA -10
4618 01 010C3 25C00373 A S,12 X'373'
4619 01 010C4 00000136 DATA SETPSW,L8C+2,X'CA35CA35',X'D2E51AE',0,0
01 010C5 00000166
01 010C6 CA35CA35 A
01 010C7 D2E51AE A
01 010C8 00000000 A
01 010C9 00000000 A
4620 01 010CA A5A5A5A5 A DATA X'A5A5A5A5',X'51AD2D2D'
01 010CB 51AD2D2D A

```

```

4621          ** CIRCULAR RIGHT SHIFT DOUBLE REGISTER. 13 BITS
4622 01 010CC FFFFFFFF A S017 DATA -10
4623 01 010CD 25C00373 A S,12 X'1373'
4624 01 010CE 00000136 DATA SETPSW,L8C+2,X'5C3A35AC',X'D2D2E1D1',0,0
      01 010CF 00000166
      01 010DD 5C3A35AC A
      01 010D1 D2D2E1D1 A
      01 010D2 00000000 A
      01 010D3 00000000 A
4625 01 010D4 5A5A5A5A A DATA X'5A5A5A5A',X'AD62D2D2'
      01 010D5 AD62D2D2 A
4626          PAGE
4627          ** CIRCULAR RIGHT SHIFT. 1A. 8DD REG. MAX SHIFT COUNT OF 64
4628 01 010D6 FFFFFFFF A S018 DATA -10
4629 01 010D7 A5D00460 S,13 *MEMBRY
4630 01 010D8 00000136 DATA SETPSW,L8C+2,-1,-1,X'340',X'340',,1,1 *B
      01 010D9 00000166
      01 010DA FFFFFFFF A
      01 010DB FFFFFFFF A
      01 010DC 00000340 A
      01 010DD 00000340 A
      01 010DE 00000001 A
      01 010DF 00000001 A
4631          ** ARITH RIGHT SHIFT. INDEXING. SHIFT OF 1
4632 01 010E0 FFFFFFFF A S019 DATA -8
4633 01 010E1 25C2FFCF A S,12 X'FFCF',1
4634 01 010E2 00000136 DATA SETPSW,L8C+2
      01 010E3 00000166
4635 01 010E4 00000430 A DATA X'430',X'218',X'FFF4F',X'FFF4F'
      01 010E5 00000218 A
      01 010E6 000FFF4F A
      01 010E7 000FFF4F A
4636          ** ARITH LEFT SHIFT. 1A AND IX. SHIFT OF 0
4637 01 010E8 FFFFFFFF A S020 DATA -8
4638 01 010E9 A5CE000C A S,12 +12,7
4639 01 010EA 00000136 DATA SETPSW,L8C+2,X'47F',X'47F',,1,1
      01 010EB 00000166
    
```

```

      01 010EC 0000047F A
      01 010ED 0000047F A
      01 010EE 00000001 A
      01 010EF 00000001 A
4640          PAGE
4641          **** THE REMAINING SHIFT TESTS ARE REDUNDANT BUT MAY AID IN UNCOVERING
4642          **** PATTERN SENSITIVE FAILURE MODES
4643 01 010F0 FFFFFFFF A S01 DATA -6 ALS 1 BF SL1 ALT 1'S + 0'S
4644 01 010F1 25C00401 A S,12 X'401' O INTB A31
4645 01 010F2 073001C2 K 0,7,3,FXP8SW BVF 01
4646 01 010F3 47300166 K 4,7,3,L8C+2
4647 01 010F4 55555555 A DATA X'55555555'
4648 01 010F5 AAAAAAAAAA A DATA X'AAAAAAAA'
4649 01 010F6 FFFFFFFF A S02 DATA -6 ALS 1
4650 01 010F7 25C00401 A S,12 X'401'
4651 01 010F8 373001C2 K 3,7,3,FXP8SW
4652 01 010F9 F7300166 K 15,7,3,L8C+2
4653 01 010FA AAAAAAAAAA A DATA X'AAAAAAAA'
4654 01 010FB 55555554 A DATA X'55555554'
4655 01 010FC FFFFFFFF A S03 DATA -6 ALS 4 SL4 ALT 1'S + 0'S
4656 01 010FD 25C00404 A S,12 X'404' PARITY 1111
4657 01 010FE 373001C2 K 3,7,3,FXP8SW BVF 10
4658 01 010FF 77300166 K 7,7,3,L8C+2
4659 01 01100 F0F0F0F0 A DATA X'F0F0F0F0'
4660 01 01101 0F0F0F00 A DATA X'0F0F0F00'
4661 01 01102 FFFFFFFF A S04 DATA -6 ALS 4
4662 01 01103 25C00404 A S,12 X'404' PARITY 0000
4663 01 01104 F73001C2 K 15,7,3,FXP8SW
4664 01 01105 77300166 K 7,7,3,L8C+2
4665 01 01106 0F0F0F0F A DATA X'0F0F0F0F'
4666 01 01107 F0F0F0F0 A DATA X'F0F0F0F0'
4667 01 01108 FFFFFFFF A S05 DATA -6 ALS 0 SJIFT 0
4668 01 01109 25C00400 A S,12 X'400'
4669 01 0110A F7300136 K 15,7,3,SETPSW
4670 01 0110B 37300166 K 3,7,3,L8C+2
4671 01 0110C 40000000 A DATA X'40000000'
4672 01 0110D 40000000 A DATA X'40000000'
    
```

4673					PAGE			
4674	01	0110E	FFFFFFFA	A	S06	DATA	-6	ALS 2
4675	01	0110F	25C00402	A		S,12	X'402'	2-SL1
4676	01	01110	07300136			K	0,7,3,SETPSW	
4677	01	01111	47300166			K	4,7,3,L8C+2	
4678	01	01112	D2345678	A		DATA	X'D2345678'	
4679	01	01113	48D159E0	A		DATA	X'48D159E0'	
4680						PAGE		
4681	01	01114	FFFFFFF8	A	S07	DATA	-8	ALS 3 *
4682	01	01115	A5C00460			S,12	*MEMORY	3-SL1
4683	01	01116	37300136			K	3,7,3,SETPSW	
4684	01	01117	B7300166			K	11,7,3,L8C+2	
4685	01	01118	F2345678	A		DATA	X'F2345678'	
4686	01	01119	91A2B3C0	A		DATA	X'91A2B3C0'	
4687	01	0111A	00000403	A		DATA	X'403'	
4688	01	0111B	00000403	A		DATA	X'403'	
4689	01	0111C	FFFFFFFA	A	S08	DATA	-6	ALS 29
4690	01	0111D	25C0041D	A		S,12	X'41D'	
4691	01	0111E	07300136			K	0,7,3,SETPSW	
4692	01	0111F	47300166			K	4,7,3,L8C+2	
4693	01	01120	12345674	A		DATA	X'12345674'	
4694	01	01121	80000000	A		DATA	X'80000000'	
4695	01	01122	FFFFFFFA	A	S09	DATA	-6	ALS 27 X
4696	01	01123	25C20428	A		S,12	X'428',1	
4697	01	01124	07300136			K	0,7,3,SETPSW	
4698	01	01125	87300166			K	8,7,3,L8C+2	
4699	01	01126	FFFFFFF0	A		DATA	-16	
4700	01	01127	80000000	A		DATA	X'80000000'	
4701	01	01128	FFFFFFFA	A	S10	DATA	-6	LLS 1
4702	01	01129	25C00001	A		S,12	1	0 INT0 A31
4703	01	0112A	77300136			K	7,7,3,SETPSW	8VF 00
4704	01	0112B	37300166			K	3,7,3,L8C+2	
4705	01	0112C	3C3C3C3C	A		DATA	X'3C3C3C3C'	
4706	01	0112D	78787878	A		DATA	X'78787878'	
4707	01	0112E	FFFFFFFA	A	S11	DATA	-6	LLS 1 X
4708	01	0112F	25C2003E	A		S,12	X'3E',1	
4709	01	01130	87300136			K	8,7,3,SETPSW	8VF 11

4710	01	01131	87300166			K	8,7,3,L8C+2	
4711	01	01132	C3C3C3C3	A		DATA	X'C3C3C3C3'	
4712	01	01133	87878786	A		DATA	X'87878786'	
4713						PAGE		
4714	01	01134	FFFFFFF8	A	S12	DATA	-8	LLS 4
4715	01	01135	A5C00460			S,12	*MEMORY	
4716	01	01136	07300136			K	0,7,3,SETPSW	
4717	01	01137	C7300166			K	12,7,3,L8C+2	
4718	01	01138	23456789	A		DATA	X'23456789'	
4719	01	01139	34567890	A		DATA	X'34567890'	
4720	01	0113A	00000004	A		DATA	4	
4721	01	0113B	00000004	A		DATA	4	
4722	01	0113C	FFFFFFFA	A	S13	DATA	-6	LLS 4
4723	01	0113D	25C00004	A		S,12	4	PARITY 0001
4724	01	0113E	F7300136			K	15,7,3,SETPSW	
4725	01	0113F	F7300166			K	15,7,3,L8C+2	
4726	01	01140	12345678	A		DATA	X'12345678'	
4727	01	01141	23456780	A		DATA	X'23456780'	
4728	01	01142	FFFFFFFA	A	S14	DATA	-6	LLS 4
4729	01	01143	25C00004	A		S,12	4	PARITY 0011
4730	01	01144	07300136			K	0,7,3,SETPSW	
4731	01	01145	47300166			K	4,7,3,L8C+2	
4732	01	01146	3456789A	A		DATA	X'3456789A'	
4733	01	01147	456789A0	A		DATA	X'456789A0'	
4734	01	01148	FFFFFFFA	A	S15	DATA	-6	LLS 4
4735	01	01149	25C00004	A		S,12	4	PARITY 0100
4736	01	0114A	07300136			K	0,7,3,SETPSW	
4737	01	0114B	C7300166			K	12,7,3,L8C+2	
4738	01	0114C	456789AB	A		DATA	X'456789AB'	
4739	01	0114D	56789AB0	A		DATA	X'56789AB0'	
4740	01	0114E	FFFFFFFA	A	S16	DATA	-6	LLS 4
4741	01	0114F	25C00004	A		S,12	4	PARITY 0101
4742	01	01150	37300136			K	3,7,3,SETPSW	
4743	01	01151	77300166			K	7,7,3,L8C+2	
4744	01	01152	56789ABC	A		DATA	X'56789ABC'	
4745	01	01153	6789ABC0	A		DATA	X'6789ABC0'	
4746						PAGE		

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 137

4747	01	01154	FFFFFFFFA	A	S17	DATA	-6		LLS 4
4748	01	01155	25C00004	A		S,12	4		PARITY 0110
4749	01	01156	07300136			K	0,7,3,SETPSW		
4750	01	01157	47300166			K	4,7,3,L0C+2		
4751	01	01158	6789ABCD	A		DATA	X'6789ABCD'		
4752	01	01159	789ABCDE0	A		DATA	X'789ABCDE0'		
4753	01	0115A	FFFFFFFFA	A	S18	DATA	-6		LLS 4
4754	01	01158	25C00004	A		S,12	4		PARITY 0111
4755	01	0115C	A7300136			K	10,7,3,SETPSW		
4756	01	0115D	E7300166			K	14,7,3,L0C+2		
4757	01	0115E	789ABCDE	A		DATA	X'789ABCDE'		
4758	01	0115F	89ABCDEF0	A		DATA	X'89ABCDEF0'		
4759	01	01160	FFFFFFFFA	A	S19	DATA	-6		LLS 32
4760	01	01161	25C00020	A		S,12	X'120'		
4761	01	01162	07300136			K	0,7,3,SETPSW		
4762	01	01163	C7300166			K	12,7,3,L0C+2		
4763	01	01164	00000001	A		DATA	1		
4764	01	01165	00000000	A		DATA	0		
4765	01	01166	FFFFFFFFA	A	S20	DATA	-6		LLS 30
4766	01	01167	25C0001E	A		S,12	X'11E'		
4767	01	01168	37300136			K	3,7,3,SETPSW		
4768	01	01169	F7300166			K	15,7,3,L0C+2		
4769	01	0116A	89ABCDEF7	A		DATA	X'89ABCDEF7'		
4770	01	0116B	C0000000	A		DATA	X'C0000000'		
4771	01	0116C	FFFFFFFFA	A	S21	DATA	-6		CLS 1
4772	01	0116D	25C00201	A		S,12	X'1201'		AO(1) INTO A31
4773	01	0116E	07300136			K	0,7,3,SETPSW		
4774	01	0116F	C7300166			K	12,7,3,L0C+2		AO+A1(10) INTO A30 A31
4775	01	01170	89ABCDEF0	A		DATA	X'89ABCDEF0'		
4776	01	01171	135798C1	A		DATA	X'135798C1'		
4777						PAGE			
4778	01	01172	FFFFFFFFA	A	S22	DATA	-6		CLS 2 X
4779	01	01173	25C20222	A		S,12	X'1222',1		
4780	01	01174	F7300136			K	15,7,3,SETPSW		
4781	01	01175	F7300166			K	15,7,3,L0C+2		
4782	01	01176	91234560	A		DATA	X'91234560'		
4783	01	01177	448D1582	A		DATA	X'448D1582'		

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 138

4784	01	01178	FFFFFFFFA	A	S23	DATA	-6		CLS 3 3-SL1
4785	01	01179	25C00203	A		S,12	X'1203'		
4786	01	0117A	37300136			K	3,7,3,SETPSW		
4787	01	0117B	77300166			K	7,7,3,L0C+2		
4788	01	0117C	76543210	A		DATA	X'76543210'		
4789	01	0117D	B2A19083	A		DATA	X'B2A19083'		
4790	01	0117E	FFFFFFFFA	A	S24	DATA	-6		CLS 4
4791	01	0117F	25C00204	A		S,12	X'1204'		PARITY 1000
4792	01	01180	F7300136			K	15,7,3,SETPSW		
4793	01	01181	F7300166			K	15,7,3,L0C+2		
4794	01	01182	89ABCDEF	A		DATA	X'89ABCDEF'		
4795	01	01183	9ABCDEF8	A		DATA	X'9ABCDEF8'		
4796	01	01184	FFFFFFFFA	A	S25	DATA	-6		CLS 4
4797	01	01185	25C00204	A		S,12	X'1204'		PARITY 1001
4798	01	01186	07300136			K	0,7,3,SETPSW		
4799	01	01187	47300166			K	4,7,3,L0C+2		
4800	01	01188	9ABCDEF0	A		DATA	X'9ABCDEF0'		
4801	01	01189	ABCDEF09	A		DATA	X'ABCDEF09'		
4802	01	0118A	FFFFFFFFA	A	S26	DATA	-6		CLS 4
4803	01	0118B	25C00204	A		S,12	X'1204'		PARITY 1010
4804	01	0118C	07300136			K	0,7,3,SETPSW		
4805	01	0118D	47300166			K	4,7,3,L0C+2		
4806	01	0118E	ABCDEF01	A		DATA	X'ABCDEF01'		
4807	01	0118F	BCDEF01A	A		DATA	X'BCDEF01A'		
4808						PAGE			
4809	01	01190	FFFFFFFFA	A	S27	DATA	-6		CLS 4
4810	01	01191	25C00204	A		S,12	X'1204'		PARITY 1011
4811	01	01192	07300136			K	0,7,3,SETPSW		
4812	01	01193	C7300166			K	12,7,3,L0C+2		
4813	01	01194	BCDEF012	A		DATA	X'BCDEF012'		
4814	01	01195	CDEF012B	A		DATA	X'CDEF012B'		
4815	01	01196	FFFFFFFFA	A	S28	DATA	-6		CLS 4
4816	01	01197	25C00204	A		S,12	X'1204'		PARITY 1100
4817	01	01198	07300136			K	0,7,3,SETPSW		
4818	01	01199	47300166			K	4,7,3,L0C+2		
4819	01	0119A	CDEF0123	A		DATA	X'CDEF0123'		
4820	01	0119B	DEF0123C	A		DATA	X'DEF0123C'		

4821					PAGE			
4822	01	0119C	FFFFFFFA	A	S29	DATA	-6	CLS 4
4823	01	0119D	25C00204	A		S,12	X'204'	PARITY 1101
4824	01	0119E	07300136			K	0,7,3,SETPSW	
4825	01	0119F	C7300166			K	12,7,3,LBC+2	
4826	01	011A0	DEF01234	A		DATA	X'DEF01234'	
4827	01	011A1	EF01234D	A		DATA	X'EF01234D'	
4828	01	011A2	FFFFFFFA	A	S30	DATA	-6	CLS 4
4829	01	011A3	25C00204	A		S,12	X'204'	PARITY 1110
4830	01	011A4	37300136			K	3,7,3,SETPSW	
4831	01	011A5	F7300166			K	15,7,3,LBC+2	
4832	01	011A6	EF012345	A		DATA	X'EF012345'	
4833	01	011A7	F012345E	A		DATA	X'F012345E'	
4834	01	011A8	FFFFFFFA	A	S31	DATA	-6	CLS 63
4835	01	011A9	25C0023F	A		S,12	X'23F'	
4836	01	011AA	07300136			K	0,7,3,SETPSW	
4837	01	011AB	C7300166			K	12,7,3,LBC+2	
4838	01	011AC	76543211	A		DATA	X'76543211'	
4839	01	011AD	BB2A1908	A		DATA	X'BB2A1908'	
4840	01	011AE	FFFFFFFA	A	S32	DATA	-6	CLS 31
4841	01	011AF	25C0023F	A		S,12	X'23F'	
4842	01	011B0	07300136			K	0,7,3,SETPSW	
4843	01	011B1	C7300166			K	12,7,3,LBC+2	
4844	01	011B2	76543211	A		DATA	X'76543211'	
4845	01	011B3	BB2A1908	A		DATA	X'BB2A1908'	
4846	01	011B4	FFFFFFF6	A	S33	DATA	-10	ALD 1 30(0) INTO A31
4847	01	011B5	25C00501	A		S,12	X'501'	(0) INTO B31
4848	01	011B6	07300136			K	0,7,3,SETPSW	
4849	01	011B7	07300166			K	0,7,3,LBC+2	
4850	01	011B8	12345679	A		DATA	X'12345679'	
4851	01	011B9	2468ACF2	A		DATA	X'2468ACF2'	
4852	01	011BA	00000000	A		DATA	0	
4853	01	011BB	00000000	A		DATA	0	
4854	01	011BC	55555555	A		DATA	X'55555555'	
4855	01	011BD	AAAAAAAA	A		DATA	X'AAAAAAAA'	
4856						PAGE		
4857	01	011BE	FFFFFFF6	A	S34	DATA	-10	ALD 1 30(1) INTO A31

4858	01	011BF	25C00501	A		S,12	X'501'	
4859	01	011C0	07300136			K	0,7,3,SETPSW	
4860	01	011C1	07300166			K	0,7,3,LBC+2	
4861	01	011C2	12345678	A		DATA	X'12345678'	
4862	01	011C3	2468ACF1	A		DATA	X'2468ACF1'	
4863	01	011C4	00000000	A		DATA	0	
4864	01	011C5	00000000	A		DATA	0	
4865	01	011C6	AAAAAAAAAB	A		DATA	X'AAAAAAAAAB'	
4866	01	011C7	55555556	A		DATA	X'55555556'	
4867	01	011C8	FFFFFFF6	A	S35	DATA	-10	ALD 35
4868	01	011C9	ASC00460			S,12	*MEMORY	
4869	01	011CA	07300136			K	0,7,3,SETPSW	
4870	01	011CB	47300166			K	4,7,3,LBC+2	
4871	01	011CC	CABBEDED	A		DATA	X'CABBEDED'	
4872	01	011CD	91A2B3C0	A		DATA	X'91A2B3C0'	
4873	01	011CE	00000523	A		DATA	X'523'	
4874	01	011CF	00000523	A		DATA	X'523'	
4875	01	011D0	12345678	A		DATA	X'12345678'	
4876	01	011D1	00000000	A		DATA	0	
4877	01	011D2	FFFFFFF6	A	S36	DATA	-10	ALD 17 x R0
4878	01	011D3	25D20547	A		S,13	X'547,1	
4879	01	011D4	07300136			K	0,7,3,SETPSW	
4880	01	011D5	47300166			K	4,7,3,LBC+2	
4881	01	011D6	1728394A	A		DATA	X'1728394A'	
4882	01	011D7	1728394A	A		DATA	X'1728394A'	
4883	01	011D8	00000000	A		DATA	0	
4884	01	011D9	00000000	A		DATA	0	
4885	01	011DA	92345678	A		DATA	X'92345678'	
4886	01	011DB	ACF12468	A		DATA	X'ACF12468'	
4887						PAGE		
4888	01	011DC	FFFFFFF6	A	S37	DATA	-10	LLD 63
4889	01	011DD	25C0013F	A		S,12	X'13F'	
4890	01	011DE	07300136			K	0,7,3,SETPSW	
4891	01	011DF	87300166			K	8,7,3,LBC+2	
4892	01	011E0	FFFFFFF6	A		DATA	-1	
4893	01	011E1	80000000	A		DATA	X'80000000'	
4894	01	011E2	00000000	A		DATA	0	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00				MARCH 12, 1969		141
4895	01	011E3	00000000 A	DATA	0	
4896	01	011E4	FFFFFFFF A	DATA	-1	
4897	01	011E5	00000000 A	DATA	0	
4898	01	011E6	FFFFFFFF A	DATA	-10	LLD 47 X R0
4899	01	011E7	25D20107 A	S,13	X'1071,1	
4900	01	011E8	07300136	K	0,7,3,SETPSW	
4901	01	011E9	C7300166	K	12,7,3,LBC+2	
4902	01	011EA	53A43928 A	DATA	X'58A43928'	
4903	01	011EB	53A43928 A	DATA	X'58A43928'	
4904	01	011EC	00000000 A	DATA	0	
4905	01	011ED	00000000 A	DATA	0	
4906	01	011EE	23A56789 A	DATA	X'23A56789'	
4907	01	011EF	B3C48000 A	DATA	X'B3C48000'	
4908	01	011F0	FFFFFFFF A	DATA	-10	CLD 19
4909	01	011F1	25C00313 A	S,12	X'313'	
4910	01	011F2	07300136	K	0,7,3,SETPSW	
4911	01	011F3	47300166	K	4,7,3,LBC+2	
4912	01	011F4	12345678 A	DATA	X'12345678'	
4913	01	011F5	B3C4D5E6 A	DATA	X'B3C4D5E6'	
4914	01	011F6	00000000 A	DATA	0	
4915	01	011F7	00000000 A	DATA	0	
4916	01	011F8	9ABCDEFO A	DATA	X'9ABCDEFO'	
4917	01	011F9	F78091A2 A	DATA	X'F78091A2'	
4918				PAGE		
4919	01	011FA	FFFFFFFF A	DATA	-6	ARS 2
4920	01	011FB	25C0047E A	S,12	X'47E'	
4921	01	011FC	F73001C2	K	15,7,3,FXPSW	
4922	01	011FD	37300166	K	3,7,3,LBC+2	
4923	01	011FE	CCCCCCCC A	DATA	X'CCCCCCCC'	
4924	01	011FF	F3333333 A	DATA	X'F3333333'	
4925	01	01200	FFFFFFFF A	DATA	-6	ARS 2
4926	01	01201	25C0047E A	S,12	X'47E'	
4927	01	01202	00000136	DATA	SETPSW	
4928	01	01203	00000166	DATA	LBC+2	
4929	01	01204	33333333 A	DATA	X'33333333'	
4930	01	01205	0CCCCCCC A	DATA	X'0CCCCCCC'	
4931	01	01206	FFFFFFFF A	DATA	-6	ARS 1

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00				MARCH 12, 1969		142
4932	01	01207	25C0047E A	S,12	X'47E'	
4933	01	01208	00000136	DATA	SETPSW	
4934	01	01209	00000166	DATA	LBC+2	
4935	01	0120A	AAAAAAAA A	DATA	X'AAAAAAAA'	
4936	01	0120B	D5555555 A	DATA	X'D5555555'	
4937	01	0120C	FFFFFFFF A	DATA	-6	ARS 1
4938	01	0120D	25C0047E A	S,12	X'47E'	
4939	01	0120E	00000136	DATA	SETPSW	
4940	01	0120F	00000166	DATA	LBC+2	
4941	01	01210	55555555 A	DATA	X'55555555'	
4942	01	01211	2AAAAAAAA A	DATA	X'2AAAAAAAA'	
4943	01	01212	FFFFFFFF A	DATA	-6	ARS 28 X
4944	01	01213	25C20471 A	S,12	X'471,1	
4945	01	01214	00000136	DATA	SETPSW	
4946	01	01215	00000166	DATA	LBC+2	
4947	01	01216	800000F3 A	DATA	X'800000F3'	
4948	01	01217	FFFFFFFF A	DATA	-8	
4949				PAGE		
4950	01	01218	FFFFFFFF A	DATA	-6	LRS 13
4951	01	01219	25C00073 A	S,12	X'73'	
4952	01	0121A	F73001C2	K	15,7,3,FXPSW	
4953	01	0121B	37300166	K	3,7,3,LBC+2	
4954	01	0121C	87654321 A	DATA	X'87654321'	
4955	01	0121D	0004332A A	DATA	X'4332A'	
4956	01	0121E	FFFFFFFF A	DATA	-6	CRS 11
4957	01	0121F	25C00275 A	S,12	X'275'	
4958	01	01220	F73001C2	K	15,7,3,FXPSW	
4959	01	01221	37300166	K	3,7,3,LBC+2	
4960	01	01222	A3CDEF89 A	DATA	X'A3CDEF89'	
4961	01	01223	F13579BD A	DATA	X'F13579BD'	
4962	01	01224	FFFFFFFF A	DATA	-6	CRS 64
4963	01	01225	25C00240 A	S,12	X'240'	
4964	01	01226	00000136	DATA	SETPSW	
4965	01	01227	00000166	DATA	LBC+2	
4966	01	01228	99999999 A	DATA	X'99999999'	
4967	01	01229	99999999 A	DATA	X'99999999'	
4968				PAGE		

SIGMA 5 CPU DIAGNOSTIC-AUT8 704287-51C00 MARCH 12, 1969 143

4969	01	0122A	FFFFFFFF6 A	S48	DATA	-10		ARD 33
4970	01	0122B	25C0055F A		S,12	X'55F'		
4971	01	0122C	F73001C2		K	15,7,3,FXP8SW		
4972	01	0122D	37300166		K	3,7,3,L8C+2		
4973	01	0122E	87654321 A		DATA	X'87654321'		
4974	01	0122F	FFFFFFFF A		DATA	-1		
4975	01	01230	00000000 A		DATA	0		
4976	01	01231	00000000 A		DATA	0		
4977	01	01232	0FEDC3A9 A		DATA	X'0FEDC3A9'		
4978	01	01233	C3B2A190 A		DATA	X'C3B2A190'		
4979	01	01234	FFFFFFFF6 A	S49	DATA	-10		ARD 15 *
4980	01	01235	A5000460		S,13	*MEMBRY		
4981	01	01236	00000136		DATA	SETPSW		
4982	01	01237	00000166		DATA	L8C+2		
4983	01	01238	789ABCDE A		DATA	X'789ABCDE'		
4984	01	01239	789ABCDE A		DATA	X'789ABCDE'		
4985	01	0123A	00000571 A		DATA	X'571'		
4986	01	0123B	00000571 A		DATA	X'571'		
4987	01	0123C	F0123456 A		DATA	X'F0123456'		
4988	01	0123D	FFFFE024 A		DATA	X'FFFFE024'		
4989	01	0123E	FFFFFFFF6 A	S50	DATA	-10		LRD 54
4990	01	0123F	25C0014A A		S,12	X'14A'		
4991	01	01240	F73001C2		K	15,7,3,FXP8SW		
4992	01	01241	37300166		K	3,7,3,L8C+2		
4993	01	01242	87654321 A		DATA	X'87654321'		
4994	01	01243	00000000 A		DATA	0		
4995	01	01244	00000000 A		DATA	0		
4996	01	01245	00000000 A		DATA	0		
4997	01	01246	ABCDEF01 A		DATA	X'ABCDEF01'		
4998	01	01247	0000021D A		DATA	X'21D'		
4999					PAGE			
5000	01	01248	FFFFFFFF6 A	S51	DATA	-10		LRD 36 R8
5001	01	01249	2500015C A		S,13	X'15C'		
5002	01	0124A	00000136		DATA	SETPSW		
5003	01	0124B	00000166		DATA	L8C+2		
5004	01	0124C	12345678 A		DATA	X'12345678'		
5005	01	0124D	12345678 A		DATA	X'12345678'		

SIGMA 5 CPU DIAGNOSTIC-AUT8 704287-51C00 MARCH 12, 1969 144

5006	01	0124E	00000000 A		DATA	0		
5007	01	0124F	00000000 A		DATA	0		
5008	01	01250	9ABCDEFO A		DATA	X'9ABCDEFO'		
5009	01	01251	00000000 A		DATA	0		
5010	01	01252	FFFFFFFF6 A	S52	DATA	-10		CRD 62 *
5011	01	01253	A5C00460		S,12	*MEMBRY		
5012	01	01254	00000136		DATA	SETPSW		
5013	01	01255	00000166		DATA	L8C+2		
5014	01	01256	99999999 A		DATA	X'99999999'		
5015	01	01257	66666666 A		DATA	X'66666666'		
5016	01	01258	00000342 A		DATA	X'342'		
5017	01	01259	00000342 A		DATA	X'342'		
5018	01	0125A	99999999 A		DATA	X'99999999'		
5019	01	0125B	66666666 A		DATA	X'66666666'		
5020	01	0125C	FFFFFFFF6 A	S53	DATA	-10		CRD 31 *x R8
5021	01	0125D	A5D20460		S,13	*MEMBRY,1		
5022	01	0125E	F73001C2		K	15,7,3,FXP8SW		
5023	01	0125F	37300166		K	3,7,3,L8C+2		
5024	01	01260	22222222 A		DATA	X'22222222'		
5025	01	01261	22222222 A		DATA	X'22222222'		
5026	01	01262	0000038F A		DATA	X'38F'		
5027	01	01263	0000038F A		DATA	X'38F'		
5028	01	01264	78DE78DE A		DATA	X'78DE78DE'		
5029	01	01265	F78CF78C A		DATA	X'F78CF78C'		
5030					PAGE			
5031					** NUMBER ALREADY N8RMALIZED			
5032	01	01266	FFFFFFFFA A	SF001	DATA	-6		
5033	01	01267	24C0000F A		SF,12	15		
5034	01	01268	F7300136		K	15,7,3,SETPSW		
5035	01	01269	A7300166		K	10,7,3,L8C+2		
5036	01	0126A	0F100000 A		DATA	X'F100000',X'F100000'		
5037	01	0126B	0F100000 A		DATA	X'F100000',X'F100000'		
5038	01	0126C	FFFFFFFF6 A	SF002	DATA	-10		
5039	01	0126D	24C00104 A		SF,12	X'104'		
5040	01	0126E	07300136		K	0,7,3,SETPSW		
5041	01	0126F	A7300166		K	10,7,3,L8C+2		

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 145

```

5042 01 01270 0F00002F A DATA X'F00002F',X'B2FFFF',0,0,-1,X'FFFF0000'
      01 01271 0B2FFFF A
      01 01272 00000000 A
      01 01273 00000000 A
      01 01274 FFFFFFFF A
      01 01275 FFFF0000 A
5043 ** NORMALIZED BEFORE COUNT EQUALS ZERO
5044 01 01276 FFFFFFFF A SF003 DATA -6
5045 01 01277 24C00104 A SF,12 X'104'
5046 01 01278 70000136 K 7,0,0,SETPSW
5047 01 01279 A0000166 K 10,0,0,LBC+2
5048 01 0127A 0F004FFF A DATA X'0F004FFF',X'D4FFF00'
      01 0127B 0D4FFF00 A
5049 PAGE
5050 ** UNDERFLOW NOT NORMALIZED COUNT NOT EQUAL ZERO S/CC2 IN PH6
5051 01 0127C FFFFFFFF A SF004 DATA -10
5052 01 0127D 24C0013F A SF,12 X'13F'
5053 01 0127E 97300136 K 9,7,3,SETPSW
5054 01 0127F 67300166 K 6,7,3,LBC+2
5055 01 01280 04000000 A DATA X'4000000',X'7F0F0000',0,0,X'F0000000',0
      01 01281 7F0F0000 A
      01 01282 00000000 A
      01 01283 00000000 A
      01 01284 F0000000 A
      01 01285 00000000 A
5056 ** UNDERFLOW NORMALIZED COUNT EQUAL ZERO S/CC2 IN PH7
5057 01 01286 FFFFFFFF A SF005 DATA -6
5058 01 01287 24C00005 A SF,12 5
5059 01 01288 17300136 K 1,7,3,SETPSW
5060 01 01289 E7300166 K 14,7,3,LBC+2
5061 01 0128A 04000008 A DATA X'4000008',X'7F800000'
      01 0128B 7F800000 A
5062 ** COUNT EQUALS ZERO NOT NORMALIZED
5063 01 0128C FFFFFFFF A SF006 DATA -6
5064 01 0128D 24C00004 A SF,12 4
5065 01 0128E D7300136 K 13,7,3,SETPSW
5066 01 0128F 27300166 K 2,7,3,LBC+2

```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 146

```

5067 01 01290 0F000001 A DATA X'F000001',X'0B010000'
      01 01291 09010000 A
5068 PAGE
5069 ** TRUE ZERO S/FL3 IN PH6
5070 01 01292 FFFFFFFF A SF007 DATA -10
5071 01 01293 24C00004 A SF,12 4
5072 01 01294 70300136 K 7,0,3,SETPSW
5073 01 01295 80300166 K 8,0,3,LBC+2
5074 01 01296 03000000 A DATA X'3000000',0,0,0,-1,-1
      01 01297 00000000 A
      01 01298 00000000 A
      01 01299 00000000 A
      01 0129A FFFFFFFF A
      01 0129B FFFFFFFF A
5075 ** NEGATIVE CHARACTERISTIC
5076 01 0129C FFFFFFFF A SF008 DATA -10
5077 01 0129D 24C00004 A SF,12 4
5078 01 0129E E7000136 K 14,7,0,SETPSW
5079 01 0129F 17000166 K 1,7,0,LBC+2
5080 01 012A0 F0FFFFF1 A DATA X'F0FFFFF1',X'F4F10000',0,0,-1,-1
      01 012A1 F4F10000 A
      01 012A2 00000000 A
      01 012A3 00000000 A
      01 012A4 FFFFFFFF A
      01 012A5 FFFFFFFF A
5081 ** NEG CHAR UNDERFLOW 8DD REG NORMALIZED
5082 01 012A6 FFFFFFFF A SF009 DATA -6
5083 01 012A7 24C00004 A SF,12 4
5084 01 012A8 27300136 K 2,7,3,SETPSW
5085 01 012A9 D7300166 K 13,7,3,LBC+2
5086 01 012AA FEFFFFF A DATA X'FEFFFFF',X'80EFFFF0'
      01 012AB 80EFFFF0 A
5087 PAGE
5088 ** NEG CHAR TO CHECK N400 IN PH4 AND PH9
5089 01 012AC FFFFFFFF A SF010 DATA -10
5090 01 012AD 24C00102 A SF,12 X'102'
5091 01 012AE 00000136 K 0,0,0,SETPSW

```


SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 147

5092	01 012AF	90000166	K	9,0,0,L8C+2
5093	01 012B0	F0FF4321 A	DATA	X'F0FF4321',X'F24321FF',0,0,-1,X'FFFFFF00'
	01 012B1	F24321FF A		
	01 012B2	00000000 A		
	01 012B3	00000000 A		
	01 012B4	FFFFFFF A		
	01 012B5	FFFFFFF0 A		
5094			** NEG CHAR TO CHECK K00 IN PH4 AND PH9	
5095	01 012B6	FFFFFFF A	SF011	DATA -6
5096	01 012B7	24C00102 A	SF,12	X'102'
5097	01 012B8	63100136	K	6,3,1,SETPSW
5098	01 012B9	93100166	K	9,3,1,L8C+2
5099	01 012BA	F0FF4320 A	DATA	X'F0FF4320',X'F2432000'
	01 012BB	F2432000 A		
5100			** TEST THAT MAX COUNT W/O NORMALIZING IS BK	
5101	01 012BC	FFFFFFF6 A	SF012	DATA -10
5102	01 012BD	24C0010C A	SF,12	X'10C'
5103	01 012BE	55100136	K	5,5,1,SETPSW
5104	01 012BF	25100166	K	2,5,1,L8C+2
5105	01 012C0	7F000000 A	DATA	X'7F000000',X'73010000',0,0,1,0
	01 012C1	73010000 A		
	01 012C2	00000000 A		
	01 012C3	00000000 A		
	01 012C4	00000001 A		
	01 012C5	00000000 A		
5106			PAGE	
5107			** RIGHT SHIFT, TRUE ZERO BEFORE COUNT DONE. S/FL3 IN PH6	
5108	01 012C6	FFFFFFF6 A	SF013	DATA -10
5109	01 012C7	24D0007B A	SF,13	X'17B'
5110	01 012C8	F7300136	K	15,7,3,SETPSW
5111	01 012C9	07300166	K	0,7,3,L8C+2
5112	01 012CA	04800000 A	DATA	X'04800000',X'04800000',0,0,X'20000100',0
	01 012CB	04800000 A		
	01 012CC	00000000 A		
	01 012CD	00000000 A		
	01 012CE	20000100 A		
	01 012CF	00000000 A		

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 148

5113			** RIGHT SHIFT OVERFLOW AT COUNT DONE. S/CC2 IN PH7	
5114	01 012D0	FFFFFFF6 A	SF014	DATA -10
5115	01 012D1	24C0017F A	SF,12	X'17F'
5116	01 012D2	07300136	K	0,7,3,SETPSW
5117	01 012D3	67300166	K	6,7,3,L8C+2
5118	01 012D4	7F453210 A	DATA	X'7F453210',X'00045321',0,0,-1,X'FFFFFFF'
	01 012D5	00045321 A		
	01 012D6	00000000 A		
	01 012D7	00000000 A		
	01 012D8	FFFFFFF A		
	01 012D9	0FFFFFF A		
5119			** RIGHT SHIFT, OVERFLOW BEFORE COUNT DONE. S/CC2 IN PH6	
5120	01 012DA	FFFFFFF6 A	SF015	DATA -10
5121	01 012DB	24C00170 A	SF,12	X'170'
5122	01 012DC	F0000136	K	15,0,0,SETPSW
5123	01 012DD	50000166	K	5,0,0,L8C+2
5124	01 012DE	81FFFFFF A	DATA	X'81FFFFFF',-1,0,0,X'FFFFFF222',X'FFFFFFF3'
	01 012DF	FFFFFFF A		
	01 012E0	00000000 A		
	01 012E1	00000000 A		
	01 012E2	FFFFFF222 A		
	01 012E3	FFFFFFF3 A		
5125			PAGE	
5126			** RIGHT SHIFT, OVERFLOW AND TRUE ZERO. AT COUNT DONE. S/FL3 IN PH7	
5127	01 012E4	FFFFFFF6 A	SF016	DATA -10
5128	01 012E5	24C0017F A	SF,12	X'17F'
5129	01 012E6	00000136	DATA	SETPSW,L8C+2,X'7F000000',0,0,0,1,0
	01 012E7	00000166		
	01 012E8	7F000000 A		
	01 012E9	00000000 A		
	01 012EA	00000000 A		
	01 012EB	00000000 A		
	01 012EC	00000001 A		
	01 012ED	00000000 A		
5130			** RIGHT SHIFT COUNT DONE. MAX COUNT W/O OVERFLOW OR TRUE ZERO	
5131	01 012EE	FFFFFFF6 A	SF017	DATA -10
5132	01 012EF	24C00173 A	SF,12	X'173'

```

5133 01 012F0 00000136 DATA SETPSW
5134 01 012F1 20000166 K 2,0,0,L8C+2
5135 01 012F2 0125AC31 A DATA X'0125AC31',X'0E000000',0,0,X'95A3C195',2
      01 012F3 0E000000 A
      01 012F4 00000000 A
      01 012F5 00000000 A
      01 012F6 95A3C195 A
      01 012F7 00000002 A

```

PAGE

** THE NEXT 16 TESTS ARE LEFT SHIFTS WITH THE COUNT GOING TO ZERO
 ** EACH TEST LEAVES A SINGLE BIT IN REG B TO VERIFY EACH BIT POSITION
 ** WILL CAUSE BOO31Z TO BE FALSE. CHARACTERISTICS ARE CHOSEN TO VERIFY
 ** THAT THE A DOWN COUNT LOGIC IS FUNCTIONING

```

5141 01 012F8 FFFFFFFF6 A SFO18 DATA -10 B00
5142 01 012F9 A4C00460 SF,12 *MEMBRY
5143 01 012FA 00000136 DATA SETPSW
5144 01 012FB 20000166 K 2,0,0,L8C+2
5145 01 012FC 73000000 A DATA X'73000000',X'71000000',X'102',X'102',X'800000'
      01 012FD 71000000 A
      01 012FE 00000102 A
      01 012FF 00000102 A
      01 01300 00800000 A
5146 01 01301 80000000 A DATA X'80000000'
5147 01 01302 FFFFFFFF6 A SFO19 DATA -10 B01
5148 01 01303 2*CE0100 A SF,12 X'100',7 IX ADD 1 TO COUNT
5149 01 01304 00000136 DATA SETPSW
5150 01 01305 20000166 K 2,0,0,L8C+2
5151 01 01306 70000000 A DATA X'70000000',X'6F000000',0,0,X'4000000',X'40000000'
      01 01307 6F000000 A
      01 01308 00000000 A
      01 01309 00000000 A
      01 0130A 04000000 A
      01 0130B 40000000 A
5152 01 0130C FFFFFFFF6 A SFO20 DATA -10 B02
5153 01 0130D A4CE0460 SF,12 *MEMBRY,7
5154 01 0130E 00000136 DATA SETPSW
5155 01 0130F 20000166 K 2,0,0,L8C+2

```

```

5156 01 01310 60000000 A DATA X'60000000',X'5F000000',X'100',X'100',X'2000000'
      01 01311 5F000000 A
      01 01312 00000100 A
      01 01313 00000100 A
      01 01314 02000000 A
5157 01 01315 20000000 A DATA X'20000000'
5158 PAGE
5159 01 01316 FFFFFFFF6 A SFO21 DATA -10 B03
5160 01 01317 2*C00101 A SF,12 X'101'
5161 01 01318 00000136 DATA SETPSW
5162 01 01319 20000166 K 2,0,0,L8C+2
5163 01 0131A 50000000 A DATA X'50000000',X'4F000000',0,0,X'1000000',X'10000000'
      01 0131B 4F000000 A
      01 0131C 00000000 A
      01 0131D 00000000 A
      01 0131E 01000000 A
      01 0131F 10000000 A
5164 01 01320 FFFFFFFF6 A SFO22 DATA -10 B04
5165 01 01321 2*C00101 A SF,12 X'101'
5166 01 01322 00000136 DATA SETPSW
5167 01 01323 20000166 K 2,0,0,L8C+2
5168 01 01324 40000000 A DATA X'40000000',X'3F000000',0,0,X'800000',X'8000000'
      01 01325 3F000000 A
      01 01326 00000000 A
      01 01327 00000000 A
      01 01328 00800000 A
      01 01329 08000000 A
5169 01 0132A FFFFFFFF6 A SFO23 DATA -10 B05
5170 01 0132B 2*C00101 A SF,12 X'101'
5171 01 0132C 00000136 DATA SETPSW
5172 01 0132D 20000166 K 2,0,0,L8C+2
5173 01 0132E 30000000 A DATA X'30000000',X'2F000000',0,0,X'400000',X'4000000'
      01 0132F 2F000000 A
      01 01330 00000000 A
      01 01331 00000000 A
      01 01332 00400000 A
      01 01333 04000000 A

```

SIGMA 5 CPU DIAGNOSTIC-AUT0 70*287-51C00 MARCH 12,1969 151

5174					PAGE		
5175	01	01334	FFFFFFF6 A	SF024	DATA	-10	306
5176	01	01335	24C00101 A		SF,12	X'101'	
5177	01	01336	00000136		DATA	SETPSW	
5178	01	01337	20000166		K	2,0,0,L8C+2	
5179	01	01338	20000000 A		DATA	X'20000000',X'1F000000',0,0,X'200000',X'200000'	
	01	01339	1F000000 A				
	01	0133A	00000000 A				
	01	0133B	00000000 A				
	01	0133C	00200000 A				
	01	0133D	02000000 A				
5180	01	0133E	FFFFFFF6 A	SF025	DATA	-10	307
5181	01	0133F	24C00101 A		SF,12	X'101'	
5182	01	01340	00000136		DATA	SETPSW	
5183	01	01341	20000166		K	2,0,0,L8C+2	
5184	01	01342	10000000 A		DATA	X'10000000',X'0F000000',0,0,X'100000',X'100000'	
	01	01343	0F000000 A				
	01	01344	00000000 A				
	01	01345	00000000 A				
	01	01346	00100000 A				
	01	01347	01000000 A				
5185	01	01348	FFFFFFF6 A	SF026	DATA	-10	308
5186	01	01349	24C00101 A		SF,12	X'101'	
5187	01	0134A	00000136		DATA	SETPSW	
5188	01	0134B	20000166		K	2,0,0,L8C+2	
5189	01	0134C	71000000 A		DATA	X'71000000',X'70000000',0,0,X'80000',X'800000'	
	01	0134D	70000000 A				
	01	0134E	00000000 A				
	01	0134F	00000000 A				
	01	01350	00800000 A				
	01	01351	00800000 A				
5190					PAGE		
5191	01	01352	FFFFFFF6 A	SF027	DATA	-10	309
5192	01	01353	24C00101 A		SF,12	X'101'	
5193	01	01354	00000136		DATA	SETPSW	
5194	01	01355	20000166		K	2,0,0,L8C+2	
5195	01	01356	61000000 A		DATA	X'61000000',X'60000000',0,0,X'40000',X'400000'	

SIGMA 5 CPU DIAGNOSTIC-AUT0 70*287-51C00 MARCH 12,1969 152

	01	01357	60000000 A				
	01	01358	00000000 A				
	01	01359	00000000 A				
	01	0135A	00040000 A				
	01	0135B	00400000 A				
5196	01	0135C	FFFFFFF6 A	SF028	DATA	-10	310
5197	01	0135D	24C00101 A		SF,12	X'101'	
5198	01	0135E	00000136		DATA	SETPSW	
5199	01	0135F	20000166		K	2,0,0,L8C+2	
5200	01	01360	51000000 A		DATA	X'51000000',X'50000000',0,0,X'20000',X'200000'	
	01	01361	50000000 A				
	01	01362	00000000 A				
	01	01363	00000000 A				
	01	01364	00020000 A				
	01	01365	00200000 A				
5201	01	01366	FFFFFFF6 A	SF029	DATA	-10	311
5202	01	01367	24C00101 A		SF,12	X'101'	
5203	01	01368	00000136		DATA	SETPSW	
5204	01	01369	20000166		K	2,0,0,L8C+2	
5205	01	0136A	41000000 A		DATA	X'41000000',X'40000000',0,0,X'10000',X'100000'	
	01	0136B	40000000 A				
	01	0136C	00000000 A				
	01	0136D	00000000 A				
	01	0136E	00010000 A				
	01	0136F	00100000 A				
5206					PAGE		
5207	01	01370	FFFFFFF6 A	SF030	DATA	-10	312
5208	01	01371	24C00101 A		SF,12	X'101'	
5209	01	01372	00000136		DATA	SETPSW	
5210	01	01373	20000166		K	2,0,0,L8C+2	
5211	01	01374	31000000 A		DATA	X'31000000',X'30000000',0,0,X'8000',X'80000'	
	01	01375	30000000 A				
	01	01376	00000000 A				
	01	01377	00000000 A				
	01	01378	00080000 A				
	01	01379	00080000 A				
5212	01	0137A	FFFFFFF6 A	SF031	DATA	-10	313

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00

MARCH 12, 1969

153

5213 01 0137B 24C00101 A
 5214 01 0137C 00000136
 5215 01 0137D 20000166
 5216 01 0137E 21000000 A
 01 0137F 20000000 A
 01 01380 00000000 A
 01 01381 00000000 A
 01 01382 00004000 A
 01 01383 00040000 A

SF,12 X'101'
 DATA SETPSW
 K 2,0,0,L8C+2
 DATA X'21000000',X'20000000',0,0,X'4000',X'0000'

5217
 5218 01 01384 FFFFFFF6 A
 5219 01 01385 24C00101 A
 5220 01 01386 00000136
 5221 01 01387 20000166
 5222 01 01388 11000000 A
 01 01389 10000000 A
 01 0138A 00000000 A
 01 0138B 00000000 A
 01 0138C 00002000 A
 01 0138D 00020000 A

SF032 PAGE
 DATA -10 814
 SF,12 X'101'
 DATA SETPSW
 K 2,0,0,L8C+2
 DATA X'11000000',X'10000000',0,0,X'2000',X'20000'

5223 01 0138E FFFFFFF6 A
 5224 01 0138F 24C00101 A
 5225 01 01390 00000136
 5226 01 01391 20000166
 5227 01 01392 01000000 A
 01 01393 00000000 A
 01 01394 00000000 A
 01 01395 00000000 A
 01 01396 00001000 A
 01 01397 00010000 A

SF033 DATA -10 815
 SF,12 X'101'
 DATA SETPSW
 K 2,0,0,L8C+2
 DATA X'01000000',0,0,0,X'1000',X'10000'

5228
 5229 01 01398 FFFFFFF6 A
 5230 01 01399 24C0017F A
 5231 01 0139A 00000136
 5234 01 0139B 20000166

PAGE
 ** THE NEXT 16 TESTS COMPLETE THE TEST OF 80031Z AND CHECK THE A UP
 ** CBUNT LOGIC.
 SF034 DATA -10 831
 SF,12 X'17F'
 DATA SETPSW
 K 2,0,0,L8C+2

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00

MARCH 12, 1969

154

5235 01 0139C 0F000000 A
 01 0139D 10000000 A
 01 0139E 00000000 A
 01 0139F 00000000 A
 01 013A0 00000010 A
 01 013A1 00000001 A

DATA X'0F000000',X'10000000',0,0,16,1

5236 01 013A2 FFFFFFF6 A
 5237 01 013A3 24C0017F A
 5238 01 013A4 00000136
 5239 01 013A5 20000166
 5240 01 013A6 1F000000 A
 01 013A7 20000000 A
 01 013A8 00000000 A
 01 013A9 00000000 A
 01 013AA 00000020 A
 01 013AB 00000002 A

SF035 DATA -10 830
 SF,12 X'17F'
 DATA SETPSW
 K 2,0,0,L8C+2
 DATA X'1F000000',X'20000000',0,0,32,2

5241 01 013AC FFFFFFF6 A
 5242 01 013AD 24C0017F A
 5243 01 013AE 00000136
 5244 01 013AF 20000166
 5245 01 013B0 2F000000 A
 01 013B1 30000000 A
 01 013B2 00000000 A
 01 013B3 00000000 A
 01 013B4 00000040 A
 01 013B5 00000004 A

SF036 DATA -10 829
 SF,12 X'17F'
 DATA SETPSW
 K 2,0,0,L8C+2
 DATA X'2F000000',X'30000000',0,0,64,4

5246
 5247 01 013B6 FFFFFFF6 A
 5248 01 013B7 24C0017F A
 5249 01 013B8 00000136
 5250 01 013B9 20000166
 5251 01 013BA 3F000000 A
 01 013BB 40000000 A
 01 013BC 00000000 A
 01 013BD 00000000 A
 01 013BE 00000080 A
 01 013BF 00000008 A

SF037 PAGE
 DATA -10 828
 SF,12 X'17F'
 DATA SETPSW
 K 2,0,0,L8C+2
 DATA X'3F000000',X'40000000',0,0,128,8

SIGMA 5 CPU DIAGNOSTIC-AUTB 704287-51C00				MARCH 12, 1969		155	
5252	01	013C0	FFFFFFF6 A	SF038	DATA	-10	827
5253	01	013C1	24C0017F A		SF,12	X'17F'	
5254	01	013C2	00000136		DATA	SETPSW	
5255	01	013C3	20000166		K	2,0,0,L8C+2	
5256	01	013C4	4F000000 A		DATA	X'4F000000',X'50000000',0,0,256,16	
	01	013C5	50000000 A				
	01	013C6	00000000 A				
	01	013C7	00000000 A				
	01	013C8	00000100 A				
	01	013C9	00000010 A				
5257	01	013CA	FFFFFFF6 A	SF039	DATA	-10	826
5258	01	013CB	24C0017F A		SF,12	X'17F'	
5259	01	013CC	00000136		DATA	SETPSW	
5260	01	013CD	20000166		K	2,0,0,L8C+2	
5261	01	013CE	5F000000 A		DATA	X'5F000000',X'60000000',0,0,512,32	
	01	013CF	60000000 A				
	01	013D0	00000000 A				
	01	013D1	00000000 A				
	01	013D2	00002000 A				
	01	013D3	00000020 A				
5262					PAGE		
5263	01	013D4	FFFFFFF6 A	SF040	DATA	-10	825
5264	01	013D5	24C0017F A		SF,12	X'17F'	
5265	01	013D6	00000136		DATA	SETPSW	
5266	01	013D7	20000166		K	2,0,0,L8C+2	
5267	01	013D8	6F000000 A		DATA	X'6F000000',X'70000000',0,0,1024,64	
	01	013D9	70000000 A				
	01	013DA	00000000 A				
	01	013DB	00000000 A				
	01	013DC	00000400 A				
	01	013DD	00000040 A				
5268	01	013DE	FFFFFFF6 A	SF041	DATA	-10	824
5269	01	013DF	24C0017F A		SF,12	X'17F'	
5270	01	013E0	00000136		DATA	SETPSW	
5271	01	013E1	20000166		K	2,0,0,L8C+2	
5272	01	013E2	06000000 A		DATA	X'60000000',X'70000000',0,0,2048,128	
	01	013E3	07000000 A				

SIGMA 5 CPU DIAGNOSTIC-AUTB 704287-51C00				MARCH 12, 1969		156	
	01	013E4	00000000 A				
	01	013E5	00000000 A				
	01	013E6	00000800 A				
	01	013E7	00000080 A				
5273	01	013E8	FFFFFFF6 A	SF042	DATA	-10	823
5274	01	013E9	24C0017F A		SF,12	X'17F'	
5275	01	013EA	00000136		DATA	SETPSW	
5276	01	013EB	20000166		K	2,0,0,L8C+2	
5277	01	013EC	70000000 A		DATA	X'70000000',X'71000000',0,0,4096,256	
	01	013ED	71000000 A				
	01	013EE	00000000 A				
	01	013EF	00000000 A				
	01	013F0	00001000 A				
	01	013F1	00000100 A				
5278					PAGE		
5279	01	013F2	FFFFFFF6 A	SF043	DATA	-10	822
5280	01	013F3	24C0017F A		SF,12	X'17F'	
5281	01	013F4	00000136		DATA	SETPSW	
5282	01	013F5	20000166		K	2,0,0,L8C+2	
5283	01	013F6	60000000 A		DATA	X'60000000',X'61000000',0,0,8192,512	
	01	013F7	61000000 A				
	01	013F8	00000000 A				
	01	013F9	00000000 A				
	01	013FA	00002000 A				
	01	013FB	00000200 A				
5284	01	013FC	FFFFFFF6 A	SF044	DATA	-10	821
5285	01	013FD	24C0017F A		SF,12	X'17F'	
5286	01	013FE	00000136		DATA	SETPSW	
5287	01	013FF	20000166		K	2,0,0,L8C+2	
5288	01	01400	50000000 A		DATA	X'50000000',X'51000000',0,0,16384,1024	
	01	01401	51000000 A				
	01	01402	00000000 A				
	01	01403	00000000 A				
	01	01404	00004000 A				
	01	01405	00000400 A				
5289	01	01406	FFFFFFF6 A	SF045	DATA	-10	820
5290	01	01407	24C0017F A		SF,12	X'17F'	

SIGMA 5 CPU DIAGNOSTIC-AUTB 704287-51C00 MARCH 12, 1969 157

5291	01 01408	00000136		DATA	SETPSW		
5292	01 01409	20000166		K	2,0,0,L8C+2		
5293	01 0140A	40000000 A		DATA	X'40000000',X'41000000',0,0,32768,2048		
	01 0140B	41000000 A					
	01 0140C	00000000 A					
	01 0140D	00000000 A					
	01 0140E	00008000 A					
	01 0140F	00000800 A					
5294				PAGE			
5295	01 01410	FFFFFFF6 A	SF046	DATA	-10		819
5296	01 01411	24C0017F A		SF,12	X'17F'		
5297	01 01412	00000136		DATA	SETPSW		
5298	01 01413	20000166		K	2,0,0,L8C+2		
5299	01 01414	30000000 A		DATA	X'30000000',X'31000000',0,0,65536,4096		
	01 01415	31000000 A					
	01 01416	00000000 A					
	01 01417	00000000 A					
	01 01418	00010000 A					
	01 01419	00001000 A					
5300	01 0141A	FFFFFFF6 A	SF047	DATA	-10		818
5301	01 0141B	24C0017F A		SF,12	X'17F'		
5302	01 0141C	00000136		DATA	SETPSW		
5303	01 0141D	20000166		K	2,0,0,L8C+2		
5304	01 0141E	20000000 A		DATA	X'20000000',X'21000000',0,0,131072,8192		
	01 0141F	21000000 A					
	01 01420	00000000 A					
	01 01421	00000000 A					
	01 01422	00020000 A					
	01 01423	00002000 A					
5305	01 01424	FFFFFFF6 A	SF048	DATA	-10		817
5306	01 01425	24C0017F A		SF,12	X'17F'		
5307	01 01426	00000136		DATA	SETPSW		
5308	01 01427	20000166		K	2,0,0,L8C+2		
5309	01 01428	10000000 A		DATA	X'10000000',X'11000000',0,0,262144,16384		
	01 01429	11000000 A					
	01 0142A	00000000 A					
	01 0142B	00000000 A					

SIGMA 5 CPU DIAGNOSTIC-AUTB 704287-51C00 MARCH 12, 1969 158

	01 0142C	00040000 A					
	01 0142D	00004000 A					
5310				PAGE			
5311	01 0142E	FFFFFFF6 A	SF049	DATA	-10		816
5312	01 0142F	24C0017F A		SF,12	X'17F'		
5313	01 01430	00000136		DATA	SETPSW		
5314	01 01431	20000166		K	2,0,0,L8C+2		
5315	01 01432	00000000 A		DATA	0,X'10000000',0,0,524288,32768		
	01 01433	01000000 A					
	01 01434	00000000 A					
	01 01435	00000000 A					
	01 01436	00080000 A					
	01 01437	00008000 A					
5316				** CHECK THAT UNUSED BITS IN ADDRESS FIELD HAVE NO EFFECT			
5317				** ALSO THAT INDEXING WILL CHANGE A - COUNT TO A + COUNT			
5318	01 01438	FFFFFFF4 A	SF050	DATA	-12		
5319	01 01439	A4C20460		SF,12	*MEMBRY,1		
5320	01 0143A	00000136		K	0,0,0,SETPSW		
5321	01 0143B	20000166		K	2,0,0,L8C+2		
5322	01 0143C	04000011 A		DATA	X'04000011',X'03000110',X'FFFFFFF0',X'FFFFFFF0',-9,-9		
	01 0143D	03000110 A					
	01 0143E	FFFFFFE0 A					
	01 0143F	FFFFFFE0 A					
	01 01440	FFFFFFF7 A					
	01 01441	FFFFFFF7 A					
5323	01 01442	00000008 A		DATA	8,8		
	01 01443	00000008 A					
5324				PAGE			
5325	01 01444	FFFFFFF4 A	SF01	DATA	-12		SF
5326	01 01445	24C00101 A		SF,12	X'101'		
5327	01 01446	073001C9		K	0,7,3,FLPFSW		
5328	01 01447	A7300166		K	10,7,3,L8C+2		
5329	01 01448	010F0F0F A		DATA	X'010F0F0F'		
5330	01 01449	00F0F0F0 A		DATA	X'00F0F0F0'		
5331	01 0144A	00000000 A		DATA	X'0'		
5332	01 0144B	00000000 A		DATA	X'0'		
5333	01 0144C	0F0F0F0F A		DATA	X'0F0F0F0F'		

5334	01	0144D	F0F0F0F0 A		DATA	X'F0F0F0F0'	
5335	01	0144E	00000000 A		DATA	X'0'	
5336	01	0144F	00000000 A		DATA	X'0'	
5337	01	01450	FFFFFFF4 A	SF02	DATA	-12	SF
5338	01	01451	24C00101 A		SF,12	X'101'	
5339	01	01452	073001C9		K	0,7,3,FLPFSW	
5340	01	01453	27300166		K	2,7,3,L8C+2	
5341	01	01454	0300F0F0 A		DATA	X'0300F0F0'	
5342	01	01455	020F0F0F A		DATA	X'020F0F0F'	
5343	01	01456	00000000 A		DATA	X'0'	
5344	01	01457	00000000 A		DATA	X'0'	
5345	01	01458	F0F0F0F0 A		DATA	X'F0F0F0F0'	
5346	01	01459	0F0F0F00 A		DATA	X'0F0F0F00'	
5347	01	0145A	00000000 A		DATA	X'0'	
5348	01	0145B	00000000 A		DATA	X'0'	
5349					PAGE		
5350	01	0145C	FFFFFFF4 A	SF03	DATA	-12	SF
5351	01	0145D	24C0017F A		SF,12	X'17F'	
5352	01	0145E	073001C9		K	0,7,3,FLPFSW	
5353	01	0145F	27300166		K	2,7,3,L8C+2	
5354	01	01460	010F0F0F A		DATA	X'010F0F0F'	
5355	01	01461	0200F0F0 A		DATA	X'0200F0F0'	
5356	01	01462	00000000 A		DATA	X'0'	
5357	01	01463	00000000 A		DATA	X'0'	
5358	01	01464	0F0F0F0F A		DATA	X'0F0F0F0F'	
5359	01	01465	F0F0F0F0 A		DATA	X'F0F0F0F0'	
5360	01	01466	00000000 A		DATA	X'0'	
5361	01	01467	00000000 A		DATA	X'0'	
5362					PAGE		
5363	01	01468	FFFFFFF4 A	SF04	DATA	-12	SF
5364	01	01469	24C0017F A		SF,12	X'17F'	
5365	01	0146A	073001C9		K	0,7,3,FLPFSW	
5366	01	0146B	27300166		K	2,7,3,L8C+2	
5367	01	0146C	03F0F0F0 A		DATA	X'03F0F0F0'	
5368	01	0146D	040F0F0F A		DATA	X'040F0F0F'	
5369	01	0146E	00000000 A		DATA	X'0'	
5370	01	0146F	00000000 A		DATA	X'0'	

5371	01	01470	F0F0F0F0 A		DATA	X'F0F0F0F0'	
5372	01	01471	0F0F0F0F A		DATA	X'0F0F0F0F'	
5373	01	01472	00000000 A		DATA	X'0'	
5374	01	01473	00000000 A		DATA	X'0'	
5375	01	01474	FFFFFFF4 A	SF05	DATA	-12	SF
5376	01	01475	24C00101 A		SF,12	X'101'	
5377	01	01476	073001C9		K	0,7,3,FLPFSW	
5378	01	01477	27300166		K	2,7,3,L8C+2	
5379	01	01478	7F000000 A		DATA	X'7F000000'	
5380	01	01479	00000000 A		DATA	X'0'	
5381	01	0147A	00000000 A		DATA	X'0'	
5382	01	0147B	00000000 A		DATA	X'0'	
5383	01	0147C	00000000 A		DATA	X'0'	
5384	01	0147D	00000000 A		DATA	X'0'	
5385	01	0147E	00000000 A		DATA	X'0'	
5386	01	0147F	00000000 A		DATA	X'0'	
5387					PAGE		
5388	01	01480	FFFFFFF4 A	SF06	DATA	-12	SF
5389	01	01481	24C00041 A		SF,12	X'041'	
5390	01	01482	073001C9		K	0,7,3,FLPFSW	
5391	01	01483	07300166		K	0,7,3,L8C+2	
5392	01	01484	7F000000 A		DATA	X'7F000000'	
5393	01	01485	00000000 A		DATA	X'0'	
5394	01	01486	00000000 A		DATA	X'0'	
5395	01	01487	00000000 A		DATA	X'0'	
5396	01	01488	00000000 A		DATA	X'0'	
5397	01	01489	00000000 A		DATA	X'0'	
5398	01	0148A	00000000 A		DATA	X'0'	
5399	01	0148B	00000000 A		DATA	X'0'	
5400	01	0148C	FFFFFFF4 A	SF07	DATA	-12	SF
5401	01	0148D	24C00101 A		SF,12	X'101'	
5402	01	0148E	073001C9		K	0,7,3,FLPFSW	
5403	01	0148F	27300166		K	2,7,3,L8C+2	
5404	01	01490	FFFFFFF4 A		DATA	X'FFFFFFF4'	
5405	01	01491	80FFFFFF0 A		DATA	X'80FFFFFF0'	
5406	01	01492	00000000 A		DATA	X'0'	
5407	01	01493	00000000 A		DATA	X'0'	

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12,1969 161

5408	01	01494	00000000	A		DATA	X'0'
5409	01	01495	00000000	A		DATA	X'0'
5410	01	01496	00000000	A		DATA	X'0'
5411	01	01497	00000000	A		DATA	X'0'
5412						PAGE	
5413	01	01498	FFFFFFF4	A	SF08	DATA	-12
5414	01	01499	24C00141	A		SF,12	X'141'
5415	01	0149A	073001C9	A		K	0,7,3,FLPFSW
5416	01	0149B	07300166	A		K	0,7,3,L8C+2
5417	01	0149C	00FFFFFF	A		DATA	X'0FFFFFF'
5418	01	0149D	00000000	A		DATA	X'0'
5419	01	0149E	00000000	A		DATA	X'0'
5420	01	0149F	00000000	A		DATA	X'0'
5421	01	014A0	FFFFFFF4	A		DATA	X'FFFFFFF'
5422	01	014A1	00000000	A		DATA	X'0'
5423	01	014A2	00000000	A		DATA	X'0'
5424	01	014A3	00000000	A		DATA	X'0'
5425	01	014A4	FFFFFFF4	A	SF09	DATA	-12
5426	01	014A5	24C00173	A		SF,12	X'173'
5427	01	014A6	073001C9	A		K	0,7,3,FLPFSW
5428	01	014A7	27300166	A		K	2,7,3,L8C+2
5429	01	014A8	72F00000	A		DATA	X'72F00000'
5430	01	014A9	7F000000	A		DATA	X'7F000000'
5431	01	014AA	00000000	A		DATA	X'0'
5432	01	014AB	00000000	A		DATA	X'0'
5433	01	014AC	00000000	A		DATA	X'0'
5434	01	014AD	0000000F	A		DATA	X'0000000F'
5435	01	014AE	00000000	A		DATA	X'0'
5436	01	014AF	00000000	A		DATA	X'0'
5437						PAGE	
5438	01	014B0	FFFFFFF4	A	SF10	DATA	-12
5439	01	014B1	24C0013F	A		SF,12	X'13F'
5440	01	014B2	073001C9	A		K	0,7,3,FLPFSW
5441	01	014B3	A7300166	A		K	10,7,3,L8C+2
5442	01	014B4	07080000	A		DATA	X'07080000'
5443	01	014B5	06800000	A		DATA	X'06800000'
5444	01	014B6	00000000	A		DATA	X'0'

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12,1969 162

5445	01	014B7	00000000	A		DATA	X'0'
5446	01	014B8	00000000	A		DATA	X'0'
5447	01	014B9	00000000	A		DATA	X'0'
5448	01	014BA	00000000	A		DATA	X'0'
5449	01	014BB	00000000	A		DATA	X'0'
5450	01	014BC	FFFFFFF4	A	SF11	DATA	-12
5451	01	014BD	24C00172	A		SF,12	X'172'
5452	01	014BE	073001C9	A		K	0,7,3,FLPFSW
5453	01	014BF	07300166	A		K	0,7,3,L8C+2
5454	01	014C0	72FFFFFF	A		DATA	X'72FFFFFF'
5455	01	014C1	00000000	A		DATA	X'0'
5456	01	014C2	00000000	A		DATA	X'0'
5457	01	014C3	00000000	A		DATA	X'0'
5458	01	014C4	FFFFFFF4	A		DATA	X'FFFFFFF'
5459	01	014C5	00000000	A		DATA	X'0'
5460	01	014C6	00000000	A		DATA	X'0'
5461	01	014C7	00000000	A		DATA	X'0'
5462						PAGE	
5463	01	014C8	FFFFFFF4	A	SF12	DATA	-12
5464	01	014C9	24C0010D	A		SF,12	X'10D'
5465	01	014CA	073001C9	A		K	0,7,3,FLPFSW
5466	01	014CB	A7300166	A		K	10,7,3,L8C+2
5467	01	014CC	73000000	A		DATA	X'73000000'
5468	01	014CD	66100000	A		DATA	X'66100000'
5469	01	014CE	00000000	A		DATA	X'0'
5470	01	014CF	00000000	A		DATA	X'0'
5471	01	014D0	00000001	A		DATA	X'00000001'
5472	01	014D1	00000000	A		DATA	X'0'
5473	01	014D2	00000000	A		DATA	X'0'
5474	01	014D3	00000000	A		DATA	X'0'
5475	01	014D4	FFFFFFF4	A	SF13	DATA	-12
5476	01	014D5	24C0017E	A		SF,12	X'17E'
5477	01	014D6	073001C9	A		K	0,7,3,FLPFSW
5478	01	014D7	67300166	A		K	6,7,3,L8C+2
5479	01	014D8	7FF00000	A		DATA	X'7FF00000'
5480	01	014D9	000F0000	A		DATA	X'000F0000'
5481	01	014DA	00000000	A		DATA	X'0'

5482	01	014D9	00000000	A		DATA	X'0'
5483	01	014DC	0000000F	A		DATA	X'0000000F'
5484	01	014DD	00000000	A		DATA	X'0'
5485	01	014DE	00000000	A		DATA	X'0'
5486	01	014DF	00000000	A		DATA	X'0'
5487						PAGE	
5488	01	014E0	FFFFFFF4	A	SF14	DATA	-12
5489	01	014E1	24C00000	A		SF,12	X'000'
5490	01	014E2	073001C9	A		K	0,7,3,FLPFSW
5491	01	014E3	A7300166	A		K	10,7,3,L8C+2
5492	01	014E4	7F555555	A		DATA	X'7F555555'
5493	01	014E5	7F555555	A		DATA	X'7F555555'
5494	01	014E6	00000000	A		DATA	X'0'
5495	01	014E7	00000000	A		DATA	X'0'
5496	01	014E8	00000000	A		DATA	X'0'
5497	01	014E9	00000000	A		DATA	X'0'
5498	01	014EA	00000000	A		DATA	X'0'
5499	01	014EB	00000000	A		DATA	X'0'
5500						PAGE	
5501	01	014EC	FFFFFFF4	A	SF15	DATA	-12
5502	01	014ED	24C00101	A		SF,12	X'101'
5503	01	014EE	073001C9	A		K	0,7,3,FLPFSW
5504	01	014EF	97300166	A		K	9,7,3,L8C+2
5505	01	014F0	FE000000	A		DATA	X'FE000000'
5506	01	014F1	FE000000	A		DATA	X'FE000000'
5507	01	014F2	00000000	A		DATA	X'0'
5508	01	014F3	00000000	A		DATA	X'0'
5509	01	014F4	FFFFFFF4	A		DATA	X'FFFFFFF4'
5510	01	014F5	FFFFFFF4	A		DATA	X'FFFFFFF4'
5511	01	014F6	00000000	A		DATA	X'0'
5512	01	014F7	00000000	A		DATA	X'0'
5513	01	014F8	FFFFFFF4	A	SF16	DATA	-12
5514	01	014F9	24D0017E	A		SF,13	X'17E'
5515	01	014FA	073001C9	A		K	0,7,3,FLPFSW
5516	01	014FB	27300166	A		K	2,7,3,L8C+2
5517	01	014FC	7FAAAAAA	A		DATA	X'7FAAAAAA'
5518	01	014FD	7FAAAAAA	A		DATA	X'7FAAAAAA'

5519	01	014FE	00000000	A		DATA	X'0'
5520	01	014FF	00000000	A		DATA	X'0'
5521	01	01500	40555555	A		DATA	X'40555555'
5522	01	01501	42005555	A		DATA	X'42005555'
5523	01	01502	00000000	A		DATA	X'0'
5524	01	01503	00000000	A		DATA	X'0'
5525						PAGE	
5526	01	01504	FFFFFFF4	A	SF17	DATA	-12
5527	01	01505	24D00104	A		SF,13	X'104'
5528	01	01506	073001C9	A		K	0,7,3,FLPFSW
5529	01	01507	A7300166	A		K	10,7,3,L8C+2
5530	01	01508	00000001	A		DATA	X'00000001'
5531	01	01509	00000001	A		DATA	X'1'
5532	01	0150A	00000000	A		DATA	X'0'
5533	01	0150B	00000000	A		DATA	X'0'
5534	01	0150C	40000FFF	A		DATA	X'40000FFF'
5535	01	0150D	30FFF400	A		DATA	X'30FFF400'
5536	01	0150E	00000000	A		DATA	X'0'
5537	01	0150F	00000000	A		DATA	X'0'
5538	01	01510	FFFFFFF4	A	SF18	DATA	-12
5539	01	01511	24C0007D	A		SF,12	X'07D'
5540	01	01512	073001C9	A		K	0,7,3,FLPFSW
5541	01	01513	07300166	A		K	0,7,3,L8C+2
5542	01	01514	FF000000	A		DATA	X'FF000000'
5543	01	01515	00000000	A		DATA	X'0'
5544	01	01516	00000000	A		DATA	X'0'
5545	01	01517	00000000	A		DATA	X'0'
5546	01	01518	00000000	A		DATA	X'0'
5547	01	01519	00000000	A		DATA	X'0'
5548	01	0151A	00000000	A		DATA	X'0'
5549	01	0151B	00000000	A		DATA	X'0'
5550						PAGE	
5551	01	0151C	FFFFFFF4	A	SF19	DATA	-12
5552	01	0151D	24D00001	A		SF,13	X'001'
5553	01	0151E	073001C9	A		K	0,7,3,FLPFSW
5554	01	0151F	A7300166	A		K	10,7,3,L8C+2
5555	01	01520	00000000	A		DATA	X'0'

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 165

5556	01	01521	00000000	A	DATA	X'0'	
5557	01	01522	00000000	A	DATA	X'0'	
5558	01	01523	00000000	A	DATA	X'0'	
5559	01	01524	080F0F0F	A	DATA	X'080F0F0F'	
5560	01	01525	07F0F0F0	A	DATA	X'07F0F0F0'	
5561	01	01526	00000000	A	DATA	X'0'	
5562	01	01527	00000000	A	DATA	X'0'	
5563	01	01528	FFFFFFF4	A	DATA	-12	SF
5564	01	01529	24D0007F	A	SF, 13	X'07F'	
5565	01	0152A	073001C9	A	K	0,7,3,FLPFSW	
5566	01	0152B	27300166	A	K	2,7,3,L8C+2	
5567	01	0152C	00000000	A	DATA	X'0'	
5568	01	0152D	00000000	A	DATA	X'0'	
5569	01	0152E	00000000	A	DATA	X'0'	
5570	01	0152F	00000000	A	DATA	X'0'	
5571	01	01530	07F0F0F0	A	DATA	X'07F0F0F0'	
5572	01	01531	080F0F0F	A	DATA	X'080F0F0F'	
5573	01	01532	00000000	A	DATA	X'0'	
5574	01	01533	00000000	A	DATA	X'0'	
5575					PAGE		
5576	01	01534	FFFFFFF4	A	DATA	-12	SF
5577	01	01535	A4C00460	A	SF, 12	*MEMORY	
5578	01	01536	073001C9	A	K	0,7,3,FLPFSW	
5579	01	01537	A7300166	A	K	10,7,3,L8C+2	
5580	01	01538	010F0F0F	A	DATA	X'010F0F0F'	
5581	01	01539	00F0F0F0	A	DATA	X'00F0F0F0'	
5582	01	0153A	00000101	A	DATA	X'101'	
5583	01	0153B	00000101	A	DATA	X'101'	
5584	01	0153C	0F0F0F0F	A	DATA	X'0F0F0F0F'	
5585	01	0153D	F0F0F0F0	A	DATA	X'F0F0F0F0'	
5586	01	0153E	00000000	A	DATA	X'0'	
5587	01	0153F	00000000	A	DATA	X'0'	
5588					PAGE		
5589	01	01540	FFFFFFF4	A	DATA	-12	SF
5590	01	01541	24CE0101	A	SF, 12	X'101',7	
5591	01	01542	073001C9	A	K	0,7,3,FLPFSW	
5592	01	01543	A7300166	A	K	10,7,3,L8C+2	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 166

5593	01	01544	010F0F0F	A	DATA	X'010F0F0F'	
5594	01	01545	00F0F0F0	A	DATA	X'00F0F0F0'	
5595	01	01546	00000000	A	DATA	X'0'	
5596	01	01547	00000000	A	DATA	X'0'	
5597	01	01548	0F0F0F0F	A	DATA	X'0F0F0F0F'	
5598	01	01549	F0F0F0F0	A	DATA	X'F0F0F0F0'	
5599	01	0154A	00000000	A	DATA	X'0'	
5600	01	0154B	00000000	A	DATA	X'0'	
5601	01	0154C	FFFFFFF4	A	DATA	-12	SF
5602	01	0154D	A4CE0460	A	SF, 12	*MEMORY,7	
5603	01	0154E	073001C9	A	K	0,7,3,FLPFSW	
5604	01	0154F	A7300166	A	K	10,7,3,L8C+2	
5605	01	01550	010F0F0F	A	DATA	X'010F0F0F'	
5606	01	01551	00F0F0F0	A	DATA	X'00F0F0F0'	
5607	01	01552	00000100	A	DATA	X'100'	
5608	01	01553	00000100	A	DATA	X'100'	
5609	01	01554	0F0F0F0F	A	DATA	X'0F0F0F0F'	
5610	01	01555	F0F0F0F0	A	DATA	X'F0F0F0F0'	
5611	01	01556	00000000	A	DATA	X'0'	
5612	01	01557	00000000	A	DATA	X'0'	
5613					PAGE		
5614					** CHECK	CBND CODE SETTINGS AND TRAP LOCATIONS. 19 SET FOR FIRST SIX	
5615	01	01558	FFFFFFFC	A	CAL01	DATA	-4
5616	01	01559	04301559	A	CAL1,3	\$	
5617	01	0155A	079001CF	A	K	0,7,9,S19CL1	SLAVE MODE
5618	01	0155B	3710009E	A	K	3,7,1,C1RET+4	
5619	01	0155C	FFFFFFFC	A	CAL02	DATA	-4
5620	01	0155D	05C0155D	A	CAL2,12	\$	
5621	01	0155E	073001D5	A	K	0,7,3,S19CL2	MASTER MODE
5622	01	0155F	C730008B	A	K	12,7,3,C2RET+13	
5623	01	01560	FFFFFFFC	A	CAL03	DATA	-4
5624	01	01561	06A01561	A	CAL3,10	\$	
5625	01	01562	00800108	A	K	0,0,8,S19CL3	SLAVE
5626	01	01563	A00000CD	A	K	10,0,0,C3RET+11	
5627	01	01564	FFFFFFFC	A	CAL04	DATA	-4
5628	01	01565	07501565	A	CAL4,5	\$	
5629	01	01566	000001E1	A	K	0,0,0,S19CL4	MASTER

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969 167

```

5630 01 01567 500000DC K 5,0,0,C4RET+6
5631
5632
5633 01 01568 FFFFFFFF A ** CHECK THAT IA AND IX HAS NO EFFECT
5634 01 01569 870E0460 CAL05 DATA -8
5635 01 0156A F08001E1 K *MEMORY,7 SLAVE
5636 01 0156B F00000D7 K 15,0,8,S19CL4
5637 01 0156C 00000000 A DATA 0
5638 01 0156D 00000000 A DATA 0
5639 01 0156E 00000460 DATA MEMBRY
5640 01 0156F 00000460 DATA MEMBRY
5641 01 01570 FFFFFFFF A CAL06 DATA -4
5642 01 01571 07F01571 CAL4,F $
5643 01 01572 000001E1 K 0,0,0,S19CL4 MASTER
5644 01 01573 F00000E6 K 15,0,0,C4RET+16
5645
5646 01 01574 FFFFFFFF A ** 19 RESET
5647 01 01575 07F01575 CAL07 DATA -4
5648 01 01576 000001E2 CAL4,F $
5649 01 01577 F00000D7 K 0,0,0,R19CL4 MASTER
5650 K 15,0,0,C4RET+1
5651 PAGE
5652
5653
5654
5655
5656
5657
5658
5659 01 01578 FFFFFFFF A FARW01 DATA -14
5660 01 01579 63C00037 A WD,12 X'137' SET ALL INTERRUPT INHIBITS IN PSW2
5661 01 0157A 000001E7 DATA FARWD
5662 01 0157B 00000166 DATA LBC+2
5663 01 0157C 00000000 A DATA 0,0,0,0,0,0,0,0,x'7000000'
01 0157D 00000000 A
01 0157E 00000000 A
01 0157F 00000000 A

***
*** CAUTION
*** PSW1 BUT IS DEPENDENT UPON THE SENSE SWITCH SETTING WHEN EXECUTING
*** FARWD INSTRUCTIONS. A FALSE ERROR COULD OCCUR IF SWITCHES ARE
*** OPERATED.
*** TO RECOVER USE THE CP INTERRUPT SET THE SENSE SWITCHES, ENTER
*** THE MODULE LOCATION IN R1, DISPLAY THE IA AND RJN.

```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969 168

```

01 01580 00000000 A
01 01581 00000000 A
01 01582 00000000 A
01 01583 00000000 A
01 01584 00000000 A
01 01585 07000000 A
5664 01 01586 FFFFFFFF A FARW02 DATA -14 INTERRUPT INHIBIT TEST *B
5665 01 01587 63C00030 A WD,12 X'130' TRY TO SET W/O SPECIFYING ANY BITS *B
5666 01 01588 000001E7 DATA FARWD
5667 01 01589 00000166 DATA LBC+2
5668 01 0158A FFFFFFFF A DATA -1,-1,-1,-1,-1,-1,-1,0,0 PSW2 IN=0 PSW2 BUT=0 *B
01 0158B FFFFFFFF A
01 0158C FFFFFFFF A
01 0158D FFFFFFFF A
01 0158E FFFFFFFF A
01 0158F FFFFFFFF A
01 01590 FFFFFFFF A
01 01591 FFFFFFFF A
01 01592 00000000 A
01 01593 00000000 A
5669
5670 01 01594 FFFFFFFF A FARW03 PAGE
5671 01 01595 63C00027 A DATA -14 INTERRUPT INHIBIT TEST *B
5672 01 01596 000001E7 WD,12 X'127' RESET ALL BITS *B
5673 01 01597 00000166 DATA FARWD *B
5674 01 01598 00000000 A DATA LBC+2 *B
01 01599 00000000 A DATA 0,0,0,0,0,0,0,0 *B
01 0159A 00000000 A
01 0159B 00000000 A
01 0159C 00000000 A
01 0159D 00000000 A
01 0159E 00000000 A
01 0159F 00000000 A
5675 01 015A0 07000000 A GEN,8,24 7,0 PSW2 IN
5676 01 015A1 00000000 A DATA 0 PSW2 BUT
5677 01 015A2 FFFFFFFF A FARW04 DATA -14 INTERRUPT INHIBIT TEST *B
5678 01 015A3 63C00020 A WD,12 X'120' TRY TO RESET W/O SPECIFYING BITS *B

```

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 169

5679	01 015A4	000001E7	DATA	FARWD	
5680	01 015A5	00000166	DATA	L8C+2	
5681	01 015A6	00000000 A	DATA	0,0,0,0,0,0,0,0	
	01 015A7	00000000 A			
	01 015A8	00000000 A			
	01 015A9	00000000 A			
	01 015AA	00000000 A			
	01 015AB	00000000 A			
	01 015AC	00000000 A			
	01 015AD	00000000 A			
5682	01 015AE	07000000 A	GEN,8,24,8,24	7,0,7,0	PSW2 IN AND OUT
		07000000			
5683			PAGE		
5684	01 015B0	FFFFFFF2 A	FARWD05	DATA	-14
5685	01 015B1	6CC00037 A	RD,12	X'37'	INTERRUPT INHIBIT TEST
5686	01 015B2	000001E7	DATA	FARWD,L8C+2	ONLY WD SHOULD SET BITS
	01 015B3	00000166			*B
5687	01 015B4	FFFFFFF7 A	DATA	-1,0,0,0,0,0,0,0	*B
	01 015B5	00000000 A			
	01 015B6	00000000 A			
	01 015B7	00000000 A			
	01 015B8	00000000 A			
	01 015B9	00000000 A			
	01 015BA	00000000 A			
	01 015BB	00000000 A			
	01 015BC	00000000 A			
	01 015BD	00000000 A			
5688			PAGE		
5689			** CHECK THAT INDX=C4 C14		
5690			** INDEXING ALIGNMENT IS CHECKED BY THE BYTE, HALF AND DOUBLEWORD MODULE		
5691	01 015BE	FFFFFFF8 A	IX01	DATA	-8
5692	01 015BF	48C3EEA2 A	EBR,12	MEMBRY-IX01,1	
5693	01 015C0	00000136	DATA	SETPSW,L8C+2	
	01 015C1	00000166			
5694	01 015C2	000015BE	DATA	IX01,0,IX01,IX01	
	01 015C3	00000000 A			
	01 015C4	000015BE			

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 170

5695	01 015C5	000015BE	** CHECK THAT INDX=C3 C12		
5696	01 015C6	FFFFFFF8 A	IX02	DATA	-8
5697	01 015C7	30C80004 A	AW,12	4,4	EFF ADDR IS 8. CONTENTS OF MEM IN 8
5698	01 015C8	00000136	DATA	SETPSW	
5699	01 015C9	20000166	K	2,0,0,L8C+2	
5700	01 015CA	00000064 A	DATA	100,300,200,200	
	01 015CB	0000012C A			
	01 015CC	000000C8 A			
	01 015CD	000000C8 A			
5701			** CHECK THAT INDX=C5 C13		
5702	01 015CE	FFFFFFF6 A	IX03	DATA	-10
5703	01 015CF	24C40002 A	SF,12	2,2	IX2 CONTAINS A 1. CAUSING LS OF 3.
5704	01 015D0	00000136	K	0,0,0,SETPSW	
5705	01 015D1	A0000166	K	10,0,0,L8C+2	
5706	01 015D2	14000100 A	DATA	X'14000100'	
5707	01 015D3	11100000 A	DATA	X'11100000'	
5708	01 015D4	00000000 A	DATA	0	
5709	01 015D5	00000000 A	DATA	0	
5710	01 015D6	FFFFFFF7 A	DATA	-1	
5711	01 015D7	FFFFFFF7 A	DATA	-1	
5712			PAGE		
5713			** TEST THAT A PRIVILEGED INSTRUCTION TRAPS IN SLAVE MODE		
5714	01 015D8	FFFFFFFC A	FAPRIV01	DATA	-4
5715	01 015D9	0F000464	XPSD,0	RETURN	
5716	01 015DA	F7B00186	K	15,7,11,SIGNAB	19=1 CAUSING TRACC2 ADDITION TO ADDR
5717	01 015DB	F7300065	K	5,7,3,MVRET+1	
5718			** TEST THAT FAPRIV IS FALSE WHEN 05 IS FALSE		
5719	01 015DC	FFFFFFFC A	FAPRIV02	DATA	-4
5720	01 015DD	48C00460	EBR,12	MEMBRY	
5721	01 015DE	F7B00136	K	15,7,11,SETPSW	
5722	01 015DF	C7B00165	K	12,7,11,L8C+1	
5723			** TEST THAT FAPRIV IS FALSE WHEN 04 IS FALSE		
5724	01 015E0	FFFFFFFC A	FAPRIV03	DATA	-4
5725	01 015E1	66C00460	AW,12	MEMBRY	
5726	01 015E2	F7B00136	K	15,7,11,SETPSW	
5727	01 015E3	07B00165	K	0,7,11,L8C+1	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 171

5728 ** TEST THAT FAPRIV IS FALSE WHEN B3 IS TRUE, NON-EXISTENT TRAP SHOULD
5729 ** OCCUR, A RETURN FROM NEIRET+2 INDICATES FAPRIV BECAME TRUE.

5730 01 015E4 FFFFFFFC A FAPRIV04 DATA -4
5731 01 015E5 7E000460 DL,0 MEMORY
5732 01 015E6 F7B001B6 K 15,7,11,SIGNAB
5733 01 015E7 F7300068 K 15,7,3,NEIRET+1

5734 PAGE
5735 ** THE FOLLOWING ROUTINES CHECK THAT ALL TERMS FOR FAILL (FAM ILLEGAL)
5736 ** ARE OPERATING PROPERLY. ALL CASES SHOULD TRAP TO 40.
5737 ** CHECK INPUT IA,FAIM

5738 01 015E8 FFFFFFFB A FAILL01 DATA -8
5739 01 015E9 A2C0045A N GEN,16,16 X'A2C0',IA LI,C *IA
5740 01 015EA 000001B6 DATA SIGNAB
5741 01 015EB 80000068 K 8,0,0,NEIRET+1
5742 01 015EC 00000000 A DATA 0 R IN
5743 01 015ED 00000000 A DATA 0 R OUT
5744 01 015EE 00000100 A DATA X'100' M IN
5745 01 015EF 00000100 A DATA X'100' M OUT

5746 ** CHECK INPUT BU1,N04,05,06-1
5747 01 015F0 FFFFFFFC A FAILL02 DATA -4
5748 01 015F1 16000000 A DATA X'16000000' ILLEGAL INST
5749 01 015F2 000001B6 DATA SIGNAB
5750 01 015F3 80000068 K 8,0,0,NEIRET+1

5751 ** CHECK INPUT FUMMC,N(ND12,ND13,D14) WITH D12 TRUE
5752 01 015F4 FFFFFFFC A FAILL03 DATA -4
5753 01 015F5 6FCA0000 A DATA X'6FCA0000' MMC,12 5
5754 01 015F6 000001B6 DATA SIGNAB
5755 01 015F7 80000068 K 8,0,0,NEIRET+1

5756 ** CHECK INPUT FUMMC,N(ND12,ND13,D14) WITH D13 TRUE
5757 01 015F8 FFFFFFFC A FAILL04 DATA -4
5758 01 015F9 6FC60000 A DATA X'6FC60000' MMC,12 3
5759 01 015FA 000001B6 DATA SIGNAB
5760 01 015FB 80000068 K 8,0,0,NEIRET+1

5761 ** CHECK INPUT FUMMC,N(ND12,ND13,D14) WITH ND14 TRUE
5762 01 015FC FFFFFFFC A FAILL05 DATA -4
5763 01 015FD 6FC00000 A DATA X'6FC00000' MMC,12 0
5764 01 015FE 000001B6 DATA SIGNAB

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 172

5765 01 015FF 80000068 K 8,0,0,NEIRET+1
5766 PAGE
5767 ** CHECK INPUT BU2,04,N05,N06

5768 01 01600 FFFFFFFC A FAILL06 DATA -4
5769 01 01601 28C00460 CVS,12 MEMORY
5770 01 01602 000001B6 DATA SIGNAB
5771 01 01603 80000068 K 8,0,0,NEIRET+1

5772 ** CHECK INPUT BU7,04,05,06
5773 01 01604 FFFFFFFC A FAILL07 DATA -4
5774 01 01605 76C00460 PACK,12 MEMORY
5775 01 01606 000001B6 DATA SIGNAB
5776 01 01607 80000068 K 8,0,0,NEIRET+1

5777 ** CHECK INPUT BU7,04
5778 01 01608 FFFFFFFC A FAILL08 DATA -4
5779 01 01609 7FC00460 DST,12 MEMORY
5780 01 0160A 000001B6 DATA SIGNAB
5781 01 0160B 80000068 K 8,0,0,NEIRET+1

5782 ** CHECK INPUT B1,N03,N04,N05
5783 01 0160C FFFFFFFC A FAILL09 DATA -4
5784 01 0160D 41C00460 TSS,12 MEMORY
5785 01 0160E 000001B6 DATA SIGNAB
5786 01 0160F 80000068 K 8,0,0,NEIRET+1

5787 ** CHECK INPUT BU5,0L9
5788 01 01610 FFFFFFFC A FAILL10 DATA -4
5789 01 01611 59000000 A DATA X'59000000'
5790 01 01612 000001B6 DATA SIGNAB
5791 01 01613 80000068 K 8,0,0,NEIRET+1

5792 ** CHECK INPUT BL4,03,NFABYTE
5793 01 01614 FFFFFFFC A FAILL11 DATA -4
5794 01 01615 34000000 A DATA X'34000000'
5795 01 01616 000001B6 DATA SIGNAB
5796 01 01617 80000068 K 8,0,0,NEIRET+1

5797 PAGE
5798 ** CHECK INPUT 04,05,01,03
5799 01 01618 FFFFFFFC A FAILL12 DATA -4
5800 01 01619 7C000460 DSA MEMORY
5801 01 0161A 000001B6 DATA SIGNAB

```

5802 01 01613 80000068 K 8,0,0,NEIRET+1
5803 ** CHECK INPUT 64,85,NB1,NB3,NB6
5804 01 0161C FFFFFFFC A FAILL13 DATA -4
5805 01 0161D 0C000000 A DATA X'C0000000'
5806 01 0161E 00000186 DATA SIGNAB
5807 01 0161F 80000068 K 8,0,0,NEIRET+1
5808 ** THIS TEST IS BYPASSED IF FLOATING POINT IS INSTALLED. IF NOT
5809 ** INSTALLED, THIS TESTS NFAIMP * FAFL,NFPPTION
5810 01 01620 FFFFFFFC A NFAIMP01 DATA -4
5811 01 01621 680001A7 B END BECOMES FAS,12MEMORY IF NFPPTION
5812 01 01622 0000018C K 0,0,0,UJIGW
5813 01 01623 00000077 K 0,0,0,UJIRET+1
5814 PAGE
5815 01 01624 FFFFFFFF A MW01 DATA -10 MW
5816 01 01625 37C00460 MW,12 MEMORY
5817 01 01626 073001C2 K 00,7,3,FXP8SW
5818 01 01627 57300166 K 5,7,3,L8C+2
5819 01 01628 55555555 A DATA X'55555555'
5820 01 01629 D58E3546 A DATA X'D58E3546'
5821 01 0162A 55555555 A DATA X'55555555'
5822 01 0162B 55555555 A DATA X'55555555'
5823 01 0162C 80AA9FD4 A DATA X'80AA9FD4'
5824 01 0162D D51C7564 A DATA X'D51C7564'
5825 01 0162E FFFFFFFF A MW02 DATA -10 MW
5826 01 0162F 37C00460 MW,12 MEMORY
5827 01 01630 073001C2 K 00,7,3,FXP8SW
5828 01 01631 57300166 K 5,7,3,L8C+2
5829 01 01632 00000000 A DATA X'00000000'
5830 01 01633 FE40C85E A DATA X'FE40C85E'
5831 01 01634 FC7CF1CC A DATA X'FC7CF1CC'
5832 01 01635 FC7CF1CC A DATA X'FC7CF1CC'
5833 01 01636 7F56BA80 A DATA X'7F56BA80'
5834 01 01637 74AF1E00 A DATA X'74AF1E00'
5835 01 01638 FFFFFFFF A MW03 DATA -10 MW
5836 01 01639 37C00460 MW,12 MEMORY
5837 01 0163A 073001C2 K 00,7,3,FXP8SW
5838 01 0163B 67300166 K 6,7,3,L8C+2

```

```

5839 01 0163C 00000000 A DATA X'00000000'
5840 01 0163D 15889088 A DATA X'15889088'
5841 01 0163E 59C61C18 A DATA X'59C61C18'
5842 01 0163F 59C61C18 A DATA X'59C61C18'
5843 01 01640 3DF91CF8 A DATA X'3DF91CF8'
5844 01 01641 AE55D740 A DATA X'AE55D740'
5845 PAGE
5846 01 01642 FFFFFFFF A MW04 DATA -10 MW
5847 01 01643 37C00460 MW,12 MEMORY
5848 01 01644 073001C2 K 00,7,3,FXP8SW
5849 01 01645 57300166 K 5,7,3,L8C+2
5850 01 01646 00000000 A DATA X'00000000'
5851 01 01647 FAE49435 A DATA X'FAE49435'
5852 01 01648 F1C3C731 A DATA X'F1C3C731'
5853 01 01649 F1C3C731 A DATA X'F1C3C731'
5854 01 0164A 59D80E1D A DATA X'59D80E1D'
5855 01 0164B 946A3E8D A DATA X'946A3E8D'
5856 01 0164C FFFFFFFF A MW05 DATA -10 MW
5857 01 0164D 37C00460 MW,12 MEMORY
5858 01 0164E 073001C2 K 00,7,3,FXP8SW
5859 01 0164F 67300166 K 6,7,3,L8C+2
5860 01 01650 00000000 A DATA X'00000000'
5861 01 01651 1EC17468 A DATA X'1EC17468'
5862 01 01652 3F01FC03 A DATA X'3F01FC03'
5863 01 01653 3F01FC03 A DATA X'3F01FC03'
5864 01 01654 7CF5C8E1 A DATA X'7CF5C8E1'
5865 01 01655 907FD6A3 A DATA X'907FD6A3'
5866 01 01656 FFFFFFFF A MW06 DATA -10 MW
5867 01 01657 37C00460 MW,12 MEMORY
5868 01 01658 073001C2 K 00,7,3,FXP8SW
5869 01 01659 57300166 K 5,7,3,L8C+2
5870 01 0165A 00000000 A DATA X'00000000'
5871 01 0165B C04A4EA5 A DATA X'C04A4EA5'
5872 01 0165C 70000000 A DATA X'70000000'
5873 01 0165D 70000000 A DATA X'70000000'
5874 01 0165E 8C178F32 A DATA X'8C178F32'
5875 01 0165F E0000000 A DATA X'E0000000'

```

5876					PAGE		
5877	01	01660	FFFFFFFF6 A	MW07	DATA	-10	
5878	01	01661	37C00460		MW,12	MEMBRY	
5879	01	01662	073001C2		K	00,7,3,FXP8SW	
5880	01	01663	57300166		K	5,7,3,L8C+2	
5881	01	01664	00000000 A		DATA	X'00000000'	
5882	01	01665	EC7E668F A		DATA	X'EC7E668F'	
5883	01	01666	CDB53C70 A		DATA	X'CDB53C70'	
5884	01	01667	CDB53C70 A		DATA	X'CDB53C70'	
5885	01	01668	634AC271 A		DATA	X'634AC271'	
5886	01	01669	E02C8D70 A		DATA	X'E02C8D70'	
5887	01	0166A	FFFFFFFF6 A	MW08	DATA	-10	
5888	01	0166B	37C00460		MW,12	MEMBRY	
5889	01	0166C	073001C2		K	00,7,3,FXP8SW	
5890	01	0166D	57300166		K	5,7,3,L8C+2	
5891	01	0166E	00000000 A		DATA	X'00000000'	
5892	01	0166F	FAA8C9D1 A		DATA	X'FAA8C9D1'	
5893	01	01670	31C3C1F0 A		DATA	X'31C3C1F0'	
5894	01	01671	31C3C1F0 A		DATA	X'31C3C1F0'	
5895	01	01672	E486C662 A		DATA	X'E486C662'	
5896	01	01673	888FDDE0 A		DATA	X'888FDDE0'	
5897	01	01674	FFFFFFFF6 A	MW09	DATA	-10	
5898	01	01675	37C00460		MW,12	MEMBRY	
5899	01	01676	073001C2		K	00,7,3,FXP8SW	
5900	01	01677	57300166		K	5,7,3,L8C+2	
5901	01	01678	00000000 A		DATA	X'00000000'	
5902	01	01679	F47642A4 A		DATA	X'F47642A4'	
5903	01	0167A	DF4F3C70 A		DATA	X'DF4F3C70'	
5904	01	0167B	DF4F3C70 A		DATA	X'DF4F3C70'	
5905	01	0167C	5A5ACF3B A		DATA	X'5A5ACF3B'	
5906	01	0167D	28817DD0 A		DATA	X'28817DD0'	
5907					PAGE		
5908	01	0167E	FFFFFFFF6 A	MW10	DATA	-10	
5909	01	0167F	37C00460		MW,12	MEMBRY	
5910	01	01680	073001C2		K	00,7,3,FXP8SW	
5911	01	01681	17300166		K	1,7,3,L8C+2	
5912	01	01682	00000000 A		DATA	X'00000000'	

5913	01	01683	FFFFFFFF A		DATA	X'FFFFFFFF'	
5914	01	01684	FFFFFFFF A		DATA	X'FFFFFFFF'	
5915	01	01685	FFFFFFFF A		DATA	X'FFFFFFFF'	
5916	01	01686	55555551 A		DATA	X'55555551'	
5917	01	01687	AAAAAAAAA A		DATA	X'AAAAAAAAA'	
5918	01	01688	FFFFFFFF6 A	MW11	DATA	-10	
5919	01	01689	37C00460		MW,12	MEMBRY	
5920	01	0168A	073001C2		K	00,7,3,FXP8SW	
5921	01	0168B	17300166		K	1,7,3,L8C+2	
5922	01	0168C	00000000 A		DATA	X'00000000'	
5923	01	0168D	FFFFFFFF A		DATA	X'FFFFFFFF'	
5924	01	0168E	FFFFFFFF A		DATA	X'FFFFFFFF'	
5925	01	0168F	FFFFFFFF A		DATA	X'FFFFFFFF'	
5926	01	01690	00000005 A		DATA	X'00000005'	
5927	01	01691	FFFFFFFFB A		DATA	X'FFFFFFFFB'	
5928	01	01692	FFFFFFFF6 A	MW12	DATA	-10	
5929	01	01693	37C00460		MW,12	MEMBRY	
5930	01	01694	073001C2		K	00,7,3,FXP8SW	
5931	01	01695	67300166		K	6,7,3,L8C+2	
5932	01	01696	00000000 A		DATA	X'00000000'	
5933	01	01697	06D3A075 A		DATA	X'06D3A075'	
5934	01	01698	EEEEEEEE A		DATA	X'EEEEEEEE'	
5935	01	01699	EEEEEEEE A		DATA	X'EEEEEEEE'	
5936	01	0169A	99999922 A		DATA	X'99999922'	
5937	01	0169B	92C5F99C A		DATA	X'92C5F99C'	
5938					PAGE		
5939	01	0169C	FFFFFFFF6 A	MW13	DATA	-10	
5940	01	0169D	37C00460		MW,12	MEMBRY	
5941	01	0169E	073001C2		K	00,7,3,FXP8SW	
5942	01	0169F	07300166		K	0,7,3,L8C+2	
5943	01	016A0	00000000 A		DATA	X'00000000'	
5944	01	016A1	00000000 A		DATA	X'00000000'	
5945	01	016A2	00000000 A		DATA	X'00000000'	
5946	01	016A3	00000000 A		DATA	X'00000000'	
5947	01	016A4	B3333334 A		DATA	X'B3333334'	
5948	01	016A5	00000000 A		DATA	X'00000000'	
5949	01	016A6	FFFFFFFF6 A	MW14	DATA	-10	

5950	01	016A7	37C00460		MW,12	MEMBRY	
5951	01	016A8	073001C2		K	00,7,3,FXPBSW	
5952	01	016A9	67300166		K	6,7,3,L8C+2	
5953	01	016AA	00000000 A		DATA	X'00000000'	
5954	01	016AB	0E8851EA A		DATA	X'0E8851EA'	
5955	01	016AC	CCCCCCCC A		DATA	X'CCCCCCCC'	
5956	01	016AD	CCCCCCCC A		DATA	X'CCCCCCCC'	
5957	01	016AE	B666666E A		DATA	X'B666666E'	
5958	01	016AF	3AE147A8 A		DATA	X'3AE147A8'	
5959	01	016B0	FFFFFFFF6 A	MW15	DATA	-10	MW
5960	01	016B1	37C00460		MW,12	MEMBRY	
5961	01	016B2	073001C2		K	00,7,3,FXPBSW	
5962	01	016B3	57300166		K	5,7,3,L8C+2	
5963	01	016B4	00000000 A		DATA	X'00000000'	
5964	01	016B5	F58F28C2 A		DATA	X'F58F28C2'	
5965	01	016B6	33333333 A		DATA	X'33333333'	
5966	01	016B7	33333333 A		DATA	X'33333333'	
5967	01	016B8	C3C3C3C3 A		DATA	X'C3C3C3C3'	
5968	01	016B9	3DA40A71 A		DATA	X'3DA40A71'	
5969					PAGE		
5970	01	016BA	FFFFFFFF6 A	MW16	DATA	-10	MW
5971	01	016BB	37C00460		MW,12	MEMBRY	
5972	01	016BC	073001C2		K	00,7,3,FXPBSW	
5973	01	016BD	67300166		K	6,7,3,L8C+2	
5974	01	016BE	00000000 A		DATA	X'00000000'	
5975	01	016BF	36A45B36 A		DATA	X'36A45B36'	
5976	01	016C0	6DB6DB6D A		DATA	X'6DB6DB6D'	
5977	01	016C1	6DB6DB6D A		DATA	X'6DB6DB6D'	
5978	01	016C2	7F7F7F7F A		DATA	X'7F7F7F7F'	
5979	01	016C3	12A4EE13 A		DATA	X'12A4EE13'	
5980	01	016C4	FFFFFFFF6 A	MW17	DATA	-10	MW
5981	01	016C5	37C00460		MW,12	MEMBRY	
5982	01	016C6	073001C2		K	00,7,3,FXPBSW	
5983	01	016C7	57300166		K	5,7,3,L8C+2	
5984	01	016C8	00000000 A		DATA	X'00000000'	
5985	01	016C9	FEFF1010 A		DATA	X'FEFF1010'	
5986	01	016CA	DDDDDDDD A		DATA	X'DDDDDDDD'	

5987	01	016CB	DDDDDDDD A		DATA	X'DDDDDDDD'	
5988	01	016CC	07870787 A		DATA	X'07870787'	
5989	01	016CD	19C0A8B A		DATA	X'19C0A8B'	
5990	01	016CE	FFFFFFFF6 A	MW18	DATA	-10	MW
5991	01	016CF	37C00460		MW,12	MEMBRY	
5992	01	016D0	073001C2		K	00,7,3,FXPBSW	
5993	01	016D1	17300166		K	1,7,3,L8C+2	
5994	01	016D2	00000000 A		DATA	X'00000000'	
5995	01	016D3	FFFFFFFF A		DATA	X'FFFFFFFF'	
5996	01	016D4	FFFFFFFF A		DATA	X'FFFFFFFF'	
5997	01	016D5	FFFFFFFF A		DATA	X'FFFFFFFF'	
5998	01	016D6	636D36D9 A		DATA	X'6B6D36D9'	
5999	01	016D7	9492C927 A		DATA	X'9492C927'	
6000					PAGE		
6001	01	016D8	FFFFFFFF6 A	MW19	DATA	-10	MW
6002	01	016D9	37C00460		MW,12	MEMBRY	
6003	01	016DA	073001C2		K	00,7,3,FXPBSW	
6004	01	016DB	57300166		K	5,7,3,L8C+2	
6005	01	016DC	00000000 A		DATA	X'00000000'	
6006	01	016DD	F30DB4B6 A		DATA	X'F30DB4B6'	
6007	01	016DE	EEEEEEEE A		DATA	X'EEEEEEEE'	
6008	01	016DF	EEEEEEEE A		DATA	X'EEEEEEEE'	
6009	01	016E0	4A32674C A		DATA	X'4A32674C'	
6010	01	016E1	656A8C8 A		DATA	X'656A8C8'	
6011	01	016E2	FFFFFFFF6 A	MW20	DATA	-10	MW
6012	01	016E3	37C00460		MW,12	MEMBRY	
6013	01	016E4	073001C2		K	00,7,3,FXPBSW	
6014	01	016E5	67300166		K	6,7,3,L8C+2	
6015	01	016E6	00000000 A		DATA	X'00000000'	
6016	01	016E7	15555552 A		DATA	X'15555552'	
6017	01	016E8	7FFFFFFFF A		DATA	X'7FFFFFFFF'	
6018	01	016E9	7FFFFFFFF A		DATA	X'7FFFFFFFF'	
6019	01	016EA	2AAAAAA6 A		DATA	X'2AAAAAA6'	
6020	01	016EB	D555555A A		DATA	X'D555555A'	
6021	01	016EC	FFFFFFFF6 A	MW21	DATA	-10	MW
6022	01	016ED	37C00460		MW,12	MEMBRY	
6023	01	016EE	073001C2		K	00,7,3,FXPBSW	

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12, 1969 179

6024	01	016EF	67300166		K	6,7,3,L8C+2	
6025	01	016F0	00000000	A	DATA	X'00000000'	
6026	01	016F1	00000000	A	DATA	X'00000000'	
6027	01	016F2	FFFFFFFF	A	DATA	X'FFFFFFFF'	
6028	01	016F3	FFFFFFFF	A	DATA	X'FFFFFFFF'	
6029	01	016F4	80000000	A	DATA	X'80000000'	
6030	01	016F5	80000000	A	DATA	X'80000000'	
6031					PAGE		
6032	01	016F6	FFFFFFFF	A	MW22	DATA	-10
6033	01	016F7	37C00460		MW,12	MEMORY	
6034	01	016F8	073001C2		K	00,7,3,FXP8SW	
6035	01	016F9	67300166		K	6,7,3,L8C+2	
6036	01	016FA	00000000	A	DATA	X'00000000'	
6037	01	016FB	3FFFFFFFF	A	DATA	X'3FFFFFFFF'	
6038	01	016FC	7FFFFFFFF	A	DATA	X'7FFFFFFFF'	
6039	01	016FD	7FFFFFFFF	A	DATA	X'7FFFFFFFF'	
6040	01	016FE	7FFFFFFFF	A	DATA	X'7FFFFFFFF'	
6041	01	016FF	00000001	A	DATA	X'00000001'	
6042	01	01700	FFFFFFFF	A	MW23	DATA	-10
6043	01	01701	37C00460		MW,12	MEMORY	
6044	01	01702	073001C2		K	00,7,3,FXP8SW	
6045	01	01703	67300166		K	6,7,3,L8C+2	
6046	01	01704	00000000	A	DATA	X'00000000'	
6047	01	01705	40000000	A	DATA	X'40000000'	
6048	01	01706	80000000	A	DATA	X'80000000'	
6049	01	01707	80000000	A	DATA	X'80000000'	
6050	01	01708	80000000	A	DATA	X'80000000'	
6051	01	01709	00000000	A	DATA	X'00000000'	
6052	01	0170A	FFFFFFFF	A	MW24	DATA	-10
6053	01	0170B	37C00460		MW,12	MEMORY	
6054	01	0170C	073001C2		K	00,7,3,FXP8SW	
6055	01	0170D	17300166		K	1,7,3,L8C+2	
6056	01	0170E	00000000	A	DATA	X'00000000'	
6057	01	0170F	FFFFFFFF	A	DATA	X'FFFFFFFF'	
6058	01	01710	00000001	A	DATA	X'00000001'	
6059	01	01711	00000001	A	DATA	X'00000001'	
6060	01	01712	80000000	A	DATA	X'80000000'	

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12, 1969 180

6061	01	01713	80000000	A	DATA	X'80000000'	
6062					PAGE		
6063	01	01714	FFFFFFFF	A	MW25	DATA	-10
6064	01	01715	37C00460		MW,12	MEMORY	
6065	01	01716	073001C2		K	00,7,3,FXP8SW	
6066	01	01717	17300166		K	1,7,3,L8C+2	
6067	01	01718	00000000	A	DATA	X'00000000'	
6068	01	01719	FFFFFFFF	A	DATA	X'FFFFFFFF'	
6069	01	0171A	80000000	A	DATA	X'80000000'	
6070	01	0171B	80000000	A	DATA	X'80000000'	
6071	01	0171C	00000001	A	DATA	X'00000001'	
6072	01	0171D	80000000	A	DATA	X'80000000'	
6073	01	0171E	FFFFFFFF	A	MW26	DATA	-10
6074	01	0171F	37C00460		MW,12	MEMORY	
6075	01	01720	073001C2		K	00,7,3,FXP8SW	
6076	01	01721	27300166		K	2,7,3,L8C+2	
6077	01	01722	00000000	A	DATA	X'00000000'	
6078	01	01723	00000000	A	DATA	X'00000000'	
6079	01	01724	FFFFFFFF	A	DATA	X'FFFFFFFF'	
6080	01	01725	FFFFFFFF	A	DATA	X'FFFFFFFF'	
6081	01	01726	FFFFFFFF	A	DATA	X'FFFFFFFF'	
6082	01	01727	00000001	A	DATA	X'00000001'	
6083	01	01728	FFFFFFFF	A	MW27	DATA	-10
6084	01	01729	37C00460		MW,12	MEMORY	
6085	01	0172A	073001C2		K	00,7,3,FXP8SW	
6086	01	0172B	07300166		K	0,7,3,L8C+2	
6087	01	0172C	7FFFFFFFF	A	DATA	X'7FFFFFFFF'	
6088	01	0172D	00000000	A	DATA	X'00000000'	
6089	01	0172E	7FFFFFFFF	A	DATA	X'7FFFFFFFF'	
6090	01	0172F	7FFFFFFFF	A	DATA	X'7FFFFFFFF'	
6091	01	01730	00000000	A	DATA	X'00000000'	
6092	01	01731	00000000	A	DATA	X'00000000'	
6093					PAGE		
6094	01	01732	FFFFFFFF	A	MW28	DATA	-10
6095	01	01733	37C00460		MW,12	MEMORY	
6096	01	01734	073001C2		K	00,7,3,FXP8SW	
6097	01	01735	07300166		K	0,7,3,L8C+2	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00

MARCH 12, 1969

181

6098	01	01736	00000000	A	DATA	X'00000000'	
6099	01	01737	00000000	A	DATA	X'00000000'	
6100	01	01738	00000000	A	DATA	X'00000000'	
6101	01	01739	00000000	A	DATA	X'00000000'	
6102	01	0173A	00000000	A	DATA	0	
6103	01	0173B	00000000	A	DATA	X'00000000'	
6104	01	0173C	FFFFFFF6	A	DATA	-10	MW
6105	01	0173D	37C00460		MW,12	MEMBRY	
6106	01	0173E	073001C2		K	00,7,3,FXP8SW	
6107	01	0173F	67300166		K	6,7,3,L8C+2	
6108	01	01740	00000000	A	DATA	X'00000000'	
6109	01	01741	17A36285	A	DATA	X'17A36285'	
6110	01	01742	79999999	A	DATA	X'79999999'	
6111	01	01743	79999999	A	DATA	X'79999999'	
6112	01	01744	31C3C1F0	A	DATA	X'31C3C1F0'	
6113	01	01745	15575870	A	DATA	X'15575870'	
6114	01	01746	FFFFFFF6	A	DATA	-10	MW
6115	01	01747	37C00460		MW,12	MEMBRY	
6116	01	01748	073001C2		K	00,7,3,FXP8SW	
6117	01	01749	57300166		K	5,7,3,L8C+2	
6118	01	0174A	00000000	A	DATA	X'00000000'	
6119	01	0174B	D3DC7674	A	DATA	X'D3DC7674'	
6120	01	0174C	59C61C18	A	DATA	X'59C61C18'	
6121	01	0174D	59C61C18	A	DATA	X'59C61C18'	
6122	01	0174E	82222222	A	DATA	X'82222222'	
6123	01	0174F	273AEB30	A	DATA	X'273AEB30'	
6124					PAGE		
6125	01	01750	FFFFFFF6	A	DATA	-10	MW
6126	01	01751	37C00460		MW,12	MEMBRY	
6127	01	01752	073001C2		K	00,7,3,FXP8SW	
6128	01	01753	57300166		K	5,7,3,L8C+2	
6129	01	01754	00000000	A	DATA	X'00000000'	
6130	01	01755	FF036C81	A	DATA	X'FF036C81'	
6131	01	01756	87777777	A	DATA	X'87777777'	
6132	01	01757	87777777	A	DATA	X'87777777'	
6133	01	01758	021871E7	A	DATA	X'021871E7'	
6134	01	01759	19B05361	A	DATA	X'19B05361'	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00

MARCH 12, 1969

182

6135	01	0175A	FFFFFFF6	A	DATA	-10	MW
6136	01	0175B	37C00460		MW,12	MEMBRY	
6137	01	0175C	073001C2		K	00,7,3,FXP8SW	
6138	01	0175D	67300166		K	6,7,3,L8C+2	
6139	01	0175E	00000000	A	DATA	X'00000000'	
6140	01	0175F	012BAF66	A	DATA	X'012BAF66'	
6141	01	01760	FC7CF1CC	A	DATA	X'FC7CF1CC'	
6142	01	01761	FC7CF1CC	A	DATA	X'FC7CF1CC'	
6143	01	01762	AAAAAAAA	A	DATA	X'AAAAAAAA'	
6144	01	01763	A0020978	A	DATA	X'A0020978'	
6145	01	01764	FFFFFFF6	A	DATA	-10	MW
6146	01	01765	37C00460		MW,12	MEMBRY	
6147	01	01766	073001C2		K	00,7,3,FXP8SW	
6148	01	01767	57300166		K	5,7,3,L8C+2	
6149	01	01768	00000000	A	DATA	X'00000000'	
6150	01	01769	F8C79A5E	A	DATA	X'F8C79A5E'	
6151	01	0176A	15555555	A	DATA	X'15555555'	
6152	01	0176B	15555555	A	DATA	X'15555555'	
6153	01	0176C	C0583C70	A	DATA	X'C0583C70'	
6154	01	0176D	8B8C4130	A	DATA	X'8B8C4130'	
6155					PAGE		
6156	01	0176E	FFFFFFF6	A	DATA	-10	MW
6157	01	0176F	37C00460		MW,12	MEMBRY	
6158	01	01770	073001C2		K	00,7,3,FXP8SW	
6159	01	01771	67300166		K	6,7,3,L8C+2	
6160	01	01772	00000000	A	DATA	X'00000000'	
6161	01	01773	00345678	A	DATA	X'00345678'	
6162	01	01774	03111111	A	DATA	X'03111111'	
6163	01	01775	03111111	A	DATA	X'03111111'	
6164	01	01776	11111111	A	DATA	X'11111111'	
6165	01	01777	99654321	A	DATA	X'99654321'	
6166	01	01778	FFFFFFF6	A	DATA	-10	MW
6167	01	01779	37C00460		MW,12	MEMBRY	
6168	01	0177A	073001C2		K	00,7,3,FXP8SW	
6169	01	0177B	57300166		K	5,7,3,L8C+2	
6170	01	0177C	00000000	A	DATA	X'00000000'	
6171	01	0177D	D5D5D5D8	A	DATA	X'D5D5D5D8'	

6172	01	0177E	66666666 A		DATA	X'66666666'	
6173	01	0177F	66666666 A		DATA	X'66666666'	
6174	01	01780	9696969D A		DATA	X'9696969D'	
6175	01	01781	9090908E A		DATA	X'9090908E'	
6176	01	01782	FFFFFFF6 A	MW36	DATA	-10	MW
6177	01	01783	37C00460		MW,12	MEMBRY	
6178	01	01784	073001C2		K	00,7,3,FXP8SW	
6179	01	01785	57300166		K	5,7,3,L8C+2	
6180	01	01786	00000000 A		DATA	X'00000000'	
6181	01	01787	E06D3A06 A		DATA	X'E06D3A06'	
6182	01	01788	44444444 A		DATA	X'44444444'	
6183	01	01789	44444444 A		DATA	X'44444444'	
6184	01	0178A	89999999 A		DATA	X'89999999'	
6185	01	0178B	CA3D70A4 A		DATA	X'CA3D70A4'	
6186					PAGE		
6187	01	0178C	FFFFFFF6 A	MW37	DATA	-10	MW
6188	01	0178D	37C00460		MW,12	MEMBRY	
6189	01	0178E	073001C2		K	00,7,3,FXP8SW	
6190	01	0178F	67300166		K	6,7,3,L8C+2	
6191	01	01790	00000000 A		DATA	X'00000000'	
6192	01	01791	080FCAE0 A		DATA	X'080FCAE0'	
6193	01	01792	E1C4C737 A		DATA	X'E1C4C737'	
6194	01	01793	E1C4C737 A		DATA	X'E1C4C737'	
6195	01	01794	88888888 A		DATA	X'88888888'	
6196	01	01795	5A6FB22D A		DATA	X'5A6FB22D'	
6197	01	01796	FFFFFFF6 A	MW38	DATA	-10	MW
6198	01	01797	37C00460		MW,12	MEMBRY	
6199	01	01798	073001C2		K	00,7,3,FXP8SW	
6200	01	01799	67300166		K	6,7,3,L8C+2	
6201	01	0179A	00000000 A		DATA	X'00000000'	
6202	01	0179B	00000000 A		DATA	X'00000000'	
6203	01	0179C	80000000 A		DATA	X'80000000'	
6204	01	0179D	80000000 A		DATA	X'80000000'	
6205	01	0179E	FFFFFFF6 A		DATA	X'FFFFFFF6'	
6206	01	0179F	80000000 A		DATA	X'80000000'	
6207	01	017A0	FFFFFFF6 A	MW39	DATA	-10	MW
6208	01	017A1	37C00460		MW,12	MEMBRY	

6209	01	017A2	073001C2		K	00,7,3,FXP8SW	
6210	01	017A3	67300166		K	6,7,3,L8C+2	
6211	01	017A4	00000000 A		DATA	X'00000000'	
6212	01	017A5	00436827 A		DATA	X'00436827'	
6213	01	017A6	42468ACE A		DATA	X'42468ACE'	
6214	01	017A7	42468ACE A		DATA	X'42468ACE'	
6215	01	017A8	01234567 A		DATA	X'01234567'	
6216	01	017A9	75F55EE2 A		DATA	X'75F55EE2'	
6217					PAGE		
6218	01	017AA	FFFFFFF6 A	MW40	DATA	-10	MW
6219	01	017AB	37C00460		MW,12	MEMBRY	
6220	01	017AC	073001C2		K	00,7,3,FXP8SW	
6221	01	017AD	57300166		K	5,7,3,L8C+2	
6222	01	017AE	00000000 A		DATA	X'00000000'	
6223	01	017AF	EEA535DC A		DATA	X'EEA535DC'	
6224	01	017B0	258BCDEF A		DATA	X'258BCDEF'	
6225	01	017B1	258BCDEF A		DATA	X'258BCDEF'	
6226	01	017B2	89ABCDEF A		DATA	X'89ABCDEF'	
6227	01	017B3	7712A521 A		DATA	X'7712A521'	
6228	01	017B4	FFFFFFF6 A	MW41	DATA	-10	MW
6229	01	017B5	37C00460		MW,12	MEMBRY	
6230	01	017B6	073001C2		K	00,7,3,FXP8SW	
6231	01	017B7	67300166		K	6,7,3,L8C+2	
6232	01	017B8	00000000 A		DATA	X'00000000'	
6233	01	017B9	0CB68AEE A		DATA	X'0CB68AEE'	
6234	01	017BA	56AE37BF A		DATA	X'56AE37BF'	
6235	01	017BB	56AE37BF A		DATA	X'56AE37BF'	
6236	01	017BC	258BE147 A		DATA	X'258BE147'	
6237	01	017BD	090554F9 A		DATA	X'090554F9'	
6238	01	017BE	FFFFFFF6 A	MW42	DATA	-10	MW
6239	01	017BF	37C00460		MW,12	MEMBRY	
6240	01	017C0	073001C2		K	00,7,3,FXP8SW	
6241	01	017C1	67300166		K	6,7,3,L8C+2	
6242	01	017C2	00000000 A		DATA	X'00000000'	
6243	01	017C3	0AAC4A2C A		DATA	X'0AAC4A2C'	
6244	01	017C4	DF1357BD A		DATA	X'DF1357BD'	
6245	01	017C5	DF1357BD A		DATA	X'DF1357BD'	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 185

6246	01	017C6	A00369CF	A	DATA	X'A00369CF'		
6247	01	017C7	0F0776D3	A	DATA	X'0F0776D3'		
6248					PAGE			
6249	01	017C8	FFFFFFFF	A	DATA	-10	MW	
6250	01	017C9	37C00460		MW,12	MEMORY		
6251	01	017CA	073001C2		K	00,7,3,FXPSW		
6252	01	017CB	67300166		K	6,7,3,LBC+2		
6253	01	017CC	00000000	A	DATA	X'00000000'		
6254	01	017CD	00CAFFF1	A	DATA	X'00CAFFF1'		
6255	01	017CE	F2468ACE	A	DATA	X'F2468ACE'		
6256	01	017CF	F2468ACE	A	DATA	X'F2468ACE'		
6257	01	017D0	F13579BD	A	DATA	X'F13579BD'		
6258	01	017D1	E055D816	A	DATA	X'E055D816'		
6259	01	017D2	FFFFFFFF	A	DATA	-10	MW	
6260	01	017D3	37C00460		MW,12	MEMORY		
6261	01	017D4	073001C2		K	00,7,3,FXPSW		
6262	01	017D5	67300166		K	6,7,3,LBC+2		
6263	01	017D6	00000000	A	DATA	X'00000000'		
6264	01	017D7	01B37451	A	DATA	X'01B37451'		
6265	01	017D8	F147AD03	A	DATA	X'F147AD03'		
6266	01	017D9	F147AD03	A	DATA	X'F147AD03'		
6267	01	017DA	E26AE38D	A	DATA	X'E26AE38D'		
6268	01	017DB	BC21F3A7	A	DATA	X'BC21F3A7'		
6269	01	017DC	FFFFFFFF	A	DATA	-10	MW	
6270	01	017DD	37C00460		MW,12	MEMORY		
6271	01	017DE	073001C2		K	00,7,3,FXPSW		
6272	01	017DF	67300166		K	6,7,3,LBC+2		
6273	01	017E0	00000000	A	DATA	X'00000000'		
6274	01	017E1	0330D831	A	DATA	X'0330D831'		
6275	01	017E2	148BF37B	A	DATA	X'148BF37B'		
6276	01	017E3	148BF37B	A	DATA	X'148BF37B'		
6277	01	017E4	27C16B05	A	DATA	X'27C16B05'		
6278	01	017E5	323B2A67	A	DATA	X'323B2A67'		
6279					PAGE			
6280	01	017E6	FFFFFFFF	A	DATA	-10	MW	
6281	01	017E7	37C00460		MW,12	MEMORY		
6282	01	017E8	073001C2		K	00,7,3,FXPSW		

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 186

6283	01	017E9	67300166		K	6,7,3,LBC+2		
6284	01	017EA	00000000	A	DATA	X'00000000'		
6285	01	017EB	01723EB3	A	DATA	X'01723EB3'		
6286	01	017EC	F37BF49E	A	DATA	X'F37BF49E'		
6287	01	017ED	F37BF49E	A	DATA	X'F37BF49E'		
6288	01	017EE	E26AF49F	A	DATA	X'E26AF49F'		
6289	01	017EF	248F8622	A	DATA	X'248F8622'		
6290	01	017F0	FFFFFFFF	A	DATA	-10	MW	
6291	01	017F1	37C00460		MW,12	MEMORY		
6292	01	017F2	073001C2		K	00,7,3,FXPSW		
6293	01	017F3	57300166		K	5,7,3,LBC+2		
6294	01	017F4	00000000	A	DATA	X'00000000'		
6295	01	017F5	F9B2877E	A	DATA	X'F9B2877E'		
6296	01	017F6	457AE39F	A	DATA	X'457AE39F'		
6297	01	017F7	457AE39F	A	DATA	X'457AE39F'		
6298	01	017F8	F0259E49	A	DATA	X'F0259E49'		
6299	01	017F9	9E820A57	A	DATA	X'9E820A57'		
6300	01	017FA	FFFFFFFF	A	DATA	-10	MW	
6301	01	017FB	37C00460		MW,12	MEMORY		
6302	01	017FC	073001C2		K	00,7,3,FXPSW		
6303	01	017FD	57300166		K	5,7,3,LBC+2		
6304	01	017FE	00000000	A	DATA	X'00000000'		
6305	01	017FF	DDF466A3	A	DATA	X'DDF466A3'		
6306	01	01800	679C05B2	A	DATA	X'679C05B2'		
6307	01	01801	679C05B2	A	DATA	X'679C05B2'		
6308	01	01802	A3E159F0	A	DATA	X'A3E159F0'		
6309	01	01803	47B238E0	A	DATA	X'47B238E0'		
6310					PAGE			
6311	01	01804	FFFFFFFF	A	DATA	-10	MW	
6312	01	01805	37C00460		MW,12	MEMORY		
6313	01	01806	073001C2		K	00,7,3,FXPSW		
6314	01	01807	67300166		K	6,7,3,LBC+2		
6315	01	01808	00000000	A	DATA	X'00000000'		
6316	01	01809	055B3FB	A	DATA	X'055B3FB'		
6317	01	0180A	59D73C28	A	DATA	X'59D73C28'		
6318	01	0180B	59D73C28	A	DATA	X'59D73C28'		
6319	01	0180C	26106573	A	DATA	X'26106573'		

SIGMA 5 CPU DIAGNOSTIC-AUT8 704287-51C00 MARCH 12,1969 187

6320	01	0180D	F8EBCDF8 A		DATA	X'F8EBCDF8'	
6321	01	0180E	FFFFFFFF6 A	MW50	DATA	-10	MW
6322	01	0180F	37C00460		MW,12	MEMORY	
6323	01	01810	073001C2		K	00,7,3,FXP8SW	
6324	01	01811	67300166		K	6,7,3,L8C+2	
6325	01	01812	00000000 A		DATA	X'00000000'	
6326	01	01813	02DA0095 A		DATA	X'02DA0095'	
6327	01	01814	CD2A3C71 A		DATA	X'CD2A3C71'	
6328	01	01815	CD2A3C71 A		DATA	X'CD2A3C71'	
6329	01	01816	F1A3C842 A		DATA	X'F1A3C842'	
6330	01	01817	C10EDD22 A		DATA	X'C10EDD22'	
6331	01	01818	FFFFFFFF6 A	MW51	DATA	-10	MW
6332	01	01819	37C00460		MW,12	MEMORY	
6333	01	0181A	073001C2		K	00,7,3,FXP8SW	
6334	01	0181B	57300166		K	5,7,3,L8C+2	
6335	01	0181C	00000000 A		DATA	X'00000000'	
6336	01	0181D	FF1737FC A		DATA	X'FF1737FC'	
6337	01	0181E	FC7CF1CC A		DATA	X'FC7CF1CC'	
6338	01	0181F	FC7CF1CC A		DATA	X'FC7CF1CC'	
6339	01	01820	42486CEA A		DATA	X'42486CEA'	
6340	01	01821	19971478 A		DATA	X'19971478'	
6341					PAGE		
6342	01	01822	FFFFFFFF6 A	MW52	DATA	-10	MW
6343	01	01823	37C00460		MW,12	MEMORY	
6344	01	01824	073001C2		K	00,7,3,FXP8SW	
6345	01	01825	67300166		K	6,7,3,L8C+2	
6346	01	01826	00000000 A		DATA	X'00000000'	
6347	01	01827	0C654900 A		DATA	X'0C654900'	
6348	01	01828	475E3AF9 A		DATA	X'475E3AF9'	
6349	01	01829	475E3AF9 A		DATA	X'475E3AF9'	
6350	01	0182A	2C768150 A		DATA	X'2C768150'	
6351	01	0182B	6EFE96D0 A		DATA	X'6EFE96D0'	
6352	01	0182C	FFFFFFFF6 A	MW53	DATA	-10	MW
6353	01	0182D	37C00460		MW,12	MEMORY	
6354	01	0182E	073001C2		K	00,7,3,FXP8SW	
6355	01	0182F	57300166		K	5,7,3,L8C+2	
6356	01	01830	00000000 A		DATA	X'00000000'	

SIGMA 5 CPU DIAGNOSTIC-AUT8 704287-51C00 MARCH 12,1969 188

6357	01	01831	F5C7652C A		DATA	X'F5C7652C'	
6358	01	01832	38D27C16 A		DATA	X'38D27C16'	
6359	01	01833	38D27C16 A		DATA	X'38D27C16'	
6360	01	01834	D1F375DB A		DATA	X'D1F375DB'	
6361	01	01835	8DA834D2 A		DATA	X'8DA834D2'	
6362	01	01836	FFFFFFFF6 A	MW54	DATA	-10	MW
6363	01	01837	37C00460		MW,12	MEMORY	
6364	01	01838	073001C2		K	00,7,3,FXP8SW	
6365	01	01839	67300166		K	6,7,3,L8C+2	
6366	01	0183A	00000000 A		DATA	X'00000000'	
6367	01	0183B	36F57A5C A		DATA	X'36F57A5C'	
6368	01	0183C	8067CB91 A		DATA	X'8067CB91'	
6369	01	0183D	8067CB91 A		DATA	X'8067CB91'	
6370	01	0183E	918BA0E5 A		DATA	X'918BA0E5'	
6371	01	0183F	8FFEB8B5 A		DATA	X'8FFEB8B5'	
6372					PAGE		
6373	01	01840	FFFFFFFF6 A	MW55	DATA	-10	MW
6374	01	01841	37C00460		MW,12	MEMORY	
6375	01	01842	073001C2		K	00,7,3,FXP8SW	
6376	01	01843	67300166		K	6,7,3,L8C+2	
6377	01	01844	00000000 A		DATA	X'00000000'	
6378	01	01845	1F5F1EB5 A		DATA	X'1F5F1EB5'	
6379	01	01846	66E91F2E A		DATA	X'66E91F2E'	
6380	01	01847	66E91F2E A		DATA	X'66E91F2E'	
6381	01	01848	4E0A2D09 A		DATA	X'4E0A2D09'	
6382	01	01849	D4792E9E A		DATA	X'D4792E9E'	
6383	01	0184A	FFFFFFFF6 A	MW56	DATA	-10	MW
6384	01	0184B	37C00460		MW,12	MEMORY	
6385	01	0184C	073001C2		K	00,7,3,FXP8SW	
6386	01	0184D	67300166		K	6,7,3,L8C+2	
6387	01	0184E	00000000 A		DATA	X'00000000'	
6388	01	0184F	2C6421FF A		DATA	X'2C6421FF'	
6389	01	01850	9D289043 A		DATA	X'9D289043'	
6390	01	01851	9D289043 A		DATA	X'9D289043'	
6391	01	01852	8D06D9F2 A		DATA	X'8D06D9F2'	
6392	01	01853	3B332A56 A		DATA	X'3B332A56'	
6393	01	01854	FFFFFFFF6 A	MW57	DATA	-10	MW

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00			MARCH 12, 1969		189
6394	01	01855	37C00460	MW,12	MEMORY
6395	01	01856	073001C2	K	00,7,3,FXP8SW
6396	01	01857	67300166	K	6,7,3,L8C+2
6397	01	01858	00000000 A	DATA	X'00000000'
6398	01	01859	117&E788 A	DATA	X'117&E788'
6399	01	0185A	266C684E A	DATA	X'266C684E'
6400	01	0185B	266C684E A	DATA	X'266C684E'
6401	01	0185C	745D382 A	DATA	X'745D382'
6402	01	0185D	48BF419C A	DATA	X'48BF419C'
6403				PAGE	
6404	01	0185E	FFFFFFF6 A	MW58	DATA -10 MW
6405	01	0185F	37C00460	MW,12	MEMORY
6406	01	01860	073001C2	K	00,7,3,FXP8SW
6407	01	01861	67300166	K	6,7,3,L8C+2
6408	01	01862	00000000 A	DATA	X'00000000'
6409	01	01863	0F673E9E A	DATA	X'0F673E9E'
6410	01	01864	CC1FC7CF A	DATA	X'CC1FC7CF'
6411	01	01865	CC1FC7CF A	DATA	X'CC1FC7CF'
6412	01	01866	83FCA5A5 A	DATA	X'83FCA5A5'
6413	01	01867	7908336B A	DATA	X'7908336B'
6414	01	01868	FFFFFFF6 A	MW59	DATA -10 MW
6415	01	01869	37C00460	MW,12	MEMORY
6416	01	0186A	073001C2	K	00,7,3,FXP8SW
6417	01	0186B	27300166	K	2,7,3,L8C+2
6418	01	0186C	00000000 A	DATA	X'00000000'
6419	01	0186D	00000000 A	DATA	X'00000000'
6420	01	0186E	00000001 A	DATA	X'00000001'
6421	01	0186F	00000001 A	DATA	X'00000001'
6422	01	01870	7FFFFFFF A	DATA	X'7FFFFFFF'
6423	01	01871	7FFFFFFF A	DATA	X'7FFFFFFF'
6424	01	01872	FFFFFFF6 A	MW60	DATA -10 MW
6425	01	01873	37C00460	MW,12	MEMORY
6426	01	01874	073001C2	K	00,7,3,FXP8SW
6427	01	01875	27300166	K	2,7,3,L8C+2
6428	01	01876	00000000 A	DATA	X'00000000'
6429	01	01877	00000000 A	DATA	X'00000000'
6430	01	01878	7FFFFFFF A	DATA	X'7FFFFFFF'

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00			MARCH 12, 1969		190
6431	01	01879	7FFFFFFF A	DATA	X'7FFFFFFF'
6432	01	0187A	00000001 A	DATA	X'00000001'
6433	01	0187B	7FFFFFFF A	DATA	X'7FFFFFFF'
6434				PAGE	
6435	01	0187C	FFFFFFF6 A	MW61	DATA -10 MW
6436	01	0187D	37C00460	MW,12	MEMORY
6437	01	0187E	073001C2	K	00,7,3,FXP8SW
6438	01	0187F	67300166	K	6,7,3,L8C+2
6439	01	01880	00000000 A	DATA	X'00000000'
6440	01	01881	0ADAA050 A	DATA	X'0ADAA050'
6441	01	01882	85631AF2 A	DATA	X'85631AF2'
6442	01	01883	85631AF2 A	DATA	X'85631AF2'
6443	01	01884	DAC269A5 A	DATA	X'DAC269A5'
6444	01	01885	0E519FFA A	DATA	X'0E519FFA'
6445	01	01886	FFFFFFF6 A	MW62	DATA -10 MW
6446	01	01887	37C00460	MW,12	MEMORY
6447	01	01888	073001C2	K	00,7,3,FXP8SW
6448	01	01889	57300166	K	5,7,3,L8C+2
6449	01	0188A	00000000 A	DATA	X'00000000'
6450	01	0188B	E8549FA9 A	DATA	X'E8549FA9'
6451	01	0188C	C7B51894 A	DATA	X'C7B51894'
6452	01	0188D	C7B51894 A	DATA	X'C7B51894'
6453	01	0188E	68A40763 A	DATA	X'68A40763'
6454	01	0188F	C9848D3C A	DATA	X'C9848D3C'
6455	01	01890	FFFFFFF6 A	MW63	DATA -10 MW
6456	01	01891	37C00460	MW,12	MEMORY
6457	01	01892	073001C2	K	00,7,3,FXP8SW
6458	01	01893	57300166	K	5,7,3,L8C+2
6459	01	01894	00000000 A	DATA	0
6460	01	01895	FE179952 A	DATA	X'FE179952'
6461	01	01896	E9D73A96 A	DATA	X'E9D73A96'
6462	01	01897	E9D73A96 A	DATA	X'E9D73A96'
6463	01	01898	160A5DC9 A	DATA	X'160A5DC9'
6464	01	01899	F8217DC6 A	DATA	X'F8217DC6'
6465				PAGE	
6466	01	0189A	FFFFFFF6 A	MW64	DATA -10 MW
6467	01	0189B	37C00460	MW,12	MEMORY

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287.51C00 MARCH 12, 1969 191

6468	01	0189C	073001C2		K	00,7,3,FXP8SW	
6469	01	0189D	67300166		K	6,7,3,L8C+2	
6470	01	0189E	00000000 A		DATA	X'00000000'	
6471	01	0189F	275BDC20 A		DATA	X'275BDC20'	
6472	01	018A0	84F82DDE A		DATA	X'84F82DDE'	
6473	01	018A1	84F82DDE A		DATA	X'84F82DDE'	
6474	01	018A2	AE1A4FEO A		DATA	X'AE1A4FEO'	
6475	01	018A3	73DBA440 A		DATA	X'73DBA440'	
6476	01	018A4	FFFFFFFF6 A	MW65	DATA	-10	MW
6477	01	018A5	37C00460		MW,12	MEMORY	
6478	01	018A6	073001C2		K	00,7,3,FXP8SW	
6479	01	018A7	67300166		K	6,7,3,L8C+2	
6480	01	018A8	00000000 A		DATA	X'00000000'	
6481	01	018A9	02F12C68 A		DATA	X'02F12C68'	
6482	01	018AA	136AF5B2 A		DATA	X'136AF5B2'	
6483	01	018AB	136AF5B2 A		DATA	X'136AF5B2'	
6484	01	018AC	26C9AAD5 A		DATA	X'26C9AAD5'	
6485	01	018AD	83E8A11A A		DATA	X'83E8A11A'	
6486	01	018AE	FFFFFFFF6 A	MW66	DATA	-10	MW
6487	01	018AF	37C00460		MW,12	MEMORY	
6488	01	018B0	073001C2		K	00,7,3,FXP8SW	
6489	01	018B1	67300166		K	6,7,3,L8C+2	
6490	01	018B2	00000000 A		DATA	X'00000000'	
6491	01	018B3	00651680 A		DATA	X'00651680'	
6492	01	018B4	158897C4 A		DATA	X'158897C4'	
6493	01	018B5	158897C4 A		DATA	X'158897C4'	
6494	01	018B6	04A766B3 A		DATA	X'04A766B3'	
6495	01	018B7	CD66360C A		DATA	X'CD66360C'	
6496					PAGE		
6497	01	018B8	FFFFFFFF6 A	MW67	DATA	-10	MW
6498	01	018B9	37C00460		MW,12	MEMORY	
6499	01	018BA	073001C2		K	00,7,3,FXP8SW	
6500	01	018BB	67300166		K	6,7,3,L8C+2	
6501	01	018BC	00000000 A		DATA	X'00000000'	
6502	01	018BD	13A50B6D A		DATA	X'13A50B6D'	
6503	01	018BE	37DA99E6 A		DATA	X'37DA99E6'	
6504	01	018BF	37DA99E6 A		DATA	X'37DA99E6'	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287.51C00 MARCH 12, 1969 192

6505	01	018C0	5A0DC619 A		DATA	X'5A0DC619'	
6506	01	018C1	340EE376 A		DATA	X'340EE376'	
6507	01	018C2	FFFFFFFF6 A	MW68	DATA	-10	MW
6508	01	018C3	37C00460		MW,12	MEMORY	
6509	01	018C4	073001C2		K	00,7,3,FXP8SW	
6510	01	018C5	67300166		K	6,7,3,L8C+2	
6511	01	018C6	00000000 A		DATA	X'00000000'	
6512	01	018C7	08DE7CCB A		DATA	X'08DE7CCB'	
6513	01	018C8	28FDD84E A		DATA	X'28FDD84E'	
6514	01	018C9	28FDD84E A		DATA	X'28FDD84E'	
6515	01	018CA	4A1FEA60 A		DATA	X'4A1FEA60'	
6516	01	018CB	245A6940 A		DATA	X'245A6940'	
6517	01	018CC	FFFFFFFF6 A	MW69	DATA	-10	MW
6518	01	018CD	37C00460		MW,12	MEMORY	
6519	01	018CE	073001C2		K	00,7,3,FXP8SW	
6520	01	018CF	57300166		K	6,7,3,L8C+2	
6521	01	018D0	00000000 A		DATA	X'00000000'	
6522	01	018D1	DFCF32C1 A		DATA	X'DFCF32C1'	
6523	01	018D2	8508753F A		DATA	X'8508753F'	
6524	01	018D3	8508753F A		DATA	X'8508753F'	
6525	01	018D4	43043218 A		DATA	X'43043218'	
6526	01	018D5	71AD43E8 A		DATA	X'71AD43E8'	
6527					PAGE		
6528	01	018D6	FFFFFFFF6 A	MW70	DATA	-10	MW
6529	01	018D7	37C00460		MW,12	MEMORY	
6530	01	018D8	073001C2		K	00,7,3,FXP8SW	
6531	01	018D9	67300166		K	6,7,3,L8C+2	
6532	01	018DA	00000000 A		DATA	X'00000000'	
6533	01	018DB	0FD0ED2C2 A		DATA	X'0FD0ED2C2'	
6534	01	018DC	235FA631 A		DATA	X'235FA631'	
6535	01	018DD	235FA631 A		DATA	X'235FA631'	
6536	01	018DE	5JA99C62 A		DATA	X'5DA89C62'	
6537	01	018DF	839E7AC2 A		DATA	X'839E7AC2'	
6538	01	018E0	FFFFFFFF6 A	MW71	DATA	-10	MW
6539	01	018E1	37C00460		MW,12	MEMORY	
6540	01	018E2	073001C2		K	00,7,3,FXP8SW	
6541	01	018E3	67300166		K	6,7,3,L8C+2	

6542	01	018E4	00000000 A		DATA	X'00000000'	
6543	01	018E5	118EA00E A		DATA	X'118EA00E'	
6544	01	018E6	4C798B51 A		DATA	X'4C798B51'	
6545	01	018E7	4C798B51 A		DATA	X'4C798B51'	
6546	01	018E8	3B667A40 A		DATA	X'3B667A40'	
6547	01	018E9	3B0D6E40 A		DATA	X'3B0D6E40'	
6548	01	018EA	FFFFFFFF6 A	MW72	DATA	-10	MW
6549	01	018EB	37C00460		MW,12	MEMORY	
6550	01	018EC	073001C2		K	00,7,3,FXP8SW	
6551	01	018ED	57300166		K	5,7,3,L8C+2	
6552	01	018EE	00000000 A		DATA	X'00000000'	
6553	01	018EF	D03A60C4 A		DATA	X'D03A60C4'	
6554	01	018F0	6E99AD73 A		DATA	X'6E99AD73'	
6555	01	018F1	6E99AD73 A		DATA	X'6E99AD73'	
6556	01	018F2	916C00A5 A		DATA	X'916C00A5'	
6557	01	018F3	757E3B1F A		DATA	X'757E3B1F'	
6558					PAGE		
6559	01	018F4	FFFFFFFF6 A	MW73	DATA	-10	MW
6560	01	018F5	37C00460		MW,12	MEMORY	
6561	01	018F6	073001C2		K	00,7,3,FXP8SW	
6562	01	018F7	57300166		K	5,7,3,L8C+2	
6563	01	018F8	00000000 A		DATA	X'00000000'	
6564	01	018F9	FF4891C2 A		DATA	X'FF4891C2'	
6565	01	018FA	E48DDF82 A		DATA	X'E48DDF82'	
6566	01	018FB	E48DDF82 A		DATA	X'E48DDF82'	
6567	01	018FC	06ACF1A4 A		DATA	X'06ACF1A4'	
6568	01	018FD	F0A89148 A		DATA	X'F0A89148'	
6569	01	018FE	FFFFFFFF6 A	MW74	DATA	-10	MW
6570	01	018FF	37C00460		MW,12	MEMORY	
6571	01	01900	073001C2		K	00,7,3,FXP8SW	
6572	01	01901	67300166		K	6,7,3,L8C+2	
6573	01	01902	00000000 A		DATA	X'00000000'	
6574	01	01903	0645D91E A		DATA	X'0645D91E'	
6575	01	01904	F3578058 A		DATA	X'F3578058'	
6576	01	01905	F3578058 A		DATA	X'F3578058'	
6577	01	01906	81234034 A		DATA	X'81234034'	
6578	01	01907	31E411E0 A		DATA	X'31E411E0'	

6579	01	01908	FFFFFFFF6 A	MW75	DATA	-10	MW
6580	01	01909	37C00460		MW,12	MEMORY	
6581	01	0190A	073001C2		K	00,7,3,FXP8SW	
6582	01	0190B	67300166		K	6,7,3,L8C+2	
6583	01	0190C	00000000 A		DATA	X'00000000'	
6584	01	0190D	0925E650 A		DATA	X'0925E650'	
6585	01	0190E	BF6125A3 A		DATA	X'BF6125A3'	
6586	01	0190F	BF6125A3 A		DATA	X'BF6125A3'	
6587	01	01910	D3C25A96 A		DATA	X'D3C25A96'	
6588	01	01911	40AD5882 A		DATA	X'40AD5882'	
6589					PAGE		
6590	01	01912	FFFFFFFF6 A	MW76	DATA	-10	MW
6591	01	01913	37C00460		MW,12	MEMORY	
6592	01	01914	073001C2		K	00,7,3,FXP8SW	
6593	01	01915	67300166		K	6,7,3,L8C+2	
6594	01	01916	00000000 A		DATA	X'00000000'	
6595	01	01917	0F90C493 A		DATA	X'0F90C493'	
6596	01	01918	C9B14785 A		DATA	X'C9B14785'	
6597	01	01919	C9B14785 A		DATA	X'C9B14785'	
6598	01	0191A	86A03674 A		DATA	X'86A03674'	
6599	01	0191B	0A8A7644 A		DATA	X'0A8A7644'	
6600	01	0191C	FFFFFFFF6 A	MW77	DATA	-10	MW
6601	01	0191D	37C00460		MW,12	MEMORY	
6602	01	0191E	073001C2		K	00,7,3,FXP8SW	
6603	01	0191F	57300166		K	5,7,3,L8C+2	
6604	01	01920	00000000 A		DATA	X'00000000'	
6605	01	01921	F092A39E A		DATA	X'F092A39E'	
6606	01	01922	E9D369A7 A		DATA	X'E9D369A7'	
6607	01	01923	E9D369A7 A		DATA	X'E9D369A7'	
6608	01	01924	1C0596DA A		DATA	X'1C0596DA'	
6609	01	01925	5232D236 A		DATA	X'5232D236'	
6610	01	01926	FFFFFFFF6 A	MW78	DATA	-10	MW
6611	01	01927	37C00460		MW,12	MEMORY	
6612	01	01928	073001C2		K	00,7,3,FXP8SW	
6613	01	01929	67300166		K	6,7,3,L8C+2	
6614	01	0192A	00000000 A		DATA	X'00000000'	
6615	01	0192B	21847A5E A		DATA	X'21847A5E'	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 195

6616	01	0192C	4DF2E8D8 A		DATA	X'4DF2E8D8'	
6617	01	0192D	4DF2E8D8 A		DATA	X'4DF2E8D8'	
6618	01	0192E	6E140AFA A		DATA	X'6E140AFA'	
6619	01	0192F	9D2FD2FO A		DATA	X'9D2FD2FO'	
6620					PAGE		
6621	01	01930	FFFFFFFF6 A	MW79	DATA	-10	MW *
6622	01	01931	B7C0045A		MW,12	*1A	
6623	01	01932	073001C2		K	00,7,3,FXP8SW	
6624	01	01933	67300166		K	6,7,3,L8C+2	
6625	01	01934	00000000 A		DATA	X'00000000'	
6626	01	01935	0416A25D A		DATA	X'0416A25D'	
6627	01	01936	3708F585 A		DATA	X'3708F585'	
6628	01	01937	3708F585 A		DATA	X'3708F585'	
6629	01	01938	13048243 A		DATA	X'13048243'	
6630	01	01939	A919C8CF A		DATA	X'A919C8CF'	
6631	01	0193A	FFFFFFFF6 A	MW80	DATA	-10	MW X
6632	01	0193B	37C3E067		MW,12	MEMORY-X'23F9',1	
6633	01	0193C	073001C2		K	00,7,3,FXP8SW	
6634	01	0193D	67300166		K	6,7,3,L8C+2	
6635	01	0193E	000023F9 A		DATA	X'23F9'	
6636	01	0193F	23CDBD6A A		DATA	X'23CDBD6A'	
6637	01	01940	A56F321B A		DATA	X'A56F321B'	
6638	01	01941	A56F321B A		DATA	X'A56F321B'	
6639	01	01942	9ACB652D A		DATA	X'9ACB652D'	
6640	01	01943	ECB975BF A		DATA	X'ECB975BF'	
6641	01	01944	FFFFFFFF6 A	MW81	DATA	-10	MW8
6642	01	01945	37D00460		MW,13	MEMORY	
6643	01	01946	073001C2		K	00,7,3,FXP8SW	
6644	01	01947	67300166		K	6,7,3,L8C+2	
6645	01	01948	00000000 A		DATA	X'00000000'	
6646	01	01949	00000000 A		DATA	0	
6647	01	0194A	DFA08A94 A		DATA	X'DFA08A94'	
6648	01	0194B	DFA08A94 A		DATA	X'DFA08A94'	
6649	01	0194C	C1C7FCFC A		DATA	X'C1C7FCFC'	
6650	01	0194D	777E19B0 A		DATA	X'777E19B0'	
6651					PAGE		
6652	01	0194E	FFFFFFFF6 A	MW82	DATA	-10	MW

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 196

6653	01	0194F	37D00460		MW,13	MEMORY	
6654	01	01950	073001C2		K	00,7,3,FXP8SW	
6655	01	01951	57300166		K	5,7,3,L8C+2	
6656	01	01952	00000000 A		DATA	X'00000000'	
6657	01	01953	00000000 A		DATA	X'00000000'	
6658	01	01954	8A5F7680 A		DATA	X'8A5F7680'	
6659	01	01955	8A5F7680 A		DATA	X'8A5F7680'	
6660	01	01956	1CC95618 A		DATA	X'1CC95618'	
6661	01	01957	7B024080 A		DATA	X'7B024080'	
6662	01	01958	FFFFFFFF6 A	MW83	DATA	-10	MW
6663	01	01959	37D00460		MW,13	MEMORY	
6664	01	0195A	073001C2		K	00,7,3,FXP8SW	
6665	01	0195B	57300166		K	5,7,3,L8C+2	
6666	01	0195C	00000000 A		DATA	X'00000000'	
6667	01	0195D	00000000 A		DATA	X'00000000'	
6668	01	0195E	FCFD3918 A		DATA	X'FCFD3918'	
6669	01	0195F	FCFD3918 A		DATA	X'FCFD3918'	
6670	01	01960	37C1F3C1 A		DATA	X'37C1F3C1'	
6671	01	01961	4831D318 A		DATA	X'4831D318'	
6672	01	01962	FFFFFFFF6 A	MW84	DATA	-10	MW
6673	01	01963	37D00460		MW,13	MEMORY	
6674	01	01964	073001C2		K	00,7,3,FXP8SW	
6675	01	01965	67300166		K	6,7,3,L8C+2	
6676	01	01966	00000000 A		DATA	X'00000000'	
6677	01	01967	00000000 A		DATA	X'00000000'	
6678	01	01968	1EDB580D A		DATA	X'1EDB580D'	
6679	01	01969	1EDB580D A		DATA	X'1EDB580D'	
6680	01	0196A	0C1031F3 A		DATA	X'0C1031F3'	
6681	01	0196B	62DF1157 A		DATA	X'62DF1157'	
6682					PAGE		
6683	01	0196C	FFFFFFFF6 A	MW85	DATA	-10	MW
6684	01	0196D	37D00460		MW,13	MEMORY	
6685	01	0196E	073001C2		K	00,7,3,FXP8SW	
6686	01	0196F	57300166		K	5,7,3,L8C+2	
6687	01	01970	00000000 A		DATA	X'00000000'	
6688	01	01971	00000000 A		DATA	X'00000000'	
6689	01	01972	E8FC75C1 A		DATA	X'E8FC75C1'	

6690	01	01973	EBFC75C1 A	DATA	X'EBFC75C1'	
6691	01	01974	3F1C8782 A	DATA	X'3F1C8782'	
6692	01	01975	D2689302 A	DATA	X'D2689302'	
6693	01	01976	FFFFFFFF6 A	DATA	-10	MW
6694	01	01977	37D00460	MW,13	MEMBRY	
6695	01	01978	073001C2	K	00,7,3,FXPBSW	
6696	01	01979	67300166	K	6,7,3,L8C+2	
6697	01	0197A	00000000 A	DATA	X'00000000'	
6698	01	0197B	00000000 A	DATA	X'00000000'	
6699	01	0197C	7C8DC530 A	DATA	X'7C8DC530'	
6700	01	0197D	7C8DC530 A	DATA	X'7C8DC530'	
6701	01	0197E	72436AC1 A	DATA	X'72436AC1'	
6702	01	0197F	9A478930 A	DATA	X'9A478930'	
6703	01	01980	FFFFFFFF6 A	DATA	-10	MW
6704	01	01981	37D00460	MW,13	MEMBRY	
6705	01	01982	073001C2	K	00,7,3,FXPBSW	
6706	01	01983	57300166	K	5,7,3,L8C+2	
6707	01	01984	00000000 A	DATA	X'00000000'	
6708	01	01985	00000000 A	DATA	X'00000000'	
6709	01	01986	F1C133C0 A	DATA	X'F1C133C0'	
6710	01	01987	F1C133C0 A	DATA	X'F1C133C0'	
6711	01	01988	6684E6C2 A	DATA	X'6684E6C2'	
6712	01	01989	F7E7B780 A	DATA	X'F7E7B780'	
6713				PAGE		
6714	01	0198A	FFFFFFFF6 A	DATA	-10	MW
6715	01	0198B	37D00460	MW,13	MEMBRY	
6716	01	0198C	073001C2	K	00,7,3,FXPBSW	
6717	01	0198D	67300166	K	6,7,3,L8C+2	
6718	01	0198E	00000000 A	DATA	X'00000000'	
6719	01	0198F	00000000 A	DATA	X'00000000'	
6720	01	01990	7CF4DF30 A	DATA	X'7CF4DF30'	
6721	01	01991	7CF4DF30 A	DATA	X'7CF4DF30'	
6722	01	01992	3F5A5ACB A	DATA	X'3F5A5ACB'	
6723	01	01993	7383DB10 A	DATA	X'7383DB10'	
6724	01	01994	FFFFFFFF6 A	DATA	-10	MW
6725	01	01995	37D00460	MW,13	MEMBRY	
6726	01	01996	073001C2	K	00,7,3,FXPBSW	

6727	01	01997	67300166	K	6,7,3,L8C+2	
6728	01	01998	00000000 A	DATA	X'00000000'	
6729	01	01999	00000000 A	DATA	X'00000000'	
6730	01	0199A	36686D39 A	DATA	X'36686D39'	
6731	01	0199B	36686D39 A	DATA	X'36686D39'	
6732	01	0199C	493A426C A	DATA	X'493A426C'	
6733	01	0199D	A764C60C A	DATA	X'A764C60C'	
6734	01	0199E	FFFFFFFF6 A	DATA	-10	MW
6735	01	0199F	37D00460	MW,13	MEMBRY	
6736	01	019A0	073001C2	K	00,7,3,FXPBSW	
6737	01	019A1	57300166	K	5,7,3,L8C+2	
6738	01	019A2	00000000 A	DATA	X'00000000'	
6739	01	019A3	00000000 A	DATA	0	
6740	01	019A4	F1C133C0 A	DATA	X'F1C133C0'	
6741	01	019A5	F1C133C0 A	DATA	X'F1C133C0'	
6742	01	019A6	1CC95618 A	DATA	X'1CC95618'	
6743	01	019A7	333F5A00 A	DATA	X'333F5A00'	
6744				PAGE		
6745	01	019A8	FFFFFFFF6 A	DATA	-10	MW
6746	01	019A9	57C00460	MW,12	MEMBRY	
6747	01	019AA	073001C2	K	00,7,3,FXPBSW	
6748	01	019AB	17300166	K	1,7,3,L8C+2	
6749	01	019AC	0000FC7C A	DATA	X'0000FC7C'	
6750	01	019AD	0000FC7C A	DATA	X'0000FC7C'	
6751	01	019AE	37BF0000 A	DATA	X'37BF0000'	
6752	01	019AF	37BF0000 A	DATA	X'37BF0000'	
6753	01	019B0	00000000 A	DATA	X'00000000'	
6754	01	019B1	FF3C0484 A	DATA	X'FF3C0484'	
6755	01	019B2	FFFFFFFF6 A	DATA	-10	MW
6756	01	019B3	57C00460	MW,12	MEMBRY	
6757	01	019B4	073001C2	K	00,7,3,FXPBSW	
6758	01	019B5	17300166	K	1,7,3,L8C+2	
6759	01	019B6	00000383 A	DATA	X'00000383'	
6760	01	019B7	00000383 A	DATA	X'00000383'	
6761	01	019B8	C8400000 A	DATA	X'C8400000'	
6762	01	019B9	C8400000 A	DATA	X'C8400000'	
6763	01	019BA	00000000 A	DATA	X'00000000'	

6764	01	0198B	FF3C38C0	A		DATA	X'FF3C38C0'		
6765	01	0198C	FFFFFFF6	A	MH03	DATA	-10	MH	X
6766	01	0198D	57CE0460			MH,12	MEMORY,7		
6767	01	0198E	073001C2			K	00,7,3,FXP8SW		
6768	01	0198F	17300166			K	1,7,3,L8C+2		
6769	01	019C0	0000E159	A		DATA	X'0000E159'		
6770	01	019C1	0000E159	A		DATA	X'0000E159'		
6771	01	019C2	000027C1	A		DATA	X'000027C1'		
6772	01	019C3	000027C1	A		DATA	X'000027C1'		
6773	01	019C4	00000000	A		DATA	X'00000000'		
6774	01	019C5	F33D7319	A		DATA	X'F33D7319'		
6775						PAGE			
6776	01	019C6	FFFFFFF6	A	MH04	DATA	-10	MH	X
6777	01	019C7	57CE0460			MH,12	MEMORY,7		
6778	01	019C8	073001C2			K	00,7,3,FXP8SW		
6779	01	019C9	17300166			K	1,7,3,L8C+2		
6780	01	019CA	00001EA6	A		DATA	X'00001EA6'		
6781	01	019CB	00001EA6	A		DATA	X'00001EA6'		
6782	01	019CC	0000D83E	A		DATA	X'0000D83E'		
6783	01	019CD	0000D83E	A		DATA	X'0000D83E'		
6784	01	019CE	00000000	A		DATA	X'00000000'		
6785	01	019CF	F33D7C34	A		DATA	X'F33D7C34'		
6786	01	019D0	FFFFFFF6	A	MH05	DATA	-10	MH	
6787	01	019D1	57D00460			MH,13	MEMORY		
6788	01	019D2	073001C2			K	00,7,3,FXP8SW		
6789	01	019D3	27300166			K	2,7,3,L8C+2		
6790	01	019D4	00000000	A		DATA	X'00000000'		
6791	01	019D5	00000000	A		DATA	X'00000000'		
6792	01	019D6	30C90000	A		DATA	X'30C90000'		
6793	01	019D7	30C90000	A		DATA	X'30C90000'		
6794	01	019D8	000048C1	A		DATA	X'000048C1'		
6795	01	019D9	00004F89	A		DATA	X'00004F89'		
6796	01	019DA	FFFFFFF6	A	MH06	DATA	-10	MH	
6797	01	019DB	57D00460			MH,13	MEMORY		
6798	01	019DC	073001C2			K	00,7,3,FXP8SW		
6799	01	019DD	27300166			K	2,7,3,L8C+2		
6800	01	019DE	00000000	A		DATA	X'00000000'		

6801	01	019DF	00000000	A		DATA	X'00000000'		
6802	01	019E0	C7360000	A		DATA	X'C7360000'		
6803	01	019E1	C7360000	A		DATA	X'C7360000'		
6804	01	019E2	0000B73E	A		DATA	X'0000B73E'		
6805	01	019E3	1023D914	A		DATA	X'1023D914'		
6806						PAGE			
6807	01	019E4	FFFFFFF6	A	MH07	DATA	-10	MH	X
6808	01	019E5	57DE0460			MH,13	MEMORY,7		
6809	01	019E6	073001C2			K	00,7,3,FXP8SW		
6810	01	019E7	27300166			K	2,7,3,L8C+2		
6811	01	019E8	00000000	A		DATA	X'00000000'		
6812	01	019E9	00000000	A		DATA	X'00000000'		
6813	01	019EA	00005AF4	A		DATA	X'00005AF4'		
6814	01	019EB	00005AF4	A		DATA	X'00005AF4'		
6815	01	019EC	FFFF62EA	A		DATA	X'FFFF62EA'		
6816	01	019ED	23248308	A		DATA	X'23248308'		
6817	01	019EE	FFFFFFF6	A	MH08	DATA	-10	MH	X
6818	01	019EF	D7D2045A			MH,13	*IA,1		
6819	01	019F0	073001C2			K	00,7,3,FXP8SW		
6820	01	019F1	27300166			K	2,7,3,L8C+2		
6821	01	019F2	00000001	A		DATA	1		
6822	01	019F3	00000001	A		DATA	1		
6823	01	019F4	0000A50B	A		DATA	X'0000A50B'		
6824	01	019F5	0000A50B	A		DATA	X'0000A50B'		
6825	01	019F6	00009D15	A		DATA	X'00009D15'		
6826	01	019F7	232548E7	A		DATA	X'232548E7'		
6827						PAGE			
6828	01	019F8	FFFFFFF6	A	MH09	DATA	-10	MH	
6829	01	019F9	23C42EFD	A		MH,12	X'42EFD'		
6830	01	019FA	073001C2			K	00,7,3,FXP8SW		
6831	01	019FB	57300166			K	5,7,3,L8C+2		
6832	01	019FC	00000000	A		DATA	X'00000000'		
6833	01	019FD	FFFFE994	A		DATA	X'FFFFE994'		
6834	01	019FE	00000000	A		DATA	X'00000000'		
6835	01	019FF	00000000	A		DATA	X'00000000'		
6836	01	01A00	FAA401EB	A		DATA	X'FAA401EB'		
6837	01	01A01	3A1A1F3F	A		DATA	X'3A1A1F3F'		

SIGMA 5 CPU DIAGNOSTIC-AUTO			704287-51C00	MARCH 12, 1969	201	
6838	01	01A02	FFFFFFF6 A	M102	DATA -10	MI
6839	01	01A03	23C6590D A		MI,12 X'6590D'	
6840	01	01A04	073001C2		K 00,7,3,FXP8SW	
6841	01	01A05	67300166		K 6,7,3,L9C+2	
6842	01	01A06	00000000 A		DATA X'00000000'	
6843	01	01A07	00019C36 A		DATA X'00019C36'	
6844	01	01A08	00000000 A		DATA X'00000000'	
6845	01	01A09	00000000 A		DATA X'00000000'	
6846	01	01A0A	36DAE799 A		DATA X'36DAE799'	
6847	01	01A0B	5137F3C5 A		DATA X'5137F3C5'	
6848	01	01A0C	FFFFFFF6 A	M103	DATA -10	MI
6849	01	01A0D	23DA7646 A		MI,13 X'A7646'	
6850	01	01A0E	F73001C2		K 15,7,3,FXP8SW	
6851	01	01A0F	E7300166		K 14,7,3,L9C+2	
6852	01	01A10	00000000 A		DATA X'00000000'	
6853	01	01A11	00000000 A		DATA 0	
6854	01	01A12	00000000 A		DATA X'00000000'	
6855	01	01A13	00000000 A		DATA X'00000000'	
6856	01	01A14	C5971488 A		DATA X'C5971488'	
6857	01	01A15	2E8C7A50 A		DATA X'2E8C7A50'	
6858					PAGE	
6859	01	01A16	FFFFFFF6 A	M104	DATA -10	MI
6860	01	01A17	23D5E9D2 A		MI,13 X'5C9D2'	
6861	01	01A18	F73001C2		K 15,7,3,FXP8SW	
6862	01	01A19	E7300166		K 14,7,3,L9C+2	
6863	01	01A1A	00000000 A		DATA X'00000000'	
6864	01	01A1B	00000000 A		DATA 0	
6865	01	01A1C	00000000 A		DATA X'00000000'	
6866	01	01A1D	00000000 A		DATA X'00000000'	
6867	01	01A1E	26A83F51 A		DATA X'26A83F51'	
6868	01	01A1F	69C58972 A		DATA X'69C58972'	
6869	01	01A20	FFFFFFF6 A	M105	DATA -10	MI
6870	01	01A21	23C44133 A		MI,12 X'44133'	
6871	01	01A22	F73001C2		K 15,7,3,FXP8SW	
6872	01	01A23	D7300166		K 13,7,3,L9C+2	
6873	01	01A24	00000000 A		DATA X'00000000'	
6874	01	01A25	FFFE0253 A		DATA X'FFFE0253'	

SIGMA 5 CPU DIAGNOSTIC-AUTO			704287-51C00	MARCH 12, 1969	202	
6875	01	01A26	00000000 A		DATA X'00000000'	
6876	01	01A27	00000000 A		DATA X'00000000'	
6877	01	01A28	88357F05 A		DATA X'88357F05'	
6878	01	01A29	83FC92FF A		DATA X'83FC92FF'	
6879	01	01A2A	FFFFFFF6 A	M106	DATA -10	MI
6880	01	01A2B	23CAE01A A		MI,12 X'AE01A'	
6881	01	01A2C	F73001C2		K 15,7,3,FXP8SW	
6882	01	01A2D	E7300166		K 14,7,3,L9C+2	
6883	01	01A2E	00000000 A		DATA X'00000000'	
6884	01	01A2F	00024888 A		DATA X'00024888'	
6885	01	01A30	00000000 A		DATA X'00000000'	
6886	01	01A31	00000000 A		DATA X'00000000'	
6887	01	01A32	8DEF82D4 A		DATA X'8DEF82D4'	
6888	01	01A33	E3D4C988 A		DATA X'E3D4C988'	
6889					PAGE	
6890	01	01A34	FFFFFFF6 A	M107	DATA -10	MI
6891	01	01A35	23D065D1 A		MI,13 X'065D1'	
6892	01	01A36	F73001C2		K 15,7,3,FXP8SW	
6893	01	01A37	D7300166		K 13,7,3,L9C+2	
6894	01	01A38	00000000 A		DATA X'00000000'	
6895	01	01A39	00000000 A		DATA 0	
6896	01	01A3A	00000000 A		DATA X'00000000'	
6897	01	01A3B	00000000 A		DATA X'00000000'	
6898	01	01A3C	D93AE796 A		DATA X'D93AE796'	
6899	01	01A3D	96753F76 A		DATA X'96753F76'	
6900	01	01A3E	FFFFFFF6 A	M108	DATA -10	MI
6901	01	01A3F	23D7B463 A		MI,13 X'7B463'	
6902	01	01A40	F73001C2		K 15,7,3,FXP8SW	
6903	01	01A41	D7300166		K 13,7,3,L9C+2	
6904	01	01A42	00000000 A		DATA X'00000000'	
6905	01	01A43	00000000 A		DATA 0	
6906	01	01A44	00000000 A		DATA X'00000000'	
6907	01	01A45	00000000 A		DATA X'00000000'	
6908	01	01A46	8C594871 A		DATA X'8C594871'	
6909	01	01A47	1FAAA0B3 A		DATA X'1FAAA0B3'	
6910	01	01A48	FFFFFFFA A	M109	DATA -6	MI *
6911	01	01A49	A3C0045A		MI,12 *1A	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969 203

6912	01	01A4A	173001B6		K	1,7,3,SIGNA6	
6913	01	01A4B	9730006B		K	9,7,3,NEIRET+1	
6914	01	01A4C	12345678 A		DATA	X'12345678'	
6915	01	01A4D	12345678 A		DATA	X'12345678'	
6916					PAGE		
6917	01	01A4E	FFFFFFFF6 A	DW01	DATA	-10	NDO*RN = OVERFLOW
6918	01	01A4F	36C00460		DW,12	MEMORY	
6919	01	01A50	072001C2		K	0,7,2,FXP8SW	
6920	01	01A51	47200166		K	4,7,2,L8C+2	
6921	01	01A52	CF999999 A		DATA	X'CF999999'	
6922	01	01A53	CF999999 A		DATA	X'CF999999'	
6923	01	01A54	60000000 A		DATA	X'60000000'	
6924	01	01A55	60000000 A		DATA	X'60000000'	
6925	01	01A56	00000000 A		DATA	X'00000000'	
6926	01	01A57	00000000 A		DATA	X'00000000'	
6927	01	01A58	FFFFFFFF6 A	DW02	DATA	-10	DO*NRN*NAZ*BWZ = OVERFLOW
6928	01	01A59	36C00460		DW,12	MEMORY	
6929	01	01A5A	F73001C2		K	15,7,3,FXP8SW	
6930	01	01A5B	F7300084		K	15,7,3,FP8RET+1	
6931	01	01A5C	60000000 A		DATA	X'60000000'	
6932	01	01A5D	60000000 A		DATA	X'60000000'	
6933	01	01A5E	8FFFFFFE A		DATA	X'8FFFFFFE'	
6934	01	01A5F	8FFFFFFE A		DATA	X'8FFFFFFE'	
6935	01	01A60	80000000 A		DATA	X'80000000'	
6936	01	01A61	80000000 A		DATA	X'80000000'	
6937	01	01A62	FFFFFFFF6 A	DW03	DATA	-10	DO*NRN*NAZ*NBWZ = OVERFLOW
6938	01	01A63	36C00460		DW,12	MEMORY	
6939	01	01A64	F73001C2		K	15,7,3,FXP8SW	
6940	01	01A65	F7300084		K	15,7,3,FP8RET+1	
6941	01	01A66	3FFFFFFF A		DATA	X'3FFFFFFF'	
6942	01	01A67	3FFFFFFF A		DATA	X'3FFFFFFF'	
6943	01	01A68	7FFFFFFD A		DATA	X'7FFFFFFD'	
6944	01	01A69	7FFFFFFD A		DATA	X'7FFFFFFD'	
6945	01	01A6A	00000001 A		DATA	X'00000001'	
6946	01	01A6B	00000001 A		DATA	X'00000001'	
6947					PAGE		
6948	01	01A6C	FFFFFFFF6 A	DW04	DATA	-10	DO*AZ*BWZ*MMN,RN = OVERFLOW

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969 204

6949	01	01A6D	36C00460		DW,12	MEMORY	
6950	01	01A6E	F73001C2		K	15,7,3,FXP8SW	
6951	01	01A6F	F7300084		K	15,7,3,FP8RET+1	
6952	01	01A70	C0000000 A		DATA	X'C0000000'	
6953	01	01A71	C0000000 A		DATA	X'C0000000'	
6954	01	01A72	80000000 A		DATA	X'80000000'	
6955	01	01A73	80000000 A		DATA	X'80000000'	
6956	01	01A74	00000000 A		DATA	X'00000000'	
6957	01	01A75	00000000 A		DATA	X'00000000'	
6958	01	01A76	FFFFFFFF6 A	DW05	DATA	-10	DO*AZ*BWZ*MMN,RN = OVERFLOW
6959	01	01A77	36C00460		DW,12	MEMORY	
6960	01	01A78	F73001C2		K	15,7,3,FXP8SW	
6961	01	01A79	F7300084		K	15,7,3,FP8RET+1	
6962	01	01A7A	40000000 A		DATA	X'40000000'	
6963	01	01A7B	40000000 A		DATA	X'40000000'	
6964	01	01A7C	7FFFFFFF A		DATA	X'7FFFFFFF'	
6965	01	01A7D	7FFFFFFF A		DATA	X'7FFFFFFF'	
6966	01	01A7E	80000000 A		DATA	X'80000000'	
6967	01	01A7F	80000000 A		DATA	X'80000000'	
6968	01	01A80	FFFFFFFF6 A	DW06	DATA	-10	DW
6969	01	01A81	36C00460		DW,12	MEMORY	
6970	01	01A82	F73001C2		K	15,7,3,FXP8SW	
6971	01	01A83	A7300166		K	10,7,3,L8C+2	
6972	01	01A84	3FFFFFFF A		DATA	X'3FFFFFFF'	
6973	01	01A85	00000000 A		DATA	X'00000000'	
6974	01	01A86	7FFFFFFF A		DATA	X'7FFFFFFF'	
6975	01	01A87	7FFFFFFF A		DATA	X'7FFFFFFF'	
6976	01	01A88	00000001 A		DATA	X'00000001'	
6977	01	01A89	7FFFFFFF A		DATA	X'7FFFFFFF'	
6978					PAGE		
6979	01	01A8A	FFFFFFFF6 A	DW07	DATA	-10	DW
6980	01	01A8B	36C00460		DW,12	MEMORY	
6981	01	01A8C	F73001C2		K	15,7,3,FXP8SW	
6982	01	01A8D	97300166		K	9,7,3,L8C+2	
6983	01	01A8E	3FFFFFFF A		DATA	X'3FFFFFFF'	
6984	01	01A8F	00000000 A		DATA	X'00000000'	
6985	01	01A90	80000001 A		DATA	X'80000001'	

SIGMA 5 CPU DIAGNOSTIC-AUTB 704287-51C00 MARCH 12, 1969 205

6986	01	01A91	80000001 A		DATA	X'80000001'	
6987	01	01A92	00000001 A		DATA	X'00000001'	
6988	01	01A93	80000001 A		DATA	X'80000001'	
6989	01	01A94	FFFFFFFF6 A	DW08	DATA	-10	DW
6990	01	01A95	36C00460		DW,12	MEMORY	
6991	01	01A96	F73001C2		K	15,7,3,FXP8SW	
6992	01	01A97	97300166		K	9,7,3,L8C+2	
6993	01	01A98	E0000000 A		DATA	X'E0000000'	
6994	01	01A99	C0000001 A		DATA	X'C0000001'	
6995	01	01A9A	7FFFFFFFF A		DATA	X'7FFFFFFFF'	
6996	01	01A9B	7FFFFFFFF A		DATA	X'7FFFFFFFF'	
6997	01	01A9C	FFFFFFFF A		DATA	X'FFFFFFFF'	
6998	01	01A9D	C0000002 A		DATA	X'C0000002'	
6999	01	01A9E	FFFFFFFF6 A	DW09	DATA	-10	DW
7000	01	01A9F	36C00460		DW,12	MEMORY	
7001	01	01AA0	F73001C2		K	15,7,3,FXP8SW	
7002	01	01AA1	A7300166		K	10,7,3,L8C+2	
7003	01	01AA2	C0000000 A		DATA	X'C0000000'	
7004	01	01AA3	00000000 A		DATA	X'00000000'	
7005	01	01AA4	80000001 A		DATA	X'80000001'	
7006	01	01AA5	80000001 A		DATA	X'80000001'	
7007	01	01AA6	FFFFFFFF A		DATA	X'FFFFFFFF'	
7008	01	01AA7	7FFFFFFFF A		DATA	X'7FFFFFFFF'	
7009					PAGE		
7010	01	01AA8	FFFFFFFF6 A	DW10	DATA	-10	DW
7011	01	01AA9	36C00460		DW,12	MEMORY	
7012	01	01AAA	F73001C2		K	15,7,3,FXP8SW	
7013	01	01AAB	A7300166		K	10,7,3,L8C+2	
7014	01	01AAC	FFFFFFFF A		DATA	X'FFFFFFFF'	
7015	01	01AAD	FFFFFFFFD A		DATA	X'FFFFFFFFD'	
7016	01	01AAE	FFFFFFFFC A		DATA	X'FFFFFFFFC'	
7017	01	01AAF	FFFFFFFFC A		DATA	X'FFFFFFFFC'	
7018	01	01AB0	FFFFFFFFE1 A		DATA	X'FFFFFFFFE1'	
7019	01	01AB1	00000007 A		DATA	X'00000007'	
7020	01	01AB2	FFFFFFFF6 A	DW11	DATA	-10	DW
7021	01	01AB3	36C00460		DW,12	MEMORY	
7022	01	01AB4	F73001C2		K	15,7,3,FXP8SW	

SIGMA 5 CPU DIAGNOSTIC-AUTB 704287-51C00 MARCH 12, 1969 206

7023	01	01AB5	A7300166		K	10,7,3,L8C+2	
7024	01	01AB6	00000000 A		DATA	X'00000000'	
7025	01	01AB7	00000000 A		DATA	X'00000000'	
7026	01	01AB8	00000004 A		DATA	X'00000004'	
7027	01	01AB9	00000004 A		DATA	X'00000004'	
7028	01	01ABA	00000020 A		DATA	X'00000020'	
7029	01	01ABB	00000008 A		DATA	X'00000008'	
7030	01	01ABC	FFFFFFFF6 A	DW12	DATA	-10	DW
7031	01	01ABD	36C00460		DW,12	MEMORY	
7032	01	01ABE	F73001C2		K	15,7,3,FXP8SW	
7033	01	01ABF	97300166		K	9,7,3,L8C+2	
7034	01	01AC0	FFFFFFFF A		DATA	X'FFFFFFFF'	
7035	01	01AC1	00000000 A		DATA	X'00000000'	
7036	01	01AC2	00000004 A		DATA	X'00000004'	
7037	01	01AC3	00000004 A		DATA	X'00000004'	
7038	01	01AC4	FFFFFFFFE0 A		DATA	X'FFFFFFFFE0'	
7039	01	01AC5	FFFFFFFFB A		DATA	X'FFFFFFFFB'	
7040					PAGE		
7041	01	01AC6	FFFFFFFF6 A	DW13	DATA	-10	DW
7042	01	01AC7	36C00460		DW,12	MEMORY	
7043	01	01AC8	F73001C2		K	15,7,3,FXP8SW	
7044	01	01AC9	A7300166		K	10,7,3,L8C+2	
7045	01	01ACA	FFFFFFFF A		DATA	X'FFFFFFFF'	
7046	01	01ACB	FFFFFFFF A		DATA	X'FFFFFFFF'	
7047	01	01ACC	FFFFFFFFB A		DATA	X'FFFFFFFFB'	
7048	01	01ACD	FFFFFFFFB A		DATA	X'FFFFFFFFB'	
7049	01	01ACE	FFFFFFFFE1 A		DATA	X'FFFFFFFFE1'	
7050	01	01ACF	00000006 A		DATA	X'00000006'	
7051	01	01AD0	FFFFFFFF6 A	DW14	DATA	-10	DW
7052	01	01AD1	36C00460		DW,12	MEMORY	
7053	01	01AD2	F73001C2		K	15,7,3,FXP8SW	
7054	01	01AD3	97300166		K	9,7,3,L8C+2	
7055	01	01AD4	00000000 A		DATA	X'00000000'	
7056	01	01AD5	00000000 A		DATA	X'00000000'	
7057	01	01AD6	FFFFFFFFC A		DATA	X'FFFFFFFFC'	
7058	01	01AD7	FFFFFFFFC A		DATA	X'FFFFFFFFC'	
7059	01	01AD8	00000020 A		DATA	X'00000020'	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 207

7060	01	01AD9	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7061	01	01ADA	FFFFFFFF	A	DW15	DATA	-10	DW
7062	01	01ADB	36C00460			DW,12	MEMORY	
7063	01	01ADC	F73001C2			K	15,7,3,FXP8SW	
7064	01	01ADD	97300166			K	9,7,3,L8C+2	
7065	01	01ADE	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7066	01	01ADF	FFFFFFFF	D		DATA	X'FFFFFFFF'	
7067	01	01AE0	00000004	A		DATA	X'00000004'	
7068	01	01AE1	00000004	A		DATA	X'00000004'	
7069	01	01AE2	FFFFFFFFE1	A		DATA	X'FFFFFFFFE1'	
7070	01	01AE3	FFFFFFFFF9	A		DATA	X'FFFFFFFFF9'	
7071						PAGE		
7072	01	01AE4	FFFFFFFF	A	DW16	DATA	-10	DW
7073	01	01AE5	36C00460			DW,12	MEMORY	
7074	01	01AE6	F73001C2			K	15,7,3,FXP8SW	
7075	01	01AE7	A7300166			K	10,7,3,L8C+2	
7076	01	01AE8	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7077	01	01AE9	00000000	A		DATA	X'00000000'	
7078	01	01AEA	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7079	01	01AEB	FFFFFFFFC	A		DATA	X'FFFFFFFFC'	
7080	01	01AEC	FFFFFFFFE0	A		DATA	X'FFFFFFFFE0'	
7081	01	01AED	00000008	A		DATA	X'00000008'	
7082	01	01AEE	FFFFFFFF	A	DW17	DATA	-10	DW
7083	01	01AEF	36C00460			DW,12	MEMORY	
7084	01	01AF0	F73001C2			K	15,7,3,FXP8SW	
7085	01	01AF1	A7300166			K	10,7,3,L8C+2	
7086	01	01AF2	00000000	A		DATA	X'00000000'	
7087	01	01AF3	00000003	A		DATA	X'00000003'	
7088	01	01AF4	00000004	A		DATA	X'00000004'	
7089	01	01AF5	00000004	A		DATA	X'00000004'	
7090	01	01AF6	0000001F	A		DATA	X'0000001F'	
7091	01	01AF7	00000007	A		DATA	X'00000007'	
7092	01	01AF8	FFFFFFFF	A	DW18	DATA	-10	DW
7093	01	01AF9	36C00460			DW,12	MEMORY	
7094	01	01AFA	F73001C2			K	15,7,3,FXP8SW	
7095	01	01AFB	A7300166			K	10,7,3,L8C+2	
7096	01	01AFC	15555555	A		DATA	X'15555555'	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 208

7097	01	01AFD	00000000	A		DATA	X'00000000'	
7098	01	01AFE	7FFFFFFFF	A		DATA	X'7FFFFFFFF'	
7099	01	01AFF	7FFFFFFFF	A		DATA	X'7FFFFFFFF'	
7100	01	01B00	55555555	A		DATA	X'55555555'	
7101	01	01B01	2AAAAAAB	A		DATA	X'2AAAAAAB'	
7102						PAGE		
7103	01	01B02	FFFFFFFF	A	DW19	DATA	-10	DW
7104	01	01B03	36C00460			DW,12	MEMORY	
7105	01	01B04	F73001C2			K	15,7,3,FXP8SW	
7106	01	01B05	A7300166			K	10,7,3,L8C+2	
7107	01	01B06	31C3C1F0	A		DATA	X'31C3C1F0'	
7108	01	01B07	3CBA3128	A		DATA	X'3CBA3128'	
7109	01	01B08	79999999	A		DATA	X'79999999'	
7110	01	01B09	79999999	A		DATA	X'79999999'	
7111	01	01B0A	11111111	A		DATA	X'11111111'	
7112	01	01B0B	68C48AD1	A		DATA	X'68C48AD1'	
7113	01	01B0C	FFFFFFFF	A	DW20	DATA	-10	DW
7114	01	01B0D	36C00460			DW,12	MEMORY	
7115	01	01B0E	F73001C2			K	15,7,3,FXP8SW	
7116	01	01B0F	97300166			K	9,7,3,L8C+2	
7117	01	01B10	FC7CF1CC	A		DATA	X'FC7CF1CC'	
7118	01	01B11	FAAAAAAA	A		DATA	X'FAAAAAAA'	
7119	01	01B12	70000000	A		DATA	X'70000000'	
7120	01	01B13	70000000	A		DATA	X'70000000'	
7121	01	01B14	AAAAAAAA	A		DATA	X'AAAAAAAA'	
7122	01	01B15	F7F9041D	A		DATA	X'F7F9041D'	
7123	01	01B16	FFFFFFFF	A	DW21	DATA	-10	DW
7124	01	01B17	36C00460			DW,12	MEMORY	
7125	01	01B18	F73001C2			K	15,7,3,FXP8SW	
7126	01	01B19	97300166			K	9,7,3,L8C+2	
7127	01	01B1A	31111111	A		DATA	X'31111111'	
7128	01	01B1B	584D7750	A		DATA	X'584D7750'	
7129	01	01B1C	84444444	A		DATA	X'84444444'	
7130	01	01B1D	84444444	A		DATA	X'84444444'	
7131	01	01B1E	59C61C18	A		DATA	X'59C61C18'	
7132	01	01B1F	9A7B9612	A		DATA	X'9A7B9612'	
7133						PAGE		

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00				MARCH 12, 1969	209		
7134	01	01820	FFFFFFFF6 A	DW22	DATA	-10	DW
7135	01	01821	36C00460		DW,12	MEMORY	
7136	01	01822	F73001C2		K	15,7,3,FXP8SW	
7137	01	01823	97300166		K	9,7,3,L8C+2	
7138	01	01824	D6666666 A		DATA	X'D6666666'	
7139	01	01825	8E7E7E7E A		DATA	X'8E7E7E7E'	
7140	01	01826	7EEEEEEE A		DATA	X'7EEEEEEE'	
7141	01	01827	7EEEEEEE A		DATA	X'7EEEEEEE'	
7142	01	01828	66666666 A		DATA	X'66666666'	
7143	01	01829	AC19D0AC A		DATA	X'AC19D0AC'	
7144	01	0182A	FFFFFFFF6 A	DW23	DATA	-10	DW
7145	01	0182B	36C00460		DW,12	MEMORY	
7146	01	0182C	F73001C2		K	15,7,3,FXP8SW	
7147	01	0182D	A7300166		K	10,7,3,L8C+2	
7148	01	0182E	F1C3C731 A		DATA	X'F1C3C731'	
7149	01	0182F	ED42FD57 A		DATA	X'ED42FD57'	
7150	01	01830	84444444 A		DATA	X'84444444'	
7151	01	01831	84444444 A		DATA	X'84444444'	
7152	01	01832	3F01FC03 A		DATA	X'3F01FC03'	
7153	01	01833	1073C4FB A		DATA	X'1073C4FB'	
7154	01	01834	FFFFFFFF6 A	DW24	DATA	-10	DW
7155	01	01835	36C00460		DW,12	MEMORY	
7156	01	01836	F73001C2		K	15,7,3,FXP8SW	
7157	01	01837	A7300166		K	10,7,3,L8C+2	
7158	01	01838	36666666 A		DATA	X'36666666'	
7159	01	01839	75555555 A		DATA	X'75555555'	
7160	01	0183A	7EEEEEEE A		DATA	X'7EEEEEEE'	
7161	01	0183B	7EEEEEEE A		DATA	X'7EEEEEEE'	
7162	01	0183C	99999999 A		DATA	X'99999999'	
7163	01	0183D	6DB6DB6E A		DATA	X'6DB6DB6E'	
7164					PAGE		
7165	01	0183E	FFFFFFFF6 A	DW25	DATA	-10	DW
7166	01	0183F	36C00460		DW,12	MEMORY	
7167	01	01840	F73001C2		K	15,7,3,FXP8SW	
7168	01	01841	A7300166		K	10,7,3,L8C+2	
7169	01	01842	27777777 A		DATA	X'27777777'	
7170	01	01843	6DB53C70 A		DATA	X'6DB53C70'	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00				MARCH 12, 1969	210		
7171	01	01844	70000000 A		DATA	X'70000000'	
7172	01	01845	70000000 A		DATA	X'70000000'	
7173	01	01846	C0853C70 A		DATA	X'C0853C70'	
7174	01	01847	5A35A35A A		DATA	X'5A35A35A'	
7175	01	01848	FFFFFFFF6 A	DW26	DATA	-10	DW
7176	01	01849	36C00460		DW,12	MEMORY	
7177	01	0184A	F73001C2		K	15,7,3,FXP8SW	
7178	01	0184B	97300166		K	9,7,3,L8C+2	
7179	01	0184C	31C3C1F0 A		DATA	X'31C3C1F0'	
7180	01	0184D	44D906D0 A		DATA	X'44D906D0'	
7181	01	0184E	85555555 A		DATA	X'85555555'	
7182	01	0184F	85555555 A		DATA	X'85555555'	
7183	01	01850	77777777 A		DATA	X'77777777'	
7184	01	01851	9824AEOB A		DATA	X'9824AEOB'	
7185	01	01852	FFFFFFFF6 A	DW27	DATA	-10	DW
7186	01	01853	36C00460		DW,12	MEMORY	
7187	01	01854	F73001C2		K	15,7,3,FXP8SW	
7188	01	01855	97300166		K	9,7,3,L8C+2	
7189	01	01856	D6666666 A		DATA	X'D6666666'	
7190	01	01857	C45C85B4 A		DATA	X'C45C85B4'	
7191	01	01858	79999999 A		DATA	X'79999999'	
7192	01	01859	79999999 A		DATA	X'79999999'	
7193	01	0185A	DF4F3C70 A		DATA	X'DF4F3C70'	
7194	01	0185B	A868CA1C A		DATA	X'A868CA1C'	
7195					PAGE		
7196	01	0185C	FFFFFFFF6 A	DW28	DATA	-10	DW
7197	01	0185D	36C00460		DW,12	MEMORY	
7198	01	0185E	F73001C2		K	15,7,3,FXP8SW	
7199	01	0185F	97300166		K	9,7,3,L8C+2	
7200	01	01860	15555555 A		DATA	X'15555555'	
7201	01	01861	4F88CDB4 A		DATA	X'4F88CDB4'	
7202	01	01862	82222222 A		DATA	X'82222222'	
7203	01	01863	82222222 A		DATA	X'82222222'	
7204	01	01864	59C61C18 A		DATA	X'59C61C18'	
7205	01	01865	D49C3412 A		DATA	X'D49C3412'	
7206	01	01866	FFFFFFFF6 A	DW29	DATA	-10	DW
7207	01	01867	36C00460		DW,12	MEMORY	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969

7208	01	01868	F73001C2		K	15,7,3,FXP8SW
7209	01	01869	97300166		K	9,7,3,L8C+2
7210	01	0186A	021871E7 A		DATA	X'021871E7'
7211	01	0186B	09CE9631 A		DATA	X'09CE9631'
7212	01	0186C	83333333 A		DATA	X'83333333'
7213	01	0186D	83333333 A		DATA	X'83333333'
7214	01	0186E	77777777 A		DATA	X'77777777'
7215	01	0186F	F8B399A2 A		DATA	X'F8B399A2'
7216	01	01870	FFFFFFFF6 A	DW30	DATA	-10
7217	01	01871	36C00460		DW,12	MEMORY
7218	01	01872	F73001C2		K	15,7,3,FXP8SW
7219	01	01873	A7300166		K	10,7,3,L8C+2
7220	01	01874	E1111111 A		DATA	X'E1111111'
7221	01	01875	8A64966C A		DATA	X'8A64966C'
7222	01	01876	87777777 A		DATA	X'87777777'
7223	01	01877	87777777 A		DATA	X'87777777'
7224	01	01878	AAAAAAAA A		DATA	X'AAAAAAAA'
7225	01	01879	41B2F932 A		DATA	X'41B2F932'
7226					PAGE	
7227	01	0187A	FFFFFFFF6 A	DW31	DATA	-10
7228	01	0187B	36C00460		DW,12	MEMORY
7229	01	0187C	F73001C2		K	15,7,3,FXP8SW
7230	01	0187D	97300166		K	9,7,3,L8C+2
7231	01	0187E	FC7CF1CC A		DATA	X'FC7CF1CC'
7232	01	0187F	88E1079C A		DATA	X'88E1079C'
7233	01	01880	7EEEEEEE A		DATA	X'7EEEEEEE'
7234	01	01881	7EEEEEEE A		DATA	X'7EEEEEEE'
7235	01	01882	CD53C70 A		DATA	X'CD53C70'
7236	01	01883	F8EAC766 A		DATA	X'F8EAC766'
7237	01	01884	FFFFFFFF6 A	DW32	DATA	-10
7238	01	01885	86C0045A		DW,12	*1A
7239	01	01886	F73001C2		K	15,7,3,FXP8SW
7240	01	01887	A7300166		K	10,7,3,L8C+2
7241	01	01888	15555555 A		DATA	X'15555555'
7242	01	01889	11111111 A		DATA	X'11111111'
7243	01	0188A	70000000 A		DATA	X'70000000'
7244	01	0188B	70000000 A		DATA	X'70000000'

211

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969

7245	01	0188C	11111111 A		DATA	X'11111111'
7246	01	0188D	30C30C30 A		DATA	X'30C30C30'
7247	01	0188E	FFFFFFFF6 A	DW33	DATA	-10
7248	01	0188F	36C2F34F		DW,12	MEMORY-X'111111',1
7249	01	01890	F73001C2		K	15,7,3,FXP8SW
7250	01	01891	97300166		K	9,7,3,L8C+2
7251	01	01892	31111111 A		DATA	X'31111111'
7252	01	01893	1E4D06CC A		DATA	X'1E4D06CC'
7253	01	01894	87777777 A		DATA	X'87777777'
7254	01	01895	87777777 A		DATA	X'87777777'
7255	01	01896	22222222 A		DATA	X'22222222'
7256	01	01897	97C9A0DA A		DATA	X'97C9A0DA'
7257					PAGE	
7258	01	01898	FFFFFFFF6 A	DW34	DATA	-10
7259	01	01899	36C00460		DW,12	MEMORY
7260	01	0189A	F73001C2		K	15,7,3,FXP8SW
7261	01	0189B	97300166		K	9,7,3,L8C+2
7262	01	0189C	D6666666 A		DATA	X'D6666666'
7263	01	0189D	93521CFB A		DATA	X'93521CFB'
7264	01	0189E	71111111 A		DATA	X'71111111'
7265	01	0189F	71111111 A		DATA	X'71111111'
7266	01	018A0	33333333 A		DATA	X'33333333'
7267	01	018A1	A1CFB2B8 A		DATA	X'A1CFB2B8'
7268	01	018A2	FFFFFFFF6 A	DW35	DATA	-10
7269	01	018A3	36C00460		DW,12	MEMORY
7270	01	018A4	F73001C2		K	15,7,3,FXP8SW
7271	01	018A5	97300166		K	9,7,3,L8C+2
7272	01	018A6	36666666 A		DATA	X'36666666'
7273	01	018A7	27482F83 A		DATA	X'27482F83'
7274	01	018A8	89999999 A		DATA	X'89999999'
7275	01	018A9	89999999 A		DATA	X'89999999'
7276	01	018AA	44444444 A		DATA	X'44444444'
7277	01	018AB	8A60DD69 A		DATA	X'8A60DD69'
7278	01	018AC	FFFFFFFF6 A	DW36	DATA	-10
7279	01	018AD	36C00460		DW,12	MEMORY
7280	01	018AE	F73001C2		K	15,7,3,FXP8SW
7281	01	018AF	A7300166		K	10,7,3,L8C+2

212

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00

MARCH 12, 1969

213

7282	01	01880	021871E7	A		DATA	X'021871E7'
7283	01	01881	88888888	A		DATA	X'88888888'
7284	01	01882	70000000	A		DATA	X'70000000'
7285	01	01883	70000000	A		DATA	X'70000000'
7286	01	01884	88888888	A		DATA	X'88888888'
7287	01	01885	04CA28EC	A		DATA	X'04CA28EC'
7288						PAGE	
7289	01	01886	FFFFFFF6	A	DW37	DATA	-10
7290	01	01887	36C00460	A		DATA	MEMBRY
7291	01	01888	F73001C2	A		DW,12	15,7,3,FXP8SW
7292	01	01889	A7300166	A		K	10,7,3,L8C+2
7293	01	0188A	E1111111	A		DATA	X'E1111111'
7294	01	0188B	C876A77D	A		DATA	X'C876A77D'
7295	01	0188C	87777777	A		DATA	X'87777777'
7296	01	0188D	87777777	A		DATA	X'87777777'
7297	01	0188E	88888888	A		DATA	X'88888888'
7298	01	0188F	41E2F932	A		DATA	X'41E2F932'
7299	01	01890	FFFFFFF6	A	DW38	DATA	-10
7300	01	018C1	36C00460	A		DW,12	MEMBRY
7301	01	018C2	F73001C2	A		K	15,7,3,FXP8SW
7302	01	018C3	97300166	A		K	9,7,3,L8C+2
7303	01	018C4	F1C3C731	A		DATA	X'F1C3C731'
7304	01	018C5	E79E5F51	A		DATA	X'E79E5F51'
7305	01	018C6	79999999	A		DATA	X'79999999'
7306	01	018C7	79999999	A		DATA	X'79999999'
7307	01	018C8	CCCCCCCC	A		DATA	X'CCCCCCCC'
7308	01	018C9	E207F433	A		DATA	X'E207F433'
7309	01	018CA	FFFFFFF6	A	DW39	DATA	-10
7310	01	018CB	36C00460	A		DW,12	MEMBRY
7311	01	018CC	F73001C2	A		K	15,7,3,FXP8SW
7312	01	018CD	A7300166	A		K	10,7,3,L8C+2
7313	01	018CE	00000000	A		DATA	X'00000000'
7314	01	018CF	00000000	A		DATA	X'00000000'
7315	01	018D0	00000001	A		DATA	X'00000001'
7316	01	018D1	00000001	A		DATA	X'00000001'
7317	01	018D2	00000002	A		DATA	X'00000002'
7318	01	018D3	00000002	A		DATA	X'00000002'

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00

MARCH 12, 1969

214

7319						PAGE	
7320	01	018D4	FFFFFFF6	A	DW40	DATA	-10
7321	01	018D5	36C00460	A		DW,12	MEMBRY
7322	01	018D6	F73001C2	A		K	15,7,3,FXP8SW
7323	01	018D7	A7300166	A		K	10,7,3,L8C+2
7324	01	018D8	00000000	A		DATA	X'00000000'
7325	01	018D9	00000000	A		DATA	X'00000000'
7326	01	018DA	7FFFFFFF	A		DATA	X'7FFFFFFF'
7327	01	018DB	7FFFFFFF	A		DATA	X'7FFFFFFF'
7328	01	018DC	7FFFFFFF	A		DATA	X'7FFFFFFF'
7329	01	018DD	00000001	A		DATA	X'00000001'
7330	01	018DE	FFFFFFF6	A	DW41	DATA	-10
7331	01	018DF	36C00460	A		DW,12	MEMBRY
7332	01	018E0	F73001C2	A		K	15,7,3,FXP8SW
7333	01	018E1	A7300166	A		K	10,7,3,L8C+2
7334	01	018E2	00000000	A		DATA	X'00000000'
7335	01	018E3	00000000	A		DATA	X'00000000'
7336	01	018E4	00000001	A		DATA	X'00000001'
7337	01	018E5	00000001	A		DATA	X'00000001'
7338	01	018E6	7FFFFFFF	A		DATA	X'7FFFFFFF'
7339	01	018E7	7FFFFFFF	A		DATA	X'7FFFFFFF'
7340	01	018E8	FFFFFFF6	A	DW42	DATA	-10
7341	01	018E9	36C00460	A		DW,12	MEMBRY
7342	01	018EA	F73001C2	A		K	15,7,3,FXP8SW
7343	01	018EB	A7300166	A		K	10,7,3,L8C+2
7344	01	018EC	FFFFFFF6	A		DATA	X'FFFFFFF6'
7345	01	018ED	00000000	A		DATA	X'00000000'
7346	01	018EE	FFFFFFF6	A		DATA	X'FFFFFFF6'
7347	01	018EF	FFFFFFF6	A		DATA	X'FFFFFFF6'
7348	01	018F0	FFFFFFFE	A		DATA	X'FFFFFFFE'
7349	01	018F1	00000002	A		DATA	X'00000002'
7350						PAGE	
7351	01	018F2	FFFFFFF6	A	DW43	DATA	-10
7352	01	018F3	36C00460	A		DW,12	MEMBRY
7353	01	018F4	F73001C2	A		K	15,7,3,FXP8SW
7354	01	018F5	A7300166	A		K	10,7,3,L8C+2
7355	01	018F6	FFFFFFF6	A		DATA	X'FFFFFFF6'

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969 215

7356	01	018F7	00000000	A		DATA	X'00000000'	
7357	01	018F8	80000001	A		DATA	X'80000001'	
7358	01	018F9	80000001	A		DATA	X'80000001'	
7359	01	018FA	80000001	A		DATA	X'80000001'	
7360	01	018FB	00000001	A		DATA	X'00000001'	
7361	01	018FC	FFFFFFFF6	A	DW44	DATA	-10	DW
7362	01	018FD	36C00460			DW,12	MEMORY	
7363	01	018FE	F73001C2			K	15,7,3,FXP8SW	
7364	01	018FF	A7300166			K	10,7,3,L8C+2	
7365	01	01C00	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7366	01	01C01	00000000	A		DATA	X'00000000'	
7367	01	01C02	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7368	01	01C03	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7369	01	01C04	80000001	A		DATA	X'80000001'	
7370	01	01C05	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7371	01	01C06	FFFFFFFF6	A	DW45	DATA	-10	DW
7372	01	01C07	36C00460			DW,12	MEMORY	
7373	01	01C08	F73001C2			K	15,7,3,FXP8SW	
7374	01	01C09	97300166			K	9,7,3,L8C+2	
7375	01	01C0A	00000000	A		DATA	X'00000000'	
7376	01	01C0B	00000000	A		DATA	X'00000000'	
7377	01	01C0C	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7378	01	01C0D	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7379	01	01C0E	00000002	A		DATA	X'00000002'	
7380	01	01C0F	FFFFFFFE	A		DATA	X'FFFFFFFE'	
7381						PAGE		
7382	01	01C10	FFFFFFFF6	A	DW46	DATA	-10	DW
7383	01	01C11	36C00460			DW,12	MEMORY	
7384	01	01C12	F73001C2			K	15,7,3,FXP8SW	
7385	01	01C13	97300166			K	9,7,3,L8C+2	
7386	01	01C14	00000000	A		DATA	X'00000000'	
7387	01	01C15	00000000	A		DATA	X'00000000'	
7388	01	01C16	80000001	A		DATA	X'80000001'	
7389	01	01C17	80000001	A		DATA	X'80000001'	
7390	01	01C18	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7391	01	01C19	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7392	01	01C1A	FFFFFFFF6	A	DW47	DATA	-10	DW

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969 216

7393	01	01C1B	36C00460			DW,12	MEMORY	
7394	01	01C1C	F73001C2			K	15,7,3,FXP8SW	
7395	01	01C1D	97300166			K	9,7,3,L8C+2	
7396	01	01C1E	00000000	A		DATA	X'00000000'	
7397	01	01C1F	00000000	A		DATA	X'00000000'	
7398	01	01C20	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7399	01	01C21	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7400	01	01C22	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7401	01	01C23	80000001	A		DATA	X'80000001'	
7402	01	01C24	FFFFFFFF6	A	DW48	DATA	-10	DW
7403	01	01C25	36C00460			DW,12	MEMORY	
7404	01	01C26	F73001C2			K	15,7,3,FXP8SW	
7405	01	01C27	97300166			K	9,7,3,L8C+2	
7406	01	01C28	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7407	01	01C29	00000000	A		DATA	X'00000000'	
7408	01	01C2A	00000001	A		DATA	X'00000001'	
7409	01	01C2B	00000001	A		DATA	X'00000001'	
7410	01	01C2C	FFFFFFFE	A		DATA	X'FFFFFFFE'	
7411	01	01C2D	FFFFFFFE	A		DATA	X'FFFFFFFE'	
7412						PAGE		
7413	01	01C2E	FFFFFFFF6	A	DW49	DATA	-10	DW
7414	01	01C2F	36C00460			DW,12	MEMORY	
7415	01	01C30	F73001C2			K	15,7,3,FXP8SW	
7416	01	01C31	97300166			K	9,7,3,L8C+2	
7417	01	01C32	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7418	01	01C33	00000000	A		DATA	X'00000000'	
7419	01	01C34	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7420	01	01C35	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7421	01	01C36	80000001	A		DATA	X'80000001'	
7422	01	01C37	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7423	01	01C38	FFFFFFFF6	A	DW50	DATA	-10	DW
7424	01	01C39	36C00460			DW,12	MEMORY	
7425	01	01C3A	F73001C2			K	15,7,3,FXP8SW	
7426	01	01C3B	97300166			K	9,7,3,L8C+2	
7427	01	01C3C	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7428	01	01C3D	00000000	A		DATA	X'00000000'	
7429	01	01C3E	00000001	A		DATA	X'00000001'	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00

MARCH 12, 1969

217

7430	01	01C3F	00000001 A		DATA	X'00000001'	
7431	01	01C40	80000001 A		DATA	X'80000001'	
7432	01	01C41	80000001 A		DATA	X'80000001'	
7433	01	01C42	FFFFFFF6 A	DW51	DATA	-10	DW
7434	01	01C43	36C00460		DW,12	MEMORY	
7435	01	01C44	F73001C2		K	15,7,3,FXP8SW	
7436	01	01C45	A7300166		K	10,7,3,L8C+2	
7437	01	01C46	01234567 A		DATA	X'01234567'	
7438	01	01C47	0DD441AF A		DATA	X'0DD441AF'	
7439	01	01C48	42468ACE A		DATA	X'42468ACE'	
7440	01	01C49	42468ACE A		DATA	X'42468ACE'	
7441	01	01C4A	89ABCDEF A		DATA	X'89ABCDEF'	
7442	01	01C4B	046514E0 A		DATA	X'046514E0'	
7443					PAGE		
7444	01	01C4C	FFFFFFF6 A	DW52	DATA	-10	DW
7445	01	01C4D	36C00460		DW,12	MEMORY	
7446	01	01C4E	F73001C2		K	15,7,3,FXP8SW	
7447	01	01C4F	A7300166		K	10,7,3,L8C+2	
7448	01	01C50	258BE147 A		DATA	X'258BE147'	
7449	01	01C51	55A20A6F A		DATA	X'55A20A6F'	
7450	01	01C52	56AE37BF A		DATA	X'56AE37BF'	
7451	01	01C53	56AE37BF A		DATA	X'56AE37BF'	
7452	01	01C54	AD0369CF A		DATA	X'AD0369CF'	
7453	01	01C55	6EE378A0 A		DATA	X'6EE378A0'	
7454	01	01C56	FFFFFFF6 A	DW53	DATA	-10	DW
7455	01	01C57	36C00460		DW,12	MEMORY	
7456	01	01C58	F73001C2		K	15,7,3,FXP8SW	
7457	01	01C59	F7300084		K	15,7,3,FP8RET+1	
7458	01	01C5A	DF1357BD A		DATA	X'DF1357BD'	
7459	01	01C5B	DF1357BD A		DATA	X'DF1357BD'	
7460	01	01C5C	E13579BD A		DATA	X'E13579BD'	
7461	01	01C5D	E13579BD A		DATA	X'E13579BD'	
7462	01	01C5E	F2468ACE A		DATA	X'F2468ACE'	
7463	01	01C5F	F2468ACE A		DATA	X'F2468ACE'	
7464	01	01C60	FFFFFFF6 A	DW54	DATA	-10	DW
7465	01	01C61	36C00460		DW,12	MEMORY	
7466	01	01C62	F73001C2		K	15,7,3,FXP8SW	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00

MARCH 12, 1969

218

7467	01	01C63	A7300166		K	10,7,3,L8C+2	
7468	01	01C64	E26AE38D A		DATA	X'E26AE38D'	
7469	01	01C65	92D13AE2 A		DATA	X'92D13AE2'	
7470	01	01C66	8147AD03 A		DATA	X'8147AD03'	
7471	01	01C67	8147AD03 A		DATA	X'8147AD03'	
7472	01	01C68	27C16B05 A		DATA	X'27C16B05'	
7473	01	01C69	38C33661 A		DATA	X'38C33661'	
7474					PAGE		
7475	01	01C6A	FFFFFFF6 A	DW55	DATA	-10	DW
7476	01	01C6B	36C00460		DW,12	MEMORY	
7477	01	01C6C	F73001C2		K	15,7,3,FXP8SW	
7478	01	01C6D	F7300084		K	15,7,3,FP8RET+1	
7479	01	01C6E	148BF37B A		DATA	X'148BF37B'	
7480	01	01C6F	148BF37B A		DATA	X'148BF37B'	
7481	01	01C70	E26AF49F A		DATA	X'E26AF49F'	
7482	01	01C71	E26AF49F A		DATA	X'E26AF49F'	
7483	01	01C72	F37BF49E A		DATA	X'F37BF49E'	
7484	01	01C73	F37BF49E A		DATA	X'F37BF49E'	
7485	01	01C74	FFFFFFF6 A	DW56	DATA	-10	DW
7486	01	01C75	36C00460		DW,12	MEMORY	
7487	01	01C76	F73001C2		K	15,7,3,FXP8SW	
7488	01	01C77	97300166		K	9,7,3,L8C+2	
7489	01	01C78	F0259E49 A		DATA	X'F0259E49'	
7490	01	01C79	DBE59C60 A		DATA	X'DBE59C60'	
7491	01	01C7A	457AE39F A		DATA	X'457AE39F'	
7492	01	01C7B	457AE39F A		DATA	X'457AE39F'	
7493	01	01C7C	A8E159F0 A		DATA	X'A8E159F0'	
7494	01	01C7D	C596D870 A		DATA	X'C596D870'	
7495	01	01C7E	FFFFFFF6 A	DW57	DATA	-10	DW
7496	01	01C7F	36C00460		DW,12	MEMORY	
7497	01	01C80	F73001C2		K	15,7,3,FXP8SW	
7498	01	01C81	97300166		K	9,7,3,L8C+2	
7499	01	01C82	00000000 A		DATA	X'00000000'	
7500	01	01C83	7FFFFFFF A		DATA	X'7FFFFFFF'	
7501	01	01C84	80000000 A		DATA	X'80000000'	
7502	01	01C85	80000000 A		DATA	X'80000000'	
7503	01	01C86	FFFFFFF6 A		DATA	X'FFFFFFF6'	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 219

7504	01	01C87	FFFFFFFF A		DATA	X'FFFFFFFF'	
7505					PAGE		
7506	01	01C88	FFFFFFF6 A	DW58	DATA	-10	DW
7507	01	01C89	36C00460		DW,12	MEMBRY	
7508	01	01C8A	F73001C2		K	15,7,3,FXP8SW	
7509	01	01C8B	A7300166		K	10,7,3,L8C+2	
7510	01	01C8C	C0000000 A		DATA	X'C0000000'	
7511	01	01C8D	80000001 A		DATA	X'80000001'	
7512	01	01C8E	80000000 A		DATA	X'80000000'	
7513	01	01C8F	80000000 A		DATA	X'80000000'	
7514	01	01C90	00000001 A		DATA	X'00000001'	
7515	01	01C91	7FFFFFFF A		DATA	X'7FFFFFFF'	
7516	01	01C92	FFFFFFF6 A	DW59	DATA	-10	DW
7517	01	01C93	36C00460		DW,12	MEMBRY	
7518	01	01C94	F73001C2		K	15,7,3,FXP8SW	
7519	01	01C95	A7300166		K	10,7,3,L8C+2	
7520	01	01C96	F0000000 A		DATA	X'F0000000'	
7521	01	01C97	00000000 A		DATA	X'00000000'	
7522	01	01C98	80000000 A		DATA	X'80000000'	
7523	01	01C99	80000000 A		DATA	X'80000000'	
7524	01	01C9A	00000000 A		DATA	X'00000000'	
7525	01	01C9B	20000000 A		DATA	X'20000000'	
7526	01	01C9C	FFFFFFF6 A	DW60	DATA	-10	DW
7527	01	01C9D	36C00460		DW,12	MEMBRY	
7528	01	01C9E	B73001C2		K	11,7,3,FXP8SW	
7529	01	01C9F	F7300084		K	15,7,3,FPBRET+1	
7530	01	01CA0	30000000 A		DATA	X'30000000'	
7531	01	01CA1	30000000 A		DATA	X'30000000'	
7532	01	01CA2	A0000000 A		DATA	X'A0000000'	
7533	01	01CA3	A0000000 A		DATA	X'A0000000'	
7534	01	01CA4	00000001 A		DATA	X'00000001'	
7535	01	01CA5	00000001 A		DATA	X'00000001'	
7536					PAGE		
7537	01	01CA6	FFFFFFF6 A	DW61	DATA	-10	DW
7538	01	01CA7	36C00460		DW,12	MEMBRY	
7539	01	01CA8	F73001C2		K	15,7,3,FXP8SW	
7540	01	01CA9	97300166		K	9,7,3,L8C+2	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969 220

7541	01	01CAA	29CE59DF A		DATA	X'29CE59DF'	
7542	01	01CAB	006C9928 A		DATA	X'006C9928'	
7543	01	01CAC	8ACE9FBD A		DATA	X'8ACE9FBD'	
7544	01	01CAD	8ACE9FBD A		DATA	X'8ACE9FBD'	
7545	01	01CAE	5A3E6E7F A		DATA	X'5A3E6E7F'	
7546	01	01CAF	A6DCA0A3 A		DATA	X'A6DCA0A3'	
7547	01	01CB0	FFFFFFF6 A	DW62	DATA	-10	DW
7548	01	01CB1	36C00460		DW,12	MEMBRY	
7549	01	01CB2	F73001C2		K	15,7,3,FXP8SW	
7550	01	01CB3	97300166		K	9,7,3,L8C+2	
7551	01	01CB4	28E45917 A		DATA	X'28E45917'	
7552	01	01CB5	4F57573B A		DATA	X'4F57573B'	
7553	01	01CB6	A13BF37D A		DATA	X'A13BF37D'	
7554	01	01CB7	A13BF37D A		DATA	X'A13BF37D'	
7555	01	01CB8	A09CD39F A		DATA	X'A09CD39F'	
7556	01	01CB9	9188D334 A		DATA	X'9188D334'	
7557	01	01CBA	FFFFFFF6 A	DW63	DATA	-10	DW
7558	01	01CBB	36C00460		DW,12	MEMBRY	
7559	01	01CBC	F73001C2		K	15,7,3,FXP8SW	
7560	01	01CBD	A7300166		K	10,7,3,L8C+2	
7561	01	01CBE	FE8C26AE A		DATA	X'FE8C26AE'	
7562	01	01CBF	F86A5FFC A		DATA	X'F86A5FFC'	
7563	01	01CC0	F673159D A		DATA	X'F673159D'	
7564	01	01CC1	F67B159D A		DATA	X'F67B159D'	
7565	01	01CC2	F4A017D3 A		DATA	X'F4A017D3'	
7566	01	01CC3	27102303 A		DATA	X'27102303'	
7567					PAGE		
7568	01	01CC4	FFFFFFF6 A	DW64	DATA	-10	DW
7569	01	01CC5	36C00460		DW,12	MEMBRY	
7570	01	01CC6	F73001C2		K	15,7,3,FXP8SW	
7571	01	01CC7	97300166		K	9,7,3,L8C+2	
7572	01	01CC8	E6E82A3D A		DATA	X'E6E82A3D'	
7573	01	01CC9	C0DD5EE4 A		DATA	X'C0DD5EE4'	
7574	01	01CCA	78F7483B A		DATA	X'78F7483B'	
7575	01	01CCB	78F7483B A		DATA	X'78F7483B'	
7576	01	01CCC	2C6071B5 A		DATA	X'2C6071B5'	
7577	01	01CCD	CAE54163 A		DATA	X'CAE54163'	

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12, 1969 221

7578	01	01CCE	FFFFFFFF6 A	DW65	DATA	-10	DW
7579	01	01CCF	36C00460		DW,12	MEMORY	
7580	01	01CDO	F73001C2		K	15,7,3,FXP8SW	
7581	01	01CD1	A7300166		K	10,7,3,L0C+2	
7582	01	01CD2	F7F9984E A		DATA	X'F7F9984E'	
7583	01	01CD3	F2D2BD30 A		DATA	X'F2D2BD30'	
7584	01	01CD4	E6F22A4F A		DATA	X'E6F22A4F'	
7585	01	01CD5	E6F22A4F A		DATA	X'E6F22A4F'	
7586	01	01CD6	47E95A3F A		DATA	X'47E95A3F'	
7587	01	01CD7	52037141 A		DATA	X'52037141'	
7588	01	01CD8	FFFFFFFF6 A	DW66	DATA	-10	DW
7589	01	01CD9	36C00460		DW,12	MEMORY	
7590	01	01CDA	F73001C2		K	15,7,3,FXP8SW	
7591	01	01CDB	97300166		K	9,7,3,L6C+2	
7592	01	01CDC	F29405E9 A		DATA	X'F29405E9'	
7593	01	01CDD	EDA31B94 A		DATA	X'EDA31B94'	
7594	01	01CDE	690B7C52 A		DATA	X'690B7C52'	
7595	01	01CDF	690B7C52 A		DATA	X'690B7C52'	
7596	01	01CE0	AE58B190 A		DATA	X'AE58B190'	
7597	01	01CE1	DF4A56CE A		DATA	X'DF4A56CE'	
7598					PAGE		
7599	01	01CE2	FFFFFFFF6 A	DW67	DATA	-10	DW
7600	01	01CE3	36C00460		DW,12	MEMORY	
7601	01	01CE4	F73001C2		K	15,7,3,FXP8SW	
7602	01	01CE5	A7300166		K	10,7,3,L0C+2	
7603	01	01CE6	2D3297C8 A		DATA	X'2D3297C8'	
7604	01	01CE7	1F22516F A		DATA	X'1F22516F'	
7605	01	01CE8	77532167 A		DATA	X'77532167'	
7606	01	01CE9	77532167 A		DATA	X'77532167'	
7607	01	01CEA	C237DAC1 A		DATA	X'C237DAC1'	
7608	01	01CEB	60F79EDE A		DATA	X'60F79EDE'	
7609	01	01CEC	FFFFFFFF6 A	DW68	DATA	-10	DW
7610	01	01CED	36C00460		DW,12	MEMORY	
7611	01	01CEE	F73001C2		K	15,7,3,FXP8SW	
7612	01	01CEF	A7300166		K	10,7,3,L0C+2	
7613	01	01CF0	FAC41382 A		DATA	X'FAC41382'	
7614	01	01CF1	EAC346BA A		DATA	X'EAC346BA'	

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12, 1969 222

7615	01	01CF2	E0FC7F1C A		DATA	X'E0FC7F1C'	
7616	01	01CF3	E0FC7F1C A		DATA	X'E0FC7F1C'	
7617	01	01CF4	446E28CA A		DATA	X'446E28CA'	
7618	01	01CF5	2B344B5C A		DATA	X'2B344B5C'	
7619	01	01CF6	FFFFFFFF6 A	DW69	DATA	-10	DW
7620	01	01CF7	36C00460		DW,12	MEMORY	
7621	01	01CF8	F73001C2		K	15,7,3,FXP8SW	
7622	01	01CF9	A7300166		K	10,7,3,L0C+2	
7623	01	01CFA	253F7EA9 A		DATA	X'253F7EA9'	
7624	01	01CFB	57824166 A		DATA	X'57824166'	
7625	01	01CFC	67B5C610 A		DATA	X'67B5C610'	
7626	01	01CFD	67B5C610 A		DATA	X'67B5C610'	
7627	01	01CFE	3D7182C6 A		DATA	X'3D7182C6'	
7628	01	01CFF	5BF19BD6 A		DATA	X'5BF19BD6'	
7629					PAGE		
7630	01	01D00	FFFFFFFF6 A	DW70	DATA	-10	DW
7631	01	01D01	36C00460		DW,12	MEMORY	
7632	01	01D02	F73001C2		K	15,7,3,FXP8SW	
7633	01	01D03	A7300166		K	10,7,3,L0C+2	
7634	01	01D04	135BDF7D A		DATA	X'135BDF7D'	
7635	01	01D05	19C47069 A		DATA	X'19C47069'	
7636	01	01D06	67B980C1 A		DATA	X'67B980C1'	
7637	01	01D07	67B980C1 A		DATA	X'67B980C1'	
7638	01	01D08	99AE1B05 A		DATA	X'99AE1B05'	
7639	01	01D09	2FC7759C A		DATA	X'2FC7759C'	
7640	01	01D0A	FFFFFFFF6 A	DW71	DATA	-10	DW
7641	01	01D0B	36D00460		DW,13	MEMORY	
7642	01	01D0C	F73001C2		K	15,7,3,FXP8SW	
7643	01	01D0D	A7300166		K	10,7,3,L0C+2	
7644	01	01D0E	FFFFFFFF6 A		DATA	X'FFFFFFFF'	
7645	01	01D0F	FFFFFFFF6 A		DATA	-1	
7646	01	01D10	26106573 A		DATA	X'26106573'	
7647	01	01D11	26106573 A		DATA	X'26106573'	
7648	01	01D12	59D73C28 A		DATA	X'59D73C28'	
7649	01	01D13	00000002 A		DATA	X'00000002'	
7650	01	01D14	FFFFFFFF6 A	DW72	DATA	-10	DW
7651	01	01D15	36D00460		DW,13	MEMORY	

7652	01	01D16	F73001C2		K	15,7,3,FXP8SW	
7653	01	01D17	A7300166		K	10,7,3,L8C+2	
7654	01	01D18	00000000 A		DATA	X'00000000'	
7655	01	01D19	00000000 A		DATA	X'00000000'	
7656	01	01D1A	F1A3C842 A		DATA	X'F1A3C842'	
7657	01	01D1B	F1A3C842 A		DATA	X'F1A3C842'	
7658	01	01D1C	CD2A3C71 A		DATA	X'CD2A3C71'	
7659	01	01D1D	00000003 A		DATA	X'00000003'	
7660					PAGE		
7661	01	01D1E	FFFFFFFF6 A	DW73	DATA	-10	DW
7662	01	01D1F	36D00460		DW,13	MEMBRY	
7663	01	01D20	F73001C2		K	15,7,3,FXP8SW	
7664	01	01D21	A7300166		K	10,7,3,L8C+2	
7665	01	01D22	FFFFFFFF A		DATA	X'FFFFFFFF'	
7666	01	01D23	FFFFFFFF A		DATA	X'FFFFFFFF'	
7667	01	01D24	00000002 A		DATA	X'00000002'	
7668	01	01D25	00000002 A		DATA	X'00000002'	
7669	01	01D26	7FFFFFFFF A		DATA	X'7FFFFFFFF'	
7670	01	01D27	3FFFFFFFF A		DATA	X'3FFFFFFFF'	
7671	01	01D28	FFFFFFFF6 A	DW74	DATA	-10	DW
7672	01	01D29	36D00460		DW,13	MEMBRY	
7673	01	01D2A	F73001C2		K	15,7,3,FXP8SW	
7674	01	01D2B	87300166		K	8,7,3,L8C+2	
7675	01	01D2C	00000000 A		DATA	X'00000000'	
7676	01	01D2D	00000000 A		DATA	X'00000000'	
7677	01	01D2E	42486CEA A		DATA	X'42486CEA'	
7678	01	01D2F	42486CEA A		DATA	X'42486CEA'	
7679	01	01D30	FC7CF1CC A		DATA	X'FC7CF1CC'	
7680	01	01D31	00000000 A		DATA	X'00000000'	
7681	01	01D32	FFFFFFFF6 A	DW75	DATA	-10	DW
7682	01	01D33	36D00460		DW,13	MEMBRY	
7683	01	01D34	F73001C2		K	15,7,3,FXP8SW	
7684	01	01D35	A7300166		K	10,7,3,L8C+2	
7685	01	01D36	FFFFFFFF A		DATA	X'FFFFFFFF'	
7686	01	01D37	FFFFFFFF A		DATA	X'FFFFFFFF'	
7687	01	01D38	2C76B150 A		DATA	X'2C76B150'	
7688	01	01D39	2C76B150 A		DATA	X'2C76B150'	

7689	01	01D3A	475E3AF9 A		DATA	X'475E3AF9'	
7690	01	01D3B	00000001 A		DATA	X'00000001'	
7691					PAGE		
7692	01	01D3C	FFFFFFFF6 A	DW76	DATA	-10	DW
7693	01	01D3D	36D00460		DW,13	MEMBRY	
7694	01	01D3E	F73001C2		K	15,7,3,FXP8SW	
7695	01	01D3F	97300166		K	9,7,3,L8C+2	
7696	01	01D40	00000000 A		DATA	X'00000000'	
7697	01	01D41	00000000 A		DATA	X'00000000'	
7698	01	01D42	00004444 A		DATA	X'00004444'	
7699	01	01D43	00004444 A		DATA	X'00004444'	
7700	01	01D44	D1F375DB A		DATA	X'D1F375DB'	
7701	01	01D45	FFFFF5351 A		DATA	X'FFFFF5351'	
7702	01	01D46	FFFFFFFF6 A	DW77	DATA	-10	DW
7703	01	01D47	36D00460		DW,13	MEMBRY	
7704	01	01D48	F73001C2		K	15,7,3,FXP8SW	
7705	01	01D49	A7300166		K	10,7,3,L8C+2	
7706	01	01D4A	FFFFFFFF A		DATA	X'FFFFFFFF'	
7707	01	01D4B	FFFFFFFF A		DATA	X'FFFFFFFF'	
7708	01	01D4C	7FFFFFFFF A		DATA	X'7FFFFFFFF'	
7709	01	01D4D	7FFFFFFFF A		DATA	X'7FFFFFFFF'	
7710	01	01D4E	7FFFFFFFF A		DATA	X'7FFFFFFFF'	
7711	01	01D4F	00000001 A		DATA	X'00000001'	
7712	01	01D50	FFFFFFFF6 A	DW78	DATA	-10	DW
7713	01	01D51	36D00460		DW,13	MEMBRY	
7714	01	01D52	F73001C2		K	15,7,3,FXP8SW	
7715	01	01D53	97300166		K	9,7,3,L8C+2	
7716	01	01D54	00000000 A		DATA	X'00000000'	
7717	01	01D55	00000000 A		DATA	X'00000000'	
7718	01	01D56	00000004 A		DATA	X'00000004'	
7719	01	01D57	00000004 A		DATA	X'00000004'	
7720	01	01D58	FFFFFFFFE1 A		DATA	X'FFFFFFFFE1'	
7721	01	01D59	FFFFFFFFF9 A		DATA	X'FFFFFFFFF9'	
7722					PAGE		
7723	01	01D5A	FFFFFFFF6 A	DW79	DATA	-10	DW
7724	01	01D5B	36D00460		DW,13	MEMBRY	
7725	01	01D5C	F73001C2		K	15,7,3,FXP8SW	

SIGMA 5 CPU DIAGNOSTIC-AUTB 704287-51C00 MARCH 12, 1969 225

7726	01	01D5D	87300166		K	8,7,3,L8C+2		
7727	01	01D5E	FFFFFFFF	A	DATA	X'FFFFFFFF'		
7728	01	01D5F	FFFFFFFF	A	DATA	X'FFFFFFFF'		
7729	01	01D60	55555555	A	DATA	X'55555555'		
7730	01	01D61	55555555	A	DATA	X'55555555'		
7731	01	01D62	000396FC	A	DATA	X'000396FC'		
7732	01	01D63	00000000	A	DATA	X'00000000'		
7733	01	01D64	FFFFFFFF	A	DW50	DATA	-10	DW
7734	01	01D65	56D00460		DW,13	MEMORY		
7735	01	01D66	F73001C2		K	15,7,3,FXPSW		
7736	01	01D67	A7300166		K	10,7,3,L8C+2		
7737	01	01D68	00000000	A	DATA	X'00000000'		
7738	01	01D69	00000000	A	DATA	X'00000000'		
7739	01	01D6A	FFFFFFFF	A	DATA	X'FFFFFFFF'		
7740	01	01D6B	FFFFFFFF	A	DATA	X'FFFFFFFF'		
7741	01	01D6C	80000001	A	DATA	X'80000001'		
7742	01	01D6D	15555555	A	DATA	X'15555555'		
7743					PAGE			
7744	01	01D6E	FFFFFFFF	A	DH01	DATA	-10	DH
7745	01	01D6F	56C00460		DH,12	MEMORY		
7746	01	01D70	F73001C2		K	15,7,3,FXPSW		
7747	01	01D71	A7300166		K	10,7,3,L8C+2		
7748	01	01D72	3FFFFFFFF	A	DATA	X'3FFFFFFFF'		
7749	01	01D73	3FFFFFFFF	A	DATA	X'3FFFFFFFF'		
7750	01	01D74	00010000	A	DATA	X'00010000'		
7751	01	01D75	00010000	A	DATA	X'00010000'		
7752	01	01D76	00000000	A	DATA	X'00000000'		
7753	01	01D77	00000000	A	DATA	X'00000000'		
7754	01	01D78	FFFFFFFF	A	DH02	DATA	-10	DH
7755	01	01D79	56C00460		DH,12	MEMORY		
7756	01	01D7A	F73001C2		K	15,7,3,FXPSW		
7757	01	01D7B	A7300166		K	10,7,3,L8C+2		
7758	01	01D7C	C0000000	A	DATA	X'C0000000'		
7759	01	01D7D	20000000	A	DATA	X'20000000'		
7760	01	01D7E	FFFE0000	A	DATA	X'FFFE0000'		
7761	01	01D7F	FFFE0000	A	DATA	X'FFFE0000'		
7762	01	01D80	00000000	A	DATA	X'00000000'		

SIGMA 5 CPU DIAGNOSTIC-AUTB 704287-51C00 MARCH 12, 1969 226

7763	01	01D81	00000000	A	DATA	X'00000000'		
7764	01	01D82	FFFFFFFF	A	DH03	DATA	-10	DH X
7765	01	01D83	56CE0460		DH,12	MEMORY,7		
7766	01	01D84	F73001C2		K	15,7,3,FXPSW		
7767	01	01D85	97300166		K	9,7,3,L8C+2		
7768	01	01D86	AAAAAAAA	A	DATA	X'AAAAAAAA'		
7769	01	01D87	AAAAAAAA	A	DATA	X'AAAAAAAA'		
7770	01	01D88	00000001	A	DATA	X'00000001'		
7771	01	01D89	00000001	A	DATA	X'00000001'		
7772	01	01D8A	00000000	A	DATA	X'00000000'		
7773	01	01D8B	00000000	A	DATA	X'00000000'		
7774					PAGE			
7775	01	01D8C	FFFFFFFF	A	DH04	DATA	-10	DH X
7776	01	01D8D	56CE0460		DH,12	MEMORY,7		
7777	01	01D8E	F73001C2		K	15,7,3,FXPSW		
7778	01	01D8F	97300166		K	9,7,3,L8C+2		
7779	01	01D90	25555555	A	DATA	X'25555555'		
7780	01	01D91	E0555555	A	DATA	X'E0555555'		
7781	01	01D92	0000FFFE	A	DATA	X'0000FFFE'		
7782	01	01D93	0000FFFE	A	DATA	X'0000FFFE'		
7783	01	01D94	00000000	A	DATA	X'00000000'		
7784	01	01D95	00000000	A	DATA	X'00000000'		
7785	01	01D96	FFFFFFFF	A	DH05	DATA	-10	DH0
7786	01	01D97	56D00460		DH,13	MEMORY		
7787	01	01D98	F73001C2		K	15,7,3,FXPSW		
7788	01	01D99	A7300166		K	10,7,3,L8C+2		
7789	01	01D9A	00000000	A	DATA	X'00000000'		
7790	01	01D9B	00000000	A	DATA	X'00000000'		
7791	01	01D9C	40000000	A	DATA	X'40000000'		
7792	01	01D9D	40000000	A	DATA	X'40000000'		
7793	01	01D9E	3FFFFFFFF	A	DATA	X'3FFFFFFFF'		
7794	01	01D9F	0000FFFE	A	DATA	X'0000FFFE'		
7795	01	01DA0	FFFFFFFF	A	DH06	DATA	-10	DH
7796	01	01DA1	56D00460		DH,13	MEMORY		
7797	01	01DA2	F73001C2		K	15,7,3,FXPSW		
7798	01	01DA3	A7300166		K	10,7,3,L8C+2		
7799	01	01DA4	00000000	A	DATA	X'00000000'		

7800	01	01DA5	00000000 A		DATA	X'00000000'	
7801	01	01DA6	87770000 A		DATA	X'87770000'	
7802	01	01DA7	87770000 A		DATA	X'87770000'	
7803	01	01DA8	C0000000 A		DATA	X'C0000000'	
7804	01	01DA9	0000E1E0 A		DATA	X'0000E1E0'	
7805					PAGE		
7806	01	01DAA	FFFFFFF6 A	DH07	DATA	-10	DH X
7807	01	01DAB	56DE0460		DR,13	MEMBRY,7	
7808	01	01DAC	F73001C2		K	15,7,3,FXP8SW	
7809	01	01DAD	97300166		K	9,7,3,L8C+2	
7810	01	01DAE	00000000 A		DATA	X'00000000'	
7811	01	01DAF	00000000 A		DATA	X'00000000'	
7812	01	01DB0	00004000 A		DATA	X'00004000'	
7813	01	01DB1	00004000 A		DATA	X'00004000'	
7814	01	01DB2	AAAAAAAA A		DATA	X'AAAAAAAA'	
7815	01	01DB3	FFFEAAA8 A		DATA	X'FFFEAAA8'	
7816	01	01DB4	FFFFFFF6 A	DH08	DATA	-10	DH *X
7817	01	01DB5	D6D2045A		DH,13	*IA,1	
7818	01	01DB6	F73001C2		K	15,7,3,FXP8SW	
7819	01	01DB7	97300166		K	9,7,3,L8C+2	
7820	01	01DB8	00000001 A		DATA	1	
7821	01	01DB9	00000001 A		DATA	1	
7822	01	01DBA	00008777 A		DATA	X'00008777'	
7823	01	01DBB	00008777 A		DATA	X'00008777'	
7824	01	01DBC	25555555 A		DATA	X'25555555'	
7825	01	01DBD	FFFF7C3E A		DATA	X'FFFF7C3E'	
7826	01	01DBE	00000000 A		DATA	0	
7827		01 0028C			END	SETRPLY	

SDS 901523

SECTION V
CONCORDANCE LISTING

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969

1

ABSVL	63/DB	63/DB	93/SET	93/SET	94/DB	94/DB	95/DB
AD01	3560/DATA	3560/DATA					
AD02	4351-DATA						
AD03	4363-DATA						
AD04	4376-DATA						
AD05	4389-DATA						
AD06	4402-DATA						
AD06	4411-DATA						
AF							
AFA	51/GEN 93/SET	57/GEN 93/SET	57/GEN 93/SET	63/DB 94/DB	77/GEN 94/DB	77/GEN 94/DB	86/GEN
AH01	77/GEN	86/GEN					
AH01	4303-DATA						
AH02	4311-DATA						
AH03	4319-DATA						
AH04	4327-DATA						
AI	70/OPEN						
AI	70/OPEN	80-CNAME					
AI8	916/EXU	917/EXU	918/EXU	921/DATA	922-AI8		
AI01	4334-DATA						
AI02							

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969

2

AI03	4340-DATA						
AI03	4346-DATA						
ANDF	739/STW	761-AND					
ANDM	741/STW	750-AND					
AND01	1732-DATA						
AND02	1736-DATA						
AND03	1744-DATA						
AND04	1753-DATA						
AND05	1761-DATA						
AND06	1769-DATA						
ANFR8	726/LW	986-AND					
ANFR2	732/LW	987-AND					
ANLZ01	3552-DATA						
ANLZ02	3563-DATA						
ANLZ03	3571-DATA						
ANLZ04	3579-DATA						
ANLZ05	3588-DATA						
ANLZ06	3597-DATA						
ANLZ07	3605-DATA						

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969

3

ANLZ08	414/STW	415/STW	417/STW	962/STW	963/STW	965/STW	3616-DATA
ANLZ09	964/LW	3626-DATA					
ANLZ10	3636-DATA						
ANLZ11	3647-DATA						
ANLZ12	3663-DATA						
ANLZ13	3678-DATA						
ANLZ14	3694-DATA						
ANLZ15	3710-DATA						
ANLZ16	3725-DATA						
ANLZ17	3742-DATA						
ANLZ18	3757-DATA						
ANLZ19	3773-DATA						
ANLZ20	3788-DATA						
ANLZ21	3804-DATA						
ANLZ22	3819-DATA						
ANLZ23	3834-DATA						
ANLZ24	3845-DATA						
ANMK	733/LW	988-AND					
AUTO							

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969

4

AWM01	410-LW	855/BCR	860/B				
AWM02	4420-DATA						
AWM03	4428-DATA						
AWM04	4436-DATA						
AWM04	4446-DATA						
AW01	1967-DATA						
AW02	1971-DATA						
AW03	1979-DATA						
AW04	1990-DATA						
AW05	2004-DATA						
AW06	2023-DATA						
AW07	2031-DATA						
AW08	2040-DATA						
AW09	2048-DATA						
AW10	2056-DATA						
AW11	2064-DATA						
AW12	2073-DATA						
AW13	2081-DATA						
AW14	2089-DATA						

AW15 2097-DATA
 AW16 2106-DATA
 AW17 2114-DATA
 AW18 2122-DATA
 AW19 2130-DATA
 AW20 2139-DATA
 AW21 2147-DATA
 AW22 2155-DATA
 AW23 2163-DATA
 AW24 2172-DATA
 AW25 2180-DATA
 AW26 2193-DATA
 AW27 2203-DATA
 AW28 2212-DATA
 AW29 2224-DATA
 AW30 2234-DATA
 AW31 2243-DATA
 AW32 2252-DATA
 AW33

AW34 2263-DATA
 AW35 2273-DATA
 AW36 2283-DATA
 AW37 2291-DATA
 AW38 2301-DATA
 AW39 2311-DATA
 AW40 2320-DATA
 AW41 2331-DATA
 AW42 2339-DATA
 AW43 2347-DATA
 AW44 2357-DATA
 AW45 2368-DATA
 AW46 2377-DATA
 AW47 2383-DATA
 AW48 2389-DATA
 BA 57/GEN 936/GEN 945/GEN 949/GEN 1154/GEN 2913/DATA 2914/DATA
 3576/DATA
 BAL01 957/LW 2472-DATA
 BAL02 2478-DATA
 BAL03

BAL04	2488-DATA			
BAL05	2496-DATA			
BCR01	418/STW	959/STW	2506-DATA	
BCR02	1898-DATA			
BCR03	1907-DATA			
BCR04	1914-DATA			
BCR05	1920-DATA			
BCR06	1925-DATA			
BCS01	1930-DATA			
BCS02	1937-DATA			
BCS03	1943-DATA			
BDR01	1948-DATA			
BDR02	2458-DATA			
BEND	2465-DATA			
BIND	416/LW	978-B		
BIR01	91-CNAME			
BIR02	2441-DATA			
BIT	2450-DATA			
	748/LW	753/LW	1010/LW	1058-DATA

BITS	746-STW	756/BIR					
BLANK							
BRANCH	1199-DATA						
	200-XPSD	637/E9R	1248/EQU	1294/EXU	1309/DATA	1310/DATA	1317/PZE
	1318/PZE	1915/BCR	1921/BCR	1926/BCR	1931/BCR	1938/BCS	1944/BCS
	2451/BIR	2459/BDR	2461/K	2466/BDR	2473/BAL	2475/K	2499/K
	2500/DATA	2680/LD	2683/DATA	2696/DATA	2904/LCF	2913/DATA	2914/DATA
	2915/DATA	2916/DATA	3201/LCH	3204/DATA	3699/DATA	3700/MW	3701/MW
	3730/DATA	3731/BAL	3732/BAL	3747/DATA	3748/BIR	3749/BIR	3762/DATA
	3763/BIR	3764/BIR	3824/DATA	3825/LM	3826/LM		
BUMP							
BUMPER	752/LPSD	1230-PZE					
BUSY	755-BIR	1230/PZE					
BYTE							
BYTES	834-SIO	836/BCR	841/BEZ				
	589/LW	760/LW	869/LW	870/FAS	1011/LW	1095-DATA	1245/EQU
C	739-STW	765/BIR					
CAL01	441/LW	450/LW	1249-EQU				
CAL02	5615-DATA						
CAL03	5619-DATA						
CAL04	5623-DATA						
CAL05	5627-DATA						
CAL06	5633-DATA						
CAL07	5641-DATA						

5646-DATA

CAL1	201/XPSD	288-PZE	646/STW	992/PZE	1004/XPSD
CAL1AD	645/EOR	992-PZE			
CAL1TR	201-XPSD	644/STW			
CAL1XD	643/EOR	1004-XPSD			
CAL2	202/XPSD	311-PZE	653/STW	993/PZE	1005/XPSD
CAL2AD	652/EOR	993-PZE			
CAL2TR	202-XPSD	651/STW			
CAL2XD	650/EOR	1005-XPSD			
CAL3	203/XPSD	334-PZE	660/STW	994/PZE	1006/XPSD
CAL3AD	659/EOR	994-PZE			
CAL3TR	203-XPSD	658/STW			
CAL3XD	657/EOR	1006-XPSD			
CAL4	204/XPSD	357-PZE	667/STW	995/PZE	1007/XPSD
CAL4AD	666/EOR	995-PZE			
CAL4TR	204-XPSD	665/STW			
CAL4XD	664/EOR	1007-XPSD			
CB01	3917-DATA				
CB02	3925-DATA				

CB03 3933-DATA

CB04 3941-DATA

CB05 3950-DATA

CB06 3958-DATA

CB07 3966-DATA

CB08 3974-DATA

CD01 3998-DATA

CD02 4010-DATA

CD03 4023-DATA

CD04 4035-DATA

CEE 568/EOR 1028-DATA

CF 77/GEN 86/GEN

CH01 3890-DATA

CH02 3899-DATA

CH03 3908-DATA

CI 70/BPEN

CI 70/BPEN 81-CNAME

CI01 3984-DATA

CI02

3991-DATA							
CLEAR	436-STW 2925/DATA	439/BIR 2926/DATA	2575/DATA	2576/DATA	2577/DATA	2578/DATA	2922/LCF
CLM01	4136-DATA						
CLM02	4150-DATA						
CLR01	4083-DATA						
CLR02	4094-DATA						
CLR03	4101-DATA						
CLR04	4113-DATA						
CLR05	4124-DATA						
CNT1CP	207/MTW	1236-PZE					
CNT2CP	208/MTW	1237-PZE					
CNT3CP	209/MTW	1238-PZE					
CNT3Z	1255-EQU						
CNT4CP	210/MTW	1239-PZE					
CNT4Z	1256-EQU						
COMP	936/GEN	938-TEXTC					
COMPAT	970/BNE	980-OR					
COND	466/AND	471/AND	1023-DATA				
COUNT							

722/STW 774/LW 1240-PZE							
CPINT	385/LW 1266/LW	395/LW 1280/STW	403/STW	420/STW	497/LW	900/STW	1047-DATA
CPINTM	405/STW	859/STW	895/LW	1048-DATA	1282/STW		
CS01	4049-DATA						
CS02	4060-DATA						
CS03	4071-DATA						
CW01	3864-DATA						
CW02	3875-DATA						
CW03	3884-DATA						
CYCLE	427-LW 919/B 2564/DATA	596/BCS 921/DATA 2565/DATA	886/BE 966/B 2566/DATA	892/BNE 972/BNE 3560/DATA	894/BNE 975/B	896/BEZ 1232/PZE	901/B 2563/DATA
C1RET	292-XPSD	1326/PZE	1327/PZE	5618/K			
C2RET	315-XPSD	5622/K					
C3RET	338-XPSD	5626/K					
C4RET	361-XPSD	5630/K	5636/K	5644/K	5649/K		
DA	51/GEN	999/PZE	3584/DATA	3610/GEN			
DF	198-XPSD	272-PZE	276/LCF	996/PZE			
DFAD	996-PZE						
DFRET							

DFTR 198-XPSD
DH01 7744-DATA
DH02 7754-DATA
DH03 7764-DATA
DH04 7775-DATA
DH05 7785-DATA
DH06 7795-DATA
DH07 7806-DATA
DH08 7816-DATA
D0NE 445/B 865-CI
D0NEMSG 835/BCR 843-T10 845/BCR 850/BEZ
DW01 6917-DATA
DW02 6927-DATA
DW03 6937-DATA
DW04 6948-DATA
DW05 6958-DATA
DW06 6968-DATA
DW07 6979-DATA

DW08 6989-DATA
DW09 6999-DATA
DW10 7010-DATA
DW11 7020-DATA
DW12 7030-DATA
DW13 7041-DATA
DW14 7051-DATA
DW15 7061-DATA
DW16 7072-DATA
DW17 7082-DATA
DW18 7092-DATA
DW19 7103-DATA
DW20 7113-DATA
DW21 7123-DATA
DW22 7134-DATA
DW23 7144-DATA
DW24 7154-DATA
DW25 7165-DATA
DW26

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12, 1969

15

DW27 7175-DATA
DW28 7185-DATA
DW29 7196-DATA
DW30 7206-DATA
DW31 7216-DATA
DW32 7227-DATA
DW33 7237-DATA
DW34 7247-DATA
DW35 7258-DATA
DW36 7268-DATA
DW37 7278-DATA
DW38 7289-DATA
DW39 7299-DATA
DW40 7309-DATA
DW41 7320-DATA
DW42 7330-DATA
DW43 7340-DATA
DW44 7351-DATA
7361-DATA

SIGMA 5 CPU DIAGNOSTIC-AUT0 704287-51C00 MARCH 12, 1969

15

DW45 7371-DATA
DW46 7382-DATA
DW47 7392-DATA
DW48 7402-DATA
DW49 7413-DATA
DW50 7423-DATA
DW51 7433-DATA
DW52 7444-DATA
DW53 7454-DATA
DW54 7464-DATA
DW55 7475-DATA
DW56 7485-DATA
DW57 7495-DATA
DW58 7506-DATA
DW59 7516-DATA
DW60 7526-DATA
DW61 7537-DATA
DW62 7547-DATA
DW63

7557-DATA
 DW64 7568-DATA
 DW65 7578-DATA
 DW66 7588-DATA
 DW67 7599-DATA
 DW68 7609-DATA
 DW69 7619-DATA
 DW70 7630-DATA
 DW71 7640-DATA
 DW72 7650-DATA
 DW73 7661-DATA
 DW74 7671-DATA
 DW75 7681-DATA
 DW76 7692-DATA
 DW77 7702-DATA
 DW78 7712-DATA
 DW79 7723-DATA
 DW80 7733-DATA
 EDIT 698/BCR 713-LW

END 591-WD 978/B 1018/PZE 3535/DATA 3559/DATA 3560/DATA 5811/B
 E0R01 1781-DATA
 E0R02 1789-DATA
 E0R03 1798-DATA
 E0R04 1806-DATA
 ERREXIT 511/BNE 516/B 523-LW
 ERRIND 585/LW 590/STW 599-DATA 694/STW
 ERR0R 540/XPSD 544/XPSD 548/XPSD 553/XPSD 557/XPSD 561/XPSD 565/XPSD
 571/XPSD 575/XPSD 579/XPSD 583/XPSD 679-PZE 686/LPSD 710/LPSD
 ERR0RS 398/LW 432/STW 527/LW 592/LW 688/STW 1241-PZE 1269/LW
 EVEN 729-LW
 EXITI0 838/B 842/B 844/BCR 847/B 851-LPSD
 EXU01 1287-DATA
 EXU02 1293-DATA
 EXU03 1297-DATA
 EXU04 1305-DATA
 EXU05 1311-DATA
 EXU06 1320-DATA
 EXU07 1330-DATA

EXU08 1338-DATA
 F 29-EQU 1720/K 1721/K 5642/CAL4 5647/CAL4 5717/K
 FAILLO1 5738-DATA
 FAILLO2 5747-DATA
 FAILLO3 5752-DATA
 FAILLO4 5757-DATA
 FAILLO5 5762-DATA
 FAILLO6 5768-DATA
 FAILLO7 5773-DATA
 FAILLO8 5778-DATA
 FAILLO9 5783-DATA
 FAILLO10 5788-DATA
 FAILLO11 5793-DATA
 FAILLO12 5799-DATA
 FAILLO13 5804-DATA
 FAPRIV01 5714-DATA
 FAPRIV04 5730-DATA
 FAPRIV03 5724-DATA
 FAPRIV02

5719-DATA
 FAPSD01 1816-DATA
 FAPSD02 1836-DATA
 FAPSD03 1851-DATA
 FARWD 672-RD 5661/DATA 5666/DATA 5672/DATA 5679/DATA 5686/DATA
 FARWD01 5659-DATA
 FARWD02 5664-DATA
 FARWD03 5670-DATA
 FARWD04 5677-DATA
 FARWD05 5684-DATA
 FASTCHK 510-CD 522/BDR
 FILL 61-CNAME
 FILTER 761/AND 986/AND 987/AND 1082-DATA
 FIRST 425/STW 781/LW 799/STW 1031-DATA
 FL4 945/GEN 947-TEXTC
 FLNIN 864/DATA 873-LW
 FLBAT 870-FAS 873/LW
 FLBATP 941/P 945-GEN
 FL4PF 197/XPSD 264-PZE 268/LCF 633/STW 997-PZE

FLPFAD	632/EOR	997-PZE					
FLPFSW	632-EOR	5327/K	5339/K	5352/K	5365/K	5377/K	5390/K
	5402/K	5415/K	5427/K	5440/K	5452/K	5465/K	5477/K
	5490/K	5503/K	5515/K	5528/K	5540/K	5553/K	5565/K
	5578/K	5591/K	5603/K				
FLPFTR	197-XPSD						
FLPRINT	872/B	876-XPSD					
FLTRAP	864-DATA	940/XPSD					
FPFRET	269-XPSD						
FPBRET	261-XPSD	2342/K	2410/K	2996/K	3093/K	3153/K	3271/K
	4189/K	4230/K	4330/K	4343/K	4366/K	4423/K	4463/K
	4492/K	4517/K	4930/K	4940/K	4951/K	4961/K	4957/K
	7478/K	7529/K					
FRAME	738/LW	1015/LW	1016/LW	1069-DATA			
FRBM	448/STW	450-LW	455/STW	597/LW			
FXPB	196/XPSD	256-PZE	260/LCF	625/STW	630/DATA	998/PZE	
FXPBA	627/EOR	630-DATA					
FXPAD	624/EOR	998-PZE					
FXPSPDW	637-EOR	2349/K					
FXPSW	624-EOR	2006/K	2025/K	2033/K	2042/K	2050/K	2058/K
	2066/K	2075/K	2083/K	2091/K	2099/K	2108/K	2116/K
	2124/K	2132/K	2141/K	2149/K	2157/K	2165/K	2174/K
	2182/K	2195/K	2205/K	2214/K	2226/K	2236/K	2245/K

	2254/K	2265/K	2275/K	2285/K	2293/K	2303/K	2313/K
	2322/K	2333/K	2341/K	2405/K	2409/K	2418/K	2433/K
	2995/K	3092/K	3152/K	3270/K	4166/K	4188/K	4220/K
	4229/K	4305/K	4313/K	4321/K	4329/K	4336/K	4342/K
	4353/K	4365/K	4378/K	4391/K	4422/K	4430/K	4438/K
	4454/K	4462/K	4491/K	4504/K	4516/K	4645/K	4651/K
	4657/K	4663/K	4921/K	4952/K	4958/K	4971/K	4991/K
	5022/K	5817/K	5827/K	5837/K	5848/K	5858/K	5868/K
	5879/K	5889/K	5899/K	5910/K	5920/K	5930/K	5941/K
	5951/K	5961/K	5972/K	5982/K	5992/K	6003/K	6013/K
	6023/K	6034/K	6044/K	6054/K	6065/K	6075/K	6085/K
	6096/K	6106/K	6116/K	6127/K	6137/K	6147/K	6158/K
	6168/K	6178/K	6189/K	6199/K	6209/K	6220/K	6230/K
	6240/K	6251/K	6261/K	6271/K	6282/K	6292/K	6302/K
	6313/K	6323/K	6333/K	6344/K	6354/K	6364/K	6375/K
	6385/K	6395/K	6406/K	6416/K	6426/K	6437/K	6447/K
	6457/K	6468/K	6478/K	6488/K	6499/K	6509/K	6519/K
	6530/K	6540/K	6550/K	6561/K	6571/K	6581/K	6592/K
	6602/K	6612/K	6623/K	6633/K	6643/K	6654/K	6664/K
	6674/K	6685/K	6695/K	6705/K	6716/K	6726/K	6736/K
	6747/K	6757/K	6767/K	6778/K	6788/K	6798/K	6809/K
	6819/K	6830/K	6840/K	6850/K	6861/K	6871/K	6881/K
	6892/K	6902/K	6919/K	6929/K	6939/K	6950/K	6960/K
	6970/K	6981/K	6991/K	7001/K	7012/K	7022/K	7032/K
	7043/K	7053/K	7063/K	7074/K	7084/K	7094/K	7105/K
	7115/K	7125/K	7136/K	7146/K	7156/K	7167/K	7177/K
	7187/K	7198/K	7208/K	7218/K	7229/K	7239/K	7249/K
	7260/K	7270/K	7280/K	7291/K	7301/K	7311/K	7322/K
	7332/K	7342/K	7353/K	7363/K	7373/K	7384/K	7394/K
	7404/K	7415/K	7425/K	7435/K	7446/K	7456/K	7466/K
	7477/K	7487/K	7497/K	7508/K	7518/K	7528/K	7539/K
	7549/K	7559/K	7570/K	7580/K	7590/K	7601/K	7611/K
	7621/K	7632/K	7642/K	7652/K	7663/K	7673/K	7683/K
	7694/K	7704/K	7714/K	7725/K	7735/K	7746/K	7756/K
	7766/K	7777/K	7787/K	7797/K	7808/K	7818/K	
FXPSTR	196-XPSD	628/STW	638/STW				

GETOUT	801/LPSD	804-PZE					
G0TOP	816/BIR	822-LW					
G1	75-EQU	77-GEN					
G2	84-EQU	86-GEN					
HA	2575/DATA	2576/DATA	3027/DATA	3559/DATA	3560/DATA	3560/DATA	
HDG	1128/J	1151/J	1176-DATA				
HEAD	1115/P	1128-J					
HLTEST	701/B	705-RD	804/PZE				
I	34-FORM	437/STW	451/STW	1250-EQU			
IA	481/STW 2404/SW* 2730/LD* 3244/LCD* 3572/ANLZ* 4187/MTW* 4447/AWM* 7238/DW*	546/LW 2489/BAL* 2818/LW* 2985/LAW* 3308/STH* 3577/CB* 4219/MTW* 4469/SH* 7817/DH*	1253-EQU 2530/LH* 2985/LAW* 3373/STB* 3578/CB* 4262/MTB* 4490/SD*	1362/LCF* 2609/LB* 3032/LAH* 3407/STD* 3894/LI* 4320/AH* 5739/GEN	1389/LW* 2618/LB* 3078/LAD* 3470/STCF* 3595/LI* 4347/AI* 6622/MW*	1972/AW* 2668/LD* 3160/LCW* 3569/STW* 3951/CB* 4377/AD* 6818/MH*	2274/AW* 2693/LD* 3193/LCN* 3570/STW* 4024/CD* 4437/AWH* 6911/MI*
IAID	545/LW	1040-I					
IMAGE	766/STW	1020/STW	1130/J	1132/J	1139/J	1143/J	1197-DATA
IMP	877/LW	939-XPSD					
INDA	479/LW	547/LW	989-PZE				
INITIATE	866/BNE	969-CW					

INST	478/STW	520/EXU	1252-EQU				
INSTID	537/LW	1038-I					
INT01	3521-DATA						
INT02	3531-DATA						
INT03	3541-DATA						
I0	795/BCS	797-XPSD	809/B	821/B			
I0COMP	932/P	936-GEN					
I0COUNT	967-DATA	981/CW					
I0INT	1057-DATA						
I0INTR	214/XPSD	921-DATA	930/LPSD				
I0M	690/LW	708/LW	914/STW	931-DATA			
ITERATE	421/STW	494/LW	523/LW	974/STW	977-DATA		
IXID	550/LW	1041-I					
IX01	5691-DATA	5692/ERR	5694/DATA	5694/DATA	5694/DATA		
IX02	5696-DATA						
IX03	5702-DATA						
I9	606/LW	642/LW	649/LW	656/LW	663/LW	1027-DATA	
J	55-CNAME						
K							

LAD01 3040-DATA
LAD02 3052-DATA
LAD03 3065-DATA
LAD04 3077-DATA
LAD05 3090-DATA
LAD06 3102-DATA
LAD07 3115-DATA
LAH01 3015-DATA
LAH02 3023-DATA
LAH03 3031-DATA
LAW01 2968-DATA
LAW02 2976-DATA
LAW03 2984-DATA
LAW04 2993-DATA
LAW05 3005-DATA
LB01 2584-DATA
LB02 2592-DATA
LB03 2600-DATA

LB04 2608-DATA
LB05 2617-DATA
LB06 2625-DATA
LB07 2635-DATA
LB08 2641-DATA
LB09 2650-DATA
LCD01 3218-DATA
LCD02 3230-DATA
LCD03 3243-DATA
LCD04 3256-DATA
LCD05 3268-DATA
LCD06 3280-DATA
LCF 70/BPEN
LCF 70/BPEN 73-CNAME
LCF1 70/BPEN
LCF1 70/BPEN 79-CNAME
LCF101 2935-DATA
LCF102 2939-DATA
LCF103

2943-DATA
LCF104 2947-DATA
LCF105 2951-DATA
LCF106 2959-DATA
LCF107 2963-DATA
LCF01 1345-DATA
LCF02 1349-DATA
LCF03 1353-DATA
LCF04 1357-DATA
LCF05 1361-DATA
LCF06 2903-DATA
LCF07 2909-DATA
LCF08 2921-DATA
LCF09 2929-DATA
LCH01 3176-DATA
LCH02 3184-DATA
LCH03 3192-DATA
LCH04 3200-DATA
LCH05 3209-DATA

LCW01 3128-DATA
LCW02 3136-DATA
LCW03 3144-DATA
LCW04 3150-DATA
LCW05 3159-DATA
LCW06 3167-DATA
LDREG 719/STW 720-LW 775/LW 777/BIR
LD01 2657-DATA
LD02 2667-DATA
LD03 2679-DATA
LD04 2692-DATA
LD05 2704-DATA
LD06 2717-DATA
LD07 2729-DATA
LD08 2742-DATA
LD09 2754-DATA
LD10 2767-DATA
LD11 2779-DATA
LD12

8792=DATA
 LD13
 2804=DATA
 LF
 51-GEN 57-GEN 77-GEN 86-GEN
 LH01 2513=DATA
 LH02 2521=DATA
 LH03 2529=DATA
 LH04 2538=DATA
 LH05 2544=DATA
 LH06 2551=DATA
 LH07 2559=DATA
 LH08 2571=DATA
 LI 70/OPEN
 LI 70/OPEN 82-CNAME
 LINE 423/STW 780/LW 798/STW 1037=DATA
 LINKAD 463/AND 1022=DATA
 LINOUT 785/BIR 793-LW
 LIST 441/LW 450/LW 1017/LW 1886=RES
 LI01 2823=DATA
 LI02 2829=DATA

LI03 2835=DATA
 LI04 2841=DATA
 LI05 2847=DATA
 LOAD 426/LW 1017-LW
 LOADR 718/LW 1012-LW
 LOC 460/STW 520-EXU 542/LW 990/PZE 991/PZE 1039/I 1228/PZE
 1288/EXU 1290/K 1296/DATA 1300/K 1308/K 1314/K 1323/K
 1348/K 1352/K 1356/K 1360/K 1364/K 1374/K 1381/K
 1391/K 1408/K 1413/K 1421/K 1429/K 1438/K 1446/K
 1454/K 1462/K 1471/K 1479/K 1487/K 1495/K 1504/K
 1512/K 1520/K 1528/K 1537/K 1545/K 1553/K 1561/K
 1570/K 1578/K 1586/K 1594/K 1603/K 1611/K 1619/K
 1627/K 1634/K 1640/K 1646/K 1653/K 1667/K 1671/K
 1679/K 1688/K 1696/K 1704/K 1713/K 1721/K 1735/K
 1739/K 1747/K 1756/K 1764/K 1772/K 1784/K 1792/K
 1801/K 1809/K 1819/K 1832/K 1839/K 1842/K 1843/K
 1854/K 1857/K 1858/K 1870/K 1885/K 1917/K 1923/K
 1928/K 1933/K 1940/K 1946/K 1970/K 1974/K 1982/K
 1993/K 2007/K 2026/K 2034/K 2043/K 2051/K 2059/K
 2067/K 2076/K 2084/K 2092/K 2100/K 2109/K 2117/K
 2125/K 2133/K 2142/K 2150/K 2158/K 2166/K 2175/K
 2183/K 2196/K 2206/K 2215/K 2227/K 2237/K 2246/K
 2255/K 2266/K 2276/K 2286/K 2294/K 2304/K 2314/K
 2323/K 2334/K 2350/K 2360/K 2371/K 2380/K 2386/K
 2392/K 2398/K 2406/K 2419/K 2425/K 2434/K 2453/K
 2468/K 2477/DATA 2487/DATA 2493/DATA 2501/DATA 2511/DATA 2516/K
 2524/K 2532/K 2541/K 2547/K 2554/K 2562/K 2574/K
 2587/K 2595/K 2603/K 2611/K 2620/K 2628/K 2638/K
 2644/K 2653/K 2660/K 2670/K 2682/K 2695/K 2707/K
 2720/K 2732/K 2745/K 2757/K 2770/K 2782/K 2795/K
 2807/K 2814/K 2820/K 2826/K 2832/K 2838/K 2844/K

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969

2867/K	2867/K	2877/K	2888/K	2899/K	2906/K	2912/K
2924/K	2932/K	2938/DATA	2942/K	2946/K	2950/K	2964/K
2966/K	2971/K	2979/K	2987/K	2988/K	3008/K	3026/K
3034/K	3043/K	3055/K	3058/K	3080/K	3105/K	3118/K
3131/K	3139/K	3147/K	3162/K	3170/K	3179/K	3187/K
3195/K	3203/K	3212/K	3221/K	3233/K	3246/K	3259/K
3283/K	3294/K	3302/K	3310/K	3318/K	3327/K	3335/K
3344/K	3352/K	3360/K	3366/K	3375/K	3384/K	3396/K
3409/K	3421/K	3434/K	3445/K	3456/K	3464/K	3472/K
3480/K	3489/K	3497/K	3505/K	3513/K	3524/K	3534/K
3544/K	3558/K	3566/K	3574/K	3582/K	3591/K	3600/K
3608/K	3619/K	3629/K	3639/K	3650/K	3666/K	3681/K
3697/K	3713/K	3725/K	3745/K	3760/K	3776/K	3791/K
3792/DATA	3807/K	3822/K	3837/K	3848/K	3867/K	3878/K
3887/K	3893/K	3902/K	3911/K	3920/K	3928/K	3936/K
3944/K	3953/K	3961/K	3969/K	3977/K	3987/K	3994/K
4001/K	4013/K	4026/K	4038/K	4052/K	4063/K	4074/K
4086/K	4097/K	4104/K	4116/K	4127/K	4139/K	4153/K
4167/K	4173/K	4179/K	4197/K	4206/K	4212/K	4221/K
4239/K	4248/K	4256/K	4264/K	4272/K	4281/K	4287/K
4293/K	4299/K	4306/K	4314/K	4322/K	4337/K	4354/K
4379/K	4392/K	4405/K	4414/K	4431/K	4439/K	4449/K
4455/K	4471/K	4480/K	4505/K	4532/K	4538/K	4544/K
4551/K	4557/K	4563/K	4570/K	4577/K	4584/K	4590/K
4595/DATA	4601/DATA	4605/DATA	4610/DATA	4615/DATA	4619/DATA	4624/DATA
4630/DATA	4634/DATA	4639/DATA	4646/K	4652/K	4658/K	4664/K
4670/K	4677/K	4684/K	4692/K	4698/K	4704/K	4710/K
4717/K	4725/K	4731/K	4737/K	4743/K	4750/K	4756/K
4762/K	4768/K	4774/K	4781/K	4787/K	4793/K	4799/K
4805/K	4812/K	4818/K	4825/K	4831/K	4837/K	4843/K
4849/K	4860/K	4870/K	4880/K	4891/K	4901/K	4911/K
4922/K	4928/DATA	4934/DATA	4940/DATA	4946/DATA	4953/K	4969/K
4965/DATA	4972/K	4982/DATA	4992/K	5003/DATA	5013/DATA	5023/K
5035/K	5041/K	5047/K	5054/K	5060/K	5066/K	5073/K
5079/K	5085/K	5092/K	5098/K	5104/K	5111/K	5117/K
5123/K	5129/DATA	5134/K	5144/K	5150/K	5155/K	5162/K
5167/K	5172/K	5178/K	5183/K	5188/K	5194/K	5199/K

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969

5204/K	5210/K	5215/K	5221/K	5226/K	5234/K	5239/K
5244/K	5250/K	5255/K	5260/K	5266/K	5271/K	5276/K
5282/K	5287/K	5292/K	5298/K	5303/K	5308/K	5314/K
5321/K	5328/K	5340/K	5353/K	5366/K	5378/K	5391/K
5403/K	5416/K	5428/K	5441/K	5453/K	5466/K	5478/K
5491/K	5504/K	5516/K	5529/K	5541/K	5554/K	5566/K
5579/K	5592/K	5604/K	5622/DATA	5667/DATA	5673/DATA	5680/DATA
5686/DATA	5693/DATA	5699/K	5705/K	5722/K	5727/K	5818/K
5828/K	5838/K	5849/K	5859/K	5869/K	5880/K	5890/K
5900/K	5911/K	5921/K	5931/K	5942/K	5952/K	5962/K
5973/K	5983/K	5993/K	6004/K	6014/K	6024/K	6035/K
6045/K	6055/K	6066/K	6076/K	6086/K	6097/K	6107/K
6117/K	6128/K	6138/K	6148/K	6159/K	6169/K	6179/K
6190/K	6200/K	6210/K	6221/K	6231/K	6241/K	6252/K
6262/K	6272/K	6283/K	6293/K	6303/K	6314/K	6324/K
6334/K	6345/K	6355/K	6365/K	6376/K	6386/K	6396/K
6407/K	6417/K	6427/K	6438/K	6448/K	6458/K	6469/K
6479/K	6489/K	6500/K	6510/K	6520/K	6531/K	6541/K
6551/K	6562/K	6572/K	6582/K	6593/K	6603/K	6613/K
6624/K	6634/K	6644/K	6655/K	6665/K	6675/K	6686/K
6696/K	6706/K	6717/K	6727/K	6737/K	6748/K	6758/K
6768/K	6779/K	6789/K	6799/K	6810/K	6820/K	6831/K
6841/K	6851/K	6862/K	6872/K	6882/K	6893/K	6903/K
6920/K	6971/K	6982/K	6992/K	7002/K	7013/K	7023/K
7033/K	7044/K	7054/K	7064/K	7075/K	7085/K	7095/K
7106/K	7116/K	7126/K	7137/K	7147/K	7157/K	7168/K
7178/K	7188/K	7199/K	7209/K	7219/K	7230/K	7240/K
7250/K	7261/K	7271/K	7281/K	7292/K	7302/K	7312/K
7323/K	7333/K	7343/K	7354/K	7364/K	7374/K	7385/K
7395/K	7405/K	7416/K	7426/K	7436/K	7447/K	7467/K
7488/K	7498/K	7509/K	7519/K	7540/K	7550/K	7560/K
7571/K	7581/K	7591/K	7602/K	7612/K	7622/K	7633/K
7643/K	7653/K	7664/K	7674/K	7684/K	7695/K	7705/K
7715/K	7726/K	7736/K	7747/K	7757/K	7767/K	7778/K
7788/K	7798/K	7809/K	7819/K			

LBCADD 472/EOR 991-PZE

LCCZAD	507/LW	990-PZE	
LONGL	1117/P	1132-J	
LPERR	817/LW	1120-P	
LPFORMAT	824/LW	1119-P	
LPGOTOP	822/LW	1118-P	
LPMSG	817-LW	826/B	
LPB	783/BLZ	806-TDV	812/BNEZ
LPREPORT	820/LW	1121-P	
LPTOP	815/BNEZ	824-LW	
LRP01	1867-DATA		
LRP02	1882-DATA		
LS01	2854-DATA		
LS02	2864-DATA		
LS03	2874-DATA		
LS04	2885-DATA		
LS05	2896-DATA		
LWB	746/STW	748-LW	
LWBIT	742/LW	1010-LW	
LWBT			

	747/STW	751/BCS	753-LW
LWBY	759/STW	760-LW	
LWBYTE	758/EOR	1011-LW	
LWFRM	725/LW	1015-LW	
LWFRM2	731/LW	1016-LW	
LWIX	2811-DATA		
LWIXIA	2817-DATA		
LWN	724/LW	1013-LW	
LWN2	730/LW	1014-LW	
LW01	1371-DATA		
LW02	1378-DATA		
LW03	413/LW	960/LW	1388-DATA
LW04	1402-DATA		
LW05	1410-DATA		
LW06	1418-DATA		
LW07	1426-DATA		
LW08	1435-DATA		
LW09	1443-DATA		
LW10	1451-DATA		

LW11 1459-DATA
 LW12 1468-DATA
 LW13 1476-DATA
 LW14 1484-DATA
 LW15 1492-DATA
 LW16 1501-DATA
 LW17 1509-DATA
 LW18 1517-DATA
 LW19 1525-DATA
 LW20 1534-DATA
 LW21 1542-DATA
 LW22 1550-DATA
 LW23 1558-DATA
 LW24 1567-DATA
 LW25 1575-DATA
 LW26 1583-DATA
 LW27 1591-DATA
 LW28 1600-DATA
 LW29

LW30 1608-DATA
 LW31 1616-DATA
 LW32 1624-DATA
 LW33 1631-DATA
 LW34 1637-DATA
 LW35 1643-DATA
 LW35 1650-DATA
 MASK 402/AND 626/EOR 750/AND 757/AND 899/LW 988/AND 1074-DATA
 1279/AND
 MAXCNT 891/CW 1053-DATA
 MEMAD 999-PZE
 MEMIO 576/LW 1044-I
 MEMORY 503/STW 504/STW 513/CD 517/STD 577/LW 581/LW 989/PZE
 999/PZE 1044/I 1254-EQU 1298/EXU 1302/LW 1303/LW 1304/LW
 1306/EXU 1309/DATA 1310/DATA 1312/EXU* 1321/EXU* 1331/EXU 1342/K
 1343/K 1346/LCF 1350/LCF 1354/LCF 1358/LCF 1372/LW 1379/LW
 1403/LW 1411/LW 1419/LW 1427/LW 1436/LW 1444/LW 1452/LW
 1460/LW 1469/LW 1477/LW 1485/LW 1493/LW 1502/LW 1510/LW
 1518/LW 1526/LW 1535/LW 1543/LW 1551/LW 1559/LW 1568/LW
 1576/LW 1584/LW 1592/LW 1601/LW 1609/LW 1617/LW 1625/LW
 1632/LW 1638/LW 1644/LW 1651/LW 1665/BR 1669/BR 1677/BR
 1686/BR 1694/BR 1702/BR 1711/STW 1719/STW 1733/AND 1737/AND
 1745/AND 1754/AND 1762/AND 1782/EOR 1790/EOR 1799/EOR 1807/EOR
 1837/LPSD 1852/LPSD 1868/LRP 1899/BCR 1901/K 1949/BCS 1951/K
 1968/AW 1980/AW 1991/AW 2005/AW 2024/AW 2032/AW 2041/AW
 2049/AW 2057/AW 2065/AW 2074/AW 2082/AW 2090/AW 2098/AW

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969

2107/AW	2115/AW	2123/AW	2131/AW	2140/AW	2148/AW	2156/AW
2164/AW	2173/AW	2181/AW	2194/AW	2204/AW	2213/AW	2225/AW
2235/AW	2244/AW	2253/AW	2264/AW	2284/AW	2298/AW	2309/AW
2312/AW	2321/AW	2332/AW	2340/AW	2348/AW	2358/AW	2369/AW
2378/AW	2384/AW	2390/AW	2396/SW	2408/SW	2423/SW	2432/SW
2442/BIR	2444/K	2479/BAL	2481/K	2491/DATA	2497/BAL*	2514/LH
2522/LH	2552/LH	2560/LHP	2563/DATA	2564/DATA	2572/LH*	2577/DATA
2578/DATA	2585/LB	2593/LB	2601/LB	2629/DATA	2630/DATA	2642/LB
2651/LB*	2654/DATA	2654/DATA	2658/LD	2683/DATA	2696/DATA	2705/LD
2718/LD	2743/LD	2805/LD*	2808/DATA	2808/DATA	2808/DATA	2815/DATA
2815/DATA	2848/LI*	2855/LS	2865/LS	2875/LS	2886/LS	2910/LCF*
2915/DATA	2916/DATA	2925/DATA	2926/DATA	2930/LCF	2960/LCFI*	2969/LAW
2977/LAW	2994/LAW*	3003/DATA	3004/DATA	3006/LAW	3016/LAH	3024/LAH
3041/LAD	3053/LAD	3069/DATA	3091/LAD	3103/LAD	3116/LAD	3129/LCW
3137/LCW	3154/DATA	3168/LCW	3177/LCH	3188/DATA	3204/DATA	3213/DATA
3219/LCD	3234/DATA	3257/LCD	3269/LCD	3292/STH	3300/STH	3316/STH
3325/STH	3333/STH	3342/STB	3350/STB	3364/STB	3382/STB	3394/STD
3419/STD	3430/STC	3454/STCF	3465/DATA	3466/DATA	3478/STCF	3487/XW
3495/XW	3498/DATA	3501/DATA	3503/XW	3522/INT	3532/INT	3535/DATA
3542/INT	3553/ANLZ	3567/DATA	3568/DATA	3576/DATA	3580/ANLZ	3584/DATA
3585/LAD	3586/LAD	3589/ANLZ	3598/ANLZ	3606/ANLZ	3617/ANLZ	3627/ANLZ
3637/ANLZ	3648/ANLZ	3664/ANLZ	3668/DATA	3669/EXU	3670/EXU	3679/ANLZ
3695/ANLZ	3711/ANLZ	3715/DATA	3716/XW	3717/XW	3726/ANLZ	3743/ANLZ
3758/ANLZ	3774/ANLZ	3789/ANLZ	3805/ANLZ	3820/ANLZ	3835/ANLZ	3846/ANLZ
3845/CW	3874/CW	3885/CW	3891/CB	3900/CH	3909/CH	3918/CB
3926/CB	3934/CB	3942/CB	3959/CB	3967/CB	3975/CB	3999/CD
4011/CD	4036/CD	4050/CS	4061/CS	4072/CS	4084/CLR	4095/CLR
4102/CLR	4114/CLR	4125/CLR	4137/CLM	4151/CLM	4177/MTW	4195/MTW
4210/MTH	4228/MTH	4237/MTH	4246/MTB	4254/MTB	4270/MTB	4304/AH
4312/AH	4352/AD	4364/AD	4390/AD	4403/AD	4412/AD	4421/AHM
4429/AHM	4450/DATA	4450/DATA	4453/SH	4461/SH	4478/SD	4503/SD
4515/SD	4629/S*	4682/S*	4715/S*	4868/S*	4980/S*	5011/S*
5021/S*	5142/SF*	5153/SF*	5319/SF*	5577/SF*	5602/SF*	5634/CAL*
5639/DATA	5640/DATA	5692/EBR	5720/EBR	5725/AWM	5731/DL	5769/CVS
5774/PACK	5779/DST	5784/TBS	5800/DSA	5816/MW	5826/MW	5836/MW
5847/MW	5857/MW	5867/MW	5878/MW	5888/MW	5898/MW	5909/MW
5919/MW	5929/MW	5940/MW	5950/MW	5960/MW	5971/MW	5981/MW

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12,1969

5991/MW	6002/MW	6012/MW	6022/MW	6033/MW	6043/MW	6053/MW
6064/MW	6074/MW	6084/MW	6095/MW	6105/MW	6115/MW	6126/MW
6136/MW	6146/MW	6157/MW	6167/MW	6177/MW	6188/MW	6198/MW
6208/MW	6219/MW	6229/MW	6239/MW	6250/MW	6260/MW	6270/MW
6281/MW	6291/MW	6301/MW	6312/MW	6322/MW	6332/MW	6343/MW
6353/MW	6363/MW	6374/MW	6384/MW	6394/MW	6405/MW	6415/MW
6425/MW	6436/MW	6446/MW	6456/MW	6467/MW	6477/MW	6487/MW
6498/MW	6508/MW	6518/MW	6529/MW	6539/MW	6549/MW	6560/MW
6570/MW	6580/MW	6591/MW	6601/MW	6611/MW	6632/MW	6642/MW
6653/MW	6663/MW	6673/MW	6684/MW	6694/MW	6704/MW	6715/MW
6725/MW	6735/MW	6746/MW	6756/MW	6766/MW	6777/MW	6787/MW
6797/MW	6808/MW	6818/MW	6828/MW	6838/MW	6849/MW	6859/MW
6869/DW	6880/DW	6890/DW	6900/DW	6911/DW	6921/DW	6931/DW
7042/DW	7052/DW	7062/DW	7073/DW	7083/DW	7093/DW	7104/DW
7114/DW	7124/DW	7135/DW	7145/DW	7155/DW	7166/DW	7176/DW
7186/DW	7197/DW	7207/DW	7217/DW	7228/DW	7248/DW	7259/DW
7269/DW	7279/DW	7290/DW	7300/DW	7310/DW	7321/DW	7331/DW
7341/DW	7352/DW	7362/DW	7372/DW	7383/DW	7393/DW	7403/DW
7414/DW	7424/DW	7434/DW	7445/DW	7455/DW	7465/DW	7476/DW
7486/DW	7496/DW	7507/DW	7517/DW	7527/DW	7538/DW	7548/DW
7558/DW	7569/DW	7579/DW	7589/DW	7600/DW	7610/DW	7620/DW
7631/DW	7641/DW	7651/DW	7662/DW	7672/DW	7682/DW	7693/DW
7703/DW	7713/DW	7724/DW	7734/DW	7745/DW	7755/DW	7765/DW
7776/DH	7786/DH	7796/DH	7807/DH			

MEMOUT 484/STW 485/STW 512/LD 602-DATA

MH01 6745-DATA

MH02 6755-DATA

MH03 6765-DATA

MH04 6776-DATA

MH05 6786-DATA

MH06

6796-DATA
 MH07 6807-DATA
 MH08 6817-DATA
 MI 70/8PEN
 MI 70/8PEN 83-CNAME
 MINCR 884/AW 979-DATA
 MI01 6828-DATA
 MI02 6838-DATA
 MI03 6848-DATA
 MI04 6859-DATA
 MI05 6869-DATA
 MI06 6879-DATA
 MI07 6890-DATA
 MI08 6900-DATA
 MI09 6910-DATA
 MODULE 598/LPSD 1257-EQU
 MOTION 811/AND 1050-DATA
 MOVE 448-STW 454/BIR
 MPVRET 223-XPSD

MSS 1154/GEN 1156-TEXTC
 MTB01 4245-DATA
 MTB02 4253-DATA
 MTB03 4261-DATA
 MTB04 4269-DATA
 MTB05 4278-DATA
 MTB06 4284-DATA
 MTB07 4290-DATA
 MTB08 4296-DATA
 MTH01 4203-DATA
 MTH02 4209-DATA
 MTH03 4218-DATA
 MTH04 4227-DATA
 MTH05 4236-DATA
 MTW01 4164-DATA
 MTW02 4170-DATA
 MTW03 4176-DATA
 MTW04 4186-DATA
 MTW05

4194-DATA
MVRET 224-KPSD 1333/K 5717/K
MW01 5815-DATA
MW02 5825-DATA
MW03 5835-DATA
MW04 5846-DATA
MW05 5856-DATA
MW06 5866-DATA
MW07 5877-DATA
MW08 5887-DATA
MW09 5897-DATA
MW10 5908-DATA
MW11 5918-DATA
MW12 5928-DATA
MW13 5939-DATA
MW14 5949-DATA
MW15 5959-DATA
MW16 5970-DATA
MW17 5980-DATA

MW18 5990-DATA
MW19 6001-DATA
MW20 6011-DATA
MW21 6021-DATA
MW22 6032-DATA
MW23 6042-DATA
MW24 6052-DATA
MW25 6063-DATA
MW26 6073-DATA
MW27 6083-DATA
MW28 6094-DATA
MW29 6104-DATA
MW30 6114-DATA
MW31 6125-DATA
MW32 6135-DATA
MW33 6145-DATA
MW34 6156-DATA
MW35 6166-DATA
MW36

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969

43

MW37 6187-DATA
MW38 6197-DATA
MW39 6207-DATA
MW40 6218-DATA
MW41 6228-DATA
MW42 6238-DATA
MW43 6249-DATA
MW44 6259-DATA
MW45 6269-DATA
MW46 6280-DATA
MW47 6290-DATA
MW48 6300-DATA
MW49 6311-DATA
MW50 6321-DATA
MW51 6331-DATA
MW52 6342-DATA
MW53 6352-DATA
MW54 6362-DATA

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969

44

MW55 6373-DATA
MW56 6383-DATA
MW57 6393-DATA
MW58 6404-DATA
MW59 6414-DATA
MW60 6424-DATA
MW61 6435-DATA
MW62 6445-DATA
MW63 6455-DATA
MW64 6466-DATA
MW65 6476-DATA
MW66 6486-DATA
MW67 6497-DATA
MW68 6507-DATA
MW69 6517-DATA
MW70 6528-DATA
MW71 6538-DATA
MW72 6548-DATA
MW73

6559-DATA
 MW74 6569-DATA
 MW75 6579-DATA
 MW76 6590-DATA
 MW77 6600-DATA
 MW78 6610-DATA
 MW79 6621-DATA
 MW80 6631-DATA
 MW81 6641-DATA
 MW82 6652-DATA
 MW83 6662-DATA
 MW84 6672-DATA
 MW85 6683-DATA
 MW86 6693-DATA
 MW87 6703-DATA
 MW88 6714-DATA
 MW89 6724-DATA
 MW90 6734-DATA
 M1Q15 443/AND 1024-DATA

NAME	77/GEN	86/GEN					
NAB	193/XPSD	218-PZE	610/STW	1000/PZE	1008/XPSD		
NABAD	609/EOR	1000-PZE					
NABRET	222-XPSD	4349/K					
NABTR	193-XPSD	461/STW	608/STW				
NABXD	607/EOR	1008-XPSD					
NEARET	226-XPSD	2509/K					
NE312	1034-DATA						
NE32	424/LW	723/LW	1247-EQJ				
NE320	435/LW	1035-DATA					
NE33	729/LW	1032-DATA					
NE34	717/LW	743/LW	1246-EQJ				
NE551	422/LW	792/LW	1036-DATA				
NE58	714/LW	1033-DATA					
NEIRET	230-XPSD	1341/K	2850/K	2962/K	3462/STCF	3465/DATA	3466/DATA
	5733/K	5741/K	5750/K	5755/K	5760/K	5765/K	5771/K
	5776/K	5781/K	5786/K	5791/K	5796/K	5802/K	5807/K
	6913/K						
NFAIMP01	419/STW	874/STW	5810-DATA				
NFLM	949/GEN	951-TEXTC					

NFLBATP	942/P	949-GEN				
NIMP	867/LW	940-XPSD				
N0HALT	706/BCS	708-LW				
N0TEND	442/BCS	446-LW				
NUMBER	737/LW	1013/LW	1014/LW	1064-DATA	1246/EQU	1247/EQU
0DD	728/BCS	733-LW				
0DDBALL	531/LW	955/LW	1062-DATA			
0NE	480/LW	556/LW	727/AND	1030-DATA		
0R01	1664-DATA					
0R02	1668-DATA					
0R03	1676-DATA					
0R04	1685-DATA					
0R05	1693-DATA					
0R06	1701-DATA					
P	49-CNAME					
PAGE	40/0PEN					
PAGE	40/0PEN	41-CNAME				
PARITY	211/XPSD	380-PZE				
PASS						

PASSES	1258-EQU	2626/LB	2629/DATA	2630/DATA			
PCPINT	397/LW	433/STW	1242-PZE	1268/LW			
PERR	430/LW	1056-DATA					
PFLBATP	1120/P	1137-J					
PF0RMAT	871/LW	941-P					
PG0	1119/P	1145-J					
PG0T0P	1054-DATA	1135/J					
PHEAD	1118/P	1135-J					
PI0CBMP	790/LW	1115-P					
PL0NGL	924/LW	932-P					
PNFLBATP	793/LW	1117-P					
PREL0C	875/LW	942-P					
PREP0RT	509-LPSD						
PRINT	1121/P	1141-J					
PRTCM0G	787/XPSD	789/XPSD	791/XPSD	797/XPSD	823/XPSD	825/XPSD	830-PZE
PSDWID	851/LPSD	876/XPSD	898/XPSD				
PSHRTL	897/LW	1122-P					
PSIXCR	558/LW	1042-I					
	796/LW	1116-P					

PSW1	464/STW	467/LP8D	473/STW	509/LP8D	519/LP8D	1234-PZE
PSW2	429/STW	475/STW	1235-PZE			
PTITLE	788/LW	1114-P				
REGID	567/LW	1043-I				
REPEAT	388/LP8D	406/LP8D	1232-PZE	1257/EQU	1258/EQU	1283/LP8D
	2998/DATA	3003/DATA	3004/DATA	3024/LAH	3027/DATA	3066/LAD
	3185/LCH	3188/DATA	3210/LCH	3213/DATA	3231/LCD	3234/DATA
	3501/DATA	3551/LH*	3562/LH*	3564/ANLZ	3567/DATA	3498/DATA
REPLAY	852/LW	860-B				
REPORT	716/BCS	717-LW				
RESET	215/XPSD	391-PZE				
RETADDR	880/LW	953-DATA				
RETEND						
RETURN	1018-PZE					
	200/XPSD	222/XPSD	223/XPSD	224/XPSD	225/XPSD	226/XPSD
	228/XPSD	229/XPSD	230/XPSD	231/XPSD	232/XPSD	233/XPSD
	235/XPSD	236/XPSD	237/XPSD	245/XPSD	252/XPSD	261/XPSD
	277/XPSD	284/XPSD	292/XPSD	293/XPSD	294/XPSD	295/XPSD
	297/XPSD	298/XPSD	299/XPSD	300/XPSD	301/XPSD	302/XPSD
	304/XPSD	305/XPSD	306/XPSD	307/XPSD	315/XPSD	316/XPSD
	318/XPSD	319/XPSD	320/XPSD	321/XPSD	322/XPSD	323/XPSD
	325/XPSD	326/XPSD	327/XPSD	328/XPSD	329/XPSD	330/XPSD
	339/XPSD	340/XPSD	341/XPSD	342/XPSD	343/XPSD	344/XPSD
	346/XPSD	347/XPSD	348/XPSD	349/XPSD	350/XPSD	351/XPSD
	353/XPSD	361/XPSD	362/XPSD	363/XPSD	364/XPSD	365/XPSD
	367/XPSD	368/XPSD	369/XPSD	370/XPSD	371/XPSD	372/XPSD
						227/XPSD
						234/XPSD
						269/XPSD
						296/XPSD
						303/XPSD
						317/XPSD
						324/XPSD
						338/XPSD
						345/XPSD
						352/XPSD
						366/XPSD
						373/XPSD

	374/XPSD	375/XPSD	376/XPSD	508/STW	521/XPSD	532/STW	881/STW
	956/STW	1226-PZE	1274/DATA	1336/XPSD	1337/XPSD	1904/XPSD	1905/XPSD
	1911/XPSD	1912/XPSD	1954/XPSD	1955/XPSD	2447/XPSD	2448/XPSD	2484/XPSD
	2485/XPSD	2494/XPSD	2495/XPSD	3151/LCW	3154/DATA	3610/GEN	3611/XPSD
	3612/XPSD	3652/DATA	3653/LS	3654/LS	3657/XPSD	3658/XPSD	3672/XPSD
	3673/XPSD	3688/XPSD	3689/XPSD	3704/XPSD	3705/XPSD	3720/XPSD	3721/XPSD
	3735/XPSD	3736/XPSD	3752/XPSD	3753/XPSD	3767/XPSD	3768/XPSD	3783/XPSD
	3784/XPSD	3798/XPSD	3799/XPSD	3814/XPSD	3815/XPSD	3828/XPSD	3829/XPSD
	3842/XPSD	3843/XPSD	5715/XPSD				
RINPUT	492/STW	493/STW	518/LD	604-DATA			
R19CL1	643-EOR						
R19CL2	650-EOR						
R19CL3	657-EOR						
R19CL4	664-EOR	5648/K					
R19NA0	607-EOR	4348/K					
ROUTPUT	488/STW	489/STW	510/CD	515/LD	603-DATA		
RTC	891-CW	983/B					
RTCM5G	1122/P	1154-GEN					
S	70/8PEN						
S	70/8PEN	72-CNAME					
SAVE	399/LW	428/STW	441-LW	534/LW	1270/LW		
SAVE0	923/STW	929/LW	933-DATA				
SD01	4477-DATA						

```

SD02      4489-DATA
SD03      4502-DATA
SD04      4514-DATA
SETRM     735/STW      738-LW      768/LW
SETINTR   911/B       913-LI      982/BE
SETN      734/STW      737-LW      767/LW
SETPSW    470-LW      611/BCR     615/BCR     619/BCR     629/BCR     639/B      647/BCR
          654/BCR     661/BCR     668/BCR     674/B      1289/K     1298/DATA  1299/K
          1307/K     1313/K     1322/K     1347/K     1351/K     1355/K     1359/K
          1363/K     1373/K     1380/K     1390/K     1404/K     1412/K     1420/K
          1428/K     1437/K     1445/K     1453/K     1461/K     1470/K     1478/K
          1486/K     1494/K     1503/K     1511/K     1519/K     1527/K     1536/K
          1544/K     1552/K     1560/K     1569/K     1577/K     1585/K     1593/K
          1602/K     1610/K     1618/K     1626/K     1633/K     1639/K     1645/K
          1652/K     1666/K     1670/K     1678/K     1687/K     1695/K     1703/K
          1712/K     1720/K     1734/K     1738/K     1746/K     1755/K     1763/K
          1771/K     1783/K     1791/K     1800/K     1808/K     1818/K     1838/K
          1853/K     1869/K     1884/K     1900/K     1909/K     1916/K     1922/K
          1927/K     1932/K     1939/K     1945/K     1950/K     1969/K     1973/K
          1981/K     1992/K     2359/K     2370/K     2379/K     2385/K     2391/K
          2397/K     2424/K     2443/K     2452/K     2460/K     2467/K     2474/K
          2480/K     2490/DATA  2498/K     2515/K     2523/K     2531/K     2540/K
          2546/K     2553/K     2561/K     2573/K     2586/K     2594/K     2602/K
          2610/K     2619/K     2627/K     2637/K     2643/K     2652/K     2659/K
          2669/K     2681/K     2694/K     2706/K     2719/K     2731/K     2744/K
          2756/K     2769/K     2781/K     2794/K     2806/K     2813/K     2819/K
          2825/K     2831/K     2837/K     2843/K     2856/K     2866/K     2876/K
          2887/K     2898/K     2905/K     2911/K     2923/K     2931/K     2937/DATA
          2941/K     2945/K     2949/K     2953/DATA  2965/K     2970/K     2978/K
          2986/K     3007/K     3017/K     3025/K     3033/K     3042/K     3054/K
    
```

```

          3067/K     3079/K     3104/K     3117/K     3130/K     3138/K     3146/K
          3161/K     3169/K     3178/K     3186/K     3194/K     3202/K     3211/K
          3220/K     3232/K     3245/K     3258/K     3282/K     3293/K     3301/K
          3309/K     3317/K     3326/K     3334/K     3343/K     3351/K     3359/K
          3365/K     3374/K     3383/K     3395/K     3408/K     3420/K     3433/K
          3444/K     3455/K     3463/K     3471/K     3479/K     3488/K     3496/K
          3504/K     3512/K     3523/K     3533/K     3543/K     3557/K     3565/K
          3573/K     3581/K     3590/K     3599/K     3607/K     3618/K     3628/K
          3638/K     3649/K     3665/K     3680/K     3696/K     3712/K     3727/K
          3744/K     3759/K     3775/K     3790/K     3806/K     3821/K     3836/K
          3847/K     3866/K     3877/K     3886/K     3892/K     3901/K     3910/K
          3919/K     3927/K     3935/K     3943/K     3952/K     3960/K     3968/K
          3976/K     3986/K     3993/K     4000/K     4012/K     4025/K     4037/K
          4051/K     4062/K     4073/K     4085/K     4096/K     4103/K     4115/K
          4126/K     4138/K     4152/K     4172/K     4178/K     4196/K     4205/K
          4211/K     4238/K     4247/K     4255/K     4263/K     4271/K     4280/K
          4286/K     4292/K     4298/K     4404/K     4413/K     4448/K     4470/K
          4479/K     4531/K     4537/K     4543/K     4550/K     4556/K     4562/K
          4569/K     4576/K     4583/K     4589/K     4595/DATA  4601/DATA  4605/DATA
          4610/DATA  4615/DATA  4619/DATA  4624/DATA  4630/DATA  4634/DATA  4639/DATA
          4669/K     4676/K     4683/K     4691/K     4697/K     4703/K     4709/K
          4716/K     4724/K     4730/K     4736/K     4742/K     4749/K     4755/K
          4761/K     4767/K     4773/K     4780/K     4786/K     4792/K     4798/K
          4804/K     4811/K     4817/K     4824/K     4830/K     4836/K     4842/K
          4848/K     4859/K     4869/K     4879/K     4890/K     4900/K     4910/K
          4927/DATA  4933/DATA  4939/DATA  4945/DATA  4964/DATA  4981/DATA  5002/DATA
          5012/DATA  5034/K     5040/K     5046/K     5053/K     5059/K     5065/K
          5072/K     5078/K     5084/K     5091/K     5097/K     5103/K     5110/K
          5116/K     5122/K     5129/DATA  5133/DATA  5143/DATA  5149/DATA  5154/DATA
          5161/DATA  5166/DATA  5171/DATA  5177/DATA  5182/DATA  5187/DATA  5193/DATA
          5198/DATA  5203/DATA  5209/DATA  5214/DATA  5220/DATA  5225/DATA  5233/DATA
          5238/DATA  5243/DATA  5249/DATA  5254/DATA  5259/DATA  5265/DATA  5270/DATA
          5275/DATA  5281/DATA  5286/DATA  5291/DATA  5297/DATA  5308/DATA  5307/DATA
          5313/DATA  5320/K     5693/DATA  5698/DATA  5704/K     5721/K     5726/K
SETRPLY   852-LW      7827/END
SF
    
```

SF	70/8PEN	71-CNAME
SF001	5032-DATA	
SF002	5038-DATA	
SF003	5044-DATA	
SF004	5051-DATA	
SF005	5057-DATA	
SF006	5063-DATA	
SF007	5070-DATA	
SF008	5076-DATA	
SF009	5082-DATA	
SF01	5325-DATA	
SF010	5089-DATA	
SF011	5095-DATA	
SF012	5101-DATA	
SF013	5108-DATA	
SF014	5114-DATA	
SF015	5120-DATA	
SF016	5127-DATA	

SF017	5131-DATA
SF018	5141-DATA
SF019	5147-DATA
SF02	5337-DATA
SF020	5152-DATA
SF021	5159-DATA
SF022	5164-DATA
SF023	5169-DATA
SF024	5175-DATA
SF025	5180-DATA
SF026	5185-DATA
SF027	5191-DATA
SF028	5196-DATA
SF029	5201-DATA
SF03	5350-DATA
SF030	5207-DATA
SF031	5212-DATA
SF032	5218-DATA
SF033	

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969

55

SF034 5231-DATA
SF035 5236-DATA
SF036 5241-DATA
SF037 5247-DATA
SF038 5252-DATA
SF039 5257-DATA
SF04 5363-DATA
SF040 5263-DATA
SF041 5268-DATA
SF042 5273-DATA
SF043 5279-DATA
SF044 5284-DATA
SF045 5289-DATA
SF046 5295-DATA
SF047 5300-DATA
SF048 5305-DATA
SF049 5311-DATA
SF05 5375-DATA

SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51C00 MARCH 12, 1969

56

SF050 5318-DATA
SF06 5388-DATA
SF07 5400-DATA
SF08 5413-DATA
SF09 5425-DATA
SF10 5438-DATA
SF11 5450-DATA
SF12 5463-DATA
SF13 5475-DATA
SF14 5488-DATA
SF15 5501-DATA
SF16 5513-DATA
SF17 5526-DATA
SF18 5538-DATA
SF19 5551-DATA
SF20 5563-DATA
SF21 5576-DATA
SF22 5589-DATA
SF23

BH0RT	503-STW	525/BC8						
SH0RTER	514/BE	517-STD						
SHRTL	1116/P	1130-J						
SH01	4452-DATA							
SH02	4460-DATA							
SH03	4468-DATA							
SIX	554/E0R	1029-DATA						
SIXCR	1113/P	1124-J						
SI9CL1	642-LW	5617/K						
SI9CL2	649-LW	5621/K						
SI9CL3	656-LW	5625/K						
SI9CL4	663-LW	5629/K	5635/K	5643/K				
SIGNA0	606-LW	1332/K	1340/K	2508/K	2849/K	2961/K	5716/K	
	5732/K	5740/DATA	5749/DATA	5754/DATA	5759/DATA	5764/DATA	5770/DATA	
	5775/DATA	5780/DATA	5785/DATA	5790/DATA	5795/DATA	5801/DATA	5806/DATA	
	6912/K							
SKIP6	784/BIR	788-LW						
SL	195/XPSD	248-PZE	618/STW	1001/PZE				
SLAD	617/E0R	1001-PZE						
SLRET								

SLSW	617-E0R				
SLTR	195-XPSD				
SPACE	1049-TEXT	1137/J	1141/J	1145/J	1149/J
SPUR	1260/XPSD	1262-PZE			
SPURTRAP	1062/DATA	1260-XPSD			
ST301	3341-DATA				
ST302	3349-DATA				
ST303	3357-DATA				
ST304	3363-DATA				
ST305	3372-DATA				
STCF	70/0PEN				
STCF	70/0PEN	74-CNAME			
STCF01	3453-DATA				
STCF02	3461-DATA				
STCF03	3469-DATA				
STCF04	3477-DATA				
STD01	3381-DATA				
STD02	3393-DATA				

STD03 3406-DATA
STD04 3418-DATA
STH01 3291-DATA
STH02 3299-DATA
STH03 3307-DATA
STH04 3315-DATA
STH05 3324-DATA
STH06 3332-DATA
STBRE 434/LW 446/LW 1019-STW
STRMG1 713/LW 1020-STW
STRWD 736/STW 766-STW 769/LW
STS01 3431-DATA
STS02 3442-DATA
STW01 1710-DATA
STW02 1718-DATA
SW01 2395-DATA
SW02 2403-DATA
SW03 2407-DATA
SW04

2416-DATA
SW05 2422-DATA
SW06 2431-DATA
S001 4529-DATA
S002 4535-DATA
S003 4541-DATA
S004 4548-DATA
S005 4554-DATA
S006 4560-DATA
S007 4567-DATA
S008 4574-DATA
S009 4581-DATA
S01 4643-DATA
S010 4587-DATA
S011 4593-DATA
S012 4599-DATA
S013 4603-DATA
S014 4608-DATA
S015 4613-DATA

S016 4617-DATA
S017 4622-DATA
S018 4628-DATA
S019 4632-DATA
S02 4649-DATA
S020 4637-DATA
S03 4655-DATA
S04 4661-DATA
S05 4667-DATA
S06 4674-DATA
S07 4681-DATA
S08 4689-DATA
S09 4695-DATA
S10 4701-DATA
S11 4707-DATA
S12 4714-DATA
S13 4722-DATA
S14 4728-DATA
S15

S16 4734-DATA
S17 4740-DATA
S18 4747-DATA
S19 4753-DATA
S19 4759-DATA
S20 4765-DATA
S21 4771-DATA
S22 4778-DATA
S23 4784-DATA
S24 4790-DATA
S25 4796-DATA
S26 4802-DATA
S27 4809-DATA
S28 4815-DATA
S29 4822-DATA
S30 4828-DATA
S31 4834-DATA
S32 4840-DATA
S33 4846-DATA

S34 4857-DATA
 S35 4867-DATA
 S36 4877-DATA
 S37 4888-DATA
 S38 4898-DATA
 S39 4908-DATA
 S40 4919-DATA
 S41 4925-DATA
 S42 4931-DATA
 S43 4937-DATA
 S44 4943-DATA
 S45 4950-DATA
 S46 4956-DATA
 S47 4962-DATA
 S48 4969-DATA
 S49 4979-DATA
 S50 4989-DATA
 S51 5000-DATA
 S52

S53 5010-DATA
 5020-DATA
 TABLE
 437/STW 451/STW 458/LW 462/LW 470/LW 474/LW 477/LW
 482/LW 483/LW 486/LW 487/LW 490/LW 491/LW 495/LW
 496/LW 505/LW 506/LW 539/LW 552/LW 560/LW 564/LW
 570/LW 574/LW 578/LW 582/LW 673/STCF 1019/STW 1202-RES
 1817/XPSD
 TEMP 810/STW 813/LW 1051-DATA
 TEST 530/STW 533/STW 535/STW 536/STW 538/LW 551/LW 555/LW
 559/LW 563/LW 569/LW 573/LW 1223-RES 1252/EQU 1253/EQU
 1254/EQU
 TEST10 696-A10 699/ROR 704/BEZ
 TITLE 1114/P 1126-J
 T0 449/STW 451-STW
 T0P 814/AND 1052-DATA
 TSTDVC 685/BCS 687-BIR
 TTL 1124/J 1126/J 1147/J 1160-DATA
 TYPE 400/LW 404/STW 697/T10* 782/LW 806/TDV* 834/S10* 843/T10*
 1055-DATA 1271/LW 1281/STW
 UII 194/XPSD 241-PZE 614/STW 939/XPSD 1002/PZE
 UIIAD 613/EOR 1002-PZE
 UIIRET 245-XPSD 5813/K
 UIISW

	613-EOR	634/BCR	5512/K				
UIITR	194-XP8D	868/STW	878/STW				
WDTR	199/XPSD	280-PZE	1003/PZE				
WDTRAD	1003-PZE						
WDTRET	284-XP8D						
WDRTR	199-XP8D						
WKB	740/STW	762/EOR	1243-PZE				
WORD	721/STW	749/AND	1244-PZE				
WORDS	734-STW	773/BIR					
XP	93-SET	95/ORG					
XPSD	459/LW	543/LW	1248-EQU				
XPSDID	541/LW	1039-I					
XRTC	901-B						
XW01	3486-DATA						
XW02	3494-DATA						
XW03	3502-DATA						
XW04	3510-DATA						
Y	1251-EQU						
ZERO	410/LW	411/LW	427/LW	465/LW	584/LW	744/LW	858/LW

	1245-EQU	1255/EQU	1256/EQU				
ZIRA	910/STW	912-DATA	928/S10*				
ZIRAIN	120/DATA	125/DATA	908-B				
ZR	588/BCS	690-LW					
ZQ3	1026-DATA						
6Q3	693/LW	702/AND	703/EOR	839/AND	840/EOR	848/AND	849/EOR
	1025-GEN						
*	63/D8	93/SET	93/SET	94/D8	94/D8	95/ORG	220/PZE
	243/PZE	250/PZE	258/PZE	266/PZE	274/PZE	282/PZE	290/PZE
	313/PZE	336/PZE	359/PZE	382/PZE	393/PZE	436/STW	438/BIR
	452/BIR	453/BIR	562/BIR	572/BIR	580/BIR	586/BCS	594/BIR
	681/PZE	687/BIR	700/BCR	755/BIR	763/BIR	764/BIR	770/BIR
	771/BIR	772/BIR	776/BIR	807/BCR	808/BCR	819/BCS	832/PZE
	837/BCR	846/BCR	887/B	908/B	953/DATA	969/CW	1198/FILL
	1224/FILL	1264/PZE	1278/BRG	5616/CAL1	5620/CAL2	5624/CAL3	5628/CAL4
	5642/CAL4	5647/CAL4					

APPENDIX A

This appendix contains the T-charts for the multiply instructions. T-charts, essentially, are snapshots of various registers at specific phase and clock times.

00001

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

M4 0001

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLK<	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B)	BC31	29L23 0000	29L28 000	C(D)
3		1	1	80AA9FD4	1	1	80AA9FD4	00000000	0	0	0	55555555
6-00		1	1	80AA9FD4	0	0	00000000	80AA9FD4	0	0	0	55555555
6-01		0	0	00000000	0	0	00000000	202AA7F5	0	0	0	AAAAAAAA
6-02		0	0	00000000	0	0	55555555	080AA9FD	0	0	0	55555555
6-03		0	0	15555555	0	0	6AAAAAAA	4202AA7F	0	0	0	55555555
6-04		0	0	1AAAAAAA	1	1	C5555555	9080AA9F	1	0	0	55555555
6-05		1	1	F1555555	1	1	F1555555	64202AA7	1	0	0	AAAAAAAA
6-06		1	1	FC555555	1	1	FC555555	59080AA9	1	0	0	AAAAAAAA
6-07		1	1	FF155555	0	0	A9BFFFFF	564202AA	0	0	0	AAAAAAAA
6-08		0	0	2A6FFFFF	0	0	D51AAAA9	D59080AA	0	0	0	AAAAAAAA
6-09		0	0	3546AAAA	0	0	DF155554	7564202A	0	0	0	AAAAAAAA
6-10		0	0	37FC5555	0	0	E2A6FFFF	1D59080A	0	0	0	AAAAAAAA
6-11		0	0	3AA9BFFF	0	0	E3546AA9	C7564202	0	0	0	AAAAAAAA
6-12		0	0	3B051AAA	0	0	E37FC554	71D59080	0	0	0	AAAAAAAA
6-13		0	0	3B0FF155	0	0	3B0FF155	1C756420	0	0	0	AAAAAAAA
6-14		0	0	0E37FC55	0	0	0E37FC55	471D5908	0	0	0	AAAAAAAA
6-15		0	0	03B0FF15	0	0	03B0FF15	51C75642	0	0	0	AAAAAAAA
6-16		0	0	00E37FC5	0	0	AB8E2A6F	5471D593	0	0	0	AAAAAAAA
7		0	0	2AE3AA9B	1	1	D58E3546	D51C7564	1	0	0	55555555
9		1	1	D58E3546	0	0	2A71CAB3	D51C7564	1	0	0	55555555
10		1	1	D58E3546	1	1	D51C7564	D51C7564	1	0	0	55555555

00002

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

M4 0002

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLK<	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B)	BC31	29L23 0000	29L28 000	C(D)
3		0	0	7F56BA80	0	0	7F56BA80	00000000	0	1	1	FC7CF1CC
6-00		0	0	7F56BA80	0	0	00000000	7F56BA80	0	1	1	FC7CF1CC
6-01		0	0	00000000	0	0	00000000	1FD5AEAD	0	1	1	F8F9E398
6-02		0	0	00000000	0	0	00000000	07F56BA8	0	1	1	F8F9E398
6-03		0	0	00000000	0	0	00000000	01FD5AEA	0	1	1	F8F9E398
6-04		0	0	00000000	1	1	F8F9E398	007F56BA	0	1	1	F8F9E398
6-05		1	1	FE3E78E6	1	1	F7385C7E	001FD5AE	0	1	1	F8F9E398
6-06		1	1	FECE171F	1	1	F6C7FA37	8007F56B	0	1	1	F8F9E398
6-07		1	1	FD31FEAD	0	0	01350CE1	E001FD5A	1	1	1	FC7CF1CC
6-08		0	0	00404338	0	0	03D051AC	78007F56	1	1	1	FC7CF1CC
6-09		0	0	00F4145B	0	0	0477228F	1E001FD5	1	1	1	FC7CF1CC
6-10		0	0	011DC8A3	1	1	FA17AC33	C78007F5	0	1	1	F8F9E398
6-11		1	1	FE35E80E	1	1	F802CCDA	F1E001FD	0	1	1	FC7CF1CC
6-12		1	1	FE03B736	1	1	F83DA902	3C78007F	0	1	1	FC7CF1CC
6-13		1	1	FE0F6A40	0	0	02527874	AF1E001F	1	1	1	FC7CF1CC
6-14		0	0	00349E1D	0	0	00949E1D	23C78007	1	1	1	F8F9E398
6-15		0	0	00352787	0	0	00252787	4AF1E001	1	1	1	F8F9E398
6-16		0	0	00349E1D	1	1	F9032D79	D23C7800	0	1	1	F8F9E398
7		1	1	FE40CB5E	1	1	FE40CB5E	74AF1E00	0	1	1	F8F9E398
9		1	1	FE40CB5E	1	1	FE40CB5E	74AF1E00	0	1	1	F8F9E398
10		1	1	FE40CB5E	0	0	74AF1E00	74AF1E00	0	1	1	F8F9E398

00003

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0003

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLOCK	17P42		-TEST POINTS-		29L19	29L17	-TEST POINTS-		29L23	29L28	C(D)
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	0000	000	
3		0	0	3DF91CF8	0	0	3DF91CF8	00000000	0	0	0	59C61C18
6- 00		0	0	3DF91CF8	0	0	00000000	3DF91CF8	0	0	0	59C61C18
6- 01		0	0	00000000	0	0	00000000	0F7E473E	0	0	0	338C3830
6- 02		0	0	00000000	0	0	B38C3830	03DF91CF	0	0	0	338C3830
6- 03		0	0	2CE3DE0C	1	1	D31CF1F4	00F7E473	1	0	0	59C61C18
6- 04		1	1	F4C73C7D	1	1	F4C73C7D	003DF91C	1	0	0	338C3830
6- 05		1	1	FD31CF1F	0	0	56F7EB37	400F7E47	0	0	0	59C61C18
6- 06		0	0	153DFACD	1	1	B8F7DEB5	0003DF91	1	0	0	59C61C18
6- 07		1	1	EEFD7AD	0	0	A28A2FD0	7400F7E4	0	0	0	338C3830
6- 08		0	0	28A28BF7	0	0	28A28BF7	5D003DF9	0	0	0	338C3830
6- 09		0	0	0A28A2FD	0	0	63EEBF15	07400F7E	0	0	0	59C61C18
6- 10		0	0	18FBACF5	0	0	CC87E7F5	75D003DF	0	0	0	338C3830
6- 11		0	0	3321F9CD	1	1	D95B0DE5	5D7400F7	1	0	0	59C61C18
6- 12		1	1	F656F779	1	1	F656F779	575D003D	1	0	0	338C3830
6- 13		1	1	FD95B0DE	0	0	B121F60E	55D7400F	0	0	0	338C3830
6- 14		0	0	2C487D83	1	1	D2826163	9575D003	1	0	0	59C61C18
6- 15		1	1	F4A0985A	1	1	F4A0985A	E55D7400	1	0	0	338C3830
6- 16		1	1	FD282616	0	0	56EE42E2	B9575D00	0	0	0	59C61C18
7		0	0	153B908B	0	0	153B908B	AE55D740	0	0	0	338C3830
9		0	0	153B908B	1	1	EA446F74	AE55D740	0	0	0	338C3830
10		0	0	153B908B	1	1	AE55D740	AE55D740	0	0	0	338C3830

00004

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0004

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLOCK	17P42		-TEST POINTS-		29L19	29L17	-TEST POINTS-		29L23	29L28	C(D)
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	0000	000	
3		0	0	5B080E1D	0	0	5B080E1D	00000000	0	0	1	F1C3C731
6- 00		0	0	5B080E1D	0	0	00000000	5B080E1D	0	0	1	F1C3C731
6- 01		0	0	00000000	1	1	F1C3C731	16F60387	0	0	1	F1C3C731
6- 02		1	1	FC7CF1CC	0	0	0AADPA93	45BD80E1	1	0	1	F1C3C731
6- 03		0	0	02AB4AA6	1	1	E63D90C8	D16F6038	0	0	1	E3878E62
6- 04		1	1	F98C3642	1	1	F98C3642	345BD80E	0	0	1	E3878E62
6- 05		1	1	FE632D90	1	1	E1EA3BF2	8D16F603	0	0	1	E3878E62
6- 06		1	1	F87AAEFC	0	0	6B86E7C3	A345BD80	1	0	1	F1C3C731
6- 07		0	0	01AD39F2	1	1	F3718123	E8D16F60	0	0	1	F1C3C731
6- 08		1	1	FCDC6048	1	1	FCDC6048	FA345BD8	0	0	1	E3878E62
6- 09		1	1	FF371812	1	1	FF371812	3E8D16F6	0	0	1	E3878E62
6- 10		1	1	FFDC6048	1	1	E3555466	8FA345BD	0	0	1	E3878E62
6- 11		1	1	F8D55519	1	1	EA991C4A	A3E8D16F	0	0	1	F1C3C731
6- 12		1	1	FAA64712	0	0	08E27FE1	A8FA345B	1	0	1	F1C3C731
6- 13		0	0	02389FF8	0	0	02389FF8	6A3E8D16	1	0	1	E3878E62
6- 14		0	0	008E27FE	0	0	0ECA60CD	1A8FA345	1	0	1	F1C3C731
6- 15		0	0	03329833	1	1	E73A2695	46A3E8D1	0	0	1	E3878E62
6- 16		1	1	F9CE89A5	1	1	EB925CD6	51A8FA34	0	0	1	F1C3C731
7		1	1	FAE49435	1	1	FAE49435	946A3E8D	0	0	1	E3878E62
9		1	1	FAE49435	0	0	05136BCA	946A3E8D	0	0	1	E3878E62
10		1	1	FAE49435	1	1	946A3E8D	946A3E8D	0	0	1	E3878E62

00005

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0005

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS, IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	17P42 -TEST POINTS-		29L19	29L17	-TEST POINTS-			29L23	29L28	C(D)
		A000	A00	S000	S00	C(S)	C(B)	BC31	0000	000	
3		0	0	7CF5C8E1	0	0	00000000	0	0	0	3F01FC03
6- 00		0	0	7CF5C8E1	0	0	00000000	7CF5C8E1	0	0	3F01FC03
6- 01		0	0	00000000	0	0	3F01FC03	1F3D7238	0	0	3F01FC03
6- 02		0	0	0FC07F00	0	0	0FC07F00	C7CF5C8E	0	0	7E03F806
6- 03		0	0	03F01FC0	0	0	81F417C6	31F3D723	0	0	7E03F806
6- 04		0	0	007005F1	1	1	E17B09EE	8C7CF5C8	1	0	3F01FC03
6- 05		1	1	F850027B	0	0	37608E7E	A31F3D72	0	0	3F01FC03
6- 06		0	0	00002F9F	0	0	8BDC27A5	A8C7CF5C	0	0	7E03F806
6- 07		0	0	02F709E9	0	0	22F709E9	6A31F3D7	0	0	7E03F806
6- 08		0	0	08B0C27A	1	1	C98BC677	5A8C7CF5	1	0	3F01FC03
6- 09		1	1	F24EF19D	0	0	7072E9A3	D6A31F3D	0	0	7E03F806
6- 10		0	0	1C1CBA68	0	0	5B1EB668	F5A8C7CF	0	0	3F01FC03
6- 11		0	0	16C7AD9A	1	1	D7C5B197	FD6A31F3	1	0	3F01FC03
6- 12		1	1	F5F16C65	1	1	F5F16C65	FF5A8C7C	1	0	7E03F806
6- 13		1	1	0D7C5B19	0	0	3C7E571C	7FD6A31F	0	0	3F01FC03
6- 14		0	0	0F1F95C7	1	1	D01D99C4	1FF5A8C7	1	0	3F01FC03
6- 15		1	1	F4076671	1	1	F4076671	07FD6A31	1	0	7E03F806
6- 16		1	1	F001D99C	0	0	7B05D1A2	41FF5A8C	0	0	7E03F806
7		0	0	1EC17468	0	0	1EC17468	907FD6A3	0	0	7E03F806
9		0	0	1EC17468	1	1	E13E8897	907FD6A3	0	0	7E03F806
10		0	0	1EC17468	1	1	907FD6A3	907FD6A3	0	0	7E03F806

00006

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0006

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS, IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	17P42 -TEST POINTS-		29L19	29L17	-TEST POINTS-			29L23	29L28	C(D)
		A000	A00	S000	S00	C(S)	C(B)	BC31	0000	000	
3		1	1	8C178F32	1	1	8C178F32	00000000	0	0	70000000
6- 00		1	1	8C178F32	0	0	00000000	8C178F32	0	0	70000000
6- 01		0	0	00000000	0	0	E0000000	2305E3CC	0	0	E0000000
6- 02		0	0	00000000	0	0	38000000	08C178F3	0	0	E0000000
6- 03		0	0	00000000	1	1	9E000000	02305E3C	1	0	70000000
6- 04		1	1	F7800000	0	0	57800000	008C178F	0	0	70000000
6- 05		0	0	10000000	1	1	A5E00000	002305E3	1	0	70000000
6- 06		1	1	F9700000	1	1	E9780000	0008C178	1	0	E0000000
6- 07		1	1	F45E0000	0	0	6A5E0000	0002305E	0	0	70000000
6- 08		0	0	1A978000	0	0	FA978000	00008C17	0	0	E0000000
6- 09		0	0	0E4A5E00	1	1	0EA5E000	00002305	1	0	70000000
6- 10		1	1	F0A97800	0	0	03A97800	000008C1	0	0	E0000000
6- 11		0	0	04A4A5E0	0	0	A4A4A5E0	00000230	0	0	70000000
6- 12		0	0	099A9780	0	0	299A9780	0000008C	0	0	E0000000
6- 13		0	0	04A4A5E0	0	0	0A4A4A5E	00000023	0	0	E0000000
6- 14		0	0	0293A978	1	1	9293A978	00000008	1	0	70000000
6- 15		1	1	04A4A5E0	0	0	04A4A5E0	00000002	0	0	70000000
6- 16		0	0	05293A97	0	0	5293A97	00000003	0	0	E0000000
7		0	0	0044A4A5	1	1	0D44A4A5	E0000000	1	0	70000000
9		1	1	0044A4A5	0	0	3295B15A	E0000000	1	0	70000000
10		1	1	0044A4A5	1	1	E0000000	E0000000	1	0	70000000

00007

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0007

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLK	17P42		29L19		29L17		-TEST POINTS-			29L23	29L28	C(D)
		A000	A00	S000	S00	C(S)	C(B)	BC31	D000	D00			
3		0	0	634AC271	0	0	634AC271	00000000	0		1	1	CDB53C70
6-00		0	0	634AC271	0	0	00000000	634AC271	0		1	1	CDB53C70
6-01		0	0	00000000	1	1	CDB53C70	18D2B09C	0		1	1	CDB53C70
6-02		1	1	F36D4F1C	1	1	F36D4F1C	0634AC27	0		1	1	9B6A78E0
6-03		1	1	FCDB53C7	0	0	2F261757	018D2B09	1		1	1	CDB53C70
6-04		0	0	03C985D5	1	1	A733FE95	C0634AC2	0		1	1	9B6A78E0
6-05		1	1	E9C0FFAD	1	1	8537788D	7018D2B0	0		1	1	9B6A78E0
6-06		1	1	E14DDE23	1	1	E14DDE23	5C0634AC	0		1	1	9B6A78E0
6-07		1	1	F8537788	1	1	F8537788	07018D2B	0		1	1	9B6A78E0
6-08		1	1	FE14DDE2	0	0	305FA172	35C0634A	1		1	1	CDB53C70
6-09		0	0	0C17E85C	0	0	3E62ABEC	8D7018D2	1		1	1	CDB53C70
6-10		0	0	0F98AAF8	0	0	41E36E83	235C0634	1		1	1	CDB53C70
6-11		0	0	1078DBA2	1	1	DE2E1812	C8D7018D	0		1	1	CDB53C70
6-12		1	1	F78B8604	1	1	C540C274	9235C063	0		1	1	CDB53C70
6-13		1	1	F150309D	0	0	239AF42D	2C8D7018	1		1	1	CDB53C70
6-14		0	0	08E6B00B	1	1	0699F97B	49235C06	0		1	1	CDB53C70
6-15		1	1	F9A6FE5E	1	1	9111773E	02C8D701	0		1	1	9B6A78E0
6-16		1	1	E4445D0F	1	1	81F99A3F	94B235C0	0		1	1	CDB53C70
7		1	1	EC7E668F	1	1	EC7E668F	ED2C8D70	0		1	1	9B6A78E0
9		1	1	EC7E668F	0	0	1381997D	ED2C8D70	0		1	1	9B6A78E0
10		1	1	EC7E668F	1	1	ED2C8D70	ED2C8D70	0		1	1	9B6A78E0

00008

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0008

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLK	17P42		29L19		29L17		-TEST POINTS-			29L23	29L28	C(D)
		A000	A00	S000	S00	C(S)	C(B)	BC31	D000	D00			
3		1	1	E486C662	1	1	E486C662	00000000	0		0	0	31C3C1F0
6-00		1	1	E486C662	0	0	00000000	E486C662	0		0	0	31C3C1F0
6-01		0	0	00000000	0	0	638783E0	3921B198	0		0	0	638783E0
6-02		0	0	18E1E0F8	0	0	18E1E0F8	0E486C66	0		0	0	638783E0
6-03		0	0	0638783E	0	0	693FFC1E	03921B19	0		0	0	638783E0
6-04		0	0	1A6FF0F7	0	0	4C33C0F7	80E486C6	0		0	0	31C3C1F0
6-05		0	0	130CF03D	0	0	7694741D	E03921B1	0		0	0	638783E0
6-06		0	0	1DA51D07	0	0	4F68DEF7	780E486C	0		0	0	31C3C1F0
6-07		0	0	13DA373D	0	0	13DA373D	0E03921B	0		0	0	638783E0
6-08		0	0	04F68DEF	1	1	0332CBFF	7780E486	1		0	0	31C3C1F0
6-09		1	1	F4CCB2FF	1	1	C308F10F	0DE03921	1		0	0	31C3C1F0
6-10		1	1	F0C23C43	0	0	5449C023	F7780E48	0		0	0	638783E0
6-11		0	0	15127008	0	0	15127008	F0DE0392	0		0	0	638783E0
6-12		0	0	05449C02	0	0	68CC1FE2	3F7780E4	0		0	0	638783E0
6-13		0	0	1A3307F8	0	0	1A3307F8	8F0DE039	0		0	0	638783E0
6-14		0	0	068CC1FE	0	0	385083EE	23F7780E	0		0	0	31C3C1F0
6-15		0	0	0E1420FB	0	0	7193A4D3	88FD0E03	0		0	0	638783E0
6-16		0	0	1C66E936	1	1	EAA32746	E23F7783	1		0	0	31C3C1F0
7		1	1	FAA8C9D1	1	1	FAA8C9D1	888FDDE0	1		0	0	638783E0
9		1	1	FAA8C9D1	0	0	0557362E	888FDDE0	1		0	0	638783E0
10		1	1	FAA8C9D1	1	1	888FDDE0	888FDDE0	1		0	0	638783E0

00009

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0009

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS, IT REPRESENTS THE A00 INPUT TO PROOO

PHASE	CLCK	A000	A00	17P42 -TEST POINTS-	29L19	29L17	-TEST POINTS-	29L23	29L28	C(D)	
				C(A)	S000	S00	C(S)	C(B)	BC31	J000 J00	
3		0	0	5A5ACF3B	0	0	5A5ACF3B	00000000	0	1 1	DF4F3C70
6-00		0	0	5A5ACF3B	0	0	00000000	5A5ACF3B	0	1 1	DF4F3C70
6-01		0	0	00000000	0	0	20B0C390	169683CE	1	1 1	DF4F3C70
6-02		0	0	082C30E4	0	0	280CF474	05A5ACF3	1	1 1	DF4F3C70
6-03		0	0	0A373D1D	0	0	0A373D1D	0169683C	1	1 1	3E9E78E0
6-04		0	0	0280CF47	1	1	E1DD0BB7	405A5ACF	0	1 1	DF4F3C70
6-05		1	1	F87742ED	0	0	1928067D	00169683	1	1 1	DF4F3C70
6-06		0	0	064A019F	0	0	064A019F	7405A5AC	1	1 1	3E9E78E0
6-07		0	0	01928067	1	1	E0E18CD7	0D016968	0	1 1	DF4F3C70
6-08		1	1	F8386F35	0	0	18E932C5	F7405A5A	1	1 1	DF4F3C70
6-09		0	0	063A4CB1	0	0	26EB1041	7DD01696	1	1 1	DF4F3C70
6-10		0	0	093AC410	0	0	2A6B87A0	5F7405A5	1	1 1	DF4F3C70
6-11		0	0	0A9AE1E8	1	1	C9395AC8	17DD0169	0	1 1	3E9E78E0
6-12		1	1	F24E56B2	1	1	D19D9322	05F7405A	0	1 1	DF4F3C70
6-13		1	1	F46764C8	1	1	8305DDA8	817DD016	0	1 1	3E9E78E0
6-14		1	1	ECC1776A	1	1	AB5FF04A	205F7405	0	1 1	3E9E78E0
6-15		1	1	EAD7FC12	1	1	CA273882	8817DD01	0	1 1	DF4F3C70
6-16		1	1	F289CE20	1	1	01D90A90	A205F740	0	1 1	DF4F3C70
7		1	1	F47642A4	1	1	F47642A4	28817DD0	0	1 1	3E9E78E0
9		1	1	F47642A4	1	1	F47642A4	28817DD0	0	1 1	3E9E78E0
10		1	1	F47642A4	0	0	28817DD0	28817DD0	0	1 1	3E9E78E0

00010

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0010

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS, IT REPRESENTS THE A00 INPUT TO PROOO

PHASE	CLCK	A000	A00	17P42 -TEST POINTS-	29L19	29L17	-TEST POINTS-	29L23	29L28	C(D)	
				C(A)	S000	S00	C(S)	C(B)	BC31	J000 J00	
3		0	0	55555551	0	0	55555551	00000000	0	1 1	FFFFFFFF
6-00		0	0	55555551	0	0	00000000	55555551	0	1 1	FFFFFFFF
6-01		0	0	00000000	1	1	FFFFFFFF	15555554	0	1 1	FFFFFFFF
6-02		1	1	FFFFFFFF	1	1	FFFFFFFF	C5555555	0	1 1	FFFFFFFF
6-03		1	1	FFFFFFFF	1	1	FFFFFFFF	F1555555	0	1 1	FFFFFFFF
6-04		1	1	FFFFFFFF	1	1	FFFFFFFF	3C555555	0	1 1	FFFFFFFF
6-05		1	1	FFFFFFFF	1	1	FFFFFFFF	AF155555	0	1 1	FFFFFFFF
6-06		1	1	FFFFFFFF	1	1	FFFFFFFF	AB055555	0	1 1	FFFFFFFF
6-07		1	1	FFFFFFFF	1	1	FFFFFFFF	AAF15555	0	1 1	FFFFFFFF
6-08		1	1	FFFFFFFF	1	1	FFFFFFFF	AABC5555	0	1 1	FFFFFFFF
6-09		1	1	FFFFFFFF	1	1	FFFFFFFF	AAAF1555	0	1 1	FFFFFFFF
6-10		1	1	FFFFFFFF	1	1	FFFFFFFF	AAABC555	0	1 1	FFFFFFFF
6-11		1	1	FFFFFFFF	1	1	FFFFFFFF	AAAAF155	0	1 1	FFFFFFFF
6-12		1	1	FFFFFFFF	1	1	FFFFFFFF	AAAA3C55	0	1 1	FFFFFFFF
6-13		1	1	FFFFFFFF	1	1	FFFFFFFF	AAAAAF15	0	1 1	FFFFFFFF
6-14		1	1	FFFFFFFF	1	1	FFFFFFFF	AAAAABC5	0	1 1	FFFFFFFF
6-15		1	1	FFFFFFFF	1	1	FFFFFFFF	AAAAAAF1	0	1 1	FFFFFFFF
6-16		1	1	FFFFFFFF	1	1	FFFFFFFF	AAAAAABC	0	1 1	FFFFFFFF
7		1	1	FFFFFFFF	1	1	FFFFFFFF	AAAAAAAF	0	1 1	FFFFFFFF
9		1	1	FFFFFFFF	0	0	00000000	AAAAAAAF	0	1 1	FFFFFFFF
10		1	1	FFFFFFFF	1	1	AAAAAAAF	AAAAAAAF	0	1 1	FFFFFFFF

00011

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0011

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLOCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 0000	29L28 000	C(D)
3		0	0	00000005	0	0	00000005	00000000 0	1	1	FFFFFFFF
6- 00		0	0	00000005	0	0	00000000	00000005 0	1	1	FFFFFFFF
6- 01		0	0	00000000	1	1	FFFFFFFF	00000001 0	1	1	FFFFFFFF
6- 02		1	1	FFFFFFFF	1	1	FFFFFFFE	00000000 0	1	1	FFFFFFFF
6- 03		1	1	FFFFFFFF	1	1	FFFFFFFF	B0000000 0	1	1	FFFFFFFE
6- 04		1	1	FFFFFFFF	1	1	FFFFFFFF	EC000000 0	1	1	FFFFFFFE
6- 05		1	1	FFFFFFFF	1	1	FFFFFFFF	FB000000 0	1	1	FFFFFFFE
6- 06		1	1	FFFFFFFF	1	1	FFFFFFFF	FE000000 0	1	1	FFFFFFFE
6- 07		1	1	FFFFFFFF	1	1	FFFFFFFF	FF000000 0	1	1	FFFFFFFE
6- 08		1	1	FFFFFFFF	1	1	FFFFFFFF	FFEC0000 0	1	1	FFFFFFFE
6- 09		1	1	FFFFFFFF	1	1	FFFFFFFF	FFFB0000 0	1	1	FFFFFFFE
6- 10		1	1	FFFFFFFF	1	1	FFFFFFFF	FFFC0000 0	1	1	FFFFFFFE
6- 11		1	1	FFFFFFFF	1	1	FFFFFFFF	FFFD0000 0	1	1	FFFFFFFE
6- 12		1	1	FFFFFFFF	1	1	FFFFFFFF	FFFE0000 0	1	1	FFFFFFFE
6- 13		1	1	FFFFFFFF	1	1	FFFFFFFF	FFFF0000 0	1	1	FFFFFFFE
6- 14		1	1	FFFFFFFF	1	1	FFFFFFFF	FFFFE000 0	1	1	FFFFFFFE
6- 15		1	1	FFFFFFFF	1	1	FFFFFFFF	FFFFF000 0	1	1	FFFFFFFE
6- 16		1	1	FFFFFFFF	1	1	FFFFFFFF	FFFFFFE0 0	1	1	FFFFFFFE
7		1	1	FFFFFFFF	1	1	FFFFFFFF	FFFFFFF0 0	1	1	FFFFFFFE
9		1	1	FFFFFFFF	0	0	00000000	FFFFFFFB 0	1	1	FFFFFFFE
10		1	1	FFFFFFFF	1	1	FFFFFFFB	FFFFFFFB 0	1	1	FFFFFFFE

00012

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0012

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLOCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 0000	29L28 000	C(D)
3		1	1	99999922	1	1	99999922	00000000 0	1	1	EEEEEEEE
6- 00		1	1	99999922	0	0	00000000	99999922 0	1	1	EEEEEEEE
6- 01		0	0	00000000	1	1	DDDDDDDC	26666648 0	1	1	DDDDDDDC
6- 02		1	1	F7777777	1	1	F7777777	09999992 0	1	1	DDDDDDDC
6- 03		1	1	F0000000	1	1	DBB938B9	C2666664 0	1	1	DDDDDDDC
6- 04		1	1	F6EEEEEE	1	1	F6EEEEEE	70999999 0	1	1	DDDDDDDC
6- 05		1	1	F0333333	1	1	ECAAAAA9	9C266666 0	1	1	EEEEEEEE
6- 06		1	1	F82AAAAA	1	1	D9088886	67099999 0	1	1	DDDDDDDC
6- 07		1	1	F6422221	1	1	E531110F	99C26666 0	1	1	EEEEEEEE
6- 08		1	1	F94C4443	1	1	D72A221F	E6709999 0	1	1	DDDDDDDC
6- 09		1	1	F5C88887	1	1	E4897775	F99C2666 0	1	1	EEEEEEEE
6- 10		1	1	F92E5000	1	1	D70C3839	7E670999 0	1	1	DDDDDDDC
6- 11		1	1	F5C30EEE	1	1	E481F00C	5F99C266 0	1	1	EEEEEEEE
6- 12		1	1	F92C7F77	1	1	D70A5053	17E67099 0	1	1	DDDDDDDC
6- 13		1	1	F5C29754	1	1	E4818642	C5F99C26 0	1	1	EEEEEEEE
6- 14		1	1	F92C6190	1	1	D70A3F6C	317E6709 0	1	1	DDDDDDDC
6- 15		1	1	F5C28F08	1	1	E4817EC9	2C5F99C2 0	1	1	EEEEEEEE
6- 16		1	1	F92C5F32	1	1	D70A308E	4317E673 0	1	1	DDDDDDDC
7		1	1	F5C28F63	0	0	06D3A075	92C5F99C 1	1	1	EEEEEEEE
9		0	0	06D3A075	1	1	F92C5F8A	92C5F99C 1	1	1	EEEEEEEE
10		0	0	06D3A075	1	1	92C5F99C	92C5F99C 1	1	1	EEEEEEEE

00013

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0013

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS, IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLOCK	17P42 A000	A00	-TEST POINTS= C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS= C(B) BC31	29L23 D000	29L28 D00	C(D)
3		1	1	33333334	1	1	33333334	00000000 0	0	0	00000000
6-00		1	1	33333334	0	0	00000000	33333334 0	0	0	00000000
6-01		0	0	00000000	0	0	00000000	2CCCCC00 0	0	0	00000000
6-02		0	0	00000000	0	0	00000000	0B333333 0	0	0	00000000
6-03		0	0	00000000	0	0	00000000	02CCCCC 1	0	0	00000000
6-04		0	0	00000000	0	0	00000000	00B33333 0	0	0	00000000
6-05		0	0	00000000	0	0	00000000	002CCCC 1	0	0	00000000
6-06		0	0	00000000	0	0	00000000	000B3333 0	0	0	00000000
6-07		0	0	00000000	0	0	00000000	0002CCCC 1	0	0	00000000
6-08		0	0	00000000	0	0	00000000	0000B333 0	0	0	00000000
6-09		0	0	00000000	0	0	00000000	00002CCC 1	0	0	00000000
6-10		0	0	00000000	0	0	00000000	00000B33 0	0	0	00000000
6-11		0	0	00000000	0	0	00000000	000002CC 1	0	0	00000000
6-12		0	0	00000000	0	0	00000000	000000B3 0	0	0	00000000
6-13		0	0	00000000	0	0	00000000	0000002C 1	0	0	00000000
6-14		0	0	00000000	0	0	00000000	0000000B 0	0	0	00000000
6-15		0	0	00000000	0	0	00000000	00000002 1	0	0	00000000
6-16		0	0	00000000	0	0	00000000	00000003 1	0	0	00000000
7		0	0	00000000	0	0	00000000	00000000 1	0	0	00000000
9		0	0	00000000	0	0	00000000	00000000 1	0	0	00000000
10		0	0	00000000	0	0	00000000	00000000 1	0	0	00000000

00014

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0014

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS, IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLOCK	17P42 A000	A00	-TEST POINTS= C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS= C(B) BC31	29L23 D000	29L28 D00	C(D)
3		1	1	3666666E	1	1	8666666E	00000000 0	1	1	CCCCCCCC
6-00		1	1	3666666E	0	0	00000000	8666666E 0	1	1	CCCCCCCC
6-01		0	0	00000000	1	1	99999998	20999998 0	1	1	99999998
6-02		1	1	E6666666	0	0	1999999A	0B666666 1	1	1	CCCCCCCC
6-03		0	0	06666666	0	0	3999999A	82099999 1	1	1	CCCCCCCC
6-04		0	0	0E666666	1	1	A7FFFFFE	A0B66666 0	1	1	99999998
6-05		1	1	E9FFFFFF	1	1	83999997	A8209999 0	1	1	99999998
6-06		1	1	E0E66665	1	1	ADB33331	EA0B6666 0	1	1	CCCCCCCC
6-07		1	1	EB6CCCCC	1	1	85066664	7A820999 0	1	1	99999998
6-08		1	1	E1419999	1	1	AE0E6665	1EA0B666 0	1	1	CCCCCCCC
6-09		1	1	EB839999	1	1	85103331	47A82099 0	1	1	99999998
6-10		1	1	E1474CCC	1	1	AE141998	51EA0B66 0	1	1	CCCCCCCC
6-11		1	1	E3850666	1	1	851E9FFE	147A8209 0	1	1	99999998
6-12		1	1	E147A7FF	1	1	AE1474CB	851EA0B6 0	1	1	CCCCCCCC
6-13		1	1	E3851032	1	1	851E36CA	E147A820 0	1	1	99999998
6-14		1	1	E147A0B2	1	1	AE147A7E	9851EA0B 0	1	1	CCCCCCCC
6-15		1	1	E3851E9F	0	0	1EB85103	AE147A82 1	1	1	CCCCCCCC
6-16		0	0	07AE1474	0	0	3AE147A8	EB851EA3 1	1	1	CCCCCCCC
7		0	0	0E3851EA	0	0	0EB851EA	3AE147A8 1	1	1	99999998
9		0	0	0E3851EA	0	0	0EB851EA	3AE147A8 1	1	1	99999998
10		0	0	0E3851EA	0	0	3AE147A8	3AE147A8 1	1	1	99999998

00015

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0015

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	17P42 -TEST POINTS-		29L19	29L17	-TEST POINTS-		29L23	29L28	C(D)	
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31		0000
3		1	1	CBCBCBCB	1	1	CBCBCBCB	00000000	0	0	33333333
6-00		1	1	CBCBCBCB	0	0	00000000	CBCBCBCB	0	0	33333333
6-01		0	0	00000000	1	1	CCCCCCCD	32F2F2F2	1	1	33333333
6-02		1	1	F3333333	1	1	C0000000	4CBC3CBC	1	1	33333333
6-03		1	1	F0000000	0	0	23333333	132F2F2F	0	0	33333333
6-04		0	0	08CCCCC	1	1	D5999999	C4CBCBCB	1	1	33333333
6-05		1	1	F5666666	1	1	F5666666	7132F2F2	1	1	66666666
6-06		1	1	FD599999	1	1	CA266666	9C4CBCBC	1	1	33333333
6-07		1	1	F2899999	0	0	258CCCCC	A7132F2F	0	0	33333333
6-08		0	0	096F3333	1	1	D63C0000	29C4CBCB	1	1	33333333
6-09		1	1	F58F0000	1	1	F58F0000	0A7132F2	1	1	66666666
6-10		1	1	FD63C000	1	1	CA308CCD	029C4CBC	1	1	33333333
6-11		1	1	F28C2333	0	0	25BF5666	40A7132F	0	0	33333333
6-12		0	0	096FD589	1	1	D63CA266	9029C4CB	1	1	33333333
6-13		1	1	F58F2899	1	1	F58F2899	A40A7132	1	1	66666666
6-14		1	1	FD63CA26	1	1	CA3096F3	69029C4C	1	1	33333333
6-15		1	1	F28C258C	0	0	258F58EF	0A40A713	0	0	33333333
6-16		0	0	096FD633	1	1	D63CA308	F69029C7	1	1	33333333
7		1	1	F58F28C2	1	1	F58F28C2	3DA40A71	1	1	66666666
9		1	1	F58F28C2	1	1	F58F28C2	3DA40A71	1	1	66666666
10		1	1	F58F28C2	0	0	3DA40A71	3DA40A71	1	1	66666666

00016

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0016

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	17P42 -TEST POINTS-		29L19	29L17	-TEST POINTS-		29L23	29L28	C(D)	
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31		0000
3		0	0	7F7F7F7F	0	0	7F7F7F7F	00000000	0	0	60B60B60
6-00		0	0	7F7F7F7F	0	0	00000000	7F7F7F7F	0	0	60B60B60
6-01		0	0	00000000	1	1	92492493	1FD0FD0F	1	1	60B60B60
6-02		1	1	E4924924	1	1	E4924924	C7F7F7F7	1	1	3360360A
6-03		1	1	F9249249	1	1	F9249249	31FD0FD0	1	1	3360360A
6-04		1	1	FE492492	0	0	09B60B6C	4C7F7F7F	0	0	3360360A
6-05		0	0	3660360B	1	1	C8B60B6E	131FD0FD	1	1	60360360
6-06		1	1	F220360B	1	1	F220B60B	84C7F7F7	1	1	3360360A
6-07		1	1	FC8B6036	1	1	FC8B6036	E131FD0F	1	1	3360360A
6-08		1	1	FF220360	0	0	0A909247	384C7F7F	0	0	3360360A
6-09		0	0	36A42491	1	1	C8ED4924	EE131FD0	1	1	60360360
6-10		1	1	F23B5249	1	1	F23B5249	3BF4C7F7	1	1	3360360A
6-11		1	1	FC8ED492	1	1	FC8ED492	4EE131FD	1	1	3360360A
6-12		1	1	FF23B524	0	0	0A916BFE	93884C7F	0	0	3360360A
6-13		0	0	36A45836	1	1	C8ED7F92	A4EE131F	1	1	60360360
6-14		1	1	F23B5FE4	1	1	F23B5FE4	A93B84C7	1	1	3360360A
6-15		1	1	FC8ED7F9	1	1	FC8ED7F9	2A4EE131	1	1	3360360A
6-16		1	1	FF23B5FE	0	0	0A916C08	4A93B84C	0	0	3360360A
7		0	0	36A45836	0	0	36A45836	12A4EE13	0	0	3360360A
9		0	0	36A45836	0	0	36A45836	12A4EE13	0	0	3360360A
10		0	0	36A45836	0	0	12A4EE13	12A4EE13	0	0	3360360A

00017

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0017

ADD DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS, IT REPRESENTS THE ADD INPUT TO PROO

PHASE	CLOCK	ADD	ADD	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		0	0	07870787	0	0	07870787	00000000 0	1	1	00000000
6- 00		0	0	07870787	0	0	00000000	07870787 0	1	1	00000000
6- 01		0	0	00000000	0	0	22222223	01E1C1E1 1	1	1	00000000
6- 02		0	0	08888888	1	1	C4444442	C0787078 0	1	1	3888888A
6- 03		1	1	F1111110	1	1	F1111110	B01E1C1E 0	1	1	3888888A
6- 04		1	1	FC444444	1	1	B7FFFFFFE	2C078707 0	1	1	3888888A
6- 05		1	1	EDFFFFFFF	0	0	10222222	8B01E1C1 1	1	1	00000000
6- 06		0	0	04088888	1	1	BFC44442	A2C07870 0	1	1	3888888A
6- 07		1	1	EFF11110	1	1	EFF11110	A8B01E1C 0	1	1	3888888A
6- 08		1	1	FBFC4444	1	1	FBFC4444	2A2C0787 0	1	1	3888888A
6- 09		1	1	FEFF1111	0	0	21213334	0A8B01E1 1	1	1	00000000
6- 10		0	0	08484000	1	1	C4040887	02A2C078 0	1	1	3888888A
6- 11		1	1	F1010221	1	1	F1010221	0A8B01E1 0	1	1	3888888A
6- 12		1	1	FC404088	1	1	B7BFC42	702A2C07 0	1	1	3888888A
6- 13		1	1	EDFEFF10	0	0	10212133	9C0A8B01 1	1	1	00000000
6- 14		0	0	0408484C	1	1	BFC40406	E702A2C0 0	1	1	3888888A
6- 15		1	1	EFF10101	1	1	EFF10101	39C0A8B0 0	1	1	3888888A
6- 16		1	1	FBFC4040	1	1	FBFC4040	6E702A2C 0	1	1	3888888A
7		1	1	FEFF1010	1	1	FEFF1010	1B9C0A8B 0	1	1	3888888A
9		1	1	FEFF1010	1	1	FEFF1010	1B9C0A8B 0	1	1	3888888A
10		1	1	FEFF1010	0	0	1B9C0A8B	1B9C0A8B 0	1	1	3888888A

00018

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0018

ADD DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS, IT REPRESENTS THE ADD INPUT TO PROO

PHASE	CLOCK	ADD	ADD	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		0	0	686D36D9	0	0	686D36D9	00000000 0	1	1	FFFFFFFF
6- 00		0	0	686D36D9	0	0	00000000	686D36D9 0	1	1	FFFFFFFF
6- 01		0	0	00000000	1	1	FFFFFFFFF	1AD34DB6 0	1	1	FFFFFFFF
6- 02		1	1	FFFFFFFFF	1	1	FFFFFFFFF	C686D36D 0	1	1	FFFFFFFF
6- 03		1	1	FFFFFFFFF	1	1	FFFFFFFFF	71AD34DB 0	1	1	FFFFFFFF
6- 04		1	1	FFFFFFFFF	0	0	00000000	9C686D36 1	1	1	FFFFFFFF
6- 05		0	0	00000000	0	0	00000001	271ADB40 1	1	1	FFFFFFFF
6- 06		0	0	00000000	1	1	FFFFFFFFE	49C686D3 0	1	1	FFFFFFFF
6- 07		1	1	FFFFFFFFF	0	0	00000000	9271ADB4 1	1	1	FFFFFFFF
6- 08		0	0	00000000	1	1	FFFFFFFFF	249C686D 0	1	1	FFFFFFFF
6- 09		1	1	FFFFFFFFF	1	1	FFFFFFFFE	C9271ADB 0	1	1	FFFFFFFF
6- 10		1	1	FFFFFFFFF	0	0	00000000	3249C686 1	1	1	FFFFFFFF
6- 11		0	0	00000000	0	0	00000001	2C9271AD 1	1	1	FFFFFFFF
6- 12		0	0	00000000	1	1	FFFFFFFFE	4B249C68 0	1	1	FFFFFFFF
6- 13		1	1	FFFFFFFFF	0	0	00000000	92C9271A 1	1	1	FFFFFFFF
6- 14		0	0	00000000	0	0	00000001	249249C6 1	1	1	FFFFFFFF
6- 15		0	0	00000000	0	0	00000001	492C9271 1	1	1	FFFFFFFF
6- 16		0	0	00000000	1	1	FFFFFFFFE	524B249C 0	1	1	FFFFFFFF
7		1	1	FFFFFFFFF	1	1	FFFFFFFFF	9492C927 0	1	1	FFFFFFFF
9		1	1	FFFFFFFFF	0	0	00000000	9492C927 0	1	1	FFFFFFFF
10		1	1	FFFFFFFFF	1	1	9492C927	9492C927 0	1	1	FFFFFFFF

00019

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0019

ADD0 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ADD INPUT TO PRODD

PHASE	CLOCK	ADD0	17P42 A00	-TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		0	0	4A32694C	0	0	4A32694C	00000000 0	1	1	EEEEEEEE
6-00		0	0	4A32694C	0	0	00000000	4A32694C 0	1	1	EEEEEEEE
6-01		0	0	00000000	0	0	00000000	128C9A53 0	1	1	DDDDDDDC
6-02		0	0	00000000	0	0	11111112	04A32694 1	1	1	EEEEEEEE
6-03		0	0	04444444	1	1	F3333332	8128C9A5 0	1	1	EEEEEEEE
6-04		1	1	F0000000	1	1	EBB388BA	A04A3269 0	1	1	EEEEEEEE
6-05		1	1	FAEEEEEE	1	1	E9DDDDDC	A8128C9A 0	1	1	EEEEEEEE
6-06		1	1	FA777777	1	1	D8555553	2A04A326 0	1	1	DDDDDDDC
6-07		1	1	F6155554	1	1	D3F33330	CA8128C9 0	1	1	DDDDDDDC
6-08		1	1	F4F00000	1	1	E3E888BA	32A04A32 0	1	1	EEEEEEEE
6-09		1	1	F8FAEEEE	1	1	D6D8CCCA	8CA8128C 0	1	1	DDDDDDDC
6-10		1	1	F5363332	1	1	F5B63332	A32A04A3 0	1	1	DDDDDDDC
6-11		1	1	F0508CCC	0	0	0E7E9DDE	A8CA8128 1	1	1	EEEEEEEE
6-12		0	0	030FA777	1	1	F28E9665	AA32A04A 0	1	1	EEEEEEEE
6-13		1	1	FCA3A599	1	1	DA818375	6A8CA812 0	1	1	DDDDDDDC
6-14		1	1	F6A060DD	1	1	D47E3E99	5AA32A04 0	1	1	DDDDDDDC
6-15		1	1	F51F8FAE	1	1	F51F8FAE	56A8CA81 0	1	1	DDDDDDDC
6-16		1	1	F047E3EB	1	1	EC3602D9	95AA32A0 0	1	1	EEEEEEEE
7		1	1	F80DB4B6	1	1	F80DB4B6	656A8CA8 0	1	1	DDDDDDDC
9		1	1	F80DB4B6	1	1	F80DB4B6	656A8CA8 0	1	1	DDDDDDDC
10		1	1	F80DB4B6	0	0	656A8CA8	656A8CA8 0	1	1	DDDDDDDC

00020

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0020

ADD0 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ADD INPUT TO PRODD

PHASE	CLOCK	ADD0	17P42 A00	-TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		0	0	2AAAAAA6	0	0	2AAAAAA6	00000000 0	0	0	7FFFFFFF
6-00		0	0	2AAAAAA6	0	0	00000000	2AAAAAA6 0	0	0	7FFFFFFF
6-01		0	0	00000000	0	0	FFFFFFFE	0AAAAAA9 0	0	0	FFFFFFFE
6-02		0	0	3FFFFFFF	0	0	3FFFFFFE	82AAAAAA 0	0	0	7FFFFFFF
6-03		0	0	2FFFFFFF	0	1	2FFFFFFD	A0AAAAAA 0	0	0	FFFFFFFE
6-04		0	0	48FFFFFF	0	1	48FFFFFFD	682AAAAA 0	0	0	FFFFFFFE
6-05		0	0	52FFFFFF	0	1	52FFFFFFD	5A0AAAAA 0	0	0	FFFFFFFE
6-06		0	0	543FFFFFF	0	1	543FFFFFFD	5682AAAA 0	0	0	FFFFFFFE
6-07		0	0	552FFFFFF	0	1	552FFFFFFD	55A0AAAA 0	0	0	FFFFFFFE
6-08		0	0	5548FFFF	0	1	5548FFFFD	55682AAA 0	0	0	FFFFFFFE
6-09		0	0	5552FFFF	0	1	5552FFFFD	555A0AAA 0	0	0	FFFFFFFE
6-10		0	0	55543FFF	0	1	55543FFFD	555682AA 0	0	0	FFFFFFFE
6-11		0	0	55552FFF	0	1	55552FFFD	5555A0AA 0	0	0	FFFFFFFE
6-12		0	0	55554BFF	0	1	55554BFFD	5555682A 0	0	0	FFFFFFFE
6-13		0	0	555552FF	0	1	555552FFD	55555A0A 0	0	0	FFFFFFFE
6-14		0	0	5555543F	0	1	5555543FD	55555682 0	0	0	FFFFFFFE
6-15		0	0	5555552F	0	1	5555552FD	555555A0 0	0	0	FFFFFFFE
6-16		0	0	5555554B	0	0	5555554B	55555568 0	0	0	FFFFFFFE
7		0	0	15555552	0	0	15555552	0555555A 0	0	0	FFFFFFFE
9		0	0	15555552	1	1	EAAAAAAD	0555555A 0	0	0	FFFFFFFE
10		0	0	15555552	1	1	0555555A	0555555A 0	0	0	FFFFFFFE

00021

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MN 0021

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		1	1	80000000	1	1	80000000	00000000 0	1	1	FFFFFFFF
6-00		1	1	80000000	0	0	00000000	80000000 0	1	1	FFFFFFFF
6-01		0	0	00000000	0	0	00000000	20000000 0	1	1	FFFFFFFF
6-02		0	0	00000000	0	0	00000000	08000000 0	1	1	FFFFFFFF
6-03		0	0	00000000	0	0	00000000	02000000 0	1	1	FFFFFFFF
6-04		0	0	00000000	0	0	00000000	00800000 0	1	1	FFFFFFFF
6-05		0	0	00000000	0	0	00000000	00200000 0	1	1	FFFFFFFF
6-06		0	0	00000000	0	0	00000000	00080000 0	1	1	FFFFFFFF
6-07		0	0	00000000	0	0	00000000	00020000 0	1	1	FFFFFFFF
6-08		0	0	00000000	0	0	00000000	00008000 0	1	1	FFFFFFFF
6-09		0	0	00000000	0	0	00000000	00002000 0	1	1	FFFFFFFF
6-10		0	0	00000000	0	0	00000000	00000800 0	1	1	FFFFFFFF
6-11		0	0	00000000	0	0	00000000	00000200 0	1	1	FFFFFFFF
6-12		0	0	00000000	0	0	00000000	00000080 0	1	1	FFFFFFFF
6-13		0	0	00000000	0	0	00000000	00000020 0	1	1	FFFFFFFF
6-14		0	0	00000000	0	0	00000000	00000008 0	1	1	FFFFFFFF
6-15		0	0	00000000	0	0	00000000	00000002 0	1	1	FFFFFFFF
6-16		0	0	00000000	1	1	FFFFFFFF	00000003 0	1	1	FFFFFFFF
7		1	1	FFFFFFFF	0	0	00000000	80000000 1	1	1	FFFFFFFF
9		0	0	00000000	1	1	FFFFFFFF	80000000 1	1	1	FFFFFFFF
10		0	0	00000000	1	1	80000000	80000000 1	1	1	FFFFFFFF

00022

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MN 0022

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		0	0	7FFFFFFFF	0	0	7FFFFFFFF	00000000 0	0	0	7FFFFFFFF
6-00		0	0	7FFFFFFFF	0	0	00000000	7FFFFFFFF 0	0	0	7FFFFFFFF
6-01		0	0	00000000	1	1	80000001	1FFFFFFFF 1	0	0	7FFFFFFFF
6-02		1	1	E0000000	1	1	E0000000	47FFFFFFFF 1	0	0	FFFFFFFF
6-03		1	1	F0000000	1	1	F8000000	11FFFFFFFF 1	0	0	FFFFFFFF
6-04		1	1	F0000000	1	1	FE000000	047FFFFFFFF 1	0	0	FFFFFFFF
6-05		1	1	FF000000	1	1	FF800000	011FFFFFFFF 1	0	0	FFFFFFFF
6-06		1	1	FF000000	1	1	FFE00000	0047FFFFFF 1	0	0	FFFFFFFF
6-07		1	1	FFF00000	1	1	FFF80000	0011FFFFFF 1	0	0	FFFFFFFF
6-08		1	1	FFE00000	1	1	FFE00000	00047FFF 1	0	0	FFFFFFFF
6-09		1	1	FFF80000	1	1	FFF80000	00011FFF 1	0	0	FFFFFFFF
6-10		1	1	FFF00000	1	1	FFF00000	000047FF 1	0	0	FFFFFFFF
6-11		1	1	FFF80000	1	1	FFF80000	000011FF 1	0	0	FFFFFFFF
6-12		1	1	FFF00000	1	1	FFF00000	0000047F 1	0	0	FFFFFFFF
6-13		1	1	FFF00000	1	1	FFF00000	0000011F 1	0	0	FFFFFFFF
6-14		1	1	FFFFFFFF	1	1	FFFFFFFF	00000047 1	0	0	FFFFFFFF
6-15		1	1	FFFFFFFF	1	1	FFFFFFFF	00000011 1	0	0	FFFFFFFF
6-16		1	1	FFFFFFFF	0	0	FFFFFFFF	00000004 0	0	0	FFFFFFFF
7		0	0	3FFFFFFFF	0	0	3FFFFFFFF	00000001 0	0	0	FFFFFFFF
9		0	0	3FFFFFFFF	0	0	3FFFFFFFF	00000001 0	0	0	FFFFFFFF
10		0	0	3FFFFFFFF	0	0	00000001	00000001 0	0	0	FFFFFFFF

00023

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0023

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	17P42		-TEST POINTS-		29L19	29L17	-TEST POINTS-		29L23	29L28	C(D)	
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	D000	D00		
3		1	1	80000000		1	1	80000000	00000000	0	1	1	80000000
6- 00		1	1	80000000		0	0	00000000	80000000	0	1	1	80000000
6- 01		0	0	00000000		0	0	00000000	20000000	0	1	1	00000000
6- 02		0	0	00000000		0	0	00000000	08000000	0	1	1	00000000
6- 03		0	0	00000000		0	0	00000000	02000000	0	1	1	00000000
6- 04		0	0	00000000		0	0	00000000	00800000	0	1	1	00000000
6- 05		0	0	00000000		0	0	00000000	00200000	0	1	1	00000000
6- 06		0	0	00000000		0	0	00000000	00080000	0	1	1	00000000
6- 07		0	0	00000000		0	0	00000000	00020000	0	1	1	00000000
6- 08		0	0	00000000		0	0	00000000	00008000	0	1	1	00000000
6- 09		0	0	00000000		0	0	00000000	00002000	0	1	1	00000000
6- 10		0	0	00000000		0	0	00000000	00000800	0	1	1	00000000
6- 11		0	0	00000000		0	0	00000000	00000200	0	1	1	00000000
6- 12		0	0	00000000		0	0	00000000	00000080	0	1	1	00000000
6- 13		0	0	00000000		0	0	00000000	00000020	0	1	1	00000000
6- 14		0	0	00000000		0	0	00000000	00000008	0	1	1	00000000
6- 15		0	0	00000000		0	0	00000000	00000002	0	1	1	00000000
6- 16		0	0	00000000		1	1	00000000	00000003	0	1	1	00000000
7		1	1	00000000		0	0	40000000	00000000	1	1	1	80000000
9		0	0	40000000		0	0	40000000	00000000	1	1	1	80000000
10		0	0	40000000		0	0	00000000	00000000	1	1	1	80000000

00024

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0024

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	17P42		-TEST POINTS-		29L19	29L17	-TEST POINTS-		29L23	29L28	C(D)	
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	D000	D00		
3		1	1	80000000		1	1	80000000	00000000	0	0	0	00000001
6- 00		1	1	80000000		0	0	00000000	80000000	0	0	0	00000001
6- 01		0	0	00000000		0	0	00000000	20000000	0	0	0	00000002
6- 02		0	0	00000000		0	0	00000000	08000000	0	0	0	00000002
6- 03		0	0	00000000		0	0	00000000	02000000	0	0	0	00000002
6- 04		0	0	00000000		0	0	00000000	00800000	0	0	0	00000002
6- 05		0	0	00000000		0	0	00000000	00200000	0	0	0	00000002
6- 06		0	0	00000000		0	0	00000000	00080000	0	0	0	00000002
6- 07		0	0	00000000		0	0	00000000	00020000	0	0	0	00000002
6- 08		0	0	00000000		0	0	00000000	00008000	0	0	0	00000002
6- 09		0	0	00000000		0	0	00000000	00002000	0	0	0	00000002
6- 10		0	0	00000000		0	0	00000000	00000800	0	0	0	00000002
6- 11		0	0	00000000		0	0	00000000	00000200	0	0	0	00000002
6- 12		0	0	00000000		0	0	00000000	00000080	0	0	0	00000002
6- 13		0	0	00000000		0	0	00000000	00000020	0	0	0	00000002
6- 14		0	0	00000000		0	0	00000000	00000008	0	0	0	00000002
6- 15		0	0	00000000		0	0	00000000	00000002	0	0	0	00000002
6- 16		0	0	00000000		1	1	00000000	00000003	0	0	0	00000002
7		1	1	00000000		1	1	FFFFFFF	80000000	1	0	0	00000001
9		1	1	FFFFFFF		0	0	00000000	80000000	1	0	0	00000001
10		1	1	FFFFFFF		1	1	80000000	80000000	1	0	0	00000001

00025

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0025

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLBCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(3)	BC31	29L23 0000	29L28 000	C(D)
3		0	0	00000001	0	0	00000001	00000000	0	1	1	80000000
6-00		0	0	00000001	0	0	00000000	00000001	0	1	1	80000000
6-01		0	0	00000000	1	1	80000000	00000000	0	1	1	80000000
6-02		1	1	E0000000	1	1	E0000000	00000000	0	1	1	00000000
6-03		1	1	F8000000	1	1	F8000000	00000000	0	1	1	00000000
6-04		1	1	FE000000	1	1	FE000000	00000000	0	1	1	00000000
6-05		1	1	FF000000	1	1	FF000000	00000000	0	1	1	00000000
6-06		1	1	FFE00000	1	1	FFE00000	00000000	0	1	1	00000000
6-07		1	1	FFF80000	1	1	FFF80000	00000000	0	1	1	00000000
6-08		1	1	FFE00000	1	1	FFE00000	00000000	0	1	1	00000000
6-09		1	1	FFF80000	1	1	FFF80000	00000000	0	1	1	00000000
6-10		1	1	FFFFE000	1	1	FFFFE000	00000000	0	1	1	00000000
6-11		1	1	FFFFF800	1	1	FFFFF800	00000000	0	1	1	00000000
6-12		1	1	FFFFFFE0	1	1	FFFFFFE0	00000000	0	1	1	00000000
6-13		1	1	FFFFFFF8	1	1	FFFFFFF8	00000000	0	1	1	00000000
6-14		1	1	FFFFFFFE	1	1	FFFFFFFE	00000000	0	1	1	00000000
6-15		1	1	FFFFFFF8	1	1	FFFFFFF8	00000000	0	1	1	00000000
6-16		1	1	FFFFFFFE	1	1	FFFFFFFE	00000000	0	1	1	00000000
7		1	1	FFFFFFF8	1	1	FFFFFFF8	80000000	0	1	1	00000000
9		1	1	FFFFFFF8	0	0	00000000	80000000	0	1	1	00000000
10		1	1	FFFFFFF8	1	1	80000000	80000000	0	1	1	00000000

00026

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0026

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLBCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(3)	BC31	29L23 0000	29L28 000	C(D)
3		1	1	FFFFFFF8	1	1	FFFFFFF8	00000000	0	1	1	FFFFFFF8
6-00		1	1	FFFFFFF8	0	0	00000000	FFFFFFF8	0	1	1	FFFFFFF8
6-01		0	0	00000000	0	0	00000001	3FFFFFFF	1	1	1	FFFFFFF8
6-02		0	0	00000000	0	0	00000000	4FFFFFFF	1	1	1	FFFFFFF8
6-03		0	0	00000000	0	0	00000000	13FFFFFF	1	1	1	FFFFFFF8
6-04		0	0	00000000	0	0	00000000	04FFFFFF	1	1	1	FFFFFFF8
6-05		0	0	00000000	0	0	00000000	013FFFFF	1	1	1	FFFFFFF8
6-06		0	0	00000000	0	0	00000000	004FFFFF	1	1	1	FFFFFFF8
6-07		0	0	00000000	0	0	00000000	0013FFFF	1	1	1	FFFFFFF8
6-08		0	0	00000000	0	0	00000000	0004FFFF	1	1	1	FFFFFFF8
6-09		0	0	00000000	0	0	00000000	00013FFF	1	1	1	FFFFFFF8
6-10		0	0	00000000	0	0	00000000	00004FFF	1	1	1	FFFFFFF8
6-11		0	0	00000000	0	0	00000000	000013FF	1	1	1	FFFFFFF8
6-12		0	0	00000000	0	0	00000000	000004FF	1	1	1	FFFFFFF8
6-13		0	0	00000000	0	0	00000000	0000013F	1	1	1	FFFFFFF8
6-14		0	0	00000000	0	0	00000000	0000004F	1	1	1	FFFFFFF8
6-15		0	0	00000000	0	0	00000000	00000013	1	1	1	FFFFFFF8
6-16		0	0	00000000	0	0	00000000	00000007	1	1	1	FFFFFFF8
7		0	0	00000000	0	0	00000000	00000001	1	1	1	FFFFFFF8
9		0	0	00000000	0	0	00000000	00000001	1	1	1	FFFFFFF8
10		0	0	00000000	0	0	00000001	00000001	1	1	1	FFFFFFF8

00027

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0027

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P0000

PHASE	CLOCK	17P42 -TEST POINTS-		29L19	29L17	-TEST POINTS-		29L23	29L28	C(D)	
		A000	A00	C(A)	S000	S00	C(S)	C(B) BC31	D000		D00
3		0	0	00000000	0	0	00000000	00000000	0	0	7FFFFFFF
6- 00		0	0	00000000	0	0	00000000	00000000	0	0	7FFFFFFF
6- 01		0	0	00000000	0	0	00000000	00000000	0	0	FFFFFFFE
6- 02		0	0	00000000	0	0	00000000	00000000	0	0	FFFFFFFD
6- 03		0	0	00000000	0	0	00000000	00000000	0	0	FFFFFFFC
6- 04		0	0	00000000	0	0	00000000	00000000	0	0	FFFFFFFB
6- 05		0	0	00000000	0	0	00000000	00000000	0	0	FFFFFFFA
6- 06		0	0	00000000	0	0	00000000	00000000	0	0	FFFFFFF9
6- 07		0	0	00000000	0	0	00000000	00000000	0	0	FFFFFFF8
6- 08		0	0	00000000	0	0	00000000	00000000	0	0	FFFFFFF7
6- 09		0	0	00000000	0	0	00000000	00000000	0	0	FFFFFFF6
6- 10		0	0	00000000	0	0	00000000	00000000	0	0	FFFFFFF5
6- 11		0	0	00000000	0	0	00000000	00000000	0	0	FFFFFFF4
6- 12		0	0	00000000	0	0	00000000	00000000	0	0	FFFFFFF3
6- 13		0	0	00000000	0	0	00000000	00000000	0	0	FFFFFFF2
6- 14		0	0	00000000	0	0	00000000	00000000	0	0	FFFFFFF1
6- 15		0	0	00000000	0	0	00000000	00000000	0	0	FFFFFFF0
6- 16		0	0	00000000	0	0	00000000	00000000	0	0	FFFFFFEF
7		0	0	00000000	0	0	00000000	00000000	0	0	FFFFFFEE
9		0	0	00000000	0	0	00000000	00000000	0	0	FFFFFFED
10		0	0	00000000	0	0	00000000	00000000	0	0	FFFFFFEC

00028

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0028

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P0000

PHASE	CLOCK	17P42 -TEST POINTS-		29L19	29L17	-TEST POINTS-		29L23	29L28	C(D)	
		A000	A00	C(A)	S000	S00	C(S)	C(B) BC31	D000		D00
3		0	0	00000000	0	0	00000000	00000000	0	0	00000000
6- 00		0	0	00000000	0	0	00000000	00000000	0	0	00000000
6- 01		0	0	00000000	0	0	00000000	00000000	0	0	00000000
6- 02		0	0	00000000	0	0	00000000	00000000	0	0	00000000
6- 03		0	0	00000000	0	0	00000000	00000000	0	0	00000000
6- 04		0	0	00000000	0	0	00000000	00000000	0	0	00000000
6- 05		0	0	00000000	0	0	00000000	00000000	0	0	00000000
6- 06		0	0	00000000	0	0	00000000	00000000	0	0	00000000
6- 07		0	0	00000000	0	0	00000000	00000000	0	0	00000000
6- 08		0	0	00000000	0	0	00000000	00000000	0	0	00000000
6- 09		0	0	00000000	0	0	00000000	00000000	0	0	00000000
6- 10		0	0	00000000	0	0	00000000	00000000	0	0	00000000
6- 11		0	0	00000000	0	0	00000000	00000000	0	0	00000000
6- 12		0	0	00000000	0	0	00000000	00000000	0	0	00000000
6- 13		0	0	00000000	0	0	00000000	00000000	0	0	00000000
6- 14		0	0	00000000	0	0	00000000	00000000	0	0	00000000
6- 15		0	0	00000000	0	0	00000000	00000000	0	0	00000000
6- 16		0	0	00000000	0	0	00000000	00000000	0	0	00000000
7		0	0	00000000	0	0	00000000	00000000	0	0	00000000
9		0	0	00000000	0	0	00000000	00000000	0	0	00000000
10		0	0	00000000	0	0	00000000	00000000	0	0	00000000

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0029

A000 DBES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPJT TB PRO00

PHASE	CL9CK	17P42 -TEST P9INTS-		29L19	29L17	-TEST P9INTS-			29L23	29L28	C(D)
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	S000	
3		0	0	31C3C1F0	0	0	31C3C1F0	00000000	0	0	79999999
6- 00		0	0	31C3C1F0	0	0	00000000	31C3C1F0	0	0	79999999
6- 01		0	0	00000000	0	0	00000000	0C70F07C	0	0	F3333332
6- 02		0	0	00000000	0	0	00000000	031C3C1F	0	0	F3333332
6- 03		0	0	00000000	1	1	86666667	00C70F07	1	0	79999999
6- 04		1	1	E1999999	1	1	E1999999	C031C3C1	1	0	F3333332
6- 05		1	1	F8666666	0	0	EB999999	700C70F0	0	0	F3333332
6- 06		0	0	3AE66666	0	0	3AE66666	1C031C3C	0	0	F3333332
6- 07		0	0	0E399999	0	0	0EB99999	8700C70F	0	0	F3333332
6- 08		0	0	03AE6666	1	1	8A14CC0D	61C031C3	1	0	79999999
6- 09		1	1	E2853333	1	1	E2853333	58700C70	1	0	F3333332
6- 10		1	1	F8A14CCC	0	0	723AE665	061C031C	0	0	79999999
6- 11		0	0	1C8EB999	0	0	1C8EB999	758700C7	0	0	F3333332
6- 12		0	0	0723AE66	1	1	8D8A14CD	5061C031	1	0	79999999
6- 13		1	1	E3628533	0	0	06953865	5758700C	0	0	F3333332
6- 14		0	0	35A56E19	0	0	35A56E19	5061C030	0	0	F3333332
6- 15		0	0	0D695886	1	1	93CF1ED	55758700	1	0	79999999
6- 16		1	1	E4F3F07B	0	0	5E8D8A14	555061C0	0	0	79999999
7		0	0	17A36285	0	0	17A36285	15575870	0	0	F3333332
9		0	0	17A36285	0	0	17A36285	15575870	0	0	F3333332
10		0	0	17A36285	0	0	15575870	15575870	0	0	F3333332

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0030

A000 DBES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPJT TB PRO00

PHASE	CL9CK	17P42 -TEST P9INTS-		29L19	29L17	-TEST P9INTS-			29L23	29L28	C(D)
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	S000	
3		1	1	82222222	1	1	82222222	00000000	0	0	59C61C18
6- 00		1	1	82222222	0	0	00000000	82222222	0	0	59C61C18
6- 01		0	0	00000000	0	0	B38C3830	20288888	0	0	338C3830
6- 02		0	0	0CE30E0C	0	0	2CE30E0C	08222222	0	0	338C3830
6- 03		0	0	038C0383	0	0	3EC4FB83	02088888	0	0	338C3830
6- 04		0	0	2FB13EEC	0	0	2FB13EEC	C0822222	0	0	338C3830
6- 05		0	0	08EC4F3B	0	0	3F787E5	30208888	0	0	338C3830
6- 06		0	0	2FDE21FA	0	0	2FDE21FA	CC082222	0	0	338C3830
6- 07		0	0	0BF7887E	0	0	3F83C0AE	33C20888	0	0	338C3830
6- 08		0	0	2FE0F02B	0	0	2FE0F02B	ACC08222	0	0	338C3830
6- 09		0	0	0BF870CA	0	0	3F84743A	E3302088	0	0	338C3830
6- 10		0	0	2FE11D0E	0	0	2FE11D0E	3ACC0822	0	0	338C3830
6- 11		0	0	0BF84743	0	0	3F847E73	AE330208	0	0	338C3830
6- 12		0	0	2FE11F0C	0	0	2FE11F0C	EBACC082	0	0	338C3830
6- 13		0	0	0BF84777	0	0	3F848027	3AEB3020	0	0	338C3830
6- 14		0	0	2FE12009	0	0	2FE12009	CEBACC08	0	0	338C3830
6- 15		0	0	0BF84802	0	0	0BF84802	73AE33C2	0	0	338C3830
6- 16		0	0	02FE1200	0	0	368A4A30	9CEBACC3	0	0	338C3830
7		0	0	030C7674	1	1	030C7674	273AEB30	1	0	59C61C18
9		1	1	030C7674	1	1	030C7674	273AEB30	1	0	59C61C18
10		1	1	030C7674	0	0	273AEB30	273AEB30	1	0	59C61C18

00031

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0031

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		0	0	021871E7	0	0	021871E7	00000000 0	1	1	87777777
6- 00		0	0	021871E7	0	0	00000000	021871E7 0	1	1	87777777
6- 01		0	0	00000000	0	0	78888889	00861C79 1	1	1	87777777
6- 02		0	0	1E222222	1	1	2D111110	4021871E 0	1	1	0EEEEEEE
6- 03		1	1	CB444444	1	0	DA333332	100861C7 0	1	1	0EEEEEEE
6- 04		1	1	3A800000	0	0	2F155555	84021871 1	1	1	87777777
6- 05		0	0	0B055555	1	1	1A344443	6100861C 0	1	1	0EEEEEEE
6- 06		1	1	C6AD1110	1	1	C6AD1110	D8402187 0	1	1	0EEEEEEE
6- 07		1	1	F1AB4444	0	0	6A330000	36100861 1	1	1	87777777
6- 08		0	0	1A8CF333	1	1	2973E221	4D840218 0	1	1	0EEEEEEE
6- 09		1	1	CA5EF888	1	1	CA5EF888	53610086 0	1	1	0EEEEEEE
6- 10		1	1	F297BE22	1	1	0186AD10	14D84021 0	1	1	0EEEEEEE
6- 11		1	1	C061AB44	1	1	47D9223B	05361008 0	1	1	87777777
6- 12		1	1	D1F648AE	1	1	D1F648AE	C14D8402 0	1	1	0EEEEEEE
6- 13		1	1	F47D922B	1	1	036C8119	90536100 0	1	1	0EEEEEEE
6- 14		1	1	C0DB2046	1	1	C0DB2046	6C14D840 0	1	1	0EEEEEEE
6- 15		1	1	FC36C811	1	1	FC36C811	9B053610 0	1	1	0EEEEEEE
6- 16		1	1	FC0D8204	1	1	FC0D8204	66C14D84 0	1	1	0EEEEEEE
7		1	1	FF036C81	1	1	FF036C81	19B05361 0	1	1	0EEEEEEE
9		1	1	FF036C81	1	1	FF036C81	19B05361 0	1	1	0EEEEEEE
10		1	1	FF036C81	0	0	19B05361	19B05361 0	1	1	0EEEEEEE

00032

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0032

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		1	1	AAAAAAAA	1	1	AAAAAAAA	00000000 0	1	1	FC7CF1CC
6- 00		1	1	AAAAAAAA	0	0	00000000	AAAAAAAA 0	1	1	FC7CF1CC
6- 01		0	0	00000000	1	1	F8F9E398	2AAAAAAAA 0	1	1	F8F9E398
6- 02		1	1	FE3E78E6	1	1	F7385C7E	0AAAAAAAA 0	1	1	F8F9E398
6- 03		1	1	FDCE171F	1	1	F6C7FAB7	82AAAAAAAA 0	1	1	F8F9E398
6- 04		1	1	FD31FEAD	1	1	F6A3E245	E0AAAAAAAA 0	1	1	F8F9E398
6- 05		1	1	FDAAF891	1	1	F6A4DC29	782AAAAAAAA 0	1	1	F8F9E398
6- 06		1	1	FD99370A	1	1	F6A31AA2	5E0AAAAA 0	1	1	F8F9E398
6- 07		1	1	FD8C6A8	1	1	F6A2AA40	9782AAAA 0	1	1	F8F9E398
6- 08		1	1	FD8AA80	1	1	F6A28E28	25E0AAAA 0	1	1	F8F9E398
6- 09		1	1	FD8A38A	1	1	F6A28722	09782AAA 0	1	1	F8F9E398
6- 10		1	1	FD8A1C8	1	1	F6A28560	825E0AAA 0	1	1	F8F9E398
6- 11		1	1	FD8A158	1	1	F6A284F0	209782AA 0	1	1	F8F9E398
6- 12		1	1	FD8A13C	1	1	F6A284D4	0825E0AA 0	1	1	F8F9E398
6- 13		1	1	FD8A135	1	1	F6A284CD	0209782A 0	1	1	F8F9E398
6- 14		1	1	FD8A133	1	1	F6A284CB	40825E0A 0	1	1	F8F9E398
6- 15		1	1	FD8A132	1	1	F6A284CA	D0209782 0	1	1	F8F9E398
6- 16		1	1	FD8A132	1	1	F6A284CA	B40825E3 0	1	1	F8F9E398
7		1	1	FD8A132	0	0	012BAF66	AD020978 1	1	1	FC7CF1CC
9		0	0	012BAF66	1	1	FED45039	ADC20978 1	1	1	FC7CF1CC
10		0	0	012BAF66	1	1	AD020978	AD020978 1	1	1	FC7CF1CC

00033

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0033

ADD DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ADD INPUT TO PROO

PHASE	CLOCK	ADD	ADD	1742 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 0000	29L28 000	C(D)
3		1	1	00883070	1	1	00583070	00000000 0	0	0	15555555
6- 00		1	1	00883070	0	0	00000000	00583070 0	0	0	15555555
6- 01		0	0	00000000	0	0	00000000	3356CF10 0	0	0	2AAAAAAA
6- 02		0	0	00000000	0	0	00000000	00058307 0	0	0	2AAAAAAA
6- 03		0	0	00000000	1	1	EAAAAAA3	03356CF1 1	0	0	15555555
6- 04		1	1	FAAAAAAA	0	0	25555554	00058307 0	0	0	2AAAAAAA
6- 05		0	0	09555555	0	0	09555555	303356CF 0	0	0	2AAAAAAA
6- 06		0	0	02555555	1	1	E0000000	40000583 1	0	0	15555555
6- 07		1	1	FB400000	1	1	FB400000	1303356C 1	0	0	2AAAAAAA
6- 08		1	1	FED00000	0	0	14255555	04000058 0	0	0	15555555
6- 09		0	0	05095555	1	1	EFB40000	41303356 1	0	0	15555555
6- 10		1	1	FED00000	1	1	E697AAA3	10400005 1	0	0	15555555
6- 11		1	1	F9A5EAAA	0	0	24509554	C4130335 0	0	0	2AAAAAAA
6- 12		0	0	09142555	0	0	1E697AAA	31040000 0	0	0	15555555
6- 13		0	0	079A5EAA	0	0	1CEF33FF	8C413033 0	0	0	15555555
6- 14		0	0	0738E0FF	1	1	F1E697AA	E3104000 1	0	0	15555555
6- 15		1	1	FC79A5EA	0	0	11CE783F	B8C41303 0	0	0	15555555
6- 16		0	0	04733ECF	1	1	EF1E697A	EE310403 1	0	0	15555555
7		1	1	FBC79A5E	1	1	FBC79A5E	B88C4130 1	0	0	2AAAAAAA
9		1	1	FBC79A5E	0	0	043865A1	B88C4130 1	0	0	2AAAAAAA
10		1	1	FBC79A5E	1	1	B88C4130	B88C4130 1	0	0	2AAAAAAA

00034

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0034

ADD DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ADD INPUT TO PROO

PHASE	CLOCK	ADD	ADD	1742 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 0000	29L28 000	C(D)
3		0	0	11111111	0	0	11111111	00000000 0	0	0	03111111
6- 00		0	0	11111111	0	0	00000000	11111111 0	0	0	03111111
6- 01		0	0	00000000	0	0	03111111	04444444 0	0	0	03111111
6- 02		0	0	00044444	0	0	00044444	41111111 0	0	0	06222222
6- 03		0	0	00311111	0	0	03422222	10444444 0	0	0	03111111
6- 04		0	0	00008888	0	0	00008888	84111111 0	0	0	06222222
6- 05		0	0	00342222	0	0	03453333	21044444 0	0	0	03111111
6- 06		0	0	00014000	0	0	00014000	08411111 0	0	0	06222222
6- 07		0	0	00345333	0	0	03456444	32104444 0	0	0	03111111
6- 08		0	0	00015911	0	0	00015911	0C841111 0	0	0	06222222
6- 09		0	0	00345644	0	0	03456755	43210444 0	0	0	03111111
6- 10		0	0	00015905	0	0	00015905	50C84111 0	0	0	06222222
6- 11		0	0	00345675	0	0	03456786	54321044 0	0	0	03111111
6- 12		0	0	000159E1	0	0	000159E1	950C8411 0	0	0	06222222
6- 13		0	0	00345678	0	0	03456789	65432104 0	0	0	03111111
6- 14		0	0	000159E2	0	0	000159E2	5950C841 0	0	0	06222222
6- 15		0	0	00345678	0	0	03456789	96543210 0	0	0	03111111
6- 16		0	0	000159E2	0	0	000159E2	65950C84 0	0	0	06222222
7		0	0	00345678	0	0	00345678	99654321 0	0	0	06222222
9		0	0	00345678	1	1	FBC3A987	99654321 0	0	0	06222222
10		0	0	00345678	1	1	99654321	99654321 0	0	0	06222222

00035

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0035

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	17P42 *TEST POINTS*			29L19	29L17	*TEST POINTS*			29L23	29L28	C(D)
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	0000	000	
3		1	1	9696969D	1	1	9696969D	00000000	0	0	66666666	
6-00		1	1	9696969D	0	0	00000000	9696969D	0	0	66666666	
6-01		0	0	00000000	0	0	66666666	25A5A5A7	0	0	66666666	
6-02		0	0	19999999	1	1	B3333333	89696969	1	0	66666666	
6-03		1	1	E0000000	0	0	B9999998	E25A5A5A	0	0	00000000	
6-04		0	0	2E666666	0	0	FB333332	38969696	0	0	00000000	
6-05		0	0	3E000000	0	1	0B999998	8E25A5A5	0	0	00000000	
6-06		0	0	42E66666	0	0	A9400000	23896969	0	0	66666666	
6-07		0	0	2A533333	0	0	90B99999	08E25A5A	0	0	66666666	
6-08		0	0	242E6666	0	0	F0FB3332	42389696	0	0	00000000	
6-09		0	0	3C3E0000	0	1	090B9998	908E25A5	0	0	00000000	
6-10		0	0	4242E666	0	0	A8A94000	24238969	0	0	66666666	
6-11		0	0	2A2A5333	0	0	9090B999	0908E25A	0	0	66666666	
6-12		0	0	24242E66	0	0	F0F0FB32	42423896	0	0	00000000	
6-13		0	0	3C3C3E00	0	1	09090B98	90908E25	0	0	00000000	
6-14		0	0	424242E6	0	0	A8A8A94C	24242389	0	0	66666666	
6-15		0	0	2A2A2A53	0	0	909090B9	090908E2	0	0	66666666	
6-16		0	0	242424E6	0	0	F0F0FOFA	42424238	0	0	00000000	
7		0	0	3C3C3C3E	1	1	D5D5D5D8	9090908E	1	0	66666666	
9		1	1	25D5D5D8	0	0	2A2A2A27	9090908E	1	0	66666666	
10		1	1	25D5D5D8	1	1	9090908E	9090908E	1	0	66666666	

00036

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0036

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	17P42 *TEST POINTS*			29L19	29L17	*TEST POINTS*			29L23	29L28	C(D)
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	0000	000	
3		1	1	89999999	1	1	89999999	00000000	0	0	44444444	
6-00		1	1	89999999	0	0	00000000	89999999	0	0	44444444	
6-01		0	0	00000000	0	0	44444444	22666666	0	0	44444444	
6-02		0	0	11111111	0	0	99999999	08999999	0	0	88888888	
6-03		0	0	26666666	0	0	6AAAAAAA	42266666	0	0	44444444	
6-04		0	0	1AAAAAAA	0	0	A3333332	90899999	0	0	88888888	
6-05		0	0	28000000	0	0	6D111110	A4226666	0	0	44444444	
6-06		0	0	13444444	0	0	A3000000	29089999	0	0	88888888	
6-07		0	0	28F33333	0	0	6D377777	0A422666	0	0	44444444	
6-08		0	0	13400000	0	0	A3D66665	C2908999	0	0	88888888	
6-09		0	0	28F59999	0	0	6D390000	70A42266	0	0	44444444	
6-10		0	0	134E7777	0	0	A3D6FFFF	5C290899	0	0	88888888	
6-11		0	0	28F5BFFF	0	0	6D3A0443	070A4226	0	0	44444444	
6-12		0	0	134E8110	0	0	A3D70998	F5C29089	0	0	88888888	
6-13		0	0	28F5C266	0	0	6D3A06AA	3D70A422	0	0	44444444	
6-14		0	0	134E81AA	0	0	A3D70A32	8F5C2908	0	0	88888888	
6-15		0	0	28F5C28C	0	0	28F5C28C	A3D70A42	0	0	88888888	
6-16		0	0	0A3D70A3	0	0	92C5F92B	28F5C293	0	0	88888888	
7		0	0	24317E4A	1	1	E06D3A06	CA3D70A4	1	0	44444444	
9		1	1	E06D3A06	0	0	1F92C5F9	CA3D70A4	1	0	44444444	
10		1	1	E06D3A06	1	1	CA3D70A4	CA3D70A4	1	0	44444444	

00037

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0037

A000 DBES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLCK	A000	A00	17P42 -TEST P0INTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST P0INTS- C(B) BC31	29L23 D000	29L28 D00	C(D)	
3		1	1	33333333	1	1	88888888	00000000	0	1	1	E1C4C737
6-00		1	1	33333333	0	0	00000000	88888888	0	1	1	E1C4C737
6-01		0	0	00000000	0	0	1E3338C9	2E888888	1	1	1	E1C4C737
6-02		0	0	078E8E32	0	0	25CA06F3	48888888	1	1	1	E1C4C737
6-03		0	0	0972813E	0	0	0972813E	02E88888	1	1	1	C3898E6E
6-04		0	0	025CA06F	0	0	20970938	84888888	1	1	1	E1C4C737
6-05		0	0	0825F64E	0	0	0825F64E	202E8888	1	1	1	C3898E6E
6-06		0	0	02097093	0	0	2044865C	88488888	1	1	1	E1C4C737
6-07		0	0	08112097	0	0	08112097	2202E888	1	1	1	C3898E6E
6-08		0	0	0204865C	0	0	203F842E	C8848888	1	1	1	E1C4C737
6-09		0	0	080FE103	0	0	080FE103	82202E88	1	1	1	C3898E6E
6-10		0	0	0203F842	0	0	203F3103	EC884888	1	1	1	E1C4C737
6-11		0	0	080FCC42	0	0	080FCC42	F32202EE	1	1	1	C3898E6E
6-12		0	0	0203F310	0	0	203F28D9	8EC88488	1	1	1	E1C4C737
6-13		0	0	080FCAF6	0	0	080FCAF6	6F82202E	1	1	1	C3898E6E
6-14		0	0	0203F28D	0	0	203F2886	93EC8848	1	1	1	E1C4C737
6-15		0	0	080FCAE1	0	0	080FCAE1	A6FB2202	1	1	1	C3898E6E
6-16		0	0	0203F288	0	0	203F2881	698EC887	1	1	1	E1C4C737
7		0	0	080FCAE0	0	0	080FCAE0	5A6FB22D	1	1	1	C3898E6E
9		0	0	080FCAE0	0	0	080FCAE0	5A6FB22D	1	1	1	C3898E6E
10		0	0	080FCAE0	0	0	5A6FB22D	5A6FB22D	1	1	1	C3898E6E

00038

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0038

A000 DBES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLCK	A000	A00	17P42 -TEST P0INTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST P0INTS- C(B) BC31	29L23 D000	29L28 D00	C(D)	
3		1	1	FFFFFFFF	1	1	FFFFFFFF	00000000	0	1	1	80000000
6-00		1	1	FFFFFFFF	0	0	00000000	FFFFFFFF	0	1	1	80000000
6-01		0	0	00000000	0	0	80000000	3FFFFFFFF	1	1	1	80000000
6-02		0	0	00000000	0	0	20000000	0FFFFFFFF	1	1	1	00000000
6-03		0	0	08000000	0	0	08000000	03FFFFFFFF	1	1	1	00000000
6-04		0	0	02000000	0	0	02000000	00FFFFFFFF	1	1	1	00000000
6-05		0	0	00800000	0	0	00800000	003FFFFFFFF	1	1	1	00000000
6-06		0	0	00200000	0	0	00200000	000FFFFFFFF	1	1	1	00000000
6-07		0	0	00080000	0	0	00080000	0003FFFFFF	1	1	1	00000000
6-08		0	0	00020000	0	0	00020000	0000FFFFFF	1	1	1	00000000
6-09		0	0	00008000	0	0	00008000	00003FFF	1	1	1	00000000
6-10		0	0	00002000	0	0	00002000	00000FFF	1	1	1	00000000
6-11		0	0	00000800	0	0	00000800	000003FF	1	1	1	00000000
6-12		0	0	00000200	0	0	00000200	000000FF	1	1	1	00000000
6-13		0	0	00000080	0	0	00000080	0000003F	1	1	1	00000000
6-14		0	0	00000020	0	0	00000020	0000000F	1	1	1	00000000
6-15		0	0	00000008	0	0	00000008	00000003	1	1	1	00000000
6-16		0	0	00000002	0	0	00000002	00000000	1	1	1	00000000
7		0	0	00000000	0	0	00000000	80000000	1	1	1	00000000
9		0	0	00000000	1	1	FFFFFFFF	80000000	1	1	1	00000000
10		0	0	00000000	1	1	80000000	80000000	1	1	1	00000000

00039

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0039

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CL9CK	17P42 -TEST POINTS-		29L19		29L17		-TEST POINTS-			29L23		29L28	
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	0000	000	C(D)		
3		0	0	01234567	0	0	01234567	00000000	0	0	0	0	42468ACE	
6-00		0	0	01234567	0	0	00000000	01234567	0	0	0	0	42468ACE	
6-01		0	0	00000000	1	1	80897532	00480159	1	0	0	0	42468ACE	
6-02		1	1	EF6E5D4C	0	0	73F872E8	80123456	0	0	0	0	848D159C	
6-03		0	0	1CFEDCBA	0	0	A18B7256	20048D15	0	0	0	0	848D159C	
6-04		0	0	2862FC95	0	0	6AA98763	88012345	0	0	0	0	42468ACE	
6-05		0	0	1AAA61D8	0	0	5CF0ECA6	E20048D1	0	0	0	0	42468ACE	
6-06		0	0	173C3B29	0	0	5982C5F7	88801234	0	0	0	0	42468ACE	
6-07		0	0	1660B17D	0	0	1660B17D	EE20048D	0	0	0	0	848D159C	
6-08		0	0	05982C5F	0	0	47DEB72D	73880123	0	0	0	0	42468ACE	
6-09		0	0	11F7ADCB	1	1	CFB122FD	5EE20048	1	0	0	0	42468ACE	
6-10		1	1	F3EC48BF	0	0	3632D38D	57888012	0	0	0	0	42468ACE	
6-11		0	0	0D8CB4E3	0	0	9219CA7F	55EE2004	0	0	0	0	848D159C	
6-12		0	0	2486729F	0	0	2486729F	D5788801	0	0	0	0	848D159C	
6-13		0	0	09219CA7	0	0	4B682775	F55EE200	0	0	0	0	42468ACE	
6-14		0	0	12DA09DD	0	0	12DA09DD	7D578880	0	0	0	0	848D159C	
6-15		0	0	04868277	0	0	04868277	5F55EE20	0	0	0	0	848D159C	
6-16		0	0	012DA09D	0	0	012DA09D	07D57888	0	0	0	0	848D159C	
7		0	0	004B6827	0	0	004B6827	75F55EE2	0	0	0	0	848D159C	
9		0	0	004B6827	0	0	004B6827	75F55EE2	0	0	0	0	848D159C	
10		0	0	004B6827	0	0	75F55EE2	75F55EE2	0	0	0	0	848D159C	

00040

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0040

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CL9CK	17P42 -TEST POINTS-		29L19		29L17		-TEST POINTS-			29L23		29L28	
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	0000	000	C(D)		
3		1	1	89ABCDEF	1	1	89ABCDEF	00000000	0	0	0	0	258BCDEF	
6-00		1	1	89ABCDEF	0	0	00000000	89ABCDEF	0	0	0	0	258BCDEF	
6-01		0	0	00000000	1	1	DA743211	226AF37B	1	0	0	0	258BCDEF	
6-02		1	1	F69DCC84	1	1	F69DCC84	489ABCDE	1	0	0	0	43179BDE	
6-03		1	1	FDA74321	1	1	08137532	1226AF37	1	0	0	0	258BCDEF	
6-04		1	1	F6C6D34C	1	1	F606D34C	8489ABCD	1	0	0	0	43179BDE	
6-05		1	1	FD41B753	0	0	48995331	21226AF3	0	0	0	0	43179BDE	
6-06		0	0	122654CC	1	1	EC9A86DD	48489ABC	1	0	0	0	258BCDEF	
6-07		1	1	F326A137	0	0	20B26FA6	521226AF	0	0	0	0	258BCDEF	
6-08		0	0	082C9BE9	1	1	E2A0CCFA	948489AB	1	0	0	0	258BCDEF	
6-09		1	1	F8A8337E	1	1	F8A8337E	A521226A	1	0	0	0	43179BDE	
6-10		1	1	FE2A0CDF	1	1	089E3EFO	A948489A	1	0	0	0	258BCDEF	
6-11		1	1	F6278F3C	1	1	D093C1CD	2A521226	1	0	0	0	258BCDEF	
6-12		1	1	F426F073	1	1	CE932284	4A948489	1	0	0	0	258BCDEF	
6-13		1	1	F3A6C8A1	0	0	3E3E647F	12A52122	0	0	0	0	43179BDE	
6-14		0	0	0FAF991F	0	0	5AC734FD	C4A94848	0	0	0	0	43179BDE	
6-15		0	0	1631CD3F	0	0	1631CD3F	712A5212	0	0	0	0	43179BDE	
6-16		0	0	05AC734F	0	0	50C4CF2D	0C4A9487	0	0	0	0	43179BDE	
7		0	0	143103CB	1	1	EEA535DC	7712A521	1	0	0	0	258BCDEF	
9		1	1	EEA535DC	1	1	EEA535DC	7712A521	1	0	0	0	258BCDEF	
10		1	1	EEA535DC	0	0	7712A521	7712A521	1	0	0	0	258BCDEF	

00041

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0041

A000 DRES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	17P42 -TEST POINTS-		29L19		29L17		-TEST POINTS-			29L23		29L28		C(D)
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	D000	D00				
3		0	0	2588E147	0	0	2588E147	00000000	0	0	0	0	0	0	56AE37BF
6- 00		0	0	2588E147	0	0	00000000	2588E147	0	0	0	0	0	0	56AE37BF
6- 01		0	0	00000000	1	1	A951C841	0962F851	1	0	0	0	0	0	56AE37BF
6- 02		1	1	E4547210	0	0	9780E18E	42588E14	0	0	0	0	0	0	AD5C6F7E
6- 03		0	0	25EC3863	0	0	25EC3863	90962F85	0	0	0	0	0	0	AD5C6F7E
6- 04		0	0	09730E18	0	0	602945D7	E42588E1	0	0	0	0	0	0	56AE37BF
6- 05		0	0	180A5175	0	0	6E888934	F90962F8	0	0	0	0	0	0	56AE37BF
6- 06		0	0	13AE224D	0	0	1BAE224D	3E42588E	0	0	0	0	0	0	AD5C6F7E
6- 07		0	0	06EB8893	0	0	B447F811	4F90962F	0	0	0	0	0	0	AD5C6F7E
6- 08		0	0	2D11FE04	1	1	0663C645	53E42588	1	0	0	0	0	0	56AE37BF
6- 09		1	1	F598F191	1	1	F598F191	54F90962	1	0	0	0	0	0	AD5C6F7E
6- 10		1	1	F0663C64	1	1	A68804A5	553E4258	1	0	0	0	0	0	56AE37BF
6- 11		1	1	E9AE0129	0	0	405C38E8	554F9096	0	0	0	0	0	0	56AE37BF
6- 12		0	0	10170E3A	0	0	BD737D88	1553E425	0	0	0	0	0	0	AD5C6F7E
6- 13		0	0	2F5C0F6E	0	0	860B172D	0554F909	0	0	0	0	0	0	56AE37BF
6- 14		0	0	F182C5CB	0	0	7830F08A	41553E42	0	0	0	0	0	0	56AE37BF
6- 15		0	0	1E0C3F62	0	0	C868AE00	00554F90	0	0	0	0	0	0	AD5C6F7E
6- 16		0	0	32DA2B38	0	0	32DA2B38	241553E4	0	0	0	0	0	0	AD5C6F7E
7		0	0	0C368AEE	0	0	0C368AEE	090554F9	0	0	0	0	0	0	AD5C6F7E
9		0	0	0C368AEE	0	0	0C368AEE	090554F9	0	0	0	0	0	0	AD5C6F7E
10		0	0	0C368AEE	0	0	090554F9	090554F9	0	0	0	0	0	0	AD5C6F7E

00042

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0042

A000 DRES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	17P42 -TEST POINTS-		29L19		29L17		-TEST POINTS-			29L23		29L28		C(D)
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	D000	D00				
3		1	1	A00369CF	1	1	A00369CF	00000000	0	0	1	1	1	1	0F1357BD
6- 00		1	1	A00369CF	0	0	00000000	A00369CF	0	0	1	1	1	1	0F1357BD
6- 01		0	0	00000000	0	0	20EC4843	2B40DA73	1	0	1	1	1	1	0F1357BD
6- 02		0	0	08832A10	0	0	08332A10	CA00369C	1	0	1	1	1	1	3E26AF7A
6- 03		0	0	020EC484	1	1	E1222241	32B40DA7	0	0	1	1	1	1	0F1357BD
6- 04		1	1	F8488890	0	0	193530D3	4CAD0369	1	0	1	1	1	1	0F1357BD
6- 05		0	0	064D4C34	1	1	C473F8AE	032B40DA	0	0	1	1	1	1	3E26AF7A
6- 06		1	1	F11CFEEB	1	1	AF43AE65	34CAD036	0	0	1	1	1	1	3E26AF7A
6- 07		1	1	F3D0E899	1	1	A9F79B13	5D32B4CD	0	0	1	1	1	1	3E26AF7A
6- 08		1	1	EA7DE6C4	1	1	C9913E81	0B4CAD03	0	0	1	1	1	1	0F1357BD
6- 09		1	1	F2644FA0	0	0	1350F7E3	76D32B40	1	0	1	1	1	1	0F1357BD
6- 10		0	0	04D43D78	1	1	E3E79535	0D84CAD0	0	0	1	1	1	1	0F1357BD
6- 11		1	1	F8F9E56D	1	1	F8F9E56D	776D32B4	0	0	1	1	1	1	3E26AF7A
6- 12		1	1	FEE7955B	1	1	FE3E7953	5DDB4CAD	0	0	1	1	1	1	3E26AF7A
6- 13		1	1	FEE7955B	1	1	DEA2F613	0776D32B	0	0	1	1	1	1	0F1357BD
6- 14		1	1	F7A83D84	0	0	189545C7	F5DDB4CA	1	0	1	1	1	1	0F1357BD
6- 15		0	0	06P55971	0	0	2712C1B4	F0776D32	1	0	1	1	1	1	0F1357BD
6- 16		0	0	09C4806D	0	0	2AB1F830	3F5DDB4F	1	0	1	1	1	1	0F1357BD
7		0	0	0AAC4A2C	0	0	0AAC4A2C	0FD776D3	1	0	1	1	1	1	3E26AF7A
9		0	0	0AAC4A2C	0	0	0AAC4A2C	0FD776D3	1	0	1	1	1	1	3E26AF7A
10		0	0	0AAC4A2C	0	0	0FD776D3	0FD776D3	1	0	1	1	1	1	3E26AF7A

00043

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MN 0043

A000 D8ES N9T ACTUALLY EXSIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPJT T8 P000

PHASE	CLCK	17P42 -TEST P8INTS-		29L19	29L17	-TEST P8INTS-			29L23	29L28	C(D)	
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	D000		D00
3		1	1	F135798D	1	1	F135798D	00000000	0	1	1	F2468ACE
6- 00		1	1	F135798D	0	0	00000000	F135798D	0	1	1	F2468ACE
6- 01		0	0	00000000	1	1	F2468ACE	3C4D5E6F	0	1	1	F2468ACE
6- 02		1	1	FC91A293	0	0	0A4B17E5	8F13579B	1	1	1	F2468ACE
6- 03		0	0	0292C5F9	0	0	0292C5F9	63C4D5E6	1	1	1	E48D159C
6- 04		0	0	00A4B17E	0	0	0E5E2680	58F13579	1	1	1	F2468ACE
6- 05		0	0	039789AC	1	1	E8249F48	163C4D5E	0	1	1	E48D159C
6- 06		1	1	FA0927D2	1	1	DE963D6E	058F1357	0	1	1	E48D159C
6- 07		1	1	F7A58F58	0	0	055F048D	8163C4D5	1	1	1	F2468ACE
6- 08		0	0	0157C123	1	1	E5E4D68F	6058F135	0	1	1	E48D159C
6- 09		1	1	F97935AF	1	1	E8BF007D	08163C4D	0	1	1	F2468ACE
6- 10		1	1	FAE0F01F	1	1	ED367AED	76058F13	0	1	1	F2468ACE
6- 11		1	1	F84D9E8B	0	0	090713ED	5D8163C4	1	1	1	F2468ACE
6- 12		0	0	0241C4FB	1	1	F4884FC9	576058F1	0	1	1	F2468ACE
6- 13		1	1	FD2213F2	1	1	EF689ECC	55D8163C	0	1	1	F2468ACE
6- 14		1	1	F3DA2730	1	1	F8DA2730	1576058F	0	1	1	E48D159C
6- 15		1	1	FEF689EC	0	0	0CAFFF1E	055D8163	1	1	1	F2468ACE
6- 16		0	0	032BFFC7	0	0	032BFFC7	81576058	1	1	1	E48D159C
7		0	0	00CAFFF1	0	0	00CAFFF1	E055D816	1	1	1	E48D159C
9		0	0	00CAFFF1	1	1	FF35000E	E055D816	1	1	1	E48D159C
10		0	0	00CAFFF1	1	1	E055D816	E055D816	1	1	1	E48D159C

00044

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MN 0044

A000 D8ES N9T ACTUALLY EXSIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPJT T8 P000

PHASE	CLCK	17P42 -TEST P8INTS-		29L19	29L17	-TEST P8INTS-			29L23	29L28	C(D)	
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	D000		D00
3		1	1	E26AE38D	1	1	E26AE38D	00000000	0	1	1	F147AD03
6- 00		1	1	E26AE38D	0	0	00000000	E26AE38D	0	1	1	F147AD03
6- 01		0	0	00000000	1	1	F147AD03	389A38E3	0	1	1	F147AD03
6- 02		1	1	FC51EB40	0	0	080A3E3D	CE26AE38	1	1	1	F147AD03
6- 03		0	0	02028F8F	1	1	F40A3C92	7389A38E	0	1	1	F147AD03
6- 04		1	1	FD028F8F	1	1	DF91E92A	9CE26AE3	0	1	1	E28F5A06
6- 05		1	1	F7E47A4A	0	0	069CCD47	A7389A88	1	1	1	F147AD03
6- 06		0	0	01473351	1	1	F2EE0054	E9CE26AE	0	1	1	F147AD03
6- 07		1	1	FC388815	1	1	DF431213	3A7389AB	0	1	1	E28F5A06
6- 08		1	1	F7D2C486	0	0	06831783	CE9CE26A	1	1	1	F147AD03
6- 09		0	0	01A2C5E0	0	0	105B18DD	F3A7389A	1	1	1	F147AD03
6- 10		0	0	0416C637	0	0	12CF1924	7CE9CE26	1	1	1	F147AD03
6- 11		0	0	0493C64D	0	0	136C194A	1F3A7389	1	1	1	F147AD03
6- 12		0	0	04D80652	1	1	E76A6058	87CE9CE2	0	1	1	E28F5A06
6- 13		1	1	F9DA9816	1	1	DC69F21C	21F3A738	0	1	1	E28F5A06
6- 14		1	1	F71A7C87	1	1	F71A7C87	087CE9CE	0	1	1	E28F5A06
6- 15		1	1	FD069F21	1	1	E055F927	C21F3A73	0	1	1	E28F5A06
6- 16		1	1	F8157E49	0	0	06CD146	F087CE9F	1	1	1	F147AD03
7		0	0	01337451	0	0	01337451	3C21F3A7	1	1	1	E28F5A06
9		0	0	01337451	1	1	FE4C8BAE	3C21F3A7	1	1	1	E28F5A06
10		0	0	01337451	1	1	BC21F3A7	3C21F3A7	1	1	1	E28F5A06

00045

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MN 0045

ADD DRES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ADD INPUT TO PROO

PHASE	CLOCK	17P42 -TEST POINTS-			29L19 29L17			-TEST POINTS-			29L23 29L28		C(D)
		ADD	ADD	C(A)	S000	S00	C(S)	C(B)	BC31	D000	D00		
3		0	0	27C16B05	0	0	27C16B05	00000000	0	0	0	0	148BF37B
6- 00		0	0	27C16B05	0	0	00000000	27C16B05	0	0	0	0	148BF37B
6- 01		0	0	00000000	0	0	148BF37B	09F05AC1	0	0	0	0	148BF37B
6- 02		0	0	0522FCDE	0	0	19AEF059	C27C16B0	0	0	0	0	148BF37B
6- 03		0	0	06633C16	0	0	06633C16	709F05AC	0	0	0	0	291E6F6
6- 04		0	0	019AEF05	0	0	019AEF05	9C27C16B	0	0	0	0	291E6F6
6- 05		0	0	006633C1	1	1	E8DAC846	6709F05A	1	0	0	0	148BF37B
6- 06		1	1	FAF63211	1	1	E66A3E96	99C27C16	1	0	0	0	148BF37B
6- 07		1	1	F99AAFA5	1	1	E50E3C2A	A6709F05	1	0	0	0	148BF37B
6- 08		1	1	F943AF0A	0	0	225B9600	A99C27C1	0	0	0	0	291E6F6
6- 09		0	0	0896E580	0	0	1D22D8F3	2A6709F0	0	0	0	0	148BF37B
6- 10		0	0	0748363E	0	0	0748363E	CA99C27C	0	0	0	0	291E6F6
6- 11		0	0	01D22D8F	0	0	01D22D8F	32A6709F	0	0	0	0	291E6F6
6- 12		0	0	00748B63	1	1	E8E897E8	ECA99C27	1	0	0	0	148BF37B
6- 13		1	1	FAFA25FA	1	1	FAFA25FA	3B2A6709	1	0	0	0	291E6F6
6- 14		1	1	FEEFE897E	0	0	27D67074	8ECA99C2	0	0	0	0	291E6F6
6- 15		0	0	09F59C1D	0	0	330D8313	2B2A670	0	0	0	0	291E6F6
6- 16		0	0	0CC360C4	0	0	0CC360C4	C8ECA99C	0	0	0	0	291E6F6
7		0	0	0330D831	0	0	0330D831	323B2A67	0	0	0	0	291E6F6
9		0	0	0330D831	0	0	0330D831	323B2A67	0	0	0	0	291E6F6
10		0	0	0330D831	0	0	323B2A67	323B2A67	0	0	0	0	291E6F6

00046

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MN 0046

ADD DRES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ADD INPUT TO PROO

PHASE	CLOCK	17P42 -TEST POINTS-			29L19 29L17			-TEST POINTS-			29L23 29L28		C(D)
		ADD	ADD	C(A)	S000	S00	C(S)	C(B)	BC31	D000	D00		
3		1	1	E26AF49F	1	1	E26AF49F	00000000	0	0	1	1	F37BF49E
6- 00		1	1	E26AF49F	0	0	00000000	E26AF49F	0	0	1	1	F37BF49E
6- 01		0	0	00000000	0	0	0C84CB62	389A3D27	1	0	1	1	F37BF49E
6- 02		0	0	03102D08	0	0	032102D8	8E26AF49	1	0	1	1	E6F7E93C
6- 03		0	0	00C840B6	1	1	E7C0P9F2	2389A3D2	0	0	1	1	E6F7E93C
6- 04		1	1	F9F00A7C	1	1	EOE7F338	88E26AF4	0	0	1	1	E6F7E93C
6- 05		1	1	F839FCEE	1	1	F839FCEE	22389ABD	0	0	1	1	E6F7E93C
6- 06		1	1	FEEFE7F3B	1	1	F18A73D9	888E26AF	0	0	1	1	F37BF49E
6- 07		1	1	FCE29CF6	0	0	08E6A858	622389AB	1	0	1	1	F37BF49E
6- 08		0	0	0239AA16	0	0	0239AA16	1888E26A	1	0	1	1	E6F7E93C
6- 09		0	0	00RE6AR5	0	0	0D1275E7	8622389A	1	0	1	1	F37BF49E
6- 10		0	0	03449D79	0	0	0FC8A8D3	E1888E26	1	0	1	1	F37BF49E
6- 11		0	0	03F22A36	0	0	10763598	F8622389	1	0	1	1	F37BF49E
6- 12		0	0	041D8D66	1	1	E31576A2	3E1888E2	0	0	1	1	E6F7E93C
6- 13		1	1	FAC655A8	1	1	E1B046E4	3F862238	0	0	1	1	E6F7E93C
6- 14		1	1	F86F51B9	1	1	F86F51B9	23E1888E	0	0	1	1	E6F7E93C
6- 15		1	1	FEBD046E	1	1	E5133DAA	48F86223	0	0	1	1	E6F7E93C
6- 16		1	1	F944EF6A	0	0	05C8FACC	923E1888	1	0	1	1	F37BF49E
7		0	0	01723E93	0	0	01723E93	248F8622	1	0	1	1	E6F7E93C
9		0	0	01723E93	0	0	01723E93	248F8622	1	0	1	1	E6F7E93C
10		0	0	01723E93	0	0	248F8622	248F8622	1	0	1	1	E6F7E93C

00047

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0047

A000 D9ES N9T ACTUALLY EXIST IN THE LOGIC EQUATIONS, IT REPRESENTS THE A00 INPJT T9 P000

PHASE	CL0CK	17P42		-TEST P0INTS-		29L19	29L17	-TEST P0INTS-			29L23	29L28	C(D)
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	D000	D00		
3		1	1	F0259E49		1	1	F0259E49	00000000	0	0	0	457AE39F
6- 00		1	1	F0259E49		0	0	00000000	F0259E49	0	0	0	457AE39F
6- 01		0	0	00000000		0	0	457AE39F	3C096792	0	0	0	457AE39F
6- 02		0	0	115E88E7		0	0	9C548025	CF0259E4	0	0	0	8AF5C73E
6- 03		0	0	27152009		0	0	27152009	73C09679	0	0	0	8AF5C73E
6- 04		0	0	09C54802		0	0	4F402BA1	5CF0259E	0	0	0	457AE39F
6- 05		0	0	13000AE8		0	0	9EC5D226	573C0967	0	0	0	8AF5C73E
6- 06		0	0	27317489		1	1	E23690EA	95CF0259	1	0	0	457AE39F
6- 07		1	1	F88DA43A		0	0	83836B78	A573C096	0	0	0	8AF5C73E
6- 08		0	0	20E0DADE		0	0	ABD6A21C	295CF025	0	0	0	8AF5C73E
6- 09		0	0	2AF5A887		0	0	70708C26	0A573C09	0	0	0	457AE39F
6- 10		0	0	1C1C2309		0	0	619706A8	8295CF02	0	0	0	457AE39F
6- 11		0	0	1865C1AA		0	0	A35B88E8	20A573C0	0	0	0	8AF5C73E
6- 12		0	0	28D6E23A		0	0	28D6E23A	08295CF0	0	0	0	8AF5C73E
6- 13		0	0	0A35B88E		0	0	0A35B88E	820A573C	0	0	0	8AF5C73E
6- 14		0	0	028D6E23		0	0	028D6E23	A08295CF	0	0	0	8AF5C73E
6- 15		0	0	00A35B88		1	1	8B2877E9	E820A573	1	0	0	457AE39F
6- 16		1	1	ECA1DFA		1	1	ECA1DFA	7A08295F	1	0	0	8AF5C73E
7		1	1	F332877E		1	1	F332877E	9E820A57	1	0	0	8AF5C73E
9		1	1	F332877E		0	0	044D7881	9E820A57	1	0	0	8AF5C73E
10		1	1	F332877E		1	1	9E820A57	9E820A57	1	0	0	8AF5C73E

00048

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0048

A000 D9ES N9T ACTUALLY EXIST IN THE LOGIC EQUATIONS, IT REPRESENTS THE A00 INPJT T9 P000

PHASE	CL0CK	17P42		-TEST P0INTS-		29L19	29L17	-TEST P0INTS-			29L23	29L28	C(D)
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	D000	D00		
3		1	1	ABE159F0		1	1	ABE159F0	00000000	0	0	0	679C0532
6- 00		1	1	ABE159F0		0	0	00000000	ABE159F0	0	0	0	679C0532
6- 01		0	0	00000000		0	0	00000000	2AF8567C	0	0	0	CF380B64
6- 02		0	0	00000000		0	0	00000000	0ABE159F	0	0	0	CF380B64
6- 03		0	0	00000000		1	1	9863FA4E	02AF8567	1	0	0	679C0532
6- 04		1	1	E618FE93		0	0	E618FE93	80ABE159	1	0	0	CF380B64
6- 05		1	1	F9863FA4		1	1	C83E4B08	E02AF856	0	0	0	CF380B64
6- 06		0	0	322F92C2		0	1	01679E26	380A3E15	0	0	0	CF380B64
6- 07		0	0	4059E789		0	0	A7F5E03B	8E02AF85	0	0	0	679C0532
6- 08		0	0	29F07B4E		0	0	91998100	E380A3E1	0	0	0	679C0532
6- 09		0	0	24666040		0	0	8C0265F2	38E02AF8	0	0	0	679C0532
6- 10		0	0	2300997C		0	0	2300997C	8E380A3E	0	0	0	CF380B64
6- 11		0	0	04C0265F		0	0	07F831C3	238E02AF	0	0	0	CF380B64
6- 12		0	0	35FE0C70		1	1	CE62063E	C8E380AB	1	0	0	679C0532
6- 13		1	1	F39881AF		1	1	F39881AF	3238E02A	1	0	0	CF380B64
6- 14		1	1	FCE6206B		1	1	954A1AB9	EC8E380A	1	0	0	679C0532
6- 15		1	1	E55286AE		1	1	7D3620FC	73238E02	1	0	0	679C0532
6- 16		1	1	DF6DA03F		1	1	77D19A8D	1EC8E383	1	0	0	679C0532
7		1	1	DDF466A3		1	1	DDF466A3	47B238E0	1	0	0	CF380B64
9		1	1	DDF466A3		1	1	DDF466A3	47B238E0	1	0	0	CF380B64
10		1	1	DDF466A3		0	0	473238E0	473238E0	1	0	0	CF380B64

00049

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0049

ADD0 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ADD INPUT TO PRODD

PHASE	CLOCK	ADD0	ADD	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) RC31	29L23 D000	29L28 D00	C(D)
3		0	0	2610A573	0	0	2610A573	00000000	0	0	59D73C28
6- 00		0	0	2610A573	0	0	00000000	2610A573	0	0	59D73C28
6- 01		0	0	00000000	1	1	A628C3D8	0984195C	1	0	59D73C28
6- 02		1	1	595A30F6	0	0	43616D1E	02610657	0	0	59D73C28
6- 03		0	0	10025B47	1	1	B7011F1F	80984195	1	0	59D73C28
6- 04		1	1	E00047C7	0	0	A16EC017	E0261065	0	0	33AE7850
6- 05		0	0	28588005	0	0	8232EC2D	F8098419	0	0	59D73C28
6- 06		0	0	20FC3B0B	0	0	7A63F733	7E0261C6	0	0	59D73C28
6- 07		0	0	1E28FDCC	0	0	D247761C	DF809841	0	0	33AE7850
6- 08		0	0	3491D087	0	0	8E6919AF	37E02610	0	0	59D73C28
6- 09		0	0	232A466B	0	0	239A4663	CDF80984	0	0	33AE7850
6- 10		0	0	08E6919A	0	0	08E6919A	F37E0261	0	0	33AE7850
6- 11		0	0	0239A466	0	0	5C10E08E	3CDF8098	0	0	59D73C28
6- 12		0	0	17043823	0	0	17043823	AF37E026	0	0	33AE7850
6- 13		0	0	05C10E08	0	0	896F8658	EBCDF809	0	0	33AE7850
6- 14		0	0	2E58E196	0	0	88331D3E	3AF37E02	0	0	59D73C28
6- 15		0	0	220CC76F	0	0	058B3BF7	8E8CDF80	0	0	33AE7850
6- 16		0	0	458ECFEF	0	0	356ECFEF	E3AF37E0	0	0	33AE7850
7		0	0	0058B3FB	0	0	0058B3FB	F8EBCDF8	0	0	33AE7850
9		0	0	0058B3FB	1	1	F2A44C04	F8EBCDF8	0	0	33AE7850
10		0	0	0058B3FB	1	1	F8EBCDF8	F8EBCDF8	0	0	33AE7850

00050

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0050

ADD0 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ADD INPUT TO PRODD

PHASE	CLOCK	ADD0	ADD	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) RC31	29L23 D000	29L28 D00	C(D)
3		1	1	F1A3C842	1	1	F1A3C842	00000000	0	1	CD2A3C71
6- 00		1	1	F1A3C842	0	0	00000000	F1A3C842	0	1	CD2A3C71
6- 01		0	0	00000000	1	1	9A5478E2	3C68F210	0	1	9A5478E2
6- 02		1	1	66951E38	1	1	E6951E38	8F1A3C84	0	1	9A5478E2
6- 03		1	1	02A5478E	1	1	F9A5478E	23C68F21	0	1	9A5478E2
6- 04		1	1	FE6951E3	1	1	CB938E54	88F1A3C8	0	1	CD2A3C71
6- 05		1	1	F2E4E395	1	1	F2E4E395	223C68F2	0	1	9A5478E2
6- 06		1	1	F08838E5	1	1	970D31C7	488F1A3C	0	1	9A5478E2
6- 07		1	1	E5C34C71	1	1	E5C34C71	D223C68F	0	1	9A5478E2
6- 08		1	1	F970D31C	0	0	2C469EA3	7488F1A3	1	1	CD2A3C71
6- 09		0	0	0B11A7AA	0	0	0B11A7AA	DD223C68	1	1	9A5478E2
6- 10		0	0	02C469EA	1	1	CFEEA653	B7488F1A	0	1	CD2A3C71
6- 11		1	1	F3F4A996	1	1	8E502278	EDD223C6	0	1	9A5478E2
6- 12		1	1	E3B4089E	1	1	7DE88180	3B7488F1	0	1	9A5478E2
6- 13		1	1	DF7A2040	1	1	ACA45C01	0E0D223C	0	1	CD2A3C71
6- 14		1	1	EB291734	1	1	EB291734	43B7488F	0	1	9A5478E2
6- 15		1	1	FACA45C0	0	0	2DA0C95C	10EDD223	1	1	CD2A3C71
6- 16		0	0	0B1A7AA	0	0	0B680257	043B7488	1	1	9A5478E2
7		0	0	02DA0095	0	0	02DA0095	C10EDD22	1	1	9A5478E2
9		0	0	02DA0095	1	1	F025FF6A	C10EDD22	1	1	9A5478E2
10		0	0	02DA0095	1	1	C10EDD22	C10EDD22	1	1	9A5478E2

00051

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0051

A000 D8ES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLBCK	17P42 A000	-TEST P0INTS- A00	29L19 S000	29L17 S00	-TEST P0INTS- C(S)	29L23 D000	29L28 D00	C(D)
3		0	0	42486CEA	0	0	42486CEA	00000000	0
6- 00		0	0	42486CEA	0	0	00000000	42486CEA	0
6- 01		0	0	00000000	1	1	F8F9E398	10921B3A	0
6- 02		1	1	FE3E78E6	1	1	F7385C7E	042486CE	0
6- 03		1	1	FDCE171F	1	1	F6C7FAB7	810921B3	0
6- 04		1	1	FDB1FEAD	0	0	01350CE1	E042486C	1
6- 05		0	0	004D4338	1	1	FCCA3504	7810921B	0
6- 06		1	1	FF32B041	0	0	02B59B75	1E042486	1
6- 07		0	0	00AD6600	0	0	04307511	47810921	1
6- 08		0	0	010C1D44	1	1	FA0600DC	51E04248	0
6- 09		1	1	FEK1R037	1	1	FE818037	14781092	0
6- 10		1	1	FFA0600D	1	1	F89A43A5	C51E0424	0
6- 11		1	1	FE2690E9	1	1	FE2690E9	71478109	0
6- 12		1	1	FF89A43A	1	1	FC069606	5C51E042	0
6- 13		1	1	FF01A581	1	1	F7FB8919	97147810	0
6- 14		1	1	FDFFE246	1	1	FDFFE246	65C51E04	0
6- 15		1	1	FF7F3891	1	1	FF7F3891	99714781	0
6- 16		1	1	FFDFEE24	1	1	FC5C0FF0	665C51E0	0
7		1	1	FF1737FC	1	1	FF1737FC	19971478	0
9		1	1	FF1737FC	1	1	FF1737FC	19971478	0
10		1	1	FF1737FC	0	0	19971478	19971478	0

00052

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0052

A000 D8ES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLBCK	17P42 A000	-TEST P0INTS- A00	29L19 S000	29L17 S00	-TEST P0INTS- C(S)	29L23 D000	29L28 D00	C(D)
3		0	0	2C76B150	0	0	2C76B150	00000000	0
6- 00		0	0	2C76B150	0	0	00000000	2C76B150	0
6- 01		0	0	00000000	0	0	00000000	0B1DAC54	0
6- 02		0	0	00000000	0	0	00000000	02C76B15	0
6- 03		0	0	00000000	0	0	475E3AF9	00B17AC5	0
6- 04		0	0	11078ERE	0	0	593C9B7	402C76B1	0
6- 05		0	0	164D726D	0	0	5DA8AD66	00B1DAC0	0
6- 06		0	0	176AEB59	0	0	176AEB59	3402C76B	0
6- 07		0	0	0B0ABAD6	1	1	3E7C7FD0	5D0031DA	1
6- 08		1	1	EF3F1FF7	1	1	A840E4FE	53402C76	1
6- 09		1	1	EA10393F	1	1	A2B1FE46	96000B1D	1
6- 10		1	1	E8AC7F91	0	0	7768F583	A5B402C7	0
6- 11		0	0	1D0A3D60	1	1	067C0267	E96D00B1	1
6- 12		1	1	F59F0099	0	0	845B7683	FA5B402C	0
6- 13		0	0	2116DDA2	0	0	2116DDA2	FE96000B	0
6- 14		0	0	0845B768	1	1	C0E77C6F	3FA5B402	1
6- 15		1	1	F039DF13	1	1	A803A422	EFE96D00	1
6- 16		1	1	EA36E908	0	0	319524C1	3BF45B40	0
7		0	0	0C654900	0	0	0C654900	6EFE96D0	0
9		0	0	0C654900	0	0	0C654900	6EFE96D0	0
10		0	0	0C654900	0	0	6EFE96D0	6EFE96D0	0

00053

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0053

ADDD DRES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ACC INPUT TO PRODD

PHASE	CLOCK	17P42 ACDD	ADDD	-TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		1	1	01F3750B	1	1	01F3750B	00000000 0	0	0	38027C16
6-00		1	1	01F3750B	0	0	00000000	01F3750B 0	0	0	38027C16
6-01		0	0	00000000	1	1	C72D83EA	347CDD76 1	0	0	38027C16
6-02		1	1	F1CB60FA	1	1	B8F8E4E4	8D1F375D 1	0	0	38027C16
6-03		1	1	EE3E3939	0	0	5FE33165	2347CDD7 0	0	0	71A4F82C
6-04		0	0	17F8CC59	1	1	0F265043	48D1F375 1	0	0	38027C16
6-05		1	1	F7C99410	0	0	696E8C3C	02347CDD 0	0	0	71A4F82C
6-06		0	0	145BA30F	0	0	532E1F25	348D1F37 0	0	0	38027C16
6-07		0	0	14CB87C9	1	1	0BF908B3	4D2347CD 1	0	0	38027C16
6-08		1	1	F6FE42EC	0	0	68A33B18	0348D1F3 0	0	0	71A4F82C
6-09		0	0	1A28CEC6	1	1	E1565230	34D2347C 1	0	0	38027C16
6-10		1	1	F85594AC	0	0	312810C2	0D348D1F 0	0	0	38027C16
6-11		0	0	CC4A0430	1	1	0377881A	834D2347 1	0	0	38027C16
6-12		1	1	F4DDDE206	1	1	F4DDDE206	A0D348D1 1	0	0	71A4F82C
6-13		1	1	F0377881	0	0	6EDC70AD	A834D234 0	0	0	71A4F82C
6-14		0	0	1B371C2B	0	0	1BB71C2B	6A0D348D 0	0	0	71A4F82C
6-15		0	0	06E0C70A	0	0	3FC04320	0A834D23 0	0	0	38027C16
6-16		0	0	0FF010CR	1	1	D71D9432	36A0D34B 1	0	0	38027C16
7		1	1	F5C7652C	1	1	F5C7652C	8DA834D2 1	0	0	71A4F82C
9		1	1	F5C7652C	0	0	0A389AD3	8DA834D2 1	0	0	71A4F82C
10		1	1	F5C7652C	1	1	8DA834D2	8DA834D2 1	0	0	71A4F82C

00054

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0054

ADDD DRES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ADD INPUT TO PRODD

PHASE	CLOCK	17P42 ACDD	ADDD	-TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		1	1	913BA0E5	1	1	913BA0E5	00000000 0	1	1	8067CB91
6-00		1	1	913BA0E5	0	0	00000000	913BA0E5 0	1	1	8067CB91
6-01		0	0	00000000	1	1	8067CB91	246EE839 0	1	1	8067CB91
6-02		1	1	E019F2E4	1	1	60813E75	491B9ACE 0	1	1	8067CB91
6-03		1	1	087066F9	1	0	08F006B7	5246EE83 0	1	1	00CF9722
6-04		1	1	367C01AF	0	0	35D4361E	04913BA0 1	1	1	8067CB91
6-05		0	0	0D75C087	1	1	8DDC0918	B5246EE8 0	1	1	8067CB91
6-06		1	1	E3773646	1	1	E3773646	2D491BBA 0	1	1	00CF9722
6-07		1	1	F8DDCC91	1	0	F9AD6433	835246EE 0	1	1	00CF9722
6-08		1	1	FE6B592C	1	0	3F3AF04E	E2D491B8 0	1	1	00CF9722
6-09		1	1	AFCE3C13	0	0	2F66F082	3B35246E 1	1	1	8067CB91
6-10		0	0	0B093C20	0	0	8B71F08F	AE2D491B 1	1	1	8067CB91
6-11		0	0	220C7C23	0	0	220C7C23	E3885246 1	1	1	00CF9722
6-12		0	0	08371F08	0	0	884F5377	FAE2D491 1	1	1	8067CB91
6-13		0	0	2213D4D0	1	1	22E363FF	FE388524 0	1	1	00CF9722
6-14		1	1	0838DAFF	1	1	C838DAFF	FFAE2D49 0	1	1	00CF9722
6-15		1	1	F22E363F	1	1	72960250	FFEB8852 0	1	1	8067CB91
6-16		1	1	00A58094	1	0	0D751736	3FFAE2D7 0	1	1	00CF9722
7		1	1	375D455C	0	0	36F57A5C	8FFE3885 1	1	1	8067CB91
9		0	0	36F57A5C	1	1	C9CAF5A3	8FFE3885 1	1	1	8067CB91
10		0	0	36F57A5C	1	1	8FFE3885	8FFE3885 1	1	1	8067CB91

00055

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0055

A000 D9ES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		0	0	4E0A2D09	0	0	4E0A2D09	00000000	0	0	66E91F2E
6- 00		0	0	4E0A2D09	0	0	00000000	4E0A2D09	0	0	66E91F2E
6- 01		0	0	00000000	0	0	66E91F2E	13828B42	0	0	66E91F2E
6- 02		0	0	193A47CB	0	0	E78C8627	84E0A2D0	0	0	DD23E5C
6- 03		0	0	39E32189	0	0	39E32189	E13828B4	0	0	DD23E5C
6- 04		0	0	0E78C862	0	0	0E78C862	784E0A2D	0	0	DD23E5C
6- 05		0	0	039E3218	0	0	6A875146	9E13828B	0	0	66E91F2E
6- 06		0	0	1AA1D451	1	1	B3B8B523	A784E0A2	1	0	66E91F2E
6- 07		1	1	ECEE2D48	1	1	86050E1A	E9E13828	1	0	66E91F2E
6- 08		1	1	E1814386	0	0	486A62B4	BA784ECA	0	0	66E91F2E
6- 09		0	0	121A98AD	0	0	DFE0709	2E9E1382	0	0	DD23E5C
6- 10		0	0	37FB35C2	0	1	05CD741E	4BA784E0	0	0	DD23E5C
6- 11		0	0	41735D07	0	0	41735D07	92E9E138	0	0	DD23E5C
6- 12		0	0	105CD741	0	0	105CD741	E48A784E	0	0	DD23E5C
6- 13		0	0	041735D0	0	0	D1E9742C	792E9E13	0	0	DD23E5C
6- 14		0	0	347A5D0B	1	1	CD913D0D	1E48A784	1	0	66E91F2E
6- 15		1	1	F3644F77	0	0	5A4D6EA5	4792E9E1	0	0	66E91F2E
6- 16		0	0	16935BA9	0	0	7D7C7AD7	51E48A78	0	0	66E91F2E
7		0	0	1F5F1E35	0	0	1F5F1E35	04792E9E	0	0	DD23E5C
9		0	0	1F5F1E35	1	1	E0ACE14A	04792E9E	0	0	DD23E5C
10		0	0	1F5F1E35	1	1	04792E9E	04792E9E	0	0	DD23E5C

00056

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0056

A000 D9ES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		1	1	SD06D9F2	1	1	8D06D9F2	00000000	0	1	9D289043
6- 00		1	1	SD06D9F2	0	0	00000000	8D06D9F2	0	1	9D289043
6- 01		0	0	00000000	1	1	3A512086	2341B67C	0	1	3A512086
6- 02		1	1	CE944821	1	1	CE944821	88D06D9F	0	1	3A512086
6- 03		1	1	F3A51208	0	0	567C81C5	62341367	1	1	9D289043
6- 04		0	0	159F2071	0	0	159F2071	588D06D9	1	1	3A512086
6- 05		0	0	0567C81C	1	1	3FB8E8A2	562341B6	0	1	3A512086
6- 06		1	1	CFEE3A28	1	1	0A3F5AAE	9588D06D	0	1	3A512086
6- 07		1	1	028FD6AB	1	1	5FB866FE	A562341B	0	1	9D289043
6- 08		1	1	07EE193B	0	0	3AC58978	A9588D06	1	1	9D289043
6- 09		0	0	0E31625E	0	0	7188D213	2A562341	1	1	9D289043
6- 10		0	0	1C623486	1	1	5683550C	CA9588D0	0	1	3A512086
6- 11		1	1	D5ACD543	1	1	D5ACD543	32A56234	0	1	3A512086
6- 12		1	1	F56B3550	1	1	F56B3550	CCA9588D	0	1	3A512086
6- 13		1	1	F0BACD54	1	1	9A83E097	332A5623	0	1	9D289043
6- 14		1	1	E6ACD765	0	0	49784722	CCCA9588	1	1	9D289043
6- 15		0	0	125E11C8	1	1	AF86A20B	B332A562	0	1	9D289043
6- 16		1	1	EBE1A882	1	1	2632C90B	ECCCA95B	0	1	3A512086
7		1	1	098C3242	0	0	2C6421FF	3B332A56	1	1	9D289043
9		0	0	2C6421FF	0	0	2C6421FF	3B332A56	1	1	9D289043
10		0	0	2C6421FF	0	0	3B332A56	3B332A56	1	1	9D289043

00057

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

NY 0057

ADD008ES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ADD INPUT TO PRO00

PHASE	CLOCK	ADD0	ADD1	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(3) BC31	29L23 D000	29L28 D00	C(D)
3		0	0	745B0382	0	0	745B0382	00000000 0	0	0	266C684E
6-00		0	0	745B0382	0	0	00000000	745B0382 0	0	0	266C684E
6-01		0	0	00000000	0	0	4C08D09C	1D16F4E0 0	0	0	4C08D09C
6-02		0	0	13363427	0	0	13363427	0745B038 0	0	0	4C08D09C
6-03		0	0	04C08D09	0	0	04C08D09	C1D16F4E 0	0	0	4C08D09C
6-04		0	0	01336342	0	0	4E0C33DE	70745B03 0	0	0	4C08D09C
6-05		0	0	13830CF7	1	1	ED16A4A9	9C1D16F4 1	0	0	266C684E
6-06		1	1	F845A92A	0	0	21821178	670745BD 0	0	0	266C684E
6-07		0	0	086C845E	0	0	2E08FCAC	19C1D16F 0	0	0	266C684E
6-08		0	0	03B63R2B	1	1	E549D2D0	0670745B 1	0	0	266C684E
6-09		1	1	F95274B7	1	1	F95274B7	419C1D16 1	0	0	4C08D09C
6-10		1	1	F8A49D2D	1	1	07E834DF	00670745 1	0	0	266C684E
6-11		1	1	F5FA0D37	0	0	42D2D0D3	F419C1D1 0	0	0	4C08D09C
6-12		0	0	10B4B774	0	0	37211FC2	F0067074 0	0	0	266C684E
6-13		0	0	00C847F0	0	0	0DC847F0	3F419C1D 0	0	0	4C08D09C
6-14		0	0	037211FC	0	0	290E7A4A	2FD06707 0	0	0	266C684E
6-15		0	0	0A779E92	1	1	E40B3644	8BF419C1 1	0	0	266C684E
6-16		1	1	F902C091	0	0	450B9E2D	22FD0670 0	0	0	4C08D09C
7		0	0	1176E78B	0	0	1176E78B	48BF419C 0	0	0	4C08D09C
8		0	0	1176E78B	0	0	1176E78B	48BF419C 0	0	0	4C08D09C
10		0	0	1176E78B	0	0	48BF419C	48BF419C 0	0	0	4C08D09C

00058

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

NY 0058

ADD008ES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ADD INPUT TO PRO00

PHASE	CLOCK	ADD0	ADD1	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(3) BC31	29L23 D000	29L28 D00	C(D)
3		1	1	B3FCA5A5	1	1	B3FCA5A5	00000000 0	1	1	CC1FC7CF
6-00		1	1	B3FCA5A5	0	0	00000000	33FCA5A5 0	1	1	CC1FC7CF
6-01		0	0	00000000	1	1	CC1FC7CF	2CFF2969 0	1	1	CC1FC7CF
6-02		1	1	F307F1F3	1	1	9F27B9C2	C33FCA5A 0	1	1	CC1FC7CF
6-03		1	1	EFC9EE70	1	1	88097E0E	32CFF296 0	1	1	983F8F9E
6-04		1	1	E2725F83	1	1	7A41EF21	ACB3FCA5 0	1	1	983F8F9E
6-05		1	1	0E007308	1	1	AA304397	682CFF29 0	1	1	CC1FC7CF
6-06		1	1	EAAAC10E5	1	1	36C308R4	0ACB3FCA 0	1	1	CC1FC7CF
6-07		1	1	ED32F62D	1	1	85F285C3	36B2CFF2 0	1	1	983F8F9E
6-08		1	1	E17CA172	1	1	79B23110	0DACB3FC 0	1	1	983F8F9E
6-09		1	1	DE6F0C44	1	1	0E670C44	336B2CFF 0	1	1	983F8F9E
6-10		1	1	F79B0311	0	0	2B73FB42	0CDACB3F 1	1	1	CC1FC7CF
6-11		0	0	0ADEFE00	0	0	0ADEFE00	8336B2CF 1	1	1	983F8F9E
6-12		0	0	0237BF34	0	0	0237BF34	20CDACB3 1	1	1	983F8F9E
6-13		0	0	0ADEFE00	0	0	00ADEFE0	08336B2C 1	1	1	983F8F9E
6-14		0	0	00P373FB	1	1	CC4343CA	42CC0ACB 0	1	1	CC1FC7CF
6-15		1	1	F312D0F2	0	0	26F30923	908336B2 1	1	1	CC1FC7CF
6-16		0	0	093CC248	0	0	3D9CFA79	E420CDAF 1	1	1	CC1FC7CF
7		0	0	0F673E9E	0	0	0F673E9E	7908336B 1	1	1	983F8F9E
8		0	0	0F673E9E	0	0	0F673E9E	7908336B 1	1	1	983F8F9E
10		0	0	0F673E9E	0	0	7908336B	7908336B 1	1	1	983F8F9E

00059

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0059

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ADD INPUT TO P000

PHASE	CLOCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		0	0	7FFFFFFF	0	0	7FFFFFFF	00000000	0	0	00000001
6-00		0	0	7FFFFFFF	0	0	00000000	7FFFFFFF	0	0	00000001
6-01		0	0	00000000	1	1	FFFFFFFF	1FFFFFFF	1	0	00000001
6-02		1	1	FFFFFFFF	1	1	FFFFFFFF	C7FFFFFF	1	0	00000002
6-03		1	1	FFFFFFFF	1	1	FFFFFFFF	F1FFFFFF	1	0	00000002
6-04		1	1	FFFFFFFF	1	1	FFFFFFFF	FC7FFFFFF	1	0	00000002
6-05		1	1	FFFFFFFF	1	1	FFFFFFFF	FF1FFFFFF	1	0	00000002
6-06		1	1	FFFFFFFF	1	1	FFFFFFFF	FFC7FFFF	1	0	00000002
6-07		1	1	FFFFFFFF	1	1	FFFFFFFF	FFF1FFFF	1	0	00000002
6-08		1	1	FFFFFFFF	1	1	FFFFFFFF	FFFC7FFF	1	0	00000002
6-09		1	1	FFFFFFFF	1	1	FFFFFFFF	FFFF1FFF	1	0	00000002
6-10		1	1	FFFFFFFF	1	1	FFFFFFFF	FFFFC7FF	1	0	00000002
6-11		1	1	FFFFFFFF	1	1	FFFFFFFF	FFFFF1FF	1	0	00000002
6-12		1	1	FFFFFFFF	1	1	FFFFFFFF	FFFFFC7F	1	0	00000002
6-13		1	1	FFFFFFFF	1	1	FFFFFFFF	FFFFFF1F	1	0	00000002
6-14		1	1	FFFFFFFF	1	1	FFFFFFFF	FFFFFFC7	1	0	00000002
6-15		1	1	FFFFFFFF	1	1	FFFFFFFF	FFFFFFF1	1	0	00000002
6-16		1	1	FFFFFFFF	0	0	00000001	FFFFFFFC	0	0	00000002
7		0	0	00000000	0	0	00000000	7FFFFFFF	0	0	00000002
9		0	0	00000000	0	0	00000000	7FFFFFFF	0	0	00000002
10		0	0	00000000	0	0	7FFFFFFF	7FFFFFFF	0	0	00000002

00060

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0060

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ADD INPUT TO P000

PHASE	CLOCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		0	0	00000001	0	0	00000001	00000000	0	0	7FFFFFFF
6-00		0	0	00000001	0	0	00000000	00000001	0	0	7FFFFFFF
6-01		0	0	00000000	0	0	7FFFFFFF	00000000	0	0	7FFFFFFF
6-02		0	0	1FFFFFFF	0	0	1FFFFFFF	C0000000	0	0	FFFFFFFF
6-03		0	0	07FFFFFF	0	0	07FFFFFF	F0000000	0	0	FFFFFFFF
6-04		0	0	01FFFFFF	0	0	01FFFFFF	FC000000	0	0	FFFFFFFF
6-05		0	0	007FFFFFF	0	0	007FFFFFF	FF000000	0	0	FFFFFFFF
6-06		0	0	001FFFFFF	0	0	001FFFFFF	FFC00000	0	0	FFFFFFFF
6-07		0	0	0007FFFF	0	0	0007FFFF	FFF00000	0	0	FFFFFFFF
6-08		0	0	0001FFFF	0	0	0001FFFF	FFFC0000	0	0	FFFFFFFF
6-09		0	0	00007FFF	0	0	00007FFF	FFFF0000	0	0	FFFFFFFF
6-10		0	0	00001FFF	0	0	00001FFF	FFFFC000	0	0	FFFFFFFF
6-11		0	0	000007FF	0	0	000007FF	FFFFF000	0	0	FFFFFFFF
6-12		0	0	000001FF	0	0	000001FF	FFFFFC00	0	0	FFFFFFFF
6-13		0	0	0000007F	0	0	0000007F	FFFFFF00	0	0	FFFFFFFF
6-14		0	0	0000001F	0	0	0000001F	FFFFFFC0	0	0	FFFFFFFF
6-15		0	0	00000007	0	0	C0000007	FFFFFFF0	0	0	FFFFFFFF
6-16		0	0	00000001	0	0	00000001	FFFFFFFC	0	0	FFFFFFFF
7		0	0	00000000	0	0	00000000	7FFFFFFF	0	0	FFFFFFFF
9		0	0	00000000	0	0	00000000	7FFFFFFF	0	0	FFFFFFFF
10		0	0	00000000	0	0	7FFFFFFF	7FFFFFFF	0	0	FFFFFFFF

00061

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0061

A000 DBES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	17P42 -TEST POINTS-			29L19	29L17	-TEST POINTS-			29L23	29L28	C(D)
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	0000	000	
3		1	1	DAC269A5	1	1	DAC269A5	00000000	0	1	1	35631AF2
6- 00		1	1	DAC269A5	0	0	00000000	DAC269A5	0	1	1	35631AF2
6- 01		0	0	00000000	1	1	35631AF2	36809A69	0	1	1	35631AF2
6- 02		1	1	EDRAC69C	1	1	A28BE1AE	8DAC269A	0	1	1	35631AF2
6- 03		1	1	E8AEF86B	1	1	53752E4F	A36B09A6	0	1	1	6AC635E4
6- 04		1	1	240D4B93	1	1	3FA38177	E87AC269	0	1	1	6AC635E4
6- 05		1	1	CFE8E05D	1	1	8543F84F	FA36B09A	0	1	1	35631AF2
6- 06		1	1	1152FED3	1	1	4C193437	FE8DAC26	0	1	1	6AC635E4
6- 07		1	1	D8064D2D	1	1	3DCC8311	FFA36B09	0	1	1	6AC635E4
6- 08		1	1	CF732024	1	1	84D638B6	7FE8DAC2	0	1	1	35631AF2
6- 09		1	1	E1358EE0	1	1	4BFBC4D1	9FFA36B0	0	1	1	6AC635E4
6- 10		1	1	22FEF134	1	1	D2FEF134	67FE8DAC	0	1	1	6AC635E4
6- 11		1	1	F43FBC4D	1	1	F4BFBC4D	19FFA36B	0	1	1	6AC635E4
6- 12		1	1	F02FEF13	0	0	47CC0421	467FE8DA	1	1	1	35631AF2
6- 13		0	0	11F33508	0	0	5C901A16	519FFA36	1	1	1	35631AF2
6- 14		0	0	17240685	0	0	61C0EB93	9467FE8D	1	1	1	35631AF2
6- 15		0	0	18703AE4	1	1	833670C8	E519FFA3	0	1	1	6AC635E4
6- 16		1	1	E0009C32	0	0	286A814C	39467FEB	1	1	1	35631AF2
7		0	0	0ADAA050	0	0	0ADAA050	0E519FFA	1	1	1	6AC635E4
9		0	0	0ADAA050	0	0	0ADAA050	0E519FFA	1	1	1	6AC635E4
10		0	0	0ADAA050	0	0	0E519FFA	0E519FFA	1	1	1	6AC635E4

00062

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0062

A000 DBES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	17P42 -TEST POINTS-			29L19	29L17	-TEST POINTS-			29L23	29L28	C(D)
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	0000	000	
3		0	0	6BA40763	0	0	6BA40763	00000000	0	1	1	C7351894
6- 00		0	0	6BA40763	0	0	00000000	6BA40763	0	1	1	C7351894
6- 01		0	0	00000000	0	0	384AE76C	1AE901D8	1	1	1	C7351894
6- 02		0	0	DE12B90B	1	1	05C7D26F	06AA4076	0	1	1	C7351894
6- 03		1	1	F571F49B	1	1	840C25C3	C1AE901D	0	1	1	8F6A3128
6- 04		1	1	E1370970	1	1	A8EC2204	F068A4C7	0	1	1	C7351894
6- 05		1	1	FAB30881	0	0	2285FEED	3C1AE901	1	1	1	C7351894
6- 06		0	0	08A17BF3	1	1	980BAD23	4FC63A40	0	1	1	8F6A3128
6- 07		1	1	F602EB48	1	1	E602EB48	03C1AE90	0	1	1	8F6A3128
6- 08		1	1	F9403A72	1	1	F9803A02	34F068A4	0	1	1	8F6A3128
6- 09		1	1	FE602E34	1	1	FE602E34	8D3C1AE9	0	1	1	8F6A3128
6- 10		1	1	FF080BAD	1	1	C74D2441	234F068A	0	1	1	C7351894
6- 11		1	1	F1D34910	1	1	R13D7A38	4803C1AE	0	1	1	8F6A3128
6- 12		1	1	E04FFERE	1	1	6F394F35	1234F068	0	1	1	8F6A3128
6- 13		1	1	D8EE63E0	0	0	14394859	848D3C1A	1	1	1	C7351894
6- 14		0	0	080E52D6	0	0	3D592A42	61234F06	1	1	1	C7351894
6- 15		0	0	CF764E90	0	0	47A135FC	9848D3C1	1	1	1	C7351894
6- 16		0	0	11E44D7F	1	1	A1527EA7	261234F0	0	1	1	8F6A3128
7		1	1	E8049FA9	1	1	E8549FA9	C9848D3C	0	1	1	8F6A3128
9		1	1	D8549FA9	0	0	17A3C056	C9848D3C	0	1	1	8F6A3128
10		1	1	E8549FA9	1	1	C9848D3C	C9848D3C	0	1	1	8F6A3128

00063

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MM 0063

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS, IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLKCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(R)	BC31	29L23 D000	29L28 D00	C(D)
3		0	0	160A5DC9	0	0	160A5DC9	00000000	0	1	1	E9D73A96
6- 00		0	0	160A5DC9	0	0	00000000	160A5DC9	0	1	1	E9D73A96
6- 01		0	0	00000000	1	1	E9D73A96	05829772	0	1	1	E9D73A96
6- 02		1	1	FA75CEA5	1	1	CE2443D1	8160A5DC	0	1	1	D3AE752C
6- 03		1	1	F38910F4	1	1	F38910F4	60582977	0	1	1	D3AE752C
6- 04		1	1	FC22443D	0	0	130B09A7	18160A5D	1	1	1	E9D73A96
6- 05		0	0	C4C2C269	1	1	D8713795	C6058297	0	1	1	D3AE752C
6- 06		1	1	F61C4DE5	0	0	0C45134F	718160A5	1	1	1	E9D73A96
6- 07		0	0	0B1144D3	1	1	068FB9FF	DC605829	0	1	1	D3AE752C
6- 08		1	1	F5AFE77F	1	1	DF872915	F718160A	0	1	1	E9D73A96
6- 09		1	1	F7E1CA45	1	1	C8903F71	7DC60582	0	1	1	D3AE752C
6- 10		1	1	F2E40FDC	1	1	C6928508	5F718160	0	1	1	D3AE752C
6- 11		1	1	F1A4A142	1	1	F1A4A142	17DC6058	0	1	1	D3AE752C
6- 12		1	1	FC692850	1	1	FC692850	85F71816	0	1	1	D3AE752C
6- 13		1	1	FF1A4A14	1	1	02C8FF40	217DC605	0	1	1	D3AE752C
6- 14		1	1	F4322FD0	1	1	E896A66	085F7181	0	1	1	E9D73A96
6- 15		1	1	F7425499	1	1	E172052F	8217DC60	0	1	1	E9D73A96
6- 16		1	1	F85E6548	1	1	F85E6548	E085F718	0	1	1	D3AE752C
7		1	1	FE179952	1	1	FE179952	F8217DC6	0	1	1	D3AE752C
9		1	1	FE179952	0	0	01E866AD	F8217DC6	0	1	1	D3AE752C
10		1	1	FE179952	1	1	F8217DC6	F8217DC6	0	1	1	D3AE752C

00064

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MM 0064

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS, IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLKCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(R)	BC31	29L23 D000	29L28 D00	C(D)
3		1	1	AE1A4FE0	1	1	AE1A4FE0	00000000	0	1	1	84F82DDE
6- 00		1	1	AE1A4FE0	0	0	00000000	AE1A4FE0	0	1	1	84F82DDE
6- 01		0	0	00000000	0	0	00000000	2B8693F8	0	1	1	09F05B3C
6- 02		0	0	00000000	0	0	00000000	0AE1A4FE	0	1	1	09F05B3C
6- 03		0	0	00000000	1	1	09F05B3C	02B8693F	0	1	1	09F05B3C
6- 04		1	1	027C16EF	0	0	3D83E911	00AE1A4F	1	1	1	84F82DDE
6- 05		0	0	0F0FA44	0	0	0F60FA44	402B8693	1	1	1	09F05B3C
6- 06		0	0	03D83E91	0	0	03D83E91	100AE1A4	1	1	1	09F05B3C
6- 07		0	0	00F60FA4	1	1	85EE3D92	4402B869	0	1	1	84F82DDE
6- 08		1	1	E17B8F60	1	1	6673D3DE	9100AE1A	0	1	1	84F82DDE
6- 09		1	1	09F05B3C	1	0	E38D4B03	A4402B86	0	1	1	09F05B3C
6- 10		1	1	8BE352C2	1	0	0203AE7E	E9100AE1	0	1	1	09F05B3C
6- 11		1	1	80F4E39F	1	1	35AD197D	8A4402B8	0	1	1	84F82DDE
6- 12		1	1	09F05B3C	1	1	0D63465F	6E9100AE	0	1	1	09F05B3C
6- 13		1	1	F3EAD197	1	0	FD432D53	09A4402B	0	1	1	09F05B3C
6- 14		1	1	F7F2CB54	0	0	3A5A9D76	F6E9100A	1	1	1	84F82DDE
6- 15		0	0	0E36A75D	0	0	899E797F	3DBA4402	1	1	1	84F82DDE
6- 16		0	0	22679E5F	0	0	9D6F7C81	EF6E9103	1	1	1	84F82DDE
7		0	0	275BDC20	0	0	275BDC20	7BDBA440	1	1	1	09F05B3C
9		0	0	275BDC20	0	0	275BDC20	7BDBA440	1	1	1	09F05B3C
10		0	0	275BDC20	0	0	7BDBA440	7BDBA440	1	1	1	09F05B3C

00065

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0065

ADD OPER NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ADD INPJT TO PROO

PHASE	CLBCK	ADD	ADD	17P42 -TEST POINTS- C(A)	29L19 5000	29L17 500	C(S)	-TEST POINTS- C(B)	BC31	29L23 0000	29L28 000	C(D)
3		0	0	26C9AAD5	0	0	26C9AAD5	00000000	0	0	0	136AF532
6-00		0	0	26C9AAD5	0	0	00000000	26C9AAD5	0	0	0	136AF532
6-01		0	0	00000000	0	0	136AF532	09326AB5	0	0	0	136AF532
6-02		0	0	040A3D6C	0	0	1845331E	826C9AAD	0	0	0	136AF532
6-03		0	0	04116CC7	0	0	197C6279	A09926AB	0	0	0	136AF532
6-04		0	0	065F189E	1	1	F2F4225C	6826C9AA	1	0	0	136AF532
6-05		0	0	F231083H	1	1	E9521309	1AC9326A	1	0	0	136AF532
6-06		1	1	F45484C2	1	1	F6E98F10	46R26C9A	1	0	0	136AF532
6-07		1	1	F9AA63C4	1	1	E64F6E12	11A09B26	1	0	0	136AF532
6-08		1	1	F9B3DB84	1	1	E628E5D2	846826C9	1	0	0	136AF532
6-09		1	1	F95A3974	0	0	206C24D8	A11A09B2	0	0	0	26D5EB64
6-10		0	0	0218C936	0	0	2EE0F49A	2846826C	0	0	0	26D5EB64
6-11		0	0	033B7D26	0	0	0B8B7D26	8A11A09B	0	0	0	26D5EB64
6-12		0	0	02EEDF49	1	1	EF83E997	A2846826	1	0	0	136AF532
6-13		1	1	F8E0FA65	1	1	F876D4B3	E8A11A09	1	0	0	136AF532
6-14		1	1	FA1D812C	0	0	20F36C90	FA284682	0	0	0	26D5EB64
6-15		0	0	02C02B24	0	0	2F12C688	3E8A11A0	0	0	0	26D5EB64
6-16		0	0	03C431A2	0	0	03C431A2	0FA28468	0	0	0	26D5EB64
7		0	0	02F12C68	0	0	02F12C68	83E8A11A	0	0	0	26D5EB64
9		0	0	02F12C68	1	1	F0E0397	83E8A11A	0	0	0	26D5EB64
10		0	0	02F12C68	1	1	83E8A11A	83E8A11A	0	0	0	26D5EB64

00066

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0066

ADD OPER NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ADD INPJT TO PROO

PHASE	CLBCK	ADD	ADD	17P42 -TEST POINTS- C(A)	29L19 5000	29L17 500	C(S)	-TEST POINTS- C(B)	BC31	29L23 0000	29L28 000	C(D)
3		0	0	04A766B3	0	0	04A766B3	00000000	0	0	0	153897C4
6-00		0	0	04A766B3	0	0	00000000	04A766B3	0	0	0	153897C4
6-01		0	0	00000000	1	1	EA47683C	0129D9AC	1	0	0	153897C4
6-02		1	1	FAB1DA0F	0	0	104A71D3	004A766B	0	0	0	153897C4
6-03		0	0	04129C74	1	1	EE5AC4B3	00129D9A	1	0	0	153897C4
6-04		1	1	F8B6812C	1	1	E5DDE968	30C4A766	1	0	0	153897C4
6-05		1	1	F9777A5A	1	1	E38EE296	0C0129D9	1	0	0	153897C4
6-06		1	1	F4CF88A6	0	0	F460F8D0	83C04A76	0	0	0	23712F88
6-07		0	0	07183A0B	0	0	34896993	60C0129D	0	0	0	23712F88
6-08		0	0	0028FA64	0	0	22DAF228	083004A7	0	0	0	153897C4
6-09		0	0	08368C9A	1	1	F2FE24C6	36C03129	1	0	0	153897C4
6-10		1	1	F00F8931	0	0	2830787D	8D83004A	0	0	0	23712F88
6-11		0	0	0AFC0E9E	0	0	357D5D36	636C0012	0	0	0	23712F88
6-12		0	0	00TF576D	0	0	38D0F6F5	98D83004	0	0	0	23712F88
6-13		0	0	0E3421B0	0	0	0E3421B0	6636C0C1	0	0	0	23712F88
6-14		0	0	03D086F	0	0	1945A033	598D8300	0	0	0	153897C4
6-15		0	0	0AE1680C	0	0	0651680C	06636C0C	0	0	0	23712F88
6-16		0	0	01945A03	0	0	01945A03	3598D830	0	0	0	23712F88
7		0	0	00651680	0	0	00651680	006636C0	0	0	0	23712F88
9		0	0	00651680	1	1	FF9AE97F	006636C0	0	0	0	23712F88
10		0	0	00651680	1	1	006636C0	006636C0	0	0	0	23712F88

00067

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MX 0067

ADD0 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ADD INPUT TO PRO00

PHASE	CLOCK	ADD0	ADD	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		0	0	5A00C619	0	0	5A00C619	00000000	0	0	37DA99E6
6- 00		0	0	5A00C619	0	0	00000000	5A00C619	0	0	37DA99E6
6- 01		0	0	00000000	0	0	37DA99E6	16837186	0	0	37DA99E6
6- 02		0	0	00F6A679	0	0	7DA3DA45	85A0DC61	0	0	6FB533CC
6- 03		0	0	1F6AF691	0	0	57459077	61683718	0	0	37DA99E6
6- 04		0	0	15D1641D	0	0	15D1641D	085A0DC6	0	0	6FB533CC
6- 05		0	0	05745977	0	0	75298C03	76168371	0	0	6FB533CC
6- 06		0	0	1D4A6334	0	0	5524FD1A	0D85A0DC	0	0	37DA99E6
6- 07		0	0	15493F46	0	0	15493F46	37616837	0	0	6FB533CC
6- 08		0	0	05524FD1	1	1	0D7735E3	ADD85A0D	1	0	37DA99E6
6- 09		1	1	F350ED7A	0	0	63132146	E3761683	0	0	6FB533CC
6- 10		0	0	18C4C851	1	1	E0EA2E63	3ADD85A0	1	0	37DA99E6
6- 11		1	1	F83A8B9A	0	0	30152580	EEB76168	0	0	37DA99E6
6- 12		0	0	0C054960	0	0	0C054960	3BAD985A	0	0	6FB533CC
6- 13		0	0	03C15258	0	0	72368624	0EEB7616	0	0	6FB533CC
6- 14		0	0	1CADA189	0	0	8C62D555	03BAD850	0	0	6FB533CC
6- 15		0	0	23183555	0	0	5AF34F33	40FEA761	0	0	37DA99E6
6- 16		0	0	163C03CE	0	0	4E976D34	003BAD88	0	0	37DA99E6
7		0	0	13A5DB6D	0	0	13A5DB6D	340EEB76	0	0	6FB533CC
9		0	0	13A5DB6D	0	0	13A5DB6D	340EEB76	0	0	6FB533CC
10		0	0	13A5DB6D	0	0	340EEB76	340EEB76	0	0	6FB533CC

00068

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MX 0068

ADD0 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ADD INPUT TO PRO00

PHASE	CLOCK	ADD0	ADD	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		0	0	4A1FEA60	0	0	4A1FEA60	00000000	0	0	28FD084E
6- 00		0	0	4A1FEA60	0	0	00000000	4A1FEA60	0	0	28FD084E
6- 01		0	0	00000000	0	0	00000000	1287FA98	0	0	51F3309C
6- 02		0	0	00000000	0	0	00000000	04A1FEA6	0	0	51F3309C
6- 03		0	0	00000000	0	0	51F3309C	01287FA9	0	0	51F3309C
6- 04		0	0	147EEC27	0	0	3D7CC47B	004A1FEA	0	0	28FD084E
6- 05		0	0	095F311D	0	0	615AE189	401287FA	0	0	51F3309C
6- 06		0	0	1836386E	0	0	6A52690A	5004A1FE	0	0	51F3309C
6- 07		0	0	1A349A42	0	0	6C904ADE	94C1287F	0	0	51F3309C
6- 08		0	0	13241237	1	1	F2263A69	A5004A1F	1	0	28FD084E
6- 09		1	1	F0998E9A	1	1	FC898E9A	69401287	1	0	51F3309C
6- 10		1	1	F2263A66	1	1	FF2263A6	9A5004A1	1	0	51F3309C
6- 11		1	1	FFC898E9	0	0	51C44985	A6940128	0	0	51F3309C
6- 12		0	0	14711261	0	0	14711261	69A5004A	0	0	51F3309C
6- 13		0	0	051C4498	0	0	5717F534	5A694012	0	0	51F3309C
6- 14		0	0	15C5F04D	0	0	67C1ADE3	169A5004	0	0	51F3309C
6- 15		0	0	19F06B7A	0	0	19F06B7A	45A69401	0	0	51F3309C
6- 16		0	0	067C1ADE	0	0	2F79F32C	9169A500	0	0	28FD084E
7		0	0	08DE7CCB	0	0	08DE7CCB	245A6940	0	0	51F3309C
9		0	0	08DE7CCB	0	0	08DE7CCB	245A6940	0	0	51F3309C
10		0	0	08DE7CCB	0	0	245A6940	245A6940	0	0	51F3309C

00069

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0069

ADD DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ADD INPUT TO PRODU

PHASE	CLOCK	ADD	ADD	17942 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 0000	29L28 000	C(D)	
3		0	0	43043218	0	0	43043218	00000000	0	1	1	8508753F
6-00		0	0	43043218	0	0	00000000	43043218	0	1	1	8508753F
6-01		0	0	00000000	0	0	00000000	10C10C86	0	1	1	0A10EA7E
6-02		0	0	00000000	1	1	0A10EA7E	04304321	0	1	1	0A10EA7E
6-03		1	1	02843A9F	1	1	478CAFDE	810C10C8	0	1	1	8508753F
6-04		1	1	01E32B77	1	1	01E32B77	A0430432	0	1	1	0A10EA7E
6-05		1	1	F474CAF0	1	0	FEB93573	E810C10C	0	1	1	0A10EA7E
6-06		1	1	3FA26D5E	1	1	BFA26D5E	FA043043	0	1	1	0A10EA7E
6-07		1	1	EFEB9B57	0	0	6AE02618	3E810C10	1	1	1	8508753F
6-08		0	0	1A820986	1	1	9FC07EC5	2FA04304	0	1	1	8508753F
6-09		1	1	E7F01FB1	1	1	E7F01FB1	48E810C1	0	1	1	0A10EA7E
6-10		1	1	F9FC07EC	1	1	7F047D23	52FA0430	0	1	1	8508753F
6-11		1	1	DFC11F4A	1	1	DFC11F4A	D48E810C	0	1	1	0A10EA7E
6-12		1	1	F7F047D2	1	1	F7F047D2	B92FA043	0	1	1	0A10EA7E
6-13		1	1	F0FC11F4	0	0	78F39C85	AD48E810	1	1	1	8508753F
6-14		0	0	1E8CE7D0	1	1	A3455C6C	6B52FA04	0	1	1	8508753F
6-15		1	1	E8D1571B	1	1	E8D1571B	1AD48E81	0	1	1	0A10EA7E
6-16		1	1	FAR455C6	1	1	7F3CCB05	C5B52FA0	0	1	1	8508753F
7		1	1	DFCF32C1	1	1	DFCF32C1	71AD48E8	0	1	1	0A10EA7E
8		1	1	DFCF32C1	1	1	DFCF32C1	71AD48E8	0	1	1	0A10EA7E
10		1	1	DFCF32C1	0	0	71AD48E8	71AD48E8	0	1	1	0A10EA7E

00070

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0070

ADD DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ADD INPUT TO PRODU

PHASE	CLOCK	ADD	ADD	17942 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 0000	29L28 000	C(D)	
3		0	0	5DAB9C62	0	0	5DAB9C62	00000000	0	0	0	235FA631
6-00		0	0	5DAB9C62	0	0	00000000	5DAB9C62	0	0	0	235FA631
6-01		0	0	00000000	0	0	56BF4C62	176AE718	0	0	0	56BF4C62
6-02		0	0	15AFD318	0	0	15AFD318	85DA39C6	0	0	0	56BF4C62
6-03		0	0	056BF4C6	0	0	5C2B4128	2176AE71	0	0	0	56BF4C62
6-04		0	0	17AD004A	0	0	426A7673	085DA39C	0	0	0	235FA631
6-05		0	0	109A9D9E	0	0	109A9D9E	C2176AE7	0	0	0	56BF4C62
6-06		0	0	048EA7E7	1	1	08C7D126	9085DA89	1	0	0	235FA631
6-07		1	1	F6810C4D	0	0	*CF12CAF	AC2176AE	0	0	0	56BF4C62
6-08		0	0	133C4323	0	0	69F3BF8D	E3085DAB	0	0	0	56BF4C62
6-09		0	0	1A7EE3E3	1	1	EF1F3D32	7AC2176A	1	0	0	235FA631
6-10		1	1	F3C7CFAC	1	1	00682933	9E3085DA	1	0	0	235FA631
6-11		1	1	F41A0A4E	1	1	C83A641D	E7AC2176	1	0	0	235FA631
6-12		1	1	F2FE9907	1	1	C6CEFD26	79EB085D	1	0	0	235FA631
6-13		1	1	F1338C35	0	0	48730917	9E7AC217	0	0	0	56BF4C62
6-14		0	0	121CC245	1	1	E63D1C14	E79E3085	1	0	0	235FA631
6-15		1	1	F9AF47D5	0	0	506E9367	39E7AC21	0	0	0	56BF4C62
6-16		0	0	1418A4D9	0	0	3F73430A	CE79E308	0	0	0	235FA631
7		0	0	0F0ED2C2	0	0	0F0ED2C2	339E7AC2	0	0	0	56BF4C62
8		0	0	0F0ED2C2	1	1	F0212D3D	339E7AC2	0	0	0	56BF4C62
10		0	0	0F0ED2C2	1	1	339E7AC2	339E7AC2	0	0	0	56BF4C62

00071

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0071

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS, IT REPRESENTS THE ADD INPUT TO P000

PHASE	CLOCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 J000	29L28 J00	C(D)
3		0	0	3B667A40	0	0	3B667A40	00000000	0	0	4C798B51
6-00		0	0	3B667A40	0	0	00000000	3B667A40	0	0	4C798B51
6-01		0	0	00000000	0	0	00000000	0ED99E90	0	0	98F316A2
6-02		0	0	00000000	0	0	00000000	03B667A4	0	0	98F316A2
6-03		0	0	00000000	0	0	00000000	00ED99E9	0	0	98F316A2
6-04		0	0	00000000	0	0	4C798B51	003B667A	0	0	4C798B51
6-05		0	0	131E62D4	0	0	AC11797F	400ED99E	0	0	98F316A2
6-06		0	0	2B045E5D	0	0	C3F774F	9003B667	0	0	98F316A2
6-07		0	0	30FDD03F	1	1	E48451EE	E400ED99	1	0	4C798B51
6-08		1	1	F921147B	0	0	92142B1D	39003B66	0	0	98F316A2
6-09		0	0	24850AC7	0	0	3D782169	6E400ED9	0	0	98F316A2
6-10		0	0	2F5E085A	0	0	7BD793A3	5B9003B6	0	0	4C798B51
6-11		0	0	1E56E4EA	0	0	37E8F38C	06E400ED	0	0	98F316A2
6-12		0	0	2DFA3EE3	0	0	7A73CA34	35B9003B	0	0	4C798B51
6-13		0	0	1E9CF28D	1	1	0223673C	0D6E400E	1	0	4C798B51
6-14		1	1	F48RD9CF	1	1	A8CF4E7E	035B9003	1	0	4C798B51
6-15		1	1	EACDD39F	1	1	EACDD39F	8076E400	1	0	98F316A2
6-16		1	1	FAXUF4E7	0	0	46FA8038	E0353900	0	0	4C798B51
7		0	0	113EA00E	0	0	113EA00E	380D6E40	0	0	98F316A2
9		0	0	113EA00E	0	0	113EA00E	380D6E40	0	0	98F316A2
10		0	0	113EA00E	0	0	380D6E40	380D6E40	0	0	98F316A2

00072

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0072

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS, IT REPRESENTS THE ADD INPUT TO P000

PHASE	CLOCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 J000	29L28 J00	C(D)
3		1	1	916CD0A5	1	1	916CD0A5	00000000	0	0	6E99AD73
6-00		1	1	916CD0A5	0	0	00000000	916CD0A5	0	0	6E99AD73
6-01		0	0	00000000	0	0	6E99AD73	245B3429	0	0	6E99AD73
6-02		0	0	1B466B5C	0	0	8A4018CF	C916CD0A	0	0	6E99AD73
6-03		0	0	229D0623	0	0	FFC36119	F245B342	0	0	0D335AE6
6-04		0	0	3F7DD846	0	1	1D24332C	7C916CD0	0	0	0D335AE6
6-05		0	0	47490CCB	0	0	47490CCB	1F245B34	0	0	0D335AE6
6-06		0	0	11D24332	0	0	11D24332	C7C916CD	0	0	0D335AE6
6-07		0	0	247490CC	0	0	73CE3E3F	31F245B3	0	0	6E99AD73
6-08		0	0	1CC38F8F	1	1	AE29E21C	EC7C916C	1	0	6E99AD73
6-09		1	1	E33A7887	0	0	5A2425FA	331F245B	0	0	6E99AD73
6-10		0	0	1637C97E	1	1	A7E75C03	3EC7C916	1	0	6E99AD73
6-11		1	1	E9F3D702	1	1	7362298F	E331F245	1	0	6E99AD73
6-12		1	1	0E788A63	0	0	3C03E549	F8EC7C91	0	0	0D335AE6
6-13		0	0	2F02F952	0	0	9D9CA6C5	7E3B1F24	0	0	6E99AD73
6-14		0	0	27672931	0	0	27672931	5F8EC7C9	0	0	0D335AE6
6-15		0	0	09D9CA6C	0	0	787377DF	57E3B1F2	0	0	6E99AD73
6-16		0	0	1E1CDD7F	0	0	F35038DD	05F8EC7F	0	0	0D335AE6
7		0	0	3ED40E37	1	1	003A60C4	757E3B1F	1	0	6E99AD73
9		1	1	003A60C4	1	1	003A60C4	757E3B1F	1	0	6E99AD73
10		1	1	003A60C4	0	0	757E3B1F	757E3B1F	1	0	6E99AD73

00073

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0073

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLBCK	A000	A00	17P42 -TEST P9INTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST P9INTS- C(3)	5C31	29L23 0000	29L28 000	C(D)
3		0	0	06AEF1A4	0	0	06AEF1A4	00000000	0	1	1	E48DDF82
6-00		0	0	06AEF1A4	0	0	00000000	06AEF1A4	0	1	1	E48DDF82
6-01		0	0	00000000	0	0	00000000	01A8BC69	0	1	1	C91BBF04
6-02		0	0	00000000	1	1	E48DDF82	006AEF1A	0	1	1	E48DDF82
6-03		1	1	F87377E0	1	1	C23F36E4	801A8BC6	0	1	1	C91BBF04
6-04		1	1	F08F00B9	1	1	39A8F0C0	2006AEF1	0	1	1	C91BBF04
6-05		1	1	EE6AE32F	1	1	02F8C2B1	4801A8BC	0	1	1	E48DDF82
6-06		1	1	F43E30AC	1	1	F43E30AC	52006AEF	0	1	1	C91BBF04
6-07		1	1	F08F8C2B	0	0	18A1ACA9	14801A8B	1	1	1	E48DDF82
6-08		0	0	0628682A	0	0	0628682A	452006AE	1	1	1	C91BBF04
6-09		0	0	018A1ACA	0	0	1CFC3848	914801A8	1	1	1	E48DDF82
6-10		0	0	073F0E02	0	0	073F0E02	2452006A	1	1	1	C91BBF04
6-11		0	0	01CF0334	0	0	1D41E432	8914801A	1	1	1	E48DDF82
6-12		0	0	07507900	0	0	22C2998A	A2452006	1	1	1	E48DDF82
6-13		0	0	0830A662	0	0	2422C6E0	A8914801	1	1	1	E48DDF82
6-14		0	0	09083138	1	1	022470BC	2A245200	0	1	1	C91BBF04
6-15		1	1	F4891C2F	1	1	F4891C2F	0A891480	0	1	1	C91BBF04
6-16		1	1	F022470B	1	1	F022470B	C2A24520	0	1	1	C91BBF04
7		1	1	FF4891C2	1	1	FF4891C2	F0A89148	0	1	1	C91BBF04
9		1	1	FF4891C2	0	0	00B76E3D	F0A89148	0	1	1	C91BBF04
10		1	1	FF4891C2	1	1	F0A89148	F0A89148	0	1	1	C91BBF04

00074

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0074

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLBCK	A000	A00	17P42 -TEST P9INTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST P9INTS- C(3)	5C31	29L23 0000	29L28 000	C(D)
3		1	1	81234034	1	1	81234034	00000000	0	1	1	F3578058
6-00		1	1	81234034	0	0	00000000	81234034	0	1	1	F3578058
6-01		0	0	00000000	0	0	00000000	20480000	0	1	1	E6AF0030
6-02		0	0	00000000	1	1	F3578058	08123403	0	1	1	F3578058
6-03		1	1	F035E016	0	0	097E5F8E	02048000	1	1	1	F3578058
6-04		0	0	028F87EF	1	1	F5371247	80812340	0	1	1	F3578058
6-05		1	1	F0A0C611	1	1	F060C611	E0204800	0	1	1	E6AF0030
6-06		1	1	FF887184	1	1	FF587184	78081234	0	1	1	E6AF0030
6-07		1	1	FF60C611	1	1	FFD60C61	1E020480	0	1	1	E6AF0030
6-08		1	1	FF887184	1	1	F3403770	47808123	0	1	1	F3578058
6-09		1	1	F0334000	0	0	09730084	11E02048	1	1	1	F3578058
6-10		0	0	028E7361	1	1	F5367339	04780812	0	1	1	F3578058
6-11		1	1	F0A09CEE	1	1	E41C908E	411E0204	0	1	1	E6AF0030
6-12		1	1	F9172767	1	1	F9072767	90478081	0	1	1	E6AF0030
6-13		1	1	FE41C909	1	1	F1994A31	E411E020	0	1	1	F3578058
6-14		1	1	F066528C	1	1	FC66528C	79047808	0	1	1	E6AF0030
6-15		1	1	FF1994A3	1	1	FF1994A3	1E411E02	0	1	1	E6AF0030
6-16		1	1	FE665288	1	1	E67565D8	C7904783	0	1	1	E6AF0030
7		1	1	F80D5976	0	0	0645091E	31E411E0	1	1	1	F3578058
9		0	0	0645091E	0	0	0645091E	31E411E0	1	1	1	F3578058
10		0	0	0645091E	0	0	31E411E0	31E411E0	1	1	1	F3578058

00075

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MN 0075

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPJT TO P0000

PHASE	CLBCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		1	1	08C25A96	1	1	08C25A96	00000000 0	1	1	3F6125A3
6- 00		1	1	08C25A96	0	0	00000000	08C25A96 0	1	1	3F6125A3
6- 01		0	0	00000000	1	1	7EC24B46	36F096A5 0	1	1	7EC24B46
6- 02		1	1	0F3092D1	1	1	9F113874	808C25A9 0	1	1	3F6125A3
6- 03		1	1	E7C46E1D	1	1	A72593C0	236F096A 0	1	1	3F6125A3
6- 04		1	1	E9C964F0	1	1	688B036	0808C25A 0	1	1	7EC24B46
6- 05		1	1	0A22E0C0	1	1	58E53753	8236F096 0	1	1	7EC24B46
6- 06		1	1	06394DD4	1	1	54F3991A	E0808C25 0	1	1	7EC24B46
6- 07		1	1	053E5646	1	1	94A008E9	B8236F09 0	1	1	3F6125A3
6- 08		1	1	E52802FA	1	1	A489289D	6E0808C2 0	1	1	3F6125A3
6- 09		1	1	E9224A27	1	1	67E4956D	588236F0 0	1	1	7EC24B46
6- 10		1	1	09F9255B	1	1	09F9255B	56E0808C 0	1	1	7EC24B46
6- 11		1	1	F67E4956	1	1	F67E4956	0588236F 0	1	1	7EC24B46
6- 12		1	1	F03F9255	0	0	3E3E6C82	956E0808 1	1	1	3F6125A3
6- 13		0	0	0F3F982C	0	0	0F8F982C	AD588236 1	1	1	7EC24B46
6- 14		0	0	03E3E6C8	0	0	4482C128	2B56E08D 1	1	1	3F6125A3
6- 15		0	0	1120B04A	1	1	8FE2F890	0A059823 0	1	1	7EC24B46
6- 16		1	1	E3F83EE4	0	0	24979941	02856E08 1	1	1	3F6125A3
7		0	0	0925E650	0	0	0925E650	40AD5882 1	1	1	7EC24B46
9		0	0	0925E650	0	0	0925E650	40AD5882 1	1	1	7EC24B46
10		0	0	0925E650	0	0	40AD5882	40AD5882 1	1	1	7EC24B46

00076

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MN 0076

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPJT TO P0000

PHASE	CLBCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		1	1	36A03674	1	1	36A03674	00000000 0	1	1	C9B14785
6- 00		1	1	36A03674	0	0	00000000	36A03674 0	1	1	C9B14785
6- 01		0	0	00000000	0	0	00000000	2DA80D9D 0	1	1	93628F0A
6- 02		0	0	00000000	1	1	C9B14785	036A0367 0	1	1	C9B14785
6- 03		1	1	F260E1E1	0	0	288B0A5C	42DA80D9 1	1	1	C9B14785
6- 04		0	0	0A2E0297	1	1	9D9151A1	1036A036 0	1	1	93628F0A
6- 05		1	1	E7645468	1	1	7AC6E372	442DA80D 0	1	1	93628F0A
6- 06		1	1	0E3138DC	1	1	A8630061	91086A03 0	1	1	C9B14785
6- 07		1	1	EA18C018	0	0	20677893	6442DA80 1	1	1	C9B14785
6- 08		0	0	0810DE24	1	1	01C825A9	091036A0 0	1	1	C9B14785
6- 09		1	1	F472C96A	1	1	F472C96A	76442DA8 0	1	1	93628F0A
6- 10		1	1	FD1C325A	1	1	FD1C325A	9D91086A 0	1	1	93628F0A
6- 11		1	1	FF472C96	1	1	92A93BA0	A76442DA 0	1	1	93628F0A
6- 12		1	1	E4AA6EE8	1	1	780CF0F2	29D91086 0	1	1	93628F0A
6- 13		1	1	DEC33F7C	1	1	7165CE86	8A76442D 0	1	1	93628F0A
6- 14		1	1	0C5973A1	1	1	A60A3B26	A29D9108 0	1	1	C9B14785
6- 15		1	1	E982AEC9	0	0	1FD16744	A8A76442 1	1	1	C9B14785
6- 16		0	0	07F459D1	0	0	3E43124C	2A29D913 1	1	1	C9B14785
7		0	0	0F90C493	0	0	0F90C493	0A8A7644 1	1	1	93628F0A
9		0	0	0F90C493	0	0	0F90C493	0A8A7644 1	1	1	93628F0A
10		0	0	0F90C493	0	0	0A8A7644	0A8A7644 1	1	1	93628F0A

00077

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0077

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLCK	17P42 -TEST POINTS-		29L19	29L17	-TEST POINTS-			29L23	29L28	C(D)	
		A000	A00	C(A)	S000	S00	C(S)	C(3)	BC31	D000		D00
3		0	0	1C0596DA	0	0	1C0596DA	00000000	0	1	1	E9D369A7
6-00		0	0	1C0596DA	0	0	00000000	1C0596DA	0	1	1	E9D369A7
6-01		0	0	00000000	1	1	D3A6D34E	070165B6	0	1	1	D3A6D34E
6-02		1	1	F4E9B4D3	1	1	C8908821	81C0596D	0	1	1	D3A6D34E
6-03		1	1	F2242208	1	1	DBF78BA7	6070165B	0	1	1	E9D369A7
6-04		1	1	F6FDE2EB	0	0	0D2A7944	081C0596	1	1	1	E9D369A7
6-05		0	0	034A9E51	0	0	197734AA	36070165	1	1	1	E9D369A7
6-06		0	0	065D0D2A	1	1	DA04A078	8D81C059	0	1	1	D3A6D34E
6-07		1	1	F681281E	1	1	E05491C5	23607016	0	1	1	E9D369A7
6-08		1	1	F8152471	1	1	CBB8F79F	48D81C05	0	1	1	D3A6D34E
6-09		1	1	F2EEF0EF	1	1	DC226796	02360701	0	1	1	E9D369A7
6-10		1	1	F73099E5	1	1	E104039C	348D81C0	0	1	1	E9D369A7
6-11		1	1	F44100E3	1	1	F84100E3	2D236070	0	1	1	D3A6D34E
6-12		1	1	FE104038	1	1	FE104038	C348D81C	0	1	1	D3A6D34E
6-13		1	1	FF84100E	1	1	FF84100E	32D23607	0	1	1	D3A6D34E
6-14		1	1	FFE10403	0	0	160D9A5C	8C848D81	1	1	1	E9D369A7
6-15		0	0	05436697	1	1	D92A39E5	232D2360	0	1	1	D3A6D34E
6-16		1	1	F64A8E79	1	1	F64A8E79	48CB48D8	0	1	1	D3A6D34E
7		1	1	FD92A39E	1	1	FD92A39E	5232D236	0	1	1	D3A6D34E
9		1	1	FD92A39E	1	1	FD92A39E	5232D236	0	1	1	D3A6D34E
10		1	1	FD92A39E	0	0	5232D236	5232D236	0	1	1	D3A6D34E

00078

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0078

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLCK	17P42 -TEST POINTS-		29L19	29L17	-TEST POINTS-			29L23	29L28	C(D)	
		A000	A00	C(A)	S000	S00	C(S)	C(3)	BC31	D000		D00
3		0	0	6E140AFA	0	0	6E140AFA	00000000	0	0	0	4DF2E8D8
6-00		0	0	6E140AFA	0	0	00000000	6E140AFA	0	0	0	4DF2E8D8
6-01		0	0	00000000	0	0	9BE5D1B0	1B8502BE	0	0	0	93E5D1B0
6-02		0	0	26F0746C	0	0	C2DF461C	06E140AF	0	0	0	98E5D1B0
6-03		0	0	3C37D187	1	1	E2C4E8AF	01B8502B	1	0	0	4DF2E8D8
6-04		1	1	F8313A2B	1	1	F8313A2B	C06E140A	1	0	0	93E5D1B0
6-05		1	1	FE0C4E8A	1	1	90396592	F01B8502	1	0	0	4DF2E8D8
6-06		1	1	ECCE596C	1	1	9E1B7D94	3C06E140	1	0	0	4DF2E8D8
6-07		1	1	E746DC25	0	0	3579C4FD	2F01B850	0	0	0	4DF2E8D8
6-08		0	0	0D6E713F	0	0	0D5E713F	43C06E14	0	0	0	93E5D1B0
6-09		0	0	03E79C4F	0	0	03579C4F	02F01B85	0	0	0	93E5D1B0
6-10		0	0	0D5E713F	0	0	4EC8CFE3	F43C06E1	0	0	0	4DF2E8D8
6-11		0	0	1B5233FA	0	0	61A51C02	FD2F01B8	0	0	0	4DF2E8D8
6-12		0	0	18694734	0	0	18694734	3F48C06E	0	0	0	93E5D1B0
6-13		0	0	261A51C0	0	0	A200237D	2FD2F01B	0	0	0	93E5D1B0
6-14		0	0	28F008DF	1	1	0AR02007	4BF48C06	1	0	0	4DF2E8D8
6-15		1	1	F6434801	1	1	A8B05F29	02FD02F0	1	0	0	4DF2E8D8
6-16		1	1	EAF017CA	0	0	8611E97A	74BF48C0	0	0	0	93E5D1B0
7		0	0	21847A5E	0	0	21847A5E	9D2FD2F0	0	0	0	93E5D1B0
9		0	0	21847A5E	1	1	0E7385A1	9D2FD2F0	0	0	0	93E5D1B0
10		0	0	21847A5E	1	1	9D2FD2F0	9D2FD2F0	0	0	0	93E5D1B0

00079

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0079

A000 D9ES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 J000	29L28 J00	C(D)
3		0	0	13048243	0	0	13048243	00000000	0	0	3708F585
6- 00		0	0	13048243	0	0	00000000	13048243	0	0	3708F585
6- 01		0	0	00000000	1	1	C8F70A73	04C12090	1	0	3708F585
6- 02		1	1	F23DC29E	0	0	2946B823	C1304824	0	0	3708F585
6- 03		0	0	0A51AE08	0	0	0A51AE08	F04C1209	0	0	6E11EB0A
6- 04		0	0	02946882	0	0	399D6107	3C130482	0	0	3708F585
6- 05		0	0	0E675841	0	0	7C794343	CFO4C120	0	0	6E11EB0A
6- 06		0	0	1F1E50D2	0	0	1F1E50D2	F3C13048	0	0	6E11EB0A
6- 07		0	0	07C79434	0	0	07C79434	BCF04C12	0	0	6E11EB0A
6- 08		0	0	01F1E50D	0	0	7003D017	2F3C1304	0	0	6E11EB0A
6- 09		0	0	1C0CF405	0	0	1C0CF405	CBCF04C1	0	0	6E11EB0A
6- 10		0	0	07C03D01	0	0	3E093286	72F3C130	0	0	3708F585
6- 11		0	0	0F824CA1	0	0	0F824CA1	9C8CF04C	0	0	6E11EB0A
6- 12		0	0	03E09328	0	0	03E09328	672F3C13	0	0	6E11EB0A
6- 13		0	0	00F824CA	1	1	C9E2F2F5	19C8CF04	1	0	3708F585
6- 14		1	1	F273CB01	0	0	2984C156	4672F3C1	0	0	3708F585
6- 15		0	0	0A613055	0	0	416A25DA	919CB3F0	0	0	3708F585
6- 16		0	0	105A8976	0	0	105A8976	A4672F3C	0	0	6E11EB0A
7		0	0	0416A25D	0	0	0416A25D	A919CB3F	0	0	6E11EB0A
9		0	0	0416A25D	1	1	F8E953A2	A919CB3F	0	0	6E11EB0A
10		0	0	0416A25D	1	1	A919CB3F	A919CB3F	0	0	6E11EB0A

00080

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0080

A000 D9ES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 J000	29L28 J00	C(D)
3		1	1	9ACB652D	1	1	9ACB652D	00000000	0	1	A56F3213
6- 00		1	1	9ACB652D	0	0	00000000	9ACB652D	0	1	A56F3213
6- 01		0	0	00000000	1	1	A56F3213	26B2D94B	0	1	A56F3213
6- 02		1	1	E9B8CC86	0	0	43EC9A6B	C9ACB652	1	1	A56F3213
6- 03		0	0	10F3269A	0	0	638B747F	F26B2D94	1	1	A56F3213
6- 04		0	0	1AECFD1F	1	1	C0522F3A	FC9ACB65	0	1	A56F3213
6- 05		1	1	F01488CE	1	1	95833DE9	3F26B2D9	0	1	A56F3213
6- 06		1	1	E56DEF7A	1	1	8AD02195	6FC9ACB6	0	1	A56F3213
6- 07		1	1	E2140865	1	1	2D926C93	5BF26B2D	0	1	4AD6436
6- 08		1	1	C3649B26	1	1	7003CD41	D6FC9ACB	0	1	A56F3213
6- 09		1	1	DC34F350	0	0	36C5C135	75BF26B2	1	1	A56F3213
6- 10		0	0	0DB1704D	0	0	68423E32	5D6FC9AC	1	1	A56F3213
6- 11		0	0	1A108F8C	1	1	3F7FC1A7	975BF26B	0	1	A56F3213
6- 12		1	1	EFDF069	0	0	4A708E4E	E5D6FC9A	1	1	A56F3213
6- 13		0	0	123C2F93	0	0	6D2CFD78	3975BF26	1	1	A56F3213
6- 14		0	0	13433F5E	0	0	750C0D43	2E5D6FC9	1	1	A56F3213
6- 15		0	0	1D770350	1	1	68556786	C3975BF2	0	1	4AD6436
6- 16		1	1	0A1559E1	1	1	24F33E17	32E5D6FF	0	1	4AD6436
7		1	1	093CEF85	0	0	23CD3D6A	ECB975BF	1	1	A56F3213
9		0	0	23CD3D6A	1	1	DC324295	ECB975BF	1	1	A56F3213
10		0	0	23CD3D6A	1	1	ECB975BF	ECB975BF	1	1	A56F3213

00081

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0081

A000 DRES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPJT TO P000

PHASE	CLCK	17P42 -TEST POINTS-		29L19	29L17	-TEST POINTS-		29L23	29L28	C(D)		
		A000	A00	S000	S00	C(S)	C(B) BC31	D000	D00			
3		1	1	C1C7FCFC	1	1	C1C7FCFC	00000000	0	1	1	0FA08A94
6-00		1	1	C1C7FCFC	0	0	00000000	C1C7FCFC	0	1	1	0FA08A94
6-01		0	0	00000000	0	0	00000000	3071FF3F	0	1	1	3F411528
6-02		0	0	00000000	0	0	205F756C	0C1C7FCF	1	1	1	0FA08A94
6-03		0	0	0817D058	0	0	0817D058	03071FF3	1	1	1	3F411528
6-04		0	0	0205F756	0	0	0205F756	00C1C7FC	1	1	1	3F411528
6-05		0	0	00817D05	1	1	E020869	803071FF	0	1	1	0FA08A94
6-06		1	1	F808821A	0	0	1867F786	6C0C1C7F	1	1	1	0FA08A94
6-07		0	0	0619FDE1	0	0	0619FDE1	9803071F	1	1	1	3F411528
6-08		0	0	01867F78	0	0	01867F78	66C0C1C7	1	1	1	3F411528
6-09		0	0	00619FDE	0	0	00619FDE	19803071	1	1	1	3F411528
6-10		0	0	001867F7	1	1	BF597D1F	866C0C1C	0	1	1	3F411528
6-11		1	1	EF065F47	1	1	EF065F47	E1980307	0	1	1	3F411528
6-12		1	1	F3F597D1	0	0	1C550D3D	F866C0C1	1	1	1	0FA08A94
6-13		0	0	0715434F	1	1	C6565877	7E198030	0	1	1	3F411528
6-14		1	1	F1959610	1	1	F1959610	0F866C0C	0	1	1	3F411528
6-15		1	1	FC656587	1	1	FC656587	77E19803	0	1	1	3F411528
6-16		1	1	FF195961	0	0	1F78CECD	0DF866C3	1	1	1	0FA08A94
7		0	0	07DE3333	0	0	07DE3333	777E1980	1	1	1	3F411528
8		0	0	07DE3333	0	0	07DE3333	777E1980	1	1	1	3F411528
10		0	0	07DE3333	0	0	777E1930	777E1980	1	1	1	3F411528

00082

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0082

A000 DRES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPJT TO P000

PHASE	CLCK	17P42 -TEST POINTS-		29L19	29L17	-TEST POINTS-		29L23	29L28	C(D)		
		A000	A00	S000	S00	C(S)	C(B) BC31	D000	D00			
3		0	0	1CC95618	0	0	1CC95618	00000000	0	1	1	8A5F7630
6-00		0	0	1CC95618	0	0	00000000	1CC95618	0	1	1	8A5F7630
6-01		0	0	00000000	0	0	00000000	07325586	0	1	1	143EED60
6-02		0	0	00000000	1	1	148EED60	01CC9561	0	1	1	143EED60
6-03		1	1	050FB858	1	1	4F8F3203	00732558	0	1	1	8A5F7630
6-04		1	1	03E3CC82	1	1	03E3CC82	001CC956	0	1	1	143EED60
6-05		1	1	F4F8F320	1	1	0987E080	80073255	0	1	1	143EED60
6-06		1	1	0260F820	1	1	4CC06ED0	2001CC95	0	1	1	8A5F7630
6-07		1	1	03335B34	1	1	5D92D264	08007325	0	1	1	8A5F7630
6-08		1	1	07648499	1	1	61C42849	02001CC9	0	1	1	8A5F7630
6-09		1	1	0871CA02	1	1	62D08182	40800732	0	1	1	8A5F7630
6-10		1	1	08342060	1	0	ED7300C0	902001CC	0	1	1	143EED60
6-11		1	1	BB5CC370	1	1	885CC370	24080073	0	1	1	143EED60
6-12		1	1	EE07300C	0	0	64779A2C	0902001C	1	1	1	8A5F7630
6-13		0	0	191DEE88	1	1	A37D4538	02408007	0	1	1	8A5F7630
6-14		1	1	E8DF594E	0	0	5E7FE29E	C0902001	1	1	1	8A5F7630
6-15		0	0	179FF8A7	1	1	2C5EE607	30240800	0	1	1	143EED60
6-16		1	1	CB17B981	1	1	C317B981	EC090200	0	1	1	143EED60
7		1	1	F2C5EE60	1	1	F2C5EE60	78024080	0	1	1	143EED60
8		1	1	F2C5EE60	1	1	F2C5EE60	78024080	0	1	1	143EED60
10		1	1	F2C5EE60	0	0	78024080	78024080	0	1	1	143EED60

00083

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0083

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS, IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLCK	17P42 -TEST POINTS-		29L19 29L17		-TEST POINTS-			29L23 29L28		C(D)	
		A000	A00	S000	S00	C(S)	C(B)	BC31	D000	D00		
3		0	0	37C1F3C1	0	0	37C1F3C1	00000000	0	1	1	FCFD3918
6- 00		0	0	37C1F3C1	0	0	00000000	37C1F3C1	0	1	1	FCFD3918
6- 01		0	0	00000000	1	1	FCFD3918	0DF07CF0	0	1	1	FCFD3918
6- 02		1	1	FF3F4E46	1	1	FF3F4E46	037C1F3C	0	1	1	F9FA7230
6- 03		1	1	FFCFD391	1	1	FFCFD391	80DF07CF	0	1	1	F9FA7230
6- 04		1	1	FF3F4E44	0	0	02F688CC	6037C1F3	1	1	1	FCFD3918
6- 05		0	0	003DAEF3	0	0	00BDAEF3	180DF07C	1	1	1	F9FA7230
6- 06		0	0	002F688C	1	1	FD2CA4D4	C6037C1F	0	1	1	FCFD3918
6- 07		1	1	FF4B2935	0	0	024DF01D	3180DF07	1	1	1	FCFD3918
6- 08		0	0	00937C07	0	0	00937C07	4C6037C1	1	1	1	F9FA7230
6- 09		0	0	0024DF01	1	1	FA1F5131	03180DF0	0	1	1	F9FA7230
6- 10		1	1	FE87D44C	1	1	FE87D44C	74C6037C	0	1	1	F9FA7230
6- 11		1	1	FFA1F513	1	1	FFA1F513	1D3180DF	0	1	1	F9FA7230
6- 12		1	1	FFE87D44	0	0	02EB442C	C74C6037	1	1	1	FCFD3918
6- 13		0	0	003AD10B	0	0	00BAD10B	31D3180D	1	1	1	F9FA7230
6- 14		0	0	002EB442	1	1	FA292672	CC74C603	0	1	1	F9FA7230
6- 15		1	1	FEAA499C	0	0	018D1084	B31D3180	1	1	1	FCFD3918
6- 16		0	0	00634421	1	1	FD607D39	2CC74C60	0	1	1	FCFD3918
7		1	1	FF581F4E	1	1	FF581F4E	4B31D318	0	1	1	F9FA7230
9		1	1	FF581F4E	1	1	FF581F4E	4B31D318	0	1	1	F9FA7230
10		1	1	FF581F4E	0	0	4B31D318	4B31D318	0	1	1	F9FA7230

00084

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0084

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS, IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLCK	17P42 -TEST POINTS-		29L19 29L17		-TEST POINTS-			29L23 29L28		C(D)	
		A000	A00	S000	S00	C(S)	C(B)	BC31	D000	D00		
3		0	0	0C1031F3	0	0	0C1031F3	00000000	0	0	0	1E0B5800
6- 00		0	0	0C1031F3	0	0	00000000	0C1031F3	0	0	0	1E0B5800
6- 01		0	0	00000000	1	1	E124A7F3	03040C7C	1	0	0	1E0B5800
6- 02		1	1	F84929FC	0	0	17248209	0C01031F	0	0	0	1E0B5800
6- 03		0	0	05C92082	1	1	E6E0C875	703040C7	1	0	0	1E0B5800
6- 04		1	1	F93B721D	1	1	F93B721D	5C0C1031	1	0	0	3D36301A
6- 05		1	1	FE6E0C87	0	0	3C258CA1	5703040C	0	0	0	3D36301A
6- 06		0	0	0F096328	0	0	0F096328	55C0C103	0	0	0	3D36301A
6- 07		0	0	03C258CA	1	1	E4E7008D	15703040	1	0	0	1E0B5800
6- 08		1	1	F939C02F	0	0	1815183C	455C0C10	0	0	0	1E0B5800
6- 09		0	0	0605460F	0	0	0605460F	11570304	0	0	0	3D36301A
6- 10		0	0	01815183	0	0	01815183	C455C0C1	0	0	0	3D36301A
6- 11		0	0	00605460	0	0	1F33AC6D	F1157030	0	0	0	1E0B5800
6- 12		0	0	07CEE81B	0	0	07CEE81B	7C455C0C	0	0	0	3D36301A
6- 13		0	0	01F3BAC6	0	0	01F3BAC6	0F115703	0	0	0	3D36301A
6- 14		0	0	007CEE81	1	1	E1A196A4	37C455C0	1	0	0	1E0B5800
6- 15		1	1	F86865A9	0	0	17433D36	2DF11570	0	0	0	1E0B5800
6- 16		0	0	05D0EF6D	0	0	05D0EF6D	8B7C455C	0	0	0	3D36301A
7		0	0	01743BDB	0	0	01743BDB	62DF1157	0	0	0	3D36301A
9		0	0	01743BDB	0	0	01743BDB	62DF1157	0	0	0	3D36301A
10		0	0	01743BDB	0	0	62DF1157	62DF1157	0	0	0	3D36301A

00085

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0085

A000 DRES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPJT TO P000

PHASE	CLOCK	17P42 -TEST POINTS-		29L19	29L17	-TEST POINTS-			29L23	29L28	C(D)	
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	D000		D00
3		0	0	3F1C8782	0	0	3F1C8782	00000000	0	1	1	E8FC75C1
6- 00		0	0	3F1C8782	0	0	00000000	3F1C8782	0	1	1	E8FC75C1
6- 01		0	0	00000000	1	1	01F8EB82	0FC721E0	0	1	1	01F8EB82
6- 02		1	1	F47E3AE0	1	1	F47E3AE0	83F1C878	0	1	1	01F8EB82
6- 03		1	1	F01FRE38	1	1	F01FRE38	20FC721E	0	1	1	01F8EB82
6- 04		1	1	FF47E3AE	1	1	0140CF30	083F1C87	0	1	1	01F8EB82
6- 05		1	1	F45033CC	0	0	08533E08	020FC721	1	1	1	E8FC75C1
6- 06		0	0	0204EFR2	1	1	04C0D804	C083F1C8	0	1	1	01F8EB82
6- 07		1	1	F53376C1	1	1	F53376C1	3020FC72	0	1	1	01F8EB82
6- 08		1	1	F04CDD90	1	1	CF45C932	4C083F1C	0	1	1	01F8EB82
6- 09		1	1	F301724C	1	1	F301724C	93020FC7	0	1	1	01F8EB82
6- 10		1	1	FCF45C93	0	0	13F7E602	24C083F1	1	1	1	E8FC75C1
6- 11		0	0	04F0F984	1	1	06F6E536	893020FC	0	1	1	01F8EB82
6- 12		1	1	F5B0B94D	1	1	F5B0B94D	A24C083F	0	1	1	01F8EB82
6- 13		1	1	F06F6E53	0	0	1472F892	6893020F	1	1	1	E8FC75C1
6- 14		0	0	051CBE24	0	0	051CBE24	9A24C083	1	1	1	01F8EB82
6- 15		0	0	01472F89	0	0	01472F89	26893020	1	1	1	01F8EB82
6- 16		0	0	0051CBE2	1	1	E94E41A3	49A24C08	0	1	1	E8FC75C1
7		1	1	F4539068	1	1	F4539068	02689302	0	1	1	01F8EB82
9		1	1	F4539068	0	0	05AC6F97	02689302	0	1	1	01F8EB82
10		1	1	F4539068	1	1	02689302	02689302	0	1	1	01F8EB82

00086

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0086

A000 DRES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPJT TO P000

PHASE	CLOCK	17P42 -TEST POINTS-		29L19	29L17	-TEST POINTS-			29L23	29L28	C(D)	
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	D000		D00
3		0	0	72436AC1	0	0	72436AC1	00000000	0	0	0	7C3DC530
6- 00		0	0	72436AC1	0	0	00000000	72436AC1	0	0	0	7C3DC530
6- 01		0	0	00000000	0	0	7CBDC530	1C90JAB0	0	0	0	7C3DC530
6- 02		0	0	1F2F714C	0	0	1F2F714C	072436AC	0	0	0	F9738A60
6- 03		0	0	07CBDC53	0	0	07CBDC53	01C90DAB	0	0	0	F9738A60
6- 04		0	0	01F2F714	1	1	853531E4	C072436A	1	0	0	7C3DC530
6- 05		1	1	E1404C79	1	1	648FE749	301C90DA	1	0	0	7C3DC530
6- 06		1	1	0993E1D2	1	1	5C661CA2	4C072436	1	0	0	7C3DC530
6- 07		1	1	07198728	1	1	5A53C1F8	9301C90D	1	0	0	7C3DC530
6- 08		1	1	0686F07E	0	0	00127ADE	24C07243	0	0	0	F9738A60
6- 09		0	0	24749E37	1	1	37460987	89301C90	1	0	0	7C3DC530
6- 10		1	1	ED013661	0	0	6A8F7391	E24C0724	0	0	0	7C3DC530
6- 11		0	0	1AA3DEE4	0	0	1AA3DEE4	789301C9	0	0	0	F9738A60
6- 12		0	0	06A8F739	0	0	83664CE9	1E24C072	0	0	0	7C3DC530
6- 13		0	0	0039AF3A	0	1	1A55399A	4789301C	0	0	0	F9738A60
6- 14		0	0	+6854E66	0	0	46954E66	91E24C07	0	0	0	F9738A60
6- 15		0	0	11465399	1	1	9AE7FE69	44789301	1	0	0	7C3DC530
6- 16		1	1	F539E39A	0	0	0E356DFA	691E24C0	0	0	0	F9738A60
7		0	0	37AD5B7E	0	0	37AD5B7E	9A478930	0	0	0	F9738A60
9		0	0	37AD5B7E	1	1	C8524481	9A478930	0	0	0	F9738A60
10		0	0	37AD5B7E	1	1	9A478930	9A478930	0	0	0	F9738A60

00087

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0087

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLOCK	17P42		-TEST POINTS-		29L19	29L17	-TEST POINTS-		29L23	29L28	C(D)
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	S000	S00	
3		0	0	6684E6C2	0	0	6684E6C2	00000000	0	1	1	F1C133C0
6-00		0	0	6684E6C2	0	0	00000000	6684E6C2	0	1	1	F1C133C0
6-01		0	0	00000000	1	1	E3826780	19A139B0	0	1	1	E3826780
6-02		1	1	F8E099E0	1	1	F8E099E0	06684E6C	0	1	1	E3826780
6-03		1	1	E3826780	1	1	E3826780	019A139B	0	1	1	E3826780
6-04		1	1	FF8E099E	0	0	00CC05DE	006684E6	1	1	1	F1C133C0
6-05		0	0	03733577	0	0	11B20197	8019A139	1	1	1	F1C133C0
6-06		0	0	046C806D	1	1	E7EE7ED0	E006684E	0	1	1	E3826780
6-07		1	1	F9F889FB	1	1	DD7E217B	78019A13	0	1	1	E3826780
6-08		1	1	F75F885E	0	0	059E549E	DE006684	1	1	1	F1C133C0
6-09		0	0	01679527	1	1	F328C8E7	B78019A1	0	1	1	F1C133C0
6-10		1	1	FCCA3239	1	1	EE8B65F9	EDE00668	0	1	1	F1C133C0
6-11		1	1	FBA2D97E	1	1	FBA2D97E	7B78019A	0	1	1	E3826780
6-12		1	1	FEE8B65F	1	1	E2631D0F	9E0E0066	0	1	1	E3826780
6-13		1	1	F89AC777	1	1	DC1D2EF7	E7B78019	0	1	1	E3826780
6-14		1	1	F70748B0	1	1	E8C87F7D	F9EDE006	0	1	1	F1C133C0
6-15		1	1	FA321FDF	1	1	0DB4875F	7E7B7801	0	1	1	E3826780
6-16		1	1	F76D21D7	1	1	E92E5597	DF9EDE00	0	1	1	F1C133C0
7		1	1	FA4B9565	1	1	FA4B9565	F7E7B780	0	1	1	E3826780
9		1	1	FA4B9565	0	0	05B46A9A	F7E7B780	0	1	1	E3826780
10		1	1	FA4B9565	1	1	F7E7B780	F7E7B780	0	1	1	E3826780

00088

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MW 0088

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO PRO00

PHASE	CLOCK	17P42		-TEST POINTS-		29L19	29L17	-TEST POINTS-		29L23	29L28	C(D)
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	S000	S00	
3		0	0	3F5A5ACB	0	0	3F5A5ACB	00000000	0	0	0	7CF4DF30
6-00		0	0	3F5A5ACB	0	0	00000000	3F5A5ACB	0	0	0	7CF4DF30
6-01		0	0	00000000	1	1	830B20D0	0FD696B2	1	0	0	7CF4DF30
6-02		1	1	E0C2C834	1	1	63CDE904	03F5A5AC	1	0	0	7CF4DF30
6-03		1	1	08F37A41	0	0	55E85971	00FD696B	0	0	0	7CF4DF30
6-04		0	0	157A165C	1	1	9885372C	403F5A5A	1	0	0	7CF4DF30
6-05		1	1	E6214DCB	1	1	692C6E93	10CFD696	1	0	0	7CF4DF30
6-06		1	1	0A4B1BA6	1	1	5D563C76	C403F5A5	1	0	0	7CF4DF30
6-07		1	1	07558F1D	0	0	013F4D7D	B100FD69	0	0	0	F9E93E60
6-08		0	0	344FD35F	0	0	3144328F	6C403F5A	0	0	0	7CF4DF30
6-09		0	0	2C512CA3	0	1	263AEB03	0B100FD6	0	0	0	F9E93E60
6-10		0	0	498E3AC0	0	1	43787920	F6C403F5	0	0	0	F9E93E60
6-11		0	0	50DE1E48	0	0	0DD2F078	3DB100FD	0	0	0	7CF4DF30
6-12		0	0	3374BFE	0	0	50699E8E	0F6C403F	0	0	0	7CF4DF30
6-13		0	0	2C1A67A3	1	1	AF258873	83DB100F	1	0	0	7CF4DF30
6-14		1	1	EBC9621C	1	1	EBC9621C	E0F6C403	1	0	0	F9E93E60
6-15		1	1	FAF25887	1	1	FAF25887	3B3DB100	1	0	0	F9E93E60
6-16		1	1	F8C9621C	0	0	7B917551	CE0F6C40	0	0	0	7CF4DF30
7		0	0	1EEC5D54	0	0	1EEC5D54	7383DB10	0	0	0	F9E93E60
9		0	0	1EEC5D54	0	0	1EEC5D54	7383DB10	0	0	0	F9E93E60
10		0	0	1EEC5D54	0	0	7383DB10	7383DB10	0	0	0	F9E93E60

00089

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0089

A000 DBES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		0	0	493A426C	0	0	493A426C	00000000	0	0	366B6D39
6- 00		0	0	493A426C	0	0	00000000	493A426C	0	0	366B6D39
6- 01		0	0	00000000	0	0	00000000	124E909B	0	0	6C06DA72
6- 02		0	0	00000000	1	1	C99492C7	0493A426	1	0	366B6D39
6- 03		1	1	F2652431	1	1	8BF99778	C124E909	1	0	366B6D39
6- 04		1	1	EEFE6DDE	0	0	5B054850	30493A42	0	0	6C06DA72
6- 05		0	0	16F5F214	0	0	R3CC2C86	0C124E90	0	0	6C06DA72
6- 06		0	0	20F30B21	0	0	20F30B21	830493A4	0	0	6C06DA72
6- 07		0	0	083CC2C8	0	0	083CC2C8	60C124E9	0	0	6C06DA72
6- 08		0	0	02CF30B2	0	0	387A9DEB	1830493A	0	0	366B6D39
6- 09		0	0	1E1EA77A	0	0	7AF581EC	C60C124E	0	0	6C06DA72
6- 10		0	0	1E9D607B	0	0	8B943AED	31830493	0	0	6C06DA72
6- 11		0	0	22E50E5B	1	1	EC79A182	4C60C124	1	0	366B6D39
6- 12		1	1	F31E6860	0	0	31890599	93183049	0	0	366B6D39
6- 13		0	0	0C627566	0	0	42CDE29F	64C60C12	0	0	366B6D39
6- 14		0	0	109378A7	0	0	7D8A5319	D9318304	0	0	6C06DA72
6- 15		0	0	1F6294C6	0	0	1F6294C6	764C60C1	0	0	6C06DA72
6- 16		0	0	07D8A531	0	0	3E44126A	9D931830	0	0	366B6D39
7		0	0	0F71049A	0	0	0F71049A	A764C60C	0	0	6C06DA72
9		0	0	0F71049A	1	1	F06EF865	A764C60C	0	0	6C06DA72
10		0	0	0F71049A	1	1	A764C60C	A764C60C	0	0	6C06DA72

00090

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MA 0090

A000 DBES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		0	0	1CC95618	0	0	1CC95618	00000000	0	1	F1C133C0
6- 00		0	0	1CC95618	0	0	00000000	1CC95618	0	1	F1C133C0
6- 01		0	0	00000000	0	0	00000000	07325586	0	1	E3826780
6- 02		0	0	00000000	1	1	E3826780	01CC9561	0	1	E3826780
6- 03		1	1	F8E099E0	1	1	EAA1CDA0	00732558	0	1	F1C133C0
6- 04		1	1	FAA87368	1	1	FAA87368	001CC956	0	1	E3826780
6- 05		1	1	EAA1CDA0	1	1	E22C845A	00C73255	0	1	E3826780
6- 06		1	1	F8B32116	1	1	EA4C54D6	80C1CC95	0	1	F1C133C0
6- 07		1	1	FA931535	1	1	EC5448F5	A0C07325	0	1	F1C133C0
6- 08		1	1	F315123D	1	1	EC0645FD	68001CC9	0	1	F1C133C0
6- 09		1	1	F335917F	1	1	ECF6C53F	5A000732	0	1	F1C133C0
6- 10		1	1	F330B14F	1	1	0ECC18CF	D68001CC	0	1	E3826780
6- 11		1	1	F7300633	1	1	F7300633	F5A00073	0	1	E3826780
6- 12		1	1	F0ECC18C	0	0	0C2AC0CC	F068001C	1	1	F1C133C0
6- 13		0	0	030AB373	1	1	F4CBF733	3F5A0007	0	1	F1C133C0
6- 14		0	0	F032F9CC	0	0	0371C60C	CF068001	1	1	F1C133C0
6- 15		0	0	020C7183	1	1	E65E0903	33F5A000	0	1	E3826780
6- 16		1	1	F997B640	1	1	F997B640	CCFD6800	0	1	E3826780
7		1	1	FE65E090	1	1	FE65E090	333F5A00	0	1	E3826780
9		1	1	FE65E090	1	1	FE65E090	333F5A00	0	1	E3826780
10		1	1	FE65E090	0	0	333F5A00	333F5A00	0	1	E3826780

00091

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MI 0001

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	17P42 -TEST POINTS-		29L19	29L17	-TEST POINTS-			29L23	29L28	C(D)
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	D000	
3		1	1	FAA401E8	1	1	FAA401E8	00000000	0	0	00042EFD
6- 00		1	1	FAA401E8	0	0	00000000	FAA401E8	0	0	00042EFD
6- 01		0	0	00000000	1	1	FFFBD103	3EA9007A	1	0	00042EFD
6- 02		1	1	FFFEF440	1	1	FFFA0543	CFAA401E	1	0	00042EFD
6- 03		1	1	FFFEF150	1	1	FFFA8253	F3EA9007	1	0	00042EFD
6- 04		1	1	FFFEA094	1	1	FFFEA094	FCFAA401	1	0	00085DFA
6- 05		1	1	FFFEA825	0	0	0008061F	3F3EA900	0	0	00085DFA
6- 06		0	0	00020187	0	0	00020187	CFCFAA40	0	0	00085DFA
6- 07		0	0	00008061	0	0	00008061	F3F3EA90	0	0	00085DFA
6- 08		0	0	00002018	0	0	00002018	7CF3FAA4	0	0	00085DFA
6- 09		0	0	00008061	0	0	00008061	1F3F3EA9	0	0	00085DFA
6- 10		0	0	00000201	0	0	000430FE	87CF3FAA	0	0	00042EFD
6- 11		0	0	00010C3F	0	0	00096A39	A1F3F3EA	0	0	00085DFA
6- 12		0	0	00025A8E	0	0	000A8888	687CF3FA	0	0	00085DFA
6- 13		0	0	0002AE22	0	0	00080C1C	1A1F3F3E	0	0	00085DFA
6- 14		0	0	0002C837	0	0	000B2101	0687CF3F	0	0	00085DFA
6- 15		0	0	0002C840	1	1	FFFE9943	41A1F3F3	1	0	00042EFD
6- 16		1	1	FFFEA650	1	1	FFFEA650	00687CFF	1	0	00085DFA
7		1	1	FFFE9944	1	1	FFFE9944	341A1F3F	1	0	00085DFA
9		1	1	FFFE9944	1	1	FFFE9944	341A1F3F	1	0	00085DFA
10		1	1	FFFE9944	0	0	341A1F3F	341A1F3F	1	0	00085DFA

00092

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MI 0002

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	17P42 -TEST POINTS-		29L19	29L17	-TEST POINTS-			29L23	29L28	C(D)
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	D000	
3		0	0	36DAE799	0	0	36DAE799	00000000	0	0	0006590D
6- 00		0	0	36DAE799	0	0	00000000	36DAE799	0	0	0006590D
6- 01		0	0	00000000	0	0	0006590D	0DB689E6	0	0	0006590D
6- 02		0	0	00019643	0	0	000E485D	436DAE79	0	0	000C321A
6- 03		0	0	00039217	0	0	0009EB24	5003689E	0	0	0006590D
6- 04		0	0	000274C9	0	0	000F2CE3	1436DAE7	0	0	000C321A
6- 05		0	0	0003CB38	1	1	FFFD7223	C50DB6B9	1	0	0006590D
6- 06		1	1	FFFE5C8A	0	0	000C0EA4	F1436DAE	0	0	000C321A
6- 07		0	0	000303A9	0	0	000F35C3	3C50DB68	0	0	000C321A
6- 08		0	0	0003ED70	1	1	FFFD9463	CF1436DA	1	0	0006590D
6- 09		1	1	FFFE6518	1	1	FFFD9C03	F3C50DB6	1	0	0006590D
6- 10		1	1	FFFE4302	1	1	FFFD7E9F	FCF1436D	1	0	0006590D
6- 11		1	1	FFFDFA7D	0	0	000AAC97	7F3C50DB	0	0	000C321A
6- 12		0	0	0002AB25	1	1	FFFC5218	7FCF1436	1	0	0006590D
6- 13		1	1	FFFE1486	1	1	FFFD83B7	37F3C50D	1	0	0006590D
6- 14		1	1	FFFE2E0E	0	0	000AE0FB	4DFCF143	0	0	000C321A
6- 15		0	0	0002R83E	1	1	FFFC5F31	137F3C50	1	0	0006590D
6- 16		1	1	FFFD17CC	0	0	000570D9	44DFCF14	0	0	0006590D
7		0	0	00015C36	0	0	00015C36	5137F3C5	0	0	000C321A
9		0	0	00015C36	0	0	00015C36	5137F3C5	0	0	000C321A
10		0	0	00015C36	0	0	5137F3C5	5137F3C5	0	0	000C321A

00093

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

M1 0003

A000 DRES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLBCK	17P42 -TEST POINTS-		29L19	29L17	-TEST POINTS-			29L23	29L28	C(D)	
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	D000		D00
3		1	1	C5971438	1	1	C5971438	00000000	0	1	1	FFFA7646
6-00		1	1	C5971438	0	0	00000000	C5971438	0	1	1	FFFA7646
6-01		0	0	00000000	0	0	00000000	3165C52E	0	1	1	FFF4EC8C
6-02		0	0	00000000	1	1	FFF4EC8C	0C59714B	0	1	1	FFF4EC8C
6-03		1	1	FFF03B23	0	0	0002C4DD	03165C52	1	1	1	FFFA7646
6-04		0	0	00003137	0	0	00063AF1	40C59714	1	1	1	FFFA7646
6-05		0	0	00018E3C	1	1	FFF00502	503165C5	0	1	1	FFFA7646
6-06		1	1	FFF00140	1	1	FFF97786	940C5971	0	1	1	FFFA7646
6-07		1	1	FFF050E1	1	1	FFF8D427	A503165C	0	1	1	FFFA7646
6-08		1	1	FFF03509	1	1	FFF03509	E940C597	0	1	1	FFF4EC8C
6-09		1	1	FFF08D42	0	0	000516FC	7A503165	1	1	1	FFFA7646
6-10		0	0	000145BF	1	1	FFF6324B	1E940C59	0	1	1	FFF4EC8C
6-11		1	1	FFF08C92	1	1	FFF802D8	C7A50316	0	1	1	FFFA7646
6-12		1	1	FFF000B6	1	1	FFF2E042	31E940C5	0	1	1	FFF4EC8C
6-13		1	1	FFF03B50	1	1	FFF73196	8C7A5031	0	1	1	FFFA7646
6-14		1	1	FFF0CC65	1	1	FFF842A3	A31E940C	0	1	1	FFFA7646
6-15		1	1	FFF010AA	1	1	FFF010AA	E8C7A503	0	1	1	FFF4EC8C
6-16		1	1	FFF0842A	0	0	0005DDE4	9A31E943	1	1	1	FFFA7646
7		0	0	00014379	0	0	00014379	2E8C7A50	1	1	1	FFF4EC8C
9		0	0	00014379	0	0	00014379	2E8C7A50	1	1	1	FFF4EC8C
10		0	0	00014379	0	0	2E8C7A50	2E8C7A50	1	1	1	FFF4EC8C

00094

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

M1 0004

A000 DRES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLBCK	17P42 -TEST POINTS-		29L19	29L17	-TEST POINTS-			29L23	29L28	C(D)	
		A000	A00	C(A)	S000	S00	C(D)	C(B)	BC31	D000		D00
3		0	0	26AB3F51	0	0	26AB3F51	00000000	0	0	0	0005C9D2
6-00		0	0	26AB3F51	0	0	00000000	26AB3F51	0	0	0	0005C9D2
6-01		0	0	00000000	0	0	0005C9D2	09AACFD4	0	0	0	0005C9D2
6-02		0	0	00017274	0	0	00017274	826AB3F5	0	0	0	000B93A4
6-03		0	0	00025C9D	0	0	0006266F	209AACFD	0	0	0	0005C9D2
6-04		0	0	0001899B	0	0	0007536D	C826AB3F	0	0	0	0005C9D2
6-05		0	0	0001D4DB	1	1	FFF02B09	7209AACF	1	0	0	0005C9D2
6-06		1	1	FFF002C2	1	1	FFF002C2	5C826AB3	1	0	0	000B93A4
6-07		1	1	FFF0C030	1	1	FFF0C030	97209AAC	1	0	0	000B93A4
6-08		1	1	FFF002C2	0	0	0005B9FE	25C826AB	0	0	0	0005C9D2
6-09		0	0	00016E7F	1	1	FFF044A0	897209AA	1	0	0	0005C9D2
6-10		1	1	FFF0E92B	1	1	FFF91759	625C826A	1	0	0	0005C9D2
6-11		1	1	FFF047D6	1	1	FFF87E04	5897209A	1	0	0	0005C9D2
6-12		1	1	FFF01F81	1	1	FFF855AF	1625C826	1	0	0	0005C9D2
6-13		1	1	FFF0156B	1	1	FFF84B99	C5897209	1	0	0	0005C9D2
6-14		1	1	FFF012E6	0	0	0009A68A	71625C82	0	0	0	000B93A4
6-15		0	0	000269A2	0	0	000DFD46	9C589720	0	0	0	000B93A4
6-16		0	0	00037F51	0	0	00037F51	A71625C8	0	0	0	000B93A4
7		0	0	0000DFD4	0	0	0000DFD4	69C58972	0	0	0	000B93A4
9		0	0	0000DFD4	0	0	0000DFD4	69C58972	0	0	0	000B93A4
10		0	0	0000DFD4	0	0	69C58972	69C58972	0	0	0	000B93A4

00095

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MI 0005

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLBCK	17P42		-TEST POINTS-		29L19	29L17	-TEST POINTS-			29L23	29L28	C(D)
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	0000	000		
3		1	1	88357F05	1	1	88357F05	00000000	0	0	0	0	00044133
6- 00		1	1	88357F05	0	0	00000000	88357F05	0	0	0	0	00044133
6- 01		0	0	00000000	0	0	00044133	220D5FC1	0	0	0	0	00044133
6- 02		0	0	0001104C	0	0	0005517F	C88357F0	0	0	0	0	00044133
6- 03		0	0	0001545F	0	0	0001545F	F220D5FC	0	0	0	0	00088266
6- 04		0	0	00005517	0	0	00005517	FC88357F	0	0	0	0	00088266
6- 05		0	0	00001545	1	1	FFFF3D412	FF220D5F	1	0	0	0	00044133
6- 06		1	1	FFFFF504	1	1	FFFFF504	3FC88357	1	0	0	0	00088266
6- 07		1	1	FFFF3D41	1	1	FFFF3D41	2FF220D5	1	0	0	0	00088266
6- 08		1	1	FFFFEF50	0	0	00087136	4BFC8835	0	0	0	0	00088266
6- 09		0	0	00021C6D	0	0	00065DA7	92FF220D	0	0	0	0	00044133
6- 10		0	0	00019768	0	0	0005D893	24BFC883	0	0	0	0	00044133
6- 11		0	0	00017626	1	1	FFF034F3	C92FF220	1	0	0	0	00044133
6- 12		1	1	FFFF4D3C	0	0	00038E6F	F24BFC88	0	0	0	0	00044133
6- 13		0	0	0000E39B	0	0	0000E39B	FC92FF22	0	0	0	0	00088266
6- 14		0	0	000038E6	0	0	0008BB4C	FF243FC8	0	0	0	0	00088266
6- 15		0	0	00022E03	0	0	00022E03	3FC92FF2	0	0	0	0	00088266
6- 16		0	0	00008B34	0	0	0009CE1A	CFE24BFF	0	0	0	0	00088266
7		0	0	00024386	1	1	FFFF0253	33FC92FF	1	0	0	0	00044133
9		1	1	FFE0253	0	0	0001F0AC	33FC92FF	1	0	0	0	00044133
10		1	1	FFE0253	1	1	33FC92FF	33FC92FF	1	0	0	0	00044133

00096

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MI 0006

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLBCK	17P42		-TEST POINTS-		29L19	29L17	-TEST POINTS-			29L23	29L28	C(D)
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	0000	000		
3		1	1	8DEF82D4	1	1	8DEF82D4	00000000	0	0	1	1	FFFAE01A
6- 00		1	1	8DEF82D4	0	0	00000000	8DEF82D4	0	0	1	1	FFFAE01A
6- 01		0	0	00000000	0	0	00000000	2378E0B5	0	0	1	1	FFF5C034
6- 02		0	0	00000000	1	1	FFFAE01A	080EF82D	0	0	1	1	FFFAE01A
6- 03		1	1	FFFE3806	1	1	FFF9982D	82373E0B	0	0	1	1	FFFAE01A
6- 04		1	1	FFFE6608	0	0	0003F5EE	2080EF82	1	1	1	1	FFFAE01A
6- 05		0	0	0000E17B	0	0	0006C161	882373E0	1	1	1	1	FFFAE01A
6- 06		0	0	00018058	1	1	FFFC6072	62080EF8	0	0	1	1	FFFAE01A
6- 07		1	1	FFFF181C	1	1	FFFF181C	988237BE	0	0	1	1	FFF5C034
6- 08		1	1	FFFFC607	1	1	FFFE8623	26208DEF	0	0	1	1	FFF5C034
6- 09		1	1	FFFD618E	0	0	0002A174	C988237B	1	1	1	1	FFFAE01A
6- 10		0	0	0000A05D	0	0	0000A05D	326208DE	1	1	1	1	FFF5C034
6- 11		0	0	00002817	0	0	000547FD	4C988237	1	1	1	1	FFFAE01A
6- 12		0	0	000151FF	0	0	000151FF	5326208D	1	1	1	1	FFF5C034
6- 13		0	0	0000547F	1	1	FFF614B3	04C98823	0	0	1	1	FFF5C034
6- 14		1	1	FFFD852C	0	0	0002A512	F5326208	1	1	1	1	FFFAE01A
6- 15		0	0	0000A944	1	1	FFF3895E	3D4C9882	0	0	1	1	FFFAE01A
6- 16		1	1	FFFE257	1	1	FFFA4A2B3	AF532623	0	0	1	1	FFF5C034
7		1	1	FFFD28A2	0	0	00024888	E3D4C988	1	1	1	1	FFFAE01A
9		0	0	00024888	1	1	FFFD3777	EBD4C988	1	1	1	1	FFFAE01A
10		0	0	00024888	1	1	EBD4C988	EBD4C988	1	1	1	1	FFFAE01A

00097

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MI 0007

A000 DBES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	17P42 -TEST POINTS-		29L19	29L17	-TEST POINTS-			29L23	29L28	C(D)
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	D000	
3		1	1	093AE796	1	1	093AE796	00000000	0	0	000065D1
6- 00		1	1	093AE796	0	0	00000000	093AE796	0	0	000065D1
6- 01		0	0	00000000	0	0	0000CBA2	364EB9E5	0	0	0000CBA2
6- 02		0	0	000032E8	0	0	000098B9	8D93AE79	0	0	000065D1
6- 03		0	0	0000262E	0	0	00008BFF	6364EB9E	0	0	000065D1
6- 04		0	0	000022FF	0	0	0000EEA1	08D93AE7	0	0	0000CBA2
6- 05		0	0	00003BA8	1	1	FFFFD5D7	76364EB9	1	0	000065D1
6- 06		1	1	FFFFFF575	0	0	0000C117	08D93AE	0	0	0000CBA2
6- 07		0	0	00003045	0	0	0000FBE7	F76364EB	0	0	0000CBA2
6- 08		0	0	00003EF9	1	1	FFFF0928	FDD8D93A	1	0	000065D1
6- 09		1	1	FFFFFF64A	1	1	FFFF9079	3F76364E	1	0	000065D1
6- 10		1	1	FFFFE41E	1	1	FFFF7E4D	4FDD8D93	1	0	000065D1
6- 11		1	1	FFFFDF93	1	1	FFFFDF93	53F76364	1	0	0000CBA2
6- 12		1	1	FFFFF7E4	0	0	00005D35	04FDD8D9	0	0	000065D1
6- 13		0	0	0000176D	0	0	00007D3E	753F7636	0	0	000065D1
6- 14		0	0	00001F4F	0	0	0000EAF1	9D4FDD8D	0	0	0000CBA2
6- 15		0	0	00003A3C	0	0	0000A08D	6753F763	0	0	000065D1
6- 16		0	0	00002823	1	1	FFFFC252	59D4FDD8	1	0	000065D1
7		1	1	FFFFF094	1	1	FFFFF094	96753F76	1	0	0000CBA2
9		1	1	FFFFF094	0	0	0000CF63	96753F76	1	0	0000CBA2
10		1	1	FFFFF094	1	1	96753F76	96753F76	1	0	0000CBA2

00098

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MI 0008

A000 DBES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	17P42 -TEST POINTS-		29L19	29L17	-TEST POINTS-			29L23	29L28	C(D)
		A000	A00	C(A)	S000	S00	C(S)	C(B)	BC31	D000	
3		1	1	8C594B71	1	1	8C594B71	00000000	0	0	00073463
6- 00		1	1	8C594B71	0	0	00000000	8C594B71	0	0	00073463
6- 01		0	0	00000000	0	0	00073463	231652DC	0	0	00073463
6- 02		0	0	0001ED18	0	0	0001FD18	08C594B7	0	0	000F68C6
6- 03		0	0	00007B46	1	1	FFF8C6E3	3231652D	1	0	00073463
6- 04		1	1	FFFE3138	0	0	000D9A7E	08C594B	0	0	000F68C6
6- 05		0	0	0003669F	1	1	FFF3323C	3231652	1	0	00073463
6- 06		1	1	FFFE0C8F	1	1	FFF7382C	2CC8C594	1	0	00073463
6- 07		1	1	FFFDCE0B	0	0	0005426E	03323165	0	0	00073463
6- 08		0	0	0001609B	0	0	000914FE	82CC8C59	0	0	00073463
6- 09		0	0	0002453F	0	0	0009F9A2	A0332316	0	0	00073463
6- 10		0	0	00027E68	0	0	0011E72E	A82CC8C5	0	0	000F68C6
6- 11		0	0	000479CB	0	0	000C2E2E	AA033231	0	0	00073463
6- 12		0	0	0003088B	0	0	000AFEE	AA82CC8C	0	0	00073463
6- 13		0	0	0002AFFB	0	0	0002AFFB	AAA03323	0	0	000F68C6
6- 14		0	0	0000A3FE	1	1	FFF8F793	EAA82CC8	1	0	00073463
6- 15		1	1	FFFE3D66	0	0	0005F249	FAAA0332	0	0	00073463
6- 16		0	0	00017C92	0	0	0010E558	7EAA82CF	0	0	000F68C6
7		0	0	00043956	1	1	FFFC84F3	1FAAA0B3	1	0	00073463
9		1	1	FFFC84F3	1	1	FFFC84F3	1FAAA0B3	1	0	00073463
10		1	1	FFFC84F3	0	0	1FAAA0B3	1FAAA0B3	1	0	00073463

00099

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MH 0001

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P0000

PHASE	CLOCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 0000	29L28 000	C(D)
3		0	0	0000FC7C	0	0	0000FC7C	00000000 0	0	0	37BF0000
4		0	0	0000FC7C	0	0	00000000	0000FC7C 0	0	0	37BF0000
5		0	0	0000FC7C	0	0	37BF0000	0000FC7C 0	0	0	37BF0000
6-00		0	0	0000FC7C	0	0	00000000	0000FC7C 0	0	0	37BF0000
6-01		0	0	00000000	0	0	00000000	00003F1F 0	0	0	6F7E0000
6-02		0	0	00000000	1	1	C8410000	00000FC7 1	0	0	37BF0000
6-03		1	1	F2104000	1	1	F2104000	000003F1 1	0	0	6F7E0000
6-04		1	1	FC841000	0	0	6C021000	000000FC 0	0	0	6F7E0000
6-05		0	0	18008400	0	0	18008400	0000003F 0	0	0	6F7E0000
6-06		0	0	06C02100	1	1	FCF01210	0000000F 1	0	0	37BF0000
6-07		1	1	F3C04840	1	1	F3C04840	00000003 1	0	0	6F7E0000
6-08		1	1	FCF01210	1	1	FCF01210	00000003 1	0	0	6F7E0000
10		1	1	FF3C0484	1	1	FF3C0484	00000000 1	0	0	6F7E0000

00100

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MH 0002

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P0000

PHASE	CLOCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 0000	29L28 000	C(D)
3		0	0	00000383	0	0	00000383	00000000 0	1	1	C8400000
4		0	0	00000383	0	0	00000000	00000383 0	1	1	C8400000
5		0	0	00000383	0	0	C8400000	00000383 0	1	1	C8400000
6-00		0	0	00000383	0	0	00000000	00000383 0	1	1	C8400000
6-01		0	0	00000000	0	0	37C00000	000000E0 1	1	1	C8400000
6-02		0	0	00000000	1	1	06300000	00000038 0	1	1	C8400000
6-03		1	1	F58C0000	1	1	F58C0000	0000000E 0	1	1	90800000
6-04		1	1	FD630000	1	1	8DE30000	00000003 0	1	1	90800000
6-05		1	1	E378C000	0	0	1B38C000	00000000 1	1	1	C8400000
6-06		0	0	06C03000	1	1	CF0E3000	00000000 0	1	1	C8400000
6-07		1	1	F3C38C00	1	1	F3C38C00	00000000 0	1	1	90800000
6-08		1	1	FCF0E300	1	1	FCF0E300	00000000 0	1	1	90800000
10		1	1	FF3C38C0	1	1	FF3C38C0	00000000 0	1	1	90800000

00101

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MM 0003

ADDD DBES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ADD INPUT TO PRODD

PHASE	CLOCK	17P42 ADDD	ADDD	-TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		0	0	0000E159	0	0	0000E159	00000000 0	0	0	000027C1
4		0	0	0000E159	0	0	00000000	0000E159 0	0	0	01000027
5		0	0	0000E159	0	0	27C10000	0000E159 0	0	0	27C10000
6- 00		0	0	0000E159	0	0	00000000	0000E159 0	0	0	27C10000
6- 01		0	0	00000000	0	0	27C10000	00003856 0	0	0	27C10000
6- 02		0	0	09F24000	0	0	59724000	0000E15 0	0	0	4F820000
6- 03		0	0	165C9000	0	0	3E1D9000	0000385 0	0	0	27C10000
6- 04		0	0	0F876400	0	0	37486400	000000E1 0	0	0	27C10000
6- 05		0	0	00021900	0	0	35931900	00000038 0	0	0	27C10000
6- 06		0	0	0064C640	0	0	0064C640	0000000E 0	0	0	4F820000
6- 07		0	0	03533190	0	0	52033190	00000003 0	0	0	4F820000
6- 08		0	0	1436C64	1	1	ECF5C64	00000003 1	0	0	27C10000
10		1	1	F33D7319	1	1	F33D7319	00000000 1	0	0	4F820000

00102

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MM 0004

ADDD DBES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE ADD INPUT TO PRODD

PHASE	CLOCK	17P42 ADDD	ADDD	-TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		0	0	00001EA6	0	0	00001EA6	00000000 0	0	0	0000083E
4		0	0	00001EA6	0	0	00000000	00001EA6 0	0	0	3E000008
5		0	0	00001EA6	0	0	D83E0000	00001EA6 0	0	0	D83E0000
6- 00		0	0	00001EA6	0	0	00000000	00001EA6 0	0	0	D83E0000
6- 01		0	0	00000000	1	1	307C0000	000007A9 0	1	1	307C0000
6- 02		1	1	EC1F0000	1	1	C45D0000	000001EA 0	1	1	D83E0000
6- 03		1	1	F1174000	1	1	A1934000	0000007A 0	1	1	307C0000
6- 04		1	1	0E640000	1	1	98E00000	0000001E 0	1	1	307C0000
6- 05		1	1	0E783400	1	1	96843400	00000007 0	1	1	307C0000
6- 06		1	1	0E000000	0	0	0D6F0000	00000001 1	1	1	D83E0000
6- 07		0	0	0353C340	1	1	33D7C340	00000000 0	1	1	307C0000
6- 08		1	1	ECF5F000	1	1	ECF5F000	00000000 0	1	1	307C0000
10		1	1	F33D7C34	1	1	F33D7C34	00000000 0	1	1	307C0000

00103

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MH 0005

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		0	0	000048C1	0	0	000048C1	00000000 0	0	0	30C90000
4		0	0	000048C1	0	0	00000000	000048C1 0	0	0	30C90000
5		0	0	000048C1	0	0	30C90000	000048C1 0	0	0	30C90000
6- 00		0	0	000048C1	0	0	00000000	000048C1 0	0	0	30C90000
6- 01		0	0	00000000	0	0	30C90000	00001230 0	0	0	30C90000
6- 02		0	0	0C324000	0	0	0C324000	0000048C 0	0	0	61920000
6- 03		0	0	030C9000	0	0	030C9000	00000123 0	0	0	61920000
6- 04		0	0	00032400	1	1	0FFA2400	00000048 1	0	0	30C90000
6- 05		1	1	F3FE8900	0	0	24C78900	00000012 0	0	0	30C90000
6- 06		0	0	0931E240	0	0	6AC3E240	00000004 0	0	0	61920000
6- 07		0	0	1AB0F890	0	0	1AB0F890	00000001 0	0	0	61920000
6- 08		0	0	06AC3E24	0	0	37753E24	00000000 0	0	0	30C90000
10		0	0	00DD4FB9	0	0	00DD4FB9	00000000 0	0	0	61920000

00104

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MH 0006

A000 DOES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPUT TO P000

PHASE	CLOCK	A000	A00	17P42 -TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B) BC31	29L23 D000	29L28 D00	C(D)
3		0	0	0000B73E	0	0	0000B73E	00000000 0	1	1	C7360000
4		0	0	0000B73E	0	0	00000000	0000B73E 0	1	1	C7360000
5		0	0	0000B73E	0	0	C7360000	0000B73E 0	1	1	C7360000
6- 00		0	0	0000B73E	0	0	00000000	0000B73E 0	1	1	C7360000
6- 01		0	0	00000000	1	1	8E6C0000	000020CF 0	1	1	8E6C0000
6- 02		1	1	E3FB0000	0	0	1C650000	00000B73 1	1	1	C7360000
6- 03		0	0	07194000	0	0	07194000	0000020C 1	1	1	8E6C0000
6- 04		0	0	01265000	1	1	C8FC5000	000000B7 0	1	1	C7360000
6- 05		1	1	F2BF1400	0	0	2B091400	0000002D 1	1	1	C7360000
6- 06		0	0	0AC24500	1	1	992E4500	0000000B 0	1	1	8E6C0000
6- 07		1	1	E64B9140	0	0	1F159140	00000002 1	1	1	C7360000
6- 08		0	0	07C56450	0	0	408F6450	00000003 1	1	1	C7360000
10		0	0	10230914	0	0	10230914	00000000 1	1	1	8E6C0000

00105

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MM 0007

A000 D9ES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPJT T9 P000

PHASE	CLOCK	17P42 A000	A00	-TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B)	BC31	29L23 D000	29L28 D00	C(D)
3		1	1	FFFF62EA	1	1	FFFF62EA	00000000	0	0	0	00005AF4
4		1	1	FFFF62EA	1	1	00000000	FFFF62EA	0	0	0	F400005A
5		1	1	FFFF62EA	1	1	5AF40000	FF0062EA	0	0	0	5AF40000
6-00		1	1	FFFF62EA	0	0	00000000	FF0062EA	0	0	0	5AF40000
6-01		0	0	00000000	0	0	35E80000	3FC018BA	0	0	0	35E80000
6-02		0	0	2D7A0000	0	0	E3620000	0FF0062E	0	0	0	35E80000
6-03		0	0	3B088000	0	0	EECC8000	03FC018B	0	0	0	35E80000
6-04		0	0	3B302000	1	1	E0B20000	00FF0062	1	0	0	5AF40000
6-05		1	1	FR2FC800	1	1	9D3B0800	003FC018	1	0	0	5AF40000
6-06		1	1	E74EC200	0	0	4242C200	000FF006	0	0	0	5AF40000
6-07		0	0	1030B080	0	0	C678B080	0003FC01	0	0	0	35E80000
6-08		0	0	31DE2C20	0	0	8C922C20	0000FF00	0	0	0	5AF40000
10		0	0	23248B08	0	0	23248B08	00003FC0	0	0	0	35E80000

00166

MULTIPLY SIMULATOR (SIGMA 5 ONLY)

MM 0008

A000 D9ES NOT ACTUALLY EXIST IN THE LOGIC EQUATIONS. IT REPRESENTS THE A00 INPJT T9 P000

PHASE	CLOCK	17P42 A000	A00	-TEST POINTS- C(A)	29L19 S000	29L17 S00	C(S)	-TEST POINTS- C(B)	BC31	29L23 D000	29L28 D00	C(D)
4		0	0	00009D15	0	0	00009D15	00000000	0	0	0	0000A503
5		0	0	00009D15	0	0	00000000	00009D15	0	0	0	0B0000A5
6-00		0	0	00009D15	0	0	A50B0000	00009D15	0	0	0	A50B0000
6-01		0	0	00009D15	0	0	00000000	00009D15	0	0	0	A50B0000
6-02		1	1	E942C000	1	1	A50B0000	00002745	0	1	1	A50B0000
6-03		1	1	E3037000	1	1	8E40C000	000009D1	0	1	1	A50B0000
6-04		1	1	E2279C00	1	1	889E7000	00000274	0	1	1	A50B0000
6-05		1	1	F8E9E700	1	1	E2279C00	0000009D	0	1	1	4A160000
6-06		1	1	E74539C0	0	0	9D94E700	00000027	0	1	1	A50B0000
6-07		0	0	12B6RE70	1	1	425A29C0	00000009	1	1	1	A50B0000
6-08		1	1	D6AB239C	1	1	5AAC8E70	00000002	0	1	1	4A160000
10		1	1	C83048E7	0	0	20C1239C	00000003	0	1	1	4A160000
							232548E7	00000000	1	1	1	A50B0000

APPENDIX B

This appendix contains the T-charts for the divide instructions.

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE 001

DW	C1	PHASE	CLOCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	ZCC
		C3		CF999999	0000000	6000000	0000000	0
		C4		0000000	0000000	6000000	0000000	1
		C6	CC	CF999999	0000000	6000000	30666667	1
		C6	C1	6000000	0000001	6000000	0000000	1
		C6	C2	C199999C	0000003	6000000	A199999C	0
		IC		C199999C	0000003	6000000	0000000	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE 002

DW	C2	PHASE	CLOCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	ZCC
		C3		6000000	0000000	FFFFFFF	0000000	0
		C4		8000000	0000000	FFFFFFF	8000000	0
		C6	CC	6000000	8000000	FFFFFFF	6000000	1
		C6	C1	0000001	0000001	FFFFFFF	7FFFFFFF	1
		C6	C2	FFFFFFFE	0000003	FFFFFFF	BFFFFFFC	1
		IC		FFFFFFFE	0000003	FFFFFFF	0000000	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR							PAGE 003
Dw C3	PHASE	CLBCK	A(CC=31)	B(CC=31)	D(CC=31)	S(CC=31)	<CC
	C3		3FFFFFFF	00000000	7FFFFFFD	00000000	0
	C4		00000001	00000000	7FFFFFFD	00000001	0
	C6	CC	3FFFFFFF	00000001	7FFFFFFD	3FFFFFFF	1
	C6	C1	7FFFFFFE	00000003	7FFFFFFD	00000001	1
	C6	C2	00000002	00000007	7FFFFFFD	80000005	0
	10		00000002	00000007	7FFFFFFD	00000000	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR							PAGE 004
Dw C4	PHASE	CLBCK	A(CC=31)	B(CC=31)	D(CC=31)	S(CC=31)	<CC
	C3		00000000	00000000	80000000	00000000	0
	C4		00000000	00000000	80000000	00000000	1
	C6	CC	00000000	00000000	80000000	40000000	1
	C6	C1	80000000	00000001	80000000	00000000	1
	C6	C2	00000000	00000003	80000000	80000000	0
	10		00000000	00000003	80000000	00000000	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW	PHASE	CLOCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	ACF
05	C3		40000000	00000000	7FFFFFFF	00000000	0
	C4		80000000	00000000	7FFFFFFF	80000000	0
	C6	C0	40000000	80000000	7FFFFFFF	40000000	1
	C6	C1	80000001	00000001	7FFFFFFF	00000002	1
	C6	C2	00000004	00000003	7FFFFFFF	80000005	0
	10		00000004	00000003	7FFFFFFF	00000000	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW	PHASE	CLOCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	ACF
	C3		3FFFFFFF	00000000	7FFFFFFF	00000000	0
	C4		00000001	00000000	7FFFFFFF	00000001	0
	C6	C0	3FFFFFFF	00000001	7FFFFFFF	3FFFFFFF	1
	C6	C1	7FFFFFFF	00000003	7FFFFFFF	FFFFFFF0	0
	C6	C2	FFFFFFF0	00000006	7FFFFFFF	FFFFFFF0	1
	C6	C3	FFFFFFFA	00000000	7FFFFFFF	FFFFFFF0	1
	C6	C4	FFFFFFF6	00000013	7FFFFFFF	FFFFFFF7	1
	C6	C5	FFFFFFFE	00000037	7FFFFFFF	FFFFFFF0	1
	C6	C6	FFFFFFDE	0000006F	7FFFFFFF	FFFFFFDF	1
	C6	C7	FFFFFFB0	000000DF	7FFFFFFF	FFFFFFB0	1
	C6	C8	FFFFFF7E	000001BF	7FFFFFFF	FFFFFF7E	1
	C6	C9	FFFFFFE0	0000037F	7FFFFFFF	FFFFFFE0	1
	C6	10	FFFFFFD0	000006FF	7FFFFFFF	FFFFFFD0	1
	C6	11	FFFFFFB0	00000DFF	7FFFFFFF	FFFFFFB0	1
	C6	12	FFFFFF70	000013FF	7FFFFFFF	FFFFFF70	1
	C6	13	FFFFFFE0	000037FF	7FFFFFFF	FFFFFFE0	1
	C6	14	FFFFFFD0	00006FFF	7FFFFFFF	FFFFFFD0	1
	C6	15	FFFFFFB0	0000DFFF	7FFFFFFF	FFFFFFB0	1
	C6	16	FFFF7FFF	0001BFFF	7FFFFFFF	FFFF7FFF	1
	C6	17	FFFFFFF0	00037FFF	7FFFFFFF	FFFFFFF0	1
	C6	18	FFDFFFF0	0006FFFF	7FFFFFFF	FFDFFFF0	1
	C6	19	FFBFFFF0	000DFFFF	7FFFFFFF	FFBFFFF0	1
	C6	20	FFF7FFF0	0013FFFF	7FFFFFFF	FFF7FFF0	1
	C6	21	FFFFFFF0	0037FFFF	7FFFFFFF	FFFFFFF0	1
	C6	22	FFDFFFF0	006FFFF0	7FFFFFFF	FFDFFFF0	1
	C6	23	FFBFFFF0	00DFFFF0	7FFFFFFF	FFBFFFF0	1
	C6	24	FF7FFFF0	01BFFFF0	7FFFFFFF	FF7FFFF0	1
	C6	25	FFFFFFF0	037FFFF0	7FFFFFFF	FFFFFFF0	1
	C6	26	FDFFFFFF0	06FFFFFF0	7FFFFFFF	FDFFFFFF0	1
	C6	27	FBFFFFFF0	0DFFFFFF0	7FFFFFFF	FBFFFFFF0	1
	C6	28	F7FFFFFF0	1BFFFFFF0	7FFFFFFF	F7FFFFFF0	1
	C6	29	FFFFFFF0	37FFFFFF0	7FFFFFFF	FFFFFFF0	1
	C6	30	FFFFFFF0	6FFFFFFF0	7FFFFFFF	FFFFFFF0	1
	C6	31	BFFFFFF0	0FFFFFFF0	7FFFFFFF	BFFFFFF0	1
	C6	32	7FFFFFFF	BFFFFFFF	7FFFFFFF	00000000	1
	C7		00000000	7FFFFFFF	7FFFFFFF	80000001	0
	C8		00000000	7FFFFFFF	7FFFFFFF	00000000	0
	C9		00000000	7FFFFFFF	7FFFFFFF	7FFFFFFF	0
	10		7FFFFFFF	7FFFFFFF	7FFFFFFF	7FFFFFFF	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE 007

DW	C7	PHASE	CLBCK	A(CC=31)	B(CC=31)	D(CC=31)	S(CC=31)	KCC
		C3		3FFFFFFF	00000000	80000001	00000000	0
		C4		00000001	00000000	80000001	00000001	0
		C6	C0	3FFFFFFF	00000001	80000001	3FFFFFFF	1
		C6	C1	7FFFFFFF	00000003	80000001	7FFFFFFF	0
		C6	C2	FFFFFFFE	00000006	80000001	7FFFFFFD	1
		C6	C3	FFFFFFFA	0000000D	80000001	7FFFFFFB	1
		C6	C4	FFFFFFF6	0000001B	80000001	7FFFFFF7	1
		C6	C5	FFFFFFEE	00000037	80000001	7FFFFFFE	1
		C6	C6	FFFFFFDE	0000006F	80000001	7FFFFFFD	1
		C6	C7	FFFFFFBE	000000DF	80000001	7FFFFFFB	1
		C6	C8	FFFFF7E	000001BF	80000001	7FFFFFF7	1
		C6	C9	FFFFFFE	0000037F	80000001	7FFFFFF	1
		C6	C10	FFFFDFE	000006FF	80000001	7FFFFD	1
		C6	C11	FFFFBFE	00000DFF	80000001	7FFFF	1
		C6	C12	FFFF7FE	00001BFF	80000001	7FFFF7	1
		C6	C13	FFFFFFE	000037FF	80000001	7FFFF	1
		C6	C14	FFFFDFE	00006FFF	80000001	7FFFF	1
		C6	C15	FFFFBFE	0000DFFF	80000001	7FFB	1
		C6	C16	FFFF7FE	0001BFFF	80000001	7FF7	1
		C6	C17	FFFFE	00037FFF	80000001	7FE	1
		C6	C18	FFDFE	0006FFF	80000001	7FD	1
		C6	C19	FFBFE	000DFFF	80000001	7FB	1
		C6	C20	FF7FE	001BFFF	80000001	7F7	1
		C6	C21	FFFFE	0037FFF	80000001	7F	1
		C6	C22	FFDFE	006FFF	80000001	7D	1
		C6	C23	FFBFE	00DFFF	80000001	7B	1
		C6	C24	FF7FE	01BFFF	80000001	77	1
		C6	C25	FFFFE	037FFF	80000001	7E	1
		C6	C26	FFDFE	06FFF	80000001	7D	1
		C6	C27	FFBFE	0DFFF	80000001	7B	1
		C6	C28	F7FE	1BFFF	80000001	77	1
		C6	C29	FE	37FFF	80000001	6	1
		C6	C30	DFE	6FFF	80000001	5	1
		C6	C31	BFE	DFFF	80000001	3	1
		C6	C32	7FE	BFFF	80000001	0	1
		C7		00000000	7FFFFFFF	80000001	00000000	0
		C8		00000000	7FFFFFFF	80000001	00000001	0
		C9		00000000	7FFFFFFF	80000001	00000000	0
		C10		7FFFFFFF	7FFFFFFF	80000001	80000001	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE 008

DW	C8	PHASE	CLBCK	A(CC=31)	B(CC=31)	D(CC=31)	S(CC=31)	KCC
		C3		E0000000	00000000	7FFFFFFF	00000000	0
		C4		FFFFFFF	00000000	7FFFFFFF	00000001	0
		C6	C0	E0000000	00000001	7FFFFFFF	1FFFFFFF	1
		C6	C1	3FFFFFFE	00000003	7FFFFFFF	8FFFFFFF	0
		C6	C2	7FFFFFFE	00000006	7FFFFFFF	FFFFFFFD	0
		C6	C3	FFFFFFFA	0000000C	7FFFFFFF	7FFFFFF9	1
		C6	C4	FFFFFFF2	00000019	7FFFFFFF	7FFFFFF3	1
		C6	C5	FFFFFFE6	00000033	7FFFFFFF	7FFFFFF7	1
		C6	C6	FFFFFFCE	00000067	7FFFFFFF	7FFFFFFE	1
		C6	C7	FFFFFF9E	000000CF	7FFFFFFF	7FFFFFF3	1
		C6	C8	FFFFFF3E	0000019F	7FFFFFFF	7FFFFFF3	1
		C6	C9	FFFFFF7E	0000033F	7FFFFFFF	7FFFFFF7	1
		C6	C10	FFFFFFCE	0000067F	7FFFFFFF	7FFFFFF	1
		C6	C11	FFFFFF9E	00000CFF	7FFFFFFF	7FFFFFF9	1
		C6	C12	FFFFFF3E	000019FF	7FFFFFFF	7FFFFFF3	1
		C6	C13	FFFFE7FE	000033FF	7FFFFFFF	7FFE7	1
		C6	C14	FFFFCFE	000067FF	7FFFFFFF	7FFCF	1
		C6	C15	FFFF9FE	0000CFFF	7FFFFFFF	7FF9	1
		C6	C16	FFFF3FE	00019FFF	7FFFFFFF	7FF3	1
		C6	C17	FFE7FEE	00033FFF	7FFFFFFF	7FE7	1
		C6	C18	FFCFE	00067FFF	7FFFFFFF	7FC	1
		C6	C19	FF9FE	000CFFF	7FFFFFFF	7F9	1
		C6	C20	FF3FE	0019FFF	7FFFFFFF	7F3	1
		C6	C21	FEE7FEE	0033FFF	7FFFFFFF	7E7	1
		C6	C22	FCFE	0067FFF	7FFFFFFF	7CF	1
		C6	C23	F9FE	00CFFF	7FFFFFFF	79	1
		C6	C24	F3FE	019FFF	7FFFFFFF	7F3	1
		C6	C25	FE7FEE	033FFF	7FFFFFFF	7E7	1
		C6	C26	FCFE	067FFF	7FFFFFFF	7CF	1
		C6	C27	F9FE	0CFFF	7FFFFFFF	79	1
		C6	C28	F3FE	19FFF	7FFFFFFF	73	1
		C6	C29	E7FEE	33FFF	7FFFFFFF	67	1
		C6	C30	CFE	67FFF	7FFFFFFF	4	1
		C6	C31	9FE	9FFF	7FFFFFFF	1	1
		C6	C32	3FE	9FFF	7FFFFFFF	0	1
		C7		00000000	3FFFFFFE	7FFFFFFF	3FFFFFFF	1
		C8		3FFFFFFF	3FFFFFFE	7FFFFFFF	00000001	0
		C9		3FFFFFFF	3FFFFFFE	7FFFFFFF	3FFFFFFE	0
		C10		3FFFFFFE	3FFFFFFE	7FFFFFFF	00000002	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW	PHASE	CLBCK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	XCC
	03		00000000	00000000	80000001	00000000	0
	04		FFFFFFFF	00000000	80000001	00000001	0
	06	00	00000000	00000001	80000001	3FFFFFFF	1
	06	01	7FFFFFFE	00000003	80000001	FFFFFFFF	0
	06	02	FFFFFFFE	00000006	80000001	7FFFFFFD	1
	06	03	FFFFFFFA	0000000D	80000001	7FFFFFFB	1
	06	04	FFFFFFF6	0000001B	80000001	7FFFFFF7	1
	06	05	FFFFFFEE	00000037	80000001	7FFFFFFE	1
	06	06	FFFFFFDE	0000006F	80000001	7FFFFFFD	1
	06	07	FFFFFFBE	000000DF	80000001	7FFFFFFB	1
	06	08	FFFFFF7E	000001BF	80000001	7FFFFFF7	1
	06	09	FFFFFFFE	0000037F	80000001	7FFFFFFE	1
	06	10	FFFFFFDF	000006FF	80000001	7FFFFFFD	1
	06	11	FFFFFFBF	00000DFF	80000001	7FFFFFFB	1
	06	12	FFFFFF7F	00001BFF	80000001	7FFFFFF7	1
	06	13	FFFFFFFE	000037FF	80000001	7FFFFFFE	1
	06	14	FFFFFFDF	00006FFF	80000001	7FFFFFFD	1
	06	15	FFFFFFBF	0000DFFF	80000001	7FFFFFFB	1
	06	16	FFFF7FFE	0001BFFF	80000001	7FFF7FFF	1
	06	17	FFFFFFFE	00037FFF	80000001	7FFFFFFE	1
	06	18	FFFFDFFE	0006FFFF	80000001	7FFDFFFF	1
	06	19	FFFFBFFE	000DFFFF	80000001	7FFBFFFF	1
	06	20	FFFF7FFE	001BFFFF	80000001	7FF7FFFF	1
	06	21	FFFFFFFE	0037FFF	80000001	7FFFFFFE	1
	06	22	FFDFFFFE	006FFFF	80000001	7FDFFFF	1
	06	23	FFBFFFFE	00DFFFF	80000001	7FBFFFF	1
	06	24	FF7FFFFE	01BFFFF	80000001	7F7FFFF	1
	06	25	FFFFFFFE	037FFFF	80000001	7EFFFF	1
	06	26	FDFFFFE	06FFFF	80000001	7DFFFF	1
	06	27	FDFFFFFE	0DFFFF	80000001	7DFFFF	1
	06	28	F7FFFFE	1BFFFF	80000001	77FFFF	1
	06	29	EFFFFFFE	37FFFF	80000001	6FFFFFF	1
	06	30	DFFFFFFE	6FFFF	80000001	5FFFFFF	1
	06	31	BFFFFFFE	DFFFF	80000001	3FFFFFF	1
	06	32	7FFFFFFF	BFFFFFF	80000001	00000000	1
	07		00000000	7FFFFFFF	80000001	80000001	0
	08		00000000	7FFFFFFF	80000001	00000000	0
	09		00000000	7FFFFFFF	80000001	7FFFFFFF	0
	10		7FFFFFFF	7FFFFFFF	80000001	7FFFFFFF	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW	PHASE	CLBCK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	XCC
	03		FFFFFFFF	00000000	FFFFFFFF	00000000	0
	04		FFFFFFE1	00000000	FFFFFFFF	000001F	0
	06	00	FFFFFFFF	000001F	FFFFFFFF	00000000	1
	06	01	00000000	000003F	FFFFFFFF	FFFFFFFF	0
	06	02	FFFFFFF8	000007E	FFFFFFFF	FFFFFFFF	0
	06	03	FFFFFFF8	00000FC	FFFFFFFF	FFFFFFFF	0
	06	04	FFFFFFF8	00001F8	FFFFFFFF	FFFFFFFF	0
	06	05	FFFFFFF8	00003FC	FFFFFFFF	FFFFFFFF	0
	06	06	FFFFFFF8	00007E0	FFFFFFFF	FFFFFFFF	0
	06	07	FFFFFFF8	0000FC0	FFFFFFFF	FFFFFFFF	0
	06	08	FFFFFFF8	0001F80	FFFFFFFF	FFFFFFFF	0
	06	09	FFFFFFF8	0003FC0	FFFFFFFF	FFFFFFFF	0
	06	10	FFFFFFF8	0007L00	FFFFFFFF	FFFFFFFF	0
	06	11	FFFFFFF8	000FC00	FFFFFFFF	FFFFFFFF	0
	06	12	FFFFFFF8	001F800	FFFFFFFF	FFFFFFFF	0
	06	13	FFFFFFF8	003FC00	FFFFFFFF	FFFFFFFF	0
	06	14	FFFFFFF8	007E000	FFFFFFFF	FFFFFFFF	0
	06	15	FFFFFFF8	00FC000	FFFFFFFF	FFFFFFFF	0
	06	16	FFFFFFF8	01F8000	FFFFFFFF	FFFFFFFF	0
	06	17	FFFFFFF8	03FC000	FFFFFFFF	FFFFFFFF	0
	06	18	FFFFFFF8	07E0000	FFFFFFFF	FFFFFFFF	0
	06	19	FFFFFFF8	0FC0000	FFFFFFFF	FFFFFFFF	0
	06	20	FFFFFFF8	1F80000	FFFFFFFF	FFFFFFFF	0
	06	21	FFFFFFF8	3FC0000	FFFFFFFF	FFFFFFFF	0
	06	22	FFFFFFF8	7E00000	FFFFFFFF	FFFFFFFF	0
	06	23	FFFFFFF8	FC00000	FFFFFFFF	FFFFFFFF	0
	06	24	FFFFFFF8	F800000	FFFFFFFF	FFFFFFFF	0
	06	25	FFFFFFF8	F000000	FFFFFFFF	FFFFFFFF	0
	06	26	FFFFFFF8	7E00000	FFFFFFFF	FFFFFFFF	0
	06	27	FFFFFFF8	FC00000	FFFFFFFF	FFFFFFFF	0
	06	28	FFFFFFF9	F800000	FFFFFFFF	FFFFFFFF	0
	06	29	FFFFFFFB	F000000	FFFFFFFF	FFFFFFFF	0
	06	30	FFFFFFFB	E000000	FFFFFFFF	00000003	1
	06	31	00000007	00000001	FFFFFFFF	00000003	1
	06	32	00000007	80000003	FFFFFFFF	00000003	1
	07		00000003	00000007	FFFFFFFF	FFFFFFFF	0
	08		00000003	00000007	FFFFFFFF	FFFFFFFF	0
	09		00000003	00000007	FFFFFFFF	00000007	0
	10		00000007	00000007	FFFFFFFF	00000007	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW 11	PHASE	CLCK	A(CO=31)	B(OO=31)	D(CO=31)	S(OO=31)	<OO
	C3		00000000	00000000	00000004	00000000	0
	C4		00000020	00000000	00000004	00000020	0
	C6	00	00000000	00000020	00000004	00000000	1
	C6	01	00000000	00000041	00000004	FFFFFFFF	0
	C6	02	FFFFFFFF	00000082	00000004	FFFFFFFF	0
	C6	03	FFFFFFFF	00000104	00000004	FFFFFFFF	0
	C6	04	FFFFFFFF	00000208	00000004	FFFFFFFF	0
	C6	05	FFFFFFFF	00000410	00000004	FFFFFFFF	0
	C6	06	FFFFFFFF	00000820	00000004	FFFFFFFF	0
	C6	07	FFFFFFFF	00001040	00000004	FFFFFFFF	0
	C6	08	FFFFFFFF	00002080	00000004	FFFFFFFF	0
	C6	09	FFFFFFFF	00004100	00000004	FFFFFFFF	0
	C6	10	FFFFFFFF	00008200	00000004	FFFFFFFF	0
	C6	11	FFFFFFFF	00010400	00000004	FFFFFFFF	0
	C6	12	FFFFFFFF	00020800	00000004	FFFFFFFF	0
	C6	13	FFFFFFFF	00041000	00000004	FFFFFFFF	0
	C6	14	FFFFFFFF	00082000	00000004	FFFFFFFF	0
	C6	15	FFFFFFFF	00104000	00000004	FFFFFFFF	0
	C6	16	FFFFFFFF	00208000	00000004	FFFFFFFF	0
	C6	17	FFFFFFFF	00410000	00000004	FFFFFFFF	0
	C6	18	FFFFFFFF	00820000	00000004	FFFFFFFF	0
	C6	19	FFFFFFFF	01040000	00000004	FFFFFFFF	0
	C6	20	FFFFFFFF	02080000	00000004	FFFFFFFF	0
	C6	21	FFFFFFFF	04100000	00000004	FFFFFFFF	0
	C6	22	FFFFFFFF	08200000	00000004	FFFFFFFF	0
	C6	23	FFFFFFFF	10400000	00000004	FFFFFFFF	0
	C6	24	FFFFFFFF	20800000	00000004	FFFFFFFF	0
	C6	25	FFFFFFFF	41000000	00000004	FFFFFFFF	0
	C6	26	FFFFFFFF	82000000	00000004	FFFFFFFF	0
	C6	27	FFFFFFFF9	04000000	00000004	FFFFFFFFD	0
	C6	28	FFFFFFFA	08000000	00000004	FFFFFFFEE	0
	C6	29	FFFFFFFC	10000000	00000004	00000000	1
	C6	30	00000000	20000001	00000004	FFFFFFFF	0
	C6	31	FFFFFFFF	40000002	00000004	FFFFFFFF	0
	C6	32	FFFFFFFF	80000004	00000004	FFFFFFFF	0
	C7		FFFFFFFC	00000008	00000004	00000000	1
	C8		00000000	00000008	00000004	00000000	0
	C9		00000000	00000008	00000004	00000008	0
	10		00000008	00000008	00000004	00000008	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW 12	PHASE	CLCK	A(CO=31)	B(OO=31)	D(CO=31)	S(OO=31)	<OO
	C3		FFFFFFFF	00000000	00000004	00000000	0
	C4		FFFFFFF0	00000000	00000004	00000020	0
	C6	00	FFFFFFFF	00000000	00000004	00000000	1
	C6	01	00000000	00000041	00000004	FFFFFFFF	0
	C6	02	FFFFFFFF	00000082	00000004	FFFFFFFF	0
	C6	03	FFFFFFFF	00000104	00000004	FFFFFFFF	0
	C6	04	FFFFFFFF	00000208	00000004	FFFFFFFF	0
	C6	05	FFFFFFFF	00000410	00000004	FFFFFFFF	0
	C6	06	FFFFFFFF	00000820	00000004	FFFFFFFF	0
	C6	07	FFFFFFFF	00001040	00000004	FFFFFFFF	0
	C6	08	FFFFFFFF	00002080	00000004	FFFFFFFF	0
	C6	09	FFFFFFFF	00004100	00000004	FFFFFFFF	0
	C6	10	FFFFFFFF	00008200	00000004	FFFFFFFF	0
	C6	11	FFFFFFFF	00010400	00000004	FFFFFFFF	0
	C6	12	FFFFFFFF	00020800	00000004	FFFFFFFF	0
	C6	13	FFFFFFFF	00041000	00000004	FFFFFFFF	0
	C6	14	FFFFFFFF	00082000	00000004	FFFFFFFF	0
	C6	15	FFFFFFFF	00104000	00000004	FFFFFFFF	0
	C6	16	FFFFFFFF	00208000	00000004	FFFFFFFF	0
	C6	17	FFFFFFFF	00410000	00000004	FFFFFFFF	0
	C6	18	FFFFFFF0	00820000	00000004	FFFFFFFF	0
	C6	19	FFFFFFF0	01040000	00000004	FFFFFFFF	0
	C6	20	FFFFFFF0	02080000	00000004	FFFFFFFF	0
	C6	21	FFFFFFF0	04100000	00000004	FFFFFFFF	0
	C6	22	FFFFFFF0	08200000	00000004	FFFFFFFF	0
	C6	23	FFFFFFF0	10400000	00000004	FFFFFFFF	0
	C6	24	FFFFFFF0	20800000	00000004	FFFFFFFF	0
	C6	25	FFFFFFF0	41000000	00000004	FFFFFFFF	0
	C6	26	FFFFFFF0	82000000	00000004	FFFFFFFF	0
	C6	27	FFFFFFF9	04000000	00000004	FFFFFFFD	0
	C6	28	FFFFFFFA	08000000	00000004	FFFFFFFE	0
	C6	29	FFFFFFFC	10000000	00000004	00000000	1
	C6	30	00000000	20000001	00000004	FFFFFFFF	0
	C6	31	FFFFFFFF	40000002	00000004	FFFFFFFF	0
	C6	32	FFFFFFFF	80000004	00000004	FFFFFFFF	0
	C7		FFFFFFFC	00000008	00000004	00000000	1
	C8		00000000	00000008	00000004	00000000	0
	C9		00000000	00000008	00000004	00000008	0
	10		00000008	00000008	00000004	FFFFFFFF	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DA 13	PHASE	CLCK	A(CO-31)	B(CO-31)	D(CO-31)	S(CO-31)	KCO
	C3		FFFFFFF	0000000	FFFFFFF	0000000	0
	C4		FFFFFFE1	0000000	FFFFFFF	000001F	0
	C6	C0	FFFFFFF	000001F	FFFFFFF	0000000	1
	C6	C1	0000000	000003F	FFFFFFF	FFFFFFF	0
	C6	C2	FFFFFFF6	000007E	FFFFFFF	FFFFFFF	0
	C6	C3	FFFFFFF6	00000FC	FFFFFFF	FFFFFFF	0
	C6	C4	FFFFFFF6	00001F8	FFFFFFF	FFFFFFF	0
	C6	C5	FFFFFFF6	00003FC	FFFFFFF	FFFFFFF	0
	C6	C6	FFFFFFF6	00007E0	FFFFFFF	FFFFFFF	0
	C6	C7	FFFFFFF6	0000FC0	FFFFFFF	FFFFFFF	0
	C6	C8	FFFFFFF6	0001F80	FFFFFFF	FFFFFFF	0
	C6	C9	FFFFFFF6	0003FC0	FFFFFFF	FFFFFFF	0
	C6	C10	FFFFFFF6	0007E00	FFFFFFF	FFFFFFF	0
	C6	C11	FFFFFFF6	000FC00	FFFFFFF	FFFFFFF	0
	C6	C12	FFFFFFF6	001F800	FFFFFFF	FFFFFFF	0
	C6	C13	FFFFFFF6	003FC00	FFFFFFF	FFFFFFF	0
	C6	C14	FFFFFFF6	007E000	FFFFFFF	FFFFFFF	0
	C6	C15	FFFFFFF6	00FC000	FFFFFFF	FFFFFFF	0
	C6	C16	FFFFFFF6	001F800	FFFFFFF	FFFFFFF	0
	C6	C17	FFFFFFF6	003FC00	FFFFFFF	FFFFFFF	0
	C6	C18	FFFFFFF6	007E000	FFFFFFF	FFFFFFF	0
	C6	C19	FFFFFFF6	00FC000	FFFFFFF	FFFFFFF	0
	C6	C20	FFFFFFF6	01F8000	FFFFFFF	FFFFFFF	0
	C6	C21	FFFFFFF6	03FC000	FFFFFFF	FFFFFFF	0
	C6	C22	FFFFFFF6	07E0000	FFFFFFF	FFFFFFF	0
	C6	C23	FFFFFFF6	0FC0000	FFFFFFF	FFFFFFF	0
	C6	C24	FFFFFFF6	1F80000	FFFFFFF	FFFFFFF	0
	C6	C25	FFFFFFF6	3FC0000	FFFFFFF	FFFFFFF	0
	C6	C26	FFFFFFF6	7E00000	FFFFFFF	FFFFFFF	0
	C6	C27	FFFFFFF6	FC00000	FFFFFFF	FFFFFFF	0
	C6	C28	FFFFFFF7	F800000	FFFFFFF	FFFFFFF	0
	C6	C29	FFFFFFF9	F000000	FFFFFFF	FFFFFFF	0
	C6	C30	FFFFFFFD	E000000	FFFFFFF	0000002	1
	C6	C31	0000005	0000001	FFFFFFF	0000000	1
	C6	C32	0000001	8000003	FFFFFFF	FFFFFFF	0
	C7		FFFFFFFC	0000006	FFFFFFF	0000001	1
	C8		0000001	0000006	FFFFFFF	FFFFFFF	0
	C9		0000001	0000006	FFFFFFF	0000006	0
	C10		0000006	0000006	FFFFFFF	0000006	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DA 14	PHASE	CLCK	A(CO-31)	B(CO-31)	D(CO-31)	S(CO-31)	KCO
	C3		0000000	0000000	FFFFFFF	0000000	0
	C4		0000020	0000000	FFFFFFF	0000020	0
	C6	C0	0000000	0000020	FFFFFFF	0000000	1
	C6	C1	0000000	0000041	FFFFFFF	FFFFFFF	0
	C6	C2	FFFFFFF8	0000082	FFFFFFF	FFFFFFF	0
	C6	C3	FFFFFFF8	0000104	FFFFFFF	FFFFFFF	0
	C6	C4	FFFFFFF8	0000208	FFFFFFF	FFFFFFF	0
	C6	C5	FFFFFFF8	0000410	FFFFFFF	FFFFFFF	0
	C6	C6	FFFFFFF8	0000820	FFFFFFF	FFFFFFF	0
	C6	C7	FFFFFFF8	0001040	FFFFFFF	FFFFFFF	0
	C6	C8	FFFFFFF8	0002080	FFFFFFF	FFFFFFF	0
	C6	C9	FFFFFFF8	0004100	FFFFFFF	FFFFFFF	0
	C6	C10	FFFFFFF8	0008200	FFFFFFF	FFFFFFF	0
	C6	C11	FFFFFFF8	0010400	FFFFFFF	FFFFFFF	0
	C6	C12	FFFFFFF8	0020800	FFFFFFF	FFFFFFF	0
	C6	C13	FFFFFFF8	0041000	FFFFFFF	FFFFFFF	0
	C6	C14	FFFFFFF8	0082000	FFFFFFF	FFFFFFF	0
	C6	C15	FFFFFFF8	0010400	FFFFFFF	FFFFFFF	0
	C6	C16	FFFFFFF8	0020800	FFFFFFF	FFFFFFF	0
	C6	C17	FFFFFFF8	0041000	FFFFFFF	FFFFFFF	0
	C6	C18	FFFFFFF8	0082000	FFFFFFF	FFFFFFF	0
	C6	C19	FFFFFFF8	0104000	FFFFFFF	FFFFFFF	0
	C6	C20	FFFFFFF8	0208000	FFFFFFF	FFFFFFF	0
	C6	C21	FFFFFFF8	0410000	FFFFFFF	FFFFFFF	0
	C6	C22	FFFFFFF8	0820000	FFFFFFF	FFFFFFF	0
	C6	C23	FFFFFFF8	1040000	FFFFFFF	FFFFFFF	0
	C6	C24	FFFFFFF8	2080000	FFFFFFF	FFFFFFF	0
	C6	C25	FFFFFFF8	4100000	FFFFFFF	FFFFFFF	0
	C6	C26	FFFFFFF8	8200000	FFFFFFF	FFFFFFF	0
	C6	C27	FFFFFFF9	0400000	FFFFFFF	FFFFFFF	0
	C6	C28	FFFFFFFA	0800000	FFFFFFF	FFFFFFF	0
	C6	C29	FFFFFFFC	1000000	FFFFFFF	0000000	1
	C6	C30	0000000	2000001	FFFFFFF	FFFFFFF	0
	C6	C31	FFFFFFF8	4000002	FFFFFFF	FFFFFFF	0
	C6	C32	FFFFFFF8	8000004	FFFFFFF	FFFFFFF	0
	C7		FFFFFFFC	0000008	FFFFFFF	0000000	1
	C8		0000000	0000008	FFFFFFF	0000000	0
	C9		0000000	0000008	FFFFFFF	0000008	0
	C10		0000008	0000008	FFFFFFF	FFFFFFF	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW 15	PHASE	CLBCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	KCC
	C3		FFFFFFFF	00000000	00000004	00000000	0
	C4		FFFFFFE1	00000000	00000004	0000001F	0
	C6	C0	FFFFFFFF	0000001F	00000004	00000000	1
	C6	C1	00000000	0000003F	00000004	FFFFFFFF	0
	C6	C2	FFFFFFFF8	0000007E	00000004	FFFFFFFFC	0
	C6	C3	FFFFFFFF8	000000FC	00000004	FFFFFFFFC	0
	C6	C4	FFFFFFFF8	000001F8	00000004	FFFFFFFFC	0
	C6	C5	FFFFFFFF8	000003FC	00000004	FFFFFFFFC	0
	C6	C6	FFFFFFFF8	000007E0	00000004	FFFFFFFFC	0
	C6	C7	FFFFFFFF8	00000FC0	00000004	FFFFFFFFC	0
	C6	C8	FFFFFFFF8	00001F80	00000004	FFFFFFFFC	0
	C6	C9	FFFFFFFF8	00003FC0	00000004	FFFFFFFFC	0
	C6	10	FFFFFFFF8	00007FC0	00000004	FFFFFFFFC	0
	C6	11	FFFFFFFF8	0000FC00	00000004	FFFFFFFFC	0
	C6	12	FFFFFFFF8	0001F800	00000004	FFFFFFFFC	0
	C6	13	FFFFFFFF8	0003FC00	00000004	FFFFFFFFC	0
	C6	14	FFFFFFFF8	0007E000	00000004	FFFFFFFFC	0
	C6	15	FFFFFFFF8	000FC000	00000004	FFFFFFFFC	0
	C6	16	FFFFFFFF8	001F8000	00000004	FFFFFFFFC	0
	C6	17	FFFFFFFF8	003FC000	00000004	FFFFFFFFC	0
	C6	18	FFFFFFFF8	007E0000	00000004	FFFFFFFFC	0
	C6	19	FFFFFFFF8	00FC0000	00000004	FFFFFFFFC	0
	C6	20	FFFFFFFF8	01F80000	00000004	FFFFFFFFC	0
	C6	21	FFFFFFFF8	03FC0000	00000004	FFFFFFFFC	0
	C6	22	FFFFFFFF8	07E00000	00000004	FFFFFFFFC	0
	C6	23	FFFFFFFF8	0FC00000	00000004	FFFFFFFFC	0
	C6	24	FFFFFFFF8	1F800000	00000004	FFFFFFFFC	0
	C6	25	FFFFFFFF8	3FC00000	00000004	FFFFFFFFC	0
	C6	26	FFFFFFFF8	7E000000	00000004	FFFFFFFFC	0
	C6	27	FFFFFFFF8	FC000000	00000004	FFFFFFFFC	0
	C6	28	FFFFFFFF9	F8000000	00000004	FFFFFFFFD	0
	C6	29	FFFFFFFFB	F0000000	00000004	FFFFFFFFF	0
	C6	30	FFFFFFFFF	E0000000	00000004	00000003	1
	C6	31	00000007	00000001	00000004	00000003	1
	C6	32	00000007	80000003	00000004	00000003	1
	C8		00000003	00000007	00000004	FFFFFFFFF	0
	C9		00000003	00000007	00000004	FFFFFFFFF	0
	10		00000007	00000007	00000004	FFFFFFFF9	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW 16	PHASE	CLBCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	KCC
	C3		FFFFFFFF	00000000	FFFFFFFF	00000000	0
	C4		FFFFFFE0	00000000	FFFFFFFF	00000020	0
	C6	C0	FFFFFFFF	00000020	FFFFFFFF	00000000	1
	C6	C1	00000000	00000041	FFFFFFFF	FFFFFFFF	0
	C6	C2	FFFFFFFF8	00000082	FFFFFFFF	FFFFFFFF	0
	C6	C3	FFFFFFFF8	000001C4	FFFFFFFF	FFFFFFFF	0
	C6	C4	FFFFFFFF8	000002C8	FFFFFFFF	FFFFFFFF	0
	C6	C5	FFFFFFFF8	00000410	FFFFFFFF	FFFFFFFF	0
	C6	C6	FFFFFFFF8	00000820	FFFFFFFF	FFFFFFFF	0
	C6	C7	FFFFFFFF8	00001640	FFFFFFFF	FFFFFFFF	0
	C6	C8	FFFFFFFF8	00002080	FFFFFFFF	FFFFFFFF	0
	C6	C9	FFFFFFFF8	00004100	FFFFFFFF	FFFFFFFF	0
	C6	10	FFFFFFFF8	00008200	FFFFFFFF	FFFFFFFF	0
	C6	11	FFFFFFFF8	00016400	FFFFFFFF	FFFFFFFF	0
	C6	12	FFFFFFFF8	00020800	FFFFFFFF	FFFFFFFF	0
	C6	13	FFFFFFFF8	00041000	FFFFFFFF	FFFFFFFF	0
	C6	14	FFFFFFFF8	00082000	FFFFFFFF	FFFFFFFF	0
	C6	15	FFFFFFFF8	00164000	FFFFFFFF	FFFFFFFF	0
	C6	16	FFFFFFFF8	00208000	FFFFFFFF	FFFFFFFF	0
	C6	17	FFFFFFFF8	00410000	FFFFFFFF	FFFFFFFF	0
	C6	18	FFFFFFFF8	00820000	FFFFFFFF	FFFFFFFF	0
	C6	19	FFFFFFFF8	01640000	FFFFFFFF	FFFFFFFF	0
	C6	20	FFFFFFFF8	02080000	FFFFFFFF	FFFFFFFF	0
	C6	21	FFFFFFFF8	04100000	FFFFFFFF	FFFFFFFF	0
	C6	22	FFFFFFFF8	08200000	FFFFFFFF	FFFFFFFF	0
	C6	23	FFFFFFFF8	16400000	FFFFFFFF	FFFFFFFF	0
	C6	24	FFFFFFFF8	20800000	FFFFFFFF	FFFFFFFF	0
	C6	25	FFFFFFFF8	41000000	FFFFFFFF	FFFFFFFF	0
	C6	26	FFFFFFFF8	82000000	FFFFFFFF	FFFFFFFF	0
	C6	27	FFFFFFFF9	04000000	FFFFFFFF	FFFFFFFFD	0
	C6	28	FFFFFFFA	08000000	FFFFFFFF	FFFFFFF	0
	C6	29	FFFFFFFC	10000000	FFFFFFFC	00000000	1
	C6	30	00000000	20000001	FFFFFFFC	FFFFFFFC	0
	C6	31	FFFFFFFF8	40000002	FFFFFFFC	FFFFFFFC	0
	C6	32	FFFFFFFF8	80000004	FFFFFFFC	FFFFFFFC	0
	C7		FFFFFFFC	00000008	FFFFFFFC	00000000	1
	C8		00000000	00000008	FFFFFFFC	00000000	0
	C9		00000000	00000008	FFFFFFFC	00000008	0
	10		00000008	00000008	FFFFFFFC	00000008	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DA 17	PHASE	CLBCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	<00
	C3		00000000	00000000	00000004	00000000	0
	C4		0000001F	00000000	00000004	0000001F	0
	C6	00	00000000	0000001F	00000004	00000000	1
	C6	01	00000000	0000003F	00000004	FFFFFFF0	0
	C6	02	FFFFFFF8	0000007E	00000004	FFFFFFF0	0
	C6	03	FFFFFFF8	000000FC	00000004	FFFFFFF0	0
	C6	04	FFFFFFF8	000001F8	00000004	FFFFFFF0	0
	C6	05	FFFFFFF8	000003FC	00000004	FFFFFFF0	0
	C6	06	FFFFFFF8	000007E0	00000004	FFFFFFF0	0
	C6	07	FFFFFFF8	00000FC0	00000004	FFFFFFF0	0
	C6	08	FFFFFFF8	00001F80	00000004	FFFFFFF0	0
	C6	09	FFFFFFF8	00003FC0	00000004	FFFFFFF0	0
	C6	10	FFFFFFF8	00007E00	00000004	FFFFFFF0	0
	C6	11	FFFFFFF8	0000FC00	00000004	FFFFFFF0	0
	C6	12	FFFFFFF8	0001F800	00000004	FFFFFFF0	0
	C6	13	FFFFFFF8	0003FC00	00000004	FFFFFFF0	0
	C6	14	FFFFFFF8	0007E000	00000004	FFFFFFF0	0
	C6	15	FFFFFFF8	000FC000	00000004	FFFFFFF0	0
	C6	16	FFFFFFF8	001F8000	00000004	FFFFFFF0	0
	C6	17	FFFFFFF8	003FC000	00000004	FFFFFFF0	0
	C6	18	FFFFFFF8	007E0000	00000004	FFFFFFF0	0
	C6	19	FFFFFFF8	00FC0000	00000004	FFFFFFF0	0
	C6	20	FFFFFFF8	01F80000	00000004	FFFFFFF0	0
	C6	21	FFFFFFF8	03FC0000	00000004	FFFFFFF0	0
	C6	22	FFFFFFF8	07E00000	00000004	FFFFFFF0	0
	C6	23	FFFFFFF8	0FC00000	00000004	FFFFFFF0	0
	C6	24	FFFFFFF8	1F800000	00000004	FFFFFFF0	0
	C6	25	FFFFFFF8	3FC00000	00000004	FFFFFFF0	0
	C6	26	FFFFFFF8	7E000000	00000004	FFFFFFF0	0
	C6	27	FFFFFFF8	FC000000	00000004	FFFFFFF0	0
	C6	28	FFFFFFF9	F8000000	00000004	FFFFFFF0	0
	C6	29	FFFFFFF8	F0000000	00000004	FFFFFFF0	0
	C6	30	FFFFFFF8	E0000000	00000004	00000003	1
	C6	31	00000007	C0000001	00000004	00000003	1
	C6	32	00000007	80000003	00000004	00000003	1
	C7		00000003	00000007	00000004	FFFFFFF0	0
	C8		00000003	00000007	00000004	00000003	0
	C9		00000003	00000007	00000004	00000007	0
	10		00000007	00000007	00000004	00000007	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DA 18	PHASE	CLBCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	<00
	C3		15555555	00000000	7FFFFFFF	00000000	0
	C4		55555555	00000000	7FFFFFFF	55555555	0
	C6	00	15555555	55555555	7FFFFFFF	15555555	1
	C6	01	2AAAAAAA	AAAAAAAB	7FFFFFFF	AAAAAAAB	0
	C6	02	55555557	55555556	7FFFFFFF	D5555556	0
	C6	03	AAAAAAAC	AAAAAAAC	7FFFFFFF	2AAAAAA3	1
	C6	04	55555557	55555559	7FFFFFFF	D555555A	0
	C6	05	AAAAAAAB	AAAAAAAB	7FFFFFFF	2AAAAAAE	1
	C6	06	5555555F	55555565	7FFFFFFF	D5555560	0
	C6	07	AAAAAAC0	AAAAAAC0	7FFFFFFF	2AAAAAAE	1
	C6	08	5555557F	55555595	7FFFFFFF	D5555580	0
	C6	09	AAAAAB00	AAAAAB2A	7FFFFFFF	2AAAAAFF	1
	C6	10	555555FF	55555565	7FFFFFFF	D5555560	0
	C6	11	AAAAAC00	AAAAACAA	7FFFFFFF	2AAAAAFF	1
	C6	12	55557FFF	55559555	7FFFFFFF	D5555800	0
	C6	13	AAAAB000	AAAAAB2A	7FFFFFFF	2AAAAAFF	1
	C6	14	555555FF	55556555	7FFFFFFF	D5556000	0
	C6	15	AAAA0000	AAAA0AAA	7FFFFFFF	2AAAAAFF	1
	C6	16	55557FFF	55559555	7FFFFFFF	D5558000	0
	C6	17	AAAB0000	AAAB2AAA	7FFFFFFF	2AAAAAFF	1
	C6	18	5555FFFF	55556555	7FFFFFFF	D5556000	0
	C6	19	AAAC0000	AAACAAAA	7FFFFFFF	2AAAAAFF	1
	C6	20	5557FFFF	55595555	7FFFFFFF	D5580000	0
	C6	21	AAB00000	AAB2AAAA	7FFFFFFF	2AAAAAFF	1
	C6	22	555FFFFF	55655555	7FFFFFFF	D5600000	0
	C6	23	AAC00000	AACAAAAA	7FFFFFFF	2AAAAAFF	1
	C6	24	557FFFFF	55955555	7FFFFFFF	D5800000	0
	C6	25	AB000000	AB2AAAAA	7FFFFFFF	2AAAAAFF	1
	C6	26	55FFFFF8	56555555	7FFFFFFF	D6000000	0
	C6	27	AC000000	ACAAAAAA	7FFFFFFF	2AAAAAFF	1
	C6	28	57FFFFF8	59555555	7FFFFFFF	D8000000	0
	C6	29	BC000000	B2AAAAAA	7FFFFFFF	2AAAAAFF	1
	C6	30	5FFFFF8F	65555555	7FFFFFFF	E0000000	0
	C6	31	CC000000	CAAAAAAA	7FFFFFFF	3AAAAAFF	1
	C6	32	7FFFFF8F	95555555	7FFFFFFF	00000000	1
	C7		00000000	2AAAAAAH	7FFFFFFF	80000001	0
	C8		00000000	2AAAAAA3	7FFFFFFF	00000000	0
	C9		00000000	2AAAAAA3	7FFFFFFF	2AAAAAA3	0
	10		2AAAAAA3	2AAAAAA3	7FFFFFFF	2AAAAAA3	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE C19

DW	PHASE	CLOCK	A(CO=31)	B(CO=31)	D(CO=31)	S(CO=31)	KCC
19	C3		31C3C1F0	00000000	79999999	00000000	0
	C4		11111111	00000000	79999999	11111111	0
	C6	00	31C3C1F0	11111111	79999999	31C3C1F0	1
	C6	C1	638783E0	22222223	79999999	E9EDEA47	0
	C6	C2	C3DBD48E	44444446	79999999	4D756E27	1
	C6	C3	9AEADC4E	8888888D	79999999	215142B5	1
	C6	C4	42A2856B	1111111B	79999999	C9C8E9C2	0
	C6	C5	9211D7A4	22222236	79999999	0BAB713D	1
	C6	C6	1756E27A	4444446D	79999999	9DBD48E1	0
	C6	C7	3B7A91C2	888888DA	79999999	B5142R5R	0
	C6	C8	6A2856B7	111111B4	79999999	E3C1FC5C	0
	C6	C9	C783ECA0	22222368	79999999	411D7A39	1
	C6	10	823AF472	444446D1	79999999	08A15AD9	1
	C6	11	1142B5B2	88888DA3	79999999	97A91C19	0
	C6	12	2F523833	11111346	79999999	A8EBD1CC	0
	C6	13	51D7A398	2222368C	79999999	CB713D31	0
	C6	14	56E27A62	44446D18	79999999	107C13FB	1
	C6	15	20F827F6	8888DA31	79999999	A75E8F5D	0
	C6	16	4EBD1CBB	1111B462	79999999	C856B654	0
	C6	17	90AD6CA8	222368C4	79999999	0A470641	1
	C6	18	148E0C82	4446D189	79999999	9AF472E9	0
	C6	19	35E8E5D2	888DA312	79999999	AF827F6B	0
	C6	20	5FC4FED7	111B4624	79999999	D8E9R7R0	0
	C6	21	B13D3CE0	22368C48	79999999	2AD6CA79	1
	C6	22	55AD94F2	446D1891	79999999	DC13FA59	0
	C6	23	B827F6B2	88DA3122	79999999	31C19C43	1
	C6	24	43832C97	11B46245	79999999	E9E984FE	0
	C6	25	D3D30DFC	2368C48A	79999999	406CA795	1
	C6	26	9AD94F2A	46D18915	79999999	213FB591	1
	C6	27	427F6B22	8DA3122B	79999999	C8E5D189	0
	C6	28	91CBA313	1B462456	79999999	0H653CAC	1
	C6	29	16CA7958	36RC48AD	79999999	9D30DFBF	0
	C6	30	3A61BF7E	6D18915A	79999999	B3F25517	0
	C6	31	67F6B22E	DA3122B4	79999999	E19C4RC7	0
	C6	32	C320978F	B4624568	79999999	3CBA3128	1
	C7		3CBA3128	68C48AD1	79999999	C320978F	0
	C8		3CBA3128	68C48AD1	79999999	3CBA3128	0
	C9		3CBA3128	68C48AD1	79999999	68C48AD1	0
	10		68C48AD1	68C48AD1	79999999	68C48AD1	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE C20

DW	PHASE	CLOCK	A(CO=31)	B(CO=31)	D(CO=31)	S(CO=31)	KCC
20	C3		FC7CF1CC	00000000	70000000	00000000	0
	C4		AAAAAAAA	00000000	70000000	55555555	0
	C6	00	FC7CF1CC	55555556	70000000	03830133	1
	C6	C1	C7061C66	AAAAAAAA	70000000	97061C66	0
	C6	C2	2F0C38CD	5555555A	70000000	9FC03PCD	0
	C6	C3	3C18719A	AAAAAAAAB4	70000000	AC18719A	0
	C6	C4	5830E335	55555568	70000000	C830E335	0
	C6	C5	9C61C66A	AAAAAAAA0C	70000000	0061C66A	1
	C6	C6	00C38CD5	555555A1	70000000	90C38CD5	0
	C6	C7	218719AA	AAAAAB42	70000000	918719AA	0
	C6	C8	230E3355	55555684	70000000	930E3355	0
	C6	C9	261C66AA	AAAAAD08	70000000	961C66AA	0
	C6	10	2C38CD55	55555A10	70000000	9C38CD55	0
	C6	11	38719AAA	AAAAAB42C	70000000	A8719AAA	0
	C6	12	50E33555	55556840	70000000	0CE33555	0
	C6	13	81C66AAA	AAAA0C00	70000000	F1C66AAA	0
	C6	14	E38CD555	5555A100	70000000	538CD555	1
	C6	15	A719AAAA	AAAAB42C1	70000000	3719AAAA	1
	C6	16	6E335555	55568403	70000000	FE335555	0
	C6	17	FC66AAAA	AAAD0C0C	70000000	6C66AAAA	1
	C6	18	D8CD5555	555A100D	70000000	68CD5555	1
	C6	19	D19AAAAA	AAB42C1B	70000000	619AAAAA	1
	C6	20	C3355555	55684037	70000000	53355555	1
	C6	21	A66AAAAA	AAD0C06F	70000000	366AAAAA	1
	C6	22	6CD55555	55A100DF	70000000	FC555555	0
	C6	23	F9AAAAAA	AB42C1BE	70000000	69AAAAAA	1
	C6	24	D3555555	5684037D	70000000	63555555	1
	C6	25	C6AAAAAA	AD0C06BF	70000000	56AAAAAA	1
	C6	26	AD555555	5A100DF7	70000000	3D555555	1
	C6	27	7AAAAAAA	B4201BEF	70000000	CAAAAAAA	1
	C6	28	15555555	684037DF	70000000	A5555555	0
	C6	29	4AAAAAAA	D0806FRE	70000000	BAAAAAAA	0
	C6	30	75555555	A100DF7C	70000000	E5555555	0
	C6	31	CAAAAAAB	42C1BEFF	70000000	3AAAAAAB	1
	C6	32	75555556	84037DF1	70000000	05555556	1
	C7		C5555556	C8C6FBE3	70000000	95555556	0
	C8		C5555556	C8C6FBE3	70000000	FAAAAAAA	0
	C9		C5555556	C8C6FBE3	70000000	C8C6FBE3	0
	10		C8C6FBE3	C8C6FBE3	70000000	F7F9C41D	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW	PHASE	CLCK	A(CC=31)	B(CC=31)	D(CC=31)	S(CC=31)	<C>
21	C3		31111111	00000000	84444444	00000000	0
	C4		59061018	00000000	84444444	59061018	0
	C6	C0	31111111	59061018	84444444	31111111	1
	C6	C1	62222222	83803831	84444444	E6666666	0
	C6	C2	00000000	67187062	84444444	48888889	1
	C6	C3	91111112	CE30C0C5	84444444	15555556	1
	C6	C4	2AAAAAAD	9C61C18B	84444444	AE000000	0
	C6	C5	50DDDDDE3	38C38316	84444444	D999999F	0
	C6	C6	E333333E	7187062C	84444444	2E000000	0
	C6	C7	E0DDDDDF4	E30C0C59	84444444	E2222238	0
	C6	C8	C4444471	C61C18B2	84444444	4000002D	1
	C6	C9	8000005B	8C383165	84444444	0444449F	1
	C6	C10	C888893F	187062C8	84444444	80000083	0
	C6	C11	19999B06	3CE0C596	84444444	955556C2	0
	C6	C12	2AAAA0E4	61C18B2C	84444444	A666694C	0
	C6	C13	4CCCD28C	C3831658	84444444	C8888E3C	0
	C6	C14	91111C79	87062C80	84444444	00000835	1
	C6	C15	1999B06B	0E0C5961	84444444	9DDDF4AF	0
	C6	C16	38BBE95E	1C18B2C2	84444444	8777A51A	0
	C6	C17	6EEF4A34	38316584	84444444	EAA0C5F0	0
	C6	C18	D5560BEC	7C62C8C8	84444444	5111C79C	1
	C6	C19	A2238F38	E0C59611	84444444	2667D37C	1
	C6	C20	4CCFA6F9	C18B2C23	84444444	D113E83D	0
	C6	C21	A227D67B	83165846	84444444	1DE39237	1
	C6	C22	3BC7246F	062C808D	84444444	CC068E83	0
	C6	C23	8C16D166	CC59611A	84444444	F8C28D22	0
	C6	C24	F7A51A44	18B2C234	84444444	7360D6C0	1
	C6	C25	E6C1ACC0	31658469	84444444	680CFC44	1
	C6	C26	D60BE088	62C8C8D3	84444444	5A5024CC	1
	C6	C27	B4AC4998	C59611A7	84444444	38E480DC	0
	C6	C28	71C918B9	8B2C234F	84444444	F6005FFD	0
	C6	C29	EC1A8FFB	1658469E	84444444	67C678B7	1
	C6	C30	CFACF76E	2C8C8D3D	84444444	53F138B2	1
	C6	C31	A7E27764	59611A73	84444444	2C2638A8	1
	C6	C32	584D775C	B2C234F7	84444444	DC913894	0
	C7		CC918B94	658469EE	84444444	584D775C	1
	C8		584D775C	658469EE	84444444	584D775C	0
	C9		584D775C	658469EE	84444444	658469EE	0
	C10		658469EE	658469EE	84444444	9A7B9A12	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW	PHASE	CLCK	A(CC=31)	B(CC=31)	D(CC=31)	S(CC=31)	<C>
22	C3		D6666666	00000000	7FE00000	00000000	0
	C4		66666666	00000000	7FE00000	9999999A	0
	C6	C0	D6666666	9999999A	7FE00000	29999999	1
	C6	C1	53333333	33333335	7FE00000	D4444445	0
	C6	C2	A888888A	6666666A	7FE00000	27777778	1
	C6	C3	4EEEE0C0	00000005	7FE00000	00000002	0
	C6	C4	A0000005	9999999A	7FE00000	1EEEE0F3	1
	C6	C5	3DDDDDE7	33333355	7FE00000	8FE000F9	0
	C6	C6	7DDDDDF2	666666AA	7FE00000	F00000E0	0
	C6	C7	F99999CC	00000054	7FE00000	788888FA	1
	C6	C8	F111115D	999999A9	7FE00000	7222226F	1
	C6	C9	E44444DF	33333353	7FE00000	655555F1	1
	C6	C10	CAAAABE8	666666A7	7FE00000	4FE83CF4	1
	C6	C11	977779E8	00000054F	7FE00000	188888FA	1
	C6	C12	311115F5	999999A9F	7FE00000	B222227C	0
	C6	C13	644444CF	33333353E	7FE00000	E3333CFD	0
	C6	C14	C66679FA	666666A7C	7FE00000	45556RE8	1
	C6	C15	8AAAD10C	00000054F9	7FE00000	088888E2	1
	C6	C16	1777C5C5	999999A9F3	7FE00000	98888867	0
	C6	C17	3111ADAF	333553F6	7FE00000	B0009C9D	0
	C6	C18	6CC1393A	666666A7CC	7FE00000	DEF02825	0
	C6	C19	BDE05C5C	CCD54F98	7FE00000	3CCF3F3E	1
	C6	C20	799E7E7D	99A9F31	7FE00000	FAAF8F8F	0
	C6	C21	F55F1F1F	33553E62	7FE00000	744FC0C0	1
	C6	C22	E89C1C1A	66AA7CC5	7FE00000	69AD272C	1
	C6	C23	D35A5A58	CC54F98B	7FE00000	5462666A	1
	C6	C24	A8D6D6D5	9AA9F317	7FE00000	29E7E7E7	1
	C6	C25	53CF0CF0	3553E62F	7FE00000	D4E0CE11	0
	C6	C26	A9C1C1C2	6AA7CC5E	7FE00000	28808C9C	0
	C6	C27	5161616C	D54F98D0	7FE00000	D2727272	0
	C6	C28	A4E4E4E5	AA9F317A	7FE00000	23C3C3C3	0
	C6	C29	47A7A7A7	553E62F5	7FE00000	C88888B9	0
	C6	C30	91717172	AA7CC5EA	7FE00000	10606060	1
	C6	C31	200000C1	54F98D5	7FE00000	A1D1D1D3	0
	C6	C32	43A3A3A6	A9F317AA	7FE00000	C2929294	0
	C7		C2929294	53E62F54	7FE00000	41818182	1
	C8		41818182	53E62F54	7FE00000	B27E7E7E	0
	C9		41818182	53E62F54	7FE00000	53E62F54	0
	C10		53E62F54	53E62F54	7FE00000	AC190CAC	0

		SIGMA 5 FIXED POINT DIVIDE SIMULATOR				PAGE 023	
DW 23	PHASE	CLBCK	A(CC=31)	B(CC=31)	D(CC=31)	S(CC=31)	KCC
	C3		F1C3C731	00000000	84444444	00000000	0
	C4		3F01FC03	00000000	84444444	00FE03FD	0
	C6	CC	F1C3C731	00FE03FD	84444444	0E3C38CE	1
	C6	C1	1C78719D	81FC07FB	84444444	ACBCB5E1	0
	C6	C2	41796BC3	C3F80FF6	84444444	BC35277F	0
	C6	C3	7A6A4EFE	C7FC1FEC	84444444	F6260ABA	0
	C6	C4	EC4C1574	CFE03FD8	84444444	68C7D130	1
	C6	C5	DC0FA260	1FC07FB1	84444444	5453E6A4	1
	C6	C6	A8A7CD48	3F80FF63	84444444	2CEC118C	1
	C6	C7	59D82318	7FC1FEC7	84444444	DE1C675C	0
	C6	C8	BC38CEB8	FEC3FD8E	84444444	37F48A74	1
	C6	C9	6FE914E9	FCC7FB1D	84444444	F42D592D	0
	C6	1C	E85AB25B	F80FF63A	84444444	64166E17	1
	C6	11	C82C0C2F	FC1FEC75	84444444	4C712C73	1
	C6	12	9RE240E7	EC3FD8EB	84444444	1D268523	1
	C6	13	3A4DCA57	CC7FB1D7	84444444	BE914E9B	0
	C6	14	7D229D37	80FF63AE	84444444	F8CE58F3	0
	C6	15	F1BCB1E7	C1FEC75C	84444444	6D786FA3	1
	C6	16	DAF0DB46	C3FD8EB9	84444444	5F351F8A	1
	C6	17	BE6A3F14	C7FB1D73	84444444	42AE8353	1
	C6	18	855D0680	0FF63AE7	84444444	C9A14AF4	1
	C6	19	134295E8	1FEC75CF	84444444	9786DA2C	0
	C6	2C	2FCDB458	3FD8EB9E	84444444	AAC97C14	0
	C6	21	5592E028	7FB1D73C	84444444	D14E9AE4	0
	C6	22	A29D37C8	FF63AL78	84444444	1E58F384	1
	C6	23	3CB1E7C9	FEC75CF1	84444444	CCF62R4D	0
	C6	24	81EC549B	F8CDB9E2	84444444	FDAF1257	0
	C6	25	FB5024AF	FB1D73C4	84444444	77CBE063	1
	C6	26	EE17C0D7	F63AE789	84444444	725C0514	1
	C6	27	E4B80A37	EC75CF13	84444444	68FC4E7B	1
	C6	28	C1F89CF7	D8EB9E27	84444444	563CE133	1
	C6	29	AC79C277	B1D73C4F	84444444	3CRE068A	1
	C6	3C	617C0C77	63AE789F	84444444	EECC05133	0
	C6	31	CB80A376	C75CF13E	84444444	473CF32	1
	C6	3E	8E78BE65	8EB9E27D	84444444	12BDC0A9	1
	C7		12BD02A9	1D73C4FB	84444444	97C146ED	0
	C8		12BD02A9	1D73C4FB	84444444	ED42F557	0
	C9		12BD02A9	1D73C4FB	84444444	1D73C4FB	0
	10		1D73C4FB	1D73C4FB	84444444	1D73C4FB	0

		SIGMA 5 FIXED POINT DIVIDE SIMULATOR				PAGE 024	
DW 24	PHASE	CLBCK	A(CC=31)	B(CC=31)	D(CC=31)	S(CC=31)	KCC
	C3		36666666	00000000	7EEEEEEE	00000000	0
	C4		99999999	00000000	7EEEEEEE	99999999	0
	C6	CC	36666666	99999999	7EEEEEEE	36666666	1
	C6	C1	6CCCCC0D	33333333	7EEEEEEE	EDDDDDDF	0
	C6	C2	DBBBB8BE	66666666	7EEEEEEE	5AAAAAAC	1
	C6	C3	B5555558	CCCCC0D	7EEEEEEE	3666666A	1
	C6	C4	6CCCCC05	99999999	7EEEEEEE	EDDDDDDE7	0
	C6	C5	DBBBB8CF	33333336	7EEEEEEE	5AAAAABD	1
	C6	C6	B555557A	6666666D	7EEEEEEE	3666668C	1
	C6	C7	6CCCCD18	CCCCC0D	7EEEEEEE	EDDDDE2A	0
	C6	C8	DBBBB8C5	99999996	7EEEEEEE	5AAAAA43	1
	C6	C9	B5555567	3333336D	7EEEEEEE	36666799	1
	C6	1C	6CCCCF32	666666DB	7EEEEEEE	EDDDEC44	0
	C6	11	DBBBB8C8	CCCCC0D6	7EEEEEEE	5AAAAF76	1
	C6	12	B55555ED	999999B0	7EEEEEEE	36666FFF	1
	C6	13	6CCCC0FF	333336DB	7EEEEEEE	EDDDDF11	0
	C6	14	DBBBB8E2	666666D6	7EEEEEEE	5AAAD110	1
	C6	15	B555A22C	CCCCC0D	7EEEEEEE	36663332	1
	C6	16	6CCD6665	999999DB	7EEEEEEE	EDDE7777	0
	C6	17	DBBBB8EF	33336DB6	7EEEEEEE	5AARD0DD	1
	C6	18	B5578BB4	666666D8	7EEEEEEE	3668CCCC	1
	C6	19	6CD19998	CCCC096D	7EEEEEEE	EDE2AAAA	0
	C6	2C	DB555555	99996DB6	7EEEEEEE	5A844443	1
	C6	21	B5628887	3336DB6D	7EEEEEEE	36799999	1
	C6	22	6CF33332	666DB6CB	7EEEEEEE	EEC44444	0
	C6	23	CC088888	CCD36DB6	7EEEEEEE	5AF77776	1
	C6	24	B5EEEEED	99B6DB6D	7EEEEEEE	36FFFFF7	1
	C6	25	6DFFFFFF	336DB6DB	7EEEEEEE	EF111111	0
	C6	26	DE222222	66DB6DB6	7EEEEEEE	5D11111C	1
	C6	27	BA22222C	DB6DB6D	7EEEEEEE	3R333332	1
	C6	28	76666665	98DB6DB3	7EEEEEEE	F7777777	0
	C6	29	EEEEEEEF	36DB6DB6	7EEEEEEE	6DDDDDD2	1
	C6	3C	DBBBB8BA	6DB6DB6D	7EEEEEEE	5CCCCC0C	1
	C6	31	B9999998	DB6DB6D3	7EEEEEEE	3AAAAAAA	1
	C6	32	75555555	B6DB6DB7	7EEEEEEE	F6666667	0
	C7		F6666667	6DB6DB6E	7EEEEEEE	75555555	1
	C8		75555555	6DB6DB6E	7EEEEEEE	75555555	0
	C9		75555555	6DB6DB6E	7EEEEEEE	6DB6DB6E	0
	10		6DB6DB6E	6DB6DB6E	7EEEEEEE	6DB6DB6E	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW 25	PHASE	CLBCK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	KCC
	C3		27777777	00000000	70000000	00000000	0
	C4		0DB53C7C	00000000	70000000	0DB53C7C	0
	C6	CC	27777777	0DB53C7C	70000000	27777777	1
	C6	C1	4EEEEEEF	9B6A78E1	70000000	DEEEEEEF	0
	C6	C2	800000DF	36D4F1C2	70000000	200000DF	1
	C6	C3	5B8B8BE	6DA9E385	70000000	ERRR8BE	0
	C6	C4	0777777C	DB53C7CA	70000000	4777777C	1
	C6	C5	8EEEEEF9	B6A78E15	70000000	1EEEEEF9	1
	C6	C6	300000DF	6D4F1C2B	70000000	000000DF	0
	C6	C7	5B8B8BE6	DA9E3856	70000000	0B8B8BE6	1
	C6	C8	177777CD	B53C7CAD	70000000	A77777CD	0
	C6	C9	4EEEEF9B	6A78E15A	70000000	8EEEEF9B	0
	C6	C10	700000DF	D4F1C2B4	70000000	ED0000DF	0
	C6	C11	0B8B8BE6D	A9E38568	70000000	4B8B8BE6D	1
	C6	C12	97777CDB	53C7CAD1	70000000	27777CDB	1
	C6	C13	4FEF986	A78E15A3	70000000	0FEF986	0
	C6	C14	800000DF	4F1C2B46	70000000	200000DF	1
	C6	C15	5B8B8BE6DA	9E38568D	70000000	ERRR8BE6DA	0
	C6	C16	0777CDB5	3C7CAD1A	70000000	4777CDB5	1
	C6	C17	8EEF986A	78E15A35	70000000	1EEF986A	1
	C6	C18	300000DF	F1C2B46B	70000000	000000DF	0
	C6	C19	5B8B8BE6DA9	E38568D6	70000000	0B8B8BE6DA9	1
	C6	C20	177CDB53	C7CAD1AD	70000000	A77CDB53	0
	C6	C21	4EF986A7	8E15A35A	70000000	BEF986A7	0
	C6	C22	7DF36D4F	1C2B46R4	70000000	EDF36D4F	0
	C6	C23	0BE6DA9E	38568D68	70000000	4BE6DA9E	1
	C6	C24	97CDB53C	7CAD1AD1	70000000	27CDB53C	1
	C6	C25	4F986A78	E15A35A3	70000000	0F986A78	0
	C6	C26	BF36D4F1	C2B46B46	70000000	2F36D4F1	1
	C6	C27	5E6DA9E3	8568D68D	70000000	EE6DA9E3	0
	C6	C28	0CDB53C7	CAD1AD1A	70000000	4CDB53C7	1
	C6	C29	9B86A78E	15A35A35	70000000	2B86A78E	1
	C6	C30	536D4F1C	2B46B46B	70000000	E36D4F1C	0
	C6	C31	06DA9E38	568D68D6	70000000	36DA9E38	1
	C6	C32	6DB53C7C	AD1AD1AD	70000000	FD853C7C	0
	C7		0DB53C7C	5A35A35A	70000000	6DB53C7C	1
	C8		6DB53C7C	5A35A35A	70000000	6DB53C7C	0
	C9		6DB53C7C	5A35A35A	70000000	5A35A35A	0
	C10		5A35A35A	5A35A35A	70000000	5A35A35A	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW 26	PHASE	CLBCK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	KCC
	C3		31C3C1FC	00000000	8F555555	00000000	0
	C4		77777777	00000000	8F555555	77777777	0
	C6	CC	31C3C1FC	77777777	8F555555	31C3C1FC	1
	C6	C1	638783EC	EEEEEEEF	8F555555	80000935	0
	C6	C2	D189B26B	DDDDDDDE	8F555555	4C645D16	1
	C6	C3	98C8BA2D	BBBBBBBD	8F555555	1E1E0F82	1
	C6	C4	3C3C1FC5	7777777B	8F555555	C191745A	0
	C6	C5	8322E8B4	EEEEEEF6	8F555555	F0C0935F	0
	C6	C6	FR9R26BF	DDDDDEEC	8F555555	7645D16A	1
	C6	C7	EC8BA2D5	BBBBBBBD9	8F555555	71E0F82A	1
	C6	C8	E3C1FC55	777777B3	8F555555	691745AA	1
	C6	C9	D22E8B54	EEEEEEF67	8F555555	5783E0A9	1
	C6	C10	AFC7C153	DDDDDECF	8F555555	345D16A8	1
	C6	C11	68BA2D51	BBBBBBBD9F	8F555555	EECF82A6	0
	C6	C12	DC1FC54D	777777B3E	8F555555	56C9AFF8	1
	C6	C13	AD935FFC	EEEEEF67D	8F555555	32E8BF45	1
	C6	C14	65D16A8B	DDDECFR	8F555555	EB26BFEC	0
	C6	C15	064D7FC1	BBBBBD9F6	8F555555	50F82A6C	1
	C6	C16	A1FC54D9	7777B3ED	8F555555	2745AA2E	1
	C6	C17	4E8B54EC	EEEEF67D3	8F555555	D3ECA9R1	0
	C6	C18	A7C15363	DDDECFB6	8F555555	226BF1CE	1
	C6	C19	44D7FC1D	BBBBBD9F6D	8F555555	CA2D5172	0
	C6	C20	945AA2E5	777R3EDA	8F555555	0FC54D9C	0
	C6	C21	1FCA9R2C	EEF67D35	8F555555	A35FFC75	1
	C6	C22	46BFCECB	DDECF6A	8F555555	C16A8996	0
	C6	C23	82D5172D	BBBD9F6D4	8F555555	FD7FC1D8	0
	C6	C24	FAFF83B1	77B3EDAR	8F555555	75AA2E5C	1
	C6	C25	EB545CB8	EF67DB51	8F555555	7CA9B2D0	0
	C6	C26	E153641B	DECFB6A3	8F555555	66A8B970	1
	C6	C27	0D5172E1	BD9F6D47	8F555555	52A6CF36	1
	C6	C28	A54D9C6D	7B3EDARF	8F555555	2AA2EFC2	1
	C6	C29	554RCR84	F67DBB1F	8F555555	DA9B2D09	0
	C6	C30	E53641B3	ECF86A3E	8F555555	2FEECECE	1
	C6	C31	5FC1D8BD	D9F6D47D	8F555555	E5172E12	0
	C6	C32	CA2E5C25	B3EDA8FA	8F555555	44D9C6D0	1
	C7		44D9C6D0	67DB51F5	8F555555	CA2E5C25	0
	C8		44D9C6D0	67DB51F5	8F555555	44D9C6D0	0
	C9		44D9C6D0	67DB51F5	8F555555	67DB51F5	0
	C10		67DB51F5	67DB51F5	8F555555	9824AF03	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR							PAGE	C27
DW 27	PHASE	CLBCK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	<CC	
	C3		D6666666	00000000	79999999	00000000	0	
	C4		DF4F3C70	00000000	79999999	20B0C390	0	
	C6	CC	D6666666	20B0C390	79999999	29999999	1	
	C6	C1	53333332	41618721	79999999	D9999999	0	
	C6	C2	B3333332	82C30E42	79999999	2CCCCCBB	1	
	C6	C3	59999997	05861C85	79999999	DDFFFFFFE	0	
	C6	C4	BFFFFF7C	0BCC390A	79999999	39999995	1	
	C6	C5	7333332A	16187215	79999999	F9999991	0	
	C6	C6	F3333322	2C30E42A	79999999	6CCCCCBB	1	
	C6	C7	D9999976	5861C855	79999999	5FFFFFFDD	1	
	C6	C8	BFFFFFBA	0CC390A8	79999999	46666621	1	
	C6	C9	8CCCCC43	61872157	79999999	133332AA	1	
	C6	10	26666554	C30E42AF	79999999	ADCCBBB	0	
	C6	11	59999777	861C855E	79999999	D3333110	0	
	C6	12	A6666221	CC390ABC	79999999	1FFFFFBA	1	
	C6	13	3FFFF774	18721579	79999999	C66660DB	0	
	C6	14	8CCCCBB6	30E42AF2	79999999	0666554F	1	
	C6	15	CCCCAA5E	61C855E5	79999999	93333105	0	
	C6	16	266622CA	C390A8CA	79999999	9FFFFBAA3	0	
	C6	17	3FFFF747	87215794	79999999	B9591CE0	0	
	C6	18	733221C1	CE42AF28	79999999	ECCBB45A	0	
	C6	19	D99776B4	1C855E50	79999999	5331104D	1	
	C6	20	A662209A	39CABCA1	79999999	2CC88701	1	
	C6	21	59910E02	72157943	79999999	DF77469	0	
	C6	22	BFEEDD2D	E42AF286	79999999	3988826B	1	
	C6	23	731104D7	C855E50D	79999999	F977683E	0	
	C6	24	F2EED07D	3CABCA1A	79999999	6C867016	1	
	C6	25	D910E02D	21579435	79999999	5F774694	1	
	C6	26	BEEED028	42AF286B	79999999	45E4F38F	1	
	C6	27	8AA9E71E	855E50D7	79999999	11104F85	1	
	C6	28	22209808	CABCA1AF	79999999	ARF70172	0	
	C6	29	51CE0FE4	1579435E	79999999	CAA79C7D	0	
	C6	30	554F38FA	2AF2868C	79999999	CEE8D093	1	
	C6	31	1DD1A526	55E50D79	79999999	A438CB8D	0	
	C6	32	4870171A	ARCA1AF2	79999999	CC09CB33	0	
	C7		C209B0B3	579435E4	79999999	3BA34A4C	1	
	C8		3BA34A4C	579435E4	79999999	C45C35B4	0	
	C9		3BA34A4C	579435E4	79999999	57943FE4	0	
	10		579435E4	579435E4	79999999	A868CA1C	0	

SIGMA 5 FIXED POINT DIVIDE SIMULATOR							PAGE	C28
DW 28	PHASE	CLBCK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	<CC	
	C3		15555555	00000000	82222222	00000000	0	
	C4		59C61C18	00000000	82222222	59C61C18	0	
	C6	CC	15555555	59C61C18	82222222	15555555	1	
	C6	C1	2AAAAAAA	B38C3831	82222222	ACCC0000	0	
	C6	C2	59999999	67187C62	82222222	D7777777	0	
	C6	C3	AFEEEEEE	CE30ECC4	82222222	2CCCC000	1	
	C6	C4	59999999	9C61C189	82222222	D4888888	0	
	C6	C5	B7777777	38C38312	82222222	35555555	1	
	C6	C6	6AAAAAAA	7187C625	82222222	ECCCC000	0	
	C6	C7	D9999999	E30ECC4A	82222222	57777776	1	
	C6	C8	AEEFEEDD	C61C1895	82222222	3111110F	1	
	C6	C9	6222221F	8C383123	82222222	E4444441	0	
	C6	10	C8888883	187C6256	82222222	46666661	1	
	C6	11	8CCCC002	30ECC4AD	82222222	0EEFEED4	1	
	C6	12	1DDDD008	61C18958	82222222	9FFFFFFEA	0	
	C6	13	3FFFFFD4	C3831286	82222222	BDDDD082	0	
	C6	14	78888865	87C6256C	82222222	F9999943	0	
	C6	15	F3333287	CECC4AD8	82222222	71111065	1	
	C6	16	E2222CCA	1C189581	82222222	644442EC	1	
	C6	17	C88885D8	38312863	82222222	4AAAA7FA	1	
	C6	18	55554FF4	7C6256C7	82222222	17777716	1	
	C6	19	2EEEE42C	ECC4AD8F	82222222	B111064E	0	
	C6	20	6222CC9D	C189581E	82222222	DFFEA73	0	
	C6	21	BFFFD4F7	8312863C	82222222	3CCDB705	1	
	C6	22	788865A8	C6256C79	82222222	FDD87CC	0	
	C6	23	F8880F9A	CC4AD8F2	82222222	7958E578	1	
	C6	24	F331DAFC	189581E5	82222222	753FE12	1	
	C6	25	EAA7FA24	31286303	82222222	6CCAI046	1	
	C6	26	D994388C	6256C797	82222222	58865AAE	1	
	C6	27	B76CB55C	C4AD8F2F	82222222	398ED77E	1	
	C6	28	731DAEFD	89581E5F	82222222	F53FD11F	0	
	C6	29	EAF7A23F	1286303E	82222222	68578C10	1	
	C6	30	DCB8CC3A	256C797D	82222222	5DD0225C	1	
	C6	31	A5BA44B8	4AD8F2FB	82222222	27CC66DA	1	
	C6	32	4FB8CCB4	9581E5F7	82222222	D10AEFD6	0	
	C7		D10AEFD6	2B63C8EE	82222222	4FB8CDB4	1	
	C8		4FB8CDB4	2B63C8EE	82222222	4FB8CDB4	0	
	C9		4FB8CDB4	2B63C8EE	82222222	2B63C8EE	0	
	10		2B63C8EE	2B63C8EE	82222222	D49C3412	0	

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW	PHASE	CLBCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	KCC
29	C3		CP1871E7	CCCCCCCC	83333333	CCCCCCCC	C
	C4		77777777	CCCCCCCC	83333333	77777777	C
	C6	C0	CP1871E7	77777777	83333333	021871E7	1
	C6	C1	C430E3CE	EEEEEEEF	83333333	876417C1	C
	C6	C2	CEC82EC3	DDDDDDDE	83333333	8B94FAD0	C
	C6	C3	1729F5A1	BBBBBBBC	83333333	93F6C26E	C
	C6	C4	27E084DD	77777778	83333333	A4BA51AA	C
	C6	C5	4974A354	EEEEEEF0	83333333	C6417C21	C
	C6	C6	8CR2E043	DDDDDDDE	83333333	C94FAD10	1
	C6	C7	129F5A21	BBBBBBBC	83333333	95D28D54	C
	C6	C8	2BA51AA9	77777782	83333333	A871E776	C
	C6	C9	5CE3CEEC	EEEEEEF0	83333333	C0BC9A89	C
	C6	10	9B613773	DDDDDE08	83333333	182F0440	C
	C6	11	3C5C08B1	BBBBBBBC	83333333	B38F3RR4	1
	C6	12	671E7769	77777822	83333333	E3E84436	C
	C6	13	C7D6886C	EEEEEF04	83333333	44A35539	1
	C6	14	8946AA73	DDDDDE08	83333333	0C79DDA6	1
	C6	15	18F3BR4D	BBBBBC13	83333333	9C26EE80	C
	C6	16	384DDDC1	77778226	83333333	B51AA9CE	C
	C6	17	6A35539C	EEEF044C	83333333	E7C22C69	C
	C6	18	CE044CD3	DDDE0898	83333333	4AD10DAC	1
	C6	19	95A21R41	BBBB1131	83333333	1AD54E74	C
	C6	20	31AA9CE9	77782263	83333333	B40DDC1C	1
	C6	21	69BRAC38	EEFC44C6	83333333	E6886DC05	C
	C6	22	CD10DACB	DDE0898C	83333333	49DDA6D8	1
	C6	23	93BR4DB1	BBC11319	83333333	16EE8CE4	1
	C6	24	2DDDC1C9	77822633	83333333	B11034FC	C
	C6	25	622C69F8	EF044C66	83333333	DELD3AC5	1
	C6	26	BDDA6D8B	DE0898CC	83333333	3AA73A58	C
	C6	27	754E74B1	BC113199	83333333	F881A7E4	1
	C6	28	F1034FC9	78226332	83333333	6DDC1C96	1
	C6	29	DRA0322C	FC44C665	83333333	5ED36C5F	1
	C6	30	BDA6D8BF	EC898CCR	83333333	40CA0BF2	1
	C6	31	81b417E5	C1131997	83333333	C4E74D18	1
	C6	32	C9CE9631	8226332F	83333333	8DC1C964	C
	C7		8DC1C964	C44C665E	83333333	C9CE9631	1
	C8		C9CE9631	C44C665E	83333333	C9CE9631	C
	C9		C9CE9631	C44C665E	83333333	C44C665E	C
	10		C44C665E	C44C665E	83333333	FRB399A2	C

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW	PHASE	CLBCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	KCC
30	C3		E1111111	CCCCCCCC	87777777	CCCCCCCC	C
	C4		AAAAAAAA	CCCCCCCC	87777777	55555556	C
	C6	C0	E1111111	55555556	87777777	1EEEEEEE	1
	C6	C1	3DDDDDDC	AAAAAAAA	87777777	C5555553	C
	C6	C2	8AAAAAAAA7	5555555A	87777777	C333333C	1
	C6	C3	C666666C	AAAAAAB5	87777777	8DDDDDD7	C
	C6	C4	1BBRBBBF	5555556A	87777777	94444438	C
	C6	C5	2888887C	AAAAAAD4	87777777	A11110F9	C
	C6	C6	422221F3	555555AR	87777777	BAAAAA7C	C
	C6	C7	755554F8	AAAAAA5C	87777777	EDDDDD81	C
	C6	C8	DBBBBHC3	555556AC	87777777	5444438C	1
	C6	C9	AP888718	AAAAAD41	87777777	2FFFFE8F	1
	C6	10	5FFFFD1F	55555A83	87777777	E7777496	C
	C6	11	CEEEE92C	AAAAAB06	87777777	47777135	1
	C6	12	8FEEE36B	55556ACD	87777777	16665AE2	1
	C6	13	2CCCC5C4	AAAAAD4R	87777777	B4442D35	C
	C6	14	6RR85A77	5555A836	87777777	E110E3CC	C
	C6	15	C221C4C0	AAAB5C6C	87777777	3AAAAE89	1
	C6	16	75549C13	5556ACD9	87777777	FC0C148A	C
	C6	17	F9982914	AAAD41B2	87777777	722CB19D	1
	C6	18	E441633B	555A8365	87777777	6RRRDA32	1
	C6	19	D771B564	AAB5C6C3	87777777	5EE92CD3	1
	C6	20	RDD259B7	556ACD97	87777777	4549D12E	1
	C6	21	8A93A25C	AAD41B2F	87777777	12C-19D3	1
	C6	22	241633A7	55AR365F	87777777	AB4DAR1E	C
	C6	23	571B563C	AB5C6CRE	87777777	CFARCF05	C
	C6	24	9F47BDBB	56ACD97C	87777777	17C04614	1
	C6	25	2FAC8C28	AD41B2F9	87777777	B718C39F	C
	C6	26	6E30C73F	5A8365F2	87777777	E6B88FC8	C
	C6	27	CD711F9C	B5C6CBE4	87777777	45F9AF19	1
	C6	28	8FF35C33	6ACD97C9	87777777	136AC7AA	1
	C6	29	26D58FE4	D4132F93	87777777	AE4DC6CA	C
	C6	30	5C9AC097	A8365F26	87777777	D522362C	C
	C6	31	AA452C41	5C6CBE4C	87777777	22C034CA	1
	C6	32	459B6994	ACD97C99	87777777	CD12E1CB	C
	C7		CD12E1CB	41B2F932	87777777	459B6994	1
	C8		459B6994	41B2F932	87777777	BA64966C	C
	C9		459B6994	41B2F932	87777777	41B2F932	C
	10		41B2F932	41B2F932	87777777	41B2F932	C

		SIGMA 5 FIXED POINT DIVIDE SIMULATOR				PAGE 031
DW 31	PHASE	CL6CK	A(CO=31)	B(CO=31)	D(CO=31)	S(CO=31) <C
	C3		FC7CF1CC	00000000	7EEEEEEE	00000000 C
	C4		0D583C70	00000000	7EEEEEEE	32A4C390 C
	C6	00	FC7CF1CC	32A4C390	7EEEEEEF	03830F33 1
	C6	C1	C7061C66	65498721	7EEEEEEE	88172D78 C
	C6	C2	102E5AFC	CA93CE42	7EEEEEEE	8F1D49DE C
	C6	C3	1E3A93BD	95261C84	7EEEEEEE	9D2982AB C
	C6	C4	3A530557	2A4C39C8	7EEEEEEE	B941F445 C
	C6	C5	7283E88A	54987210	7EEEEEEE	F172D778 C
	C6	C6	E2E5AEFC	A930E420	7EEEEEEC	61D49DDE 1
	C6	C7	C3A93BBD	5261C841	7EEEEEEF	44BA4CCF 1
	C6	C8	8974999E	A4C39C83	7EEEEEEF	CAR5AAB0 1
	C6	C9	150B5561	498721C7	7EEEEEEF	961C6673 C
	C6	10	2C38CC6E	93CE420E	7EEEEEEE	A9273RD4 C
	C6	11	564F77A9	261C841C	7EEEEEEE	D53E6697 C
	C6	12	AA7CCD2E	4C39C838	7EEEEEEF	2968BC1C 1
	C6	13	52D77838	98721C71	7EEEEEEE	D3E8894A C
	C6	14	A7D11295	30E420E2	7EEEEEEE	26C00183 1
	C6	15	4D8003C6	61C841C5	7EEEEEEE	CE911418 C
	C6	16	9D222830	C39C838A	7EEEEEEE	1C111710 1
	C6	17	38222E3D	8721C715	7EEEEEEE	B9233F4F C
	C6	18	72667E9F	0E420E2A	7EEEEEEE	F1556D8D C
	C6	19	E2AADB1A	1C841C54	7EEEEEEF	6199CAC8 1
	C6	20	C3339410	39C838A9	7EEEEEEE	4444A522 1
	C6	21	88894A44	721C7153	7EEEEEEC	099A5R56 1
	C6	22	133486AC	E420E2A7	7EEEEEEE	9445C78E C
	C6	23	288B8F7D	C841C54E	7EEEEEEE	A77A7C68 C
	C6	24	4EF4FC07	90838A9C	7EEEEEEC	CDC3E8C9 C
	C6	25	9BC7D78B	21C71538	7EEEEEEC	1AB6C679 1
	C6	26	356D8CF2	420E2A71	7EEEEEEE	B67E9E04 C
	C6	27	6CFD3CC8	841C54E2	7EEEEEEF	EBEC2AF6 C
	C6	28	D7D855ED	C838A9C4	7EEEEEEE	56C744DB 1
	C6	29	AD8E8986	10715389	7EEEEEEE	2E9F9AC3 1
	C6	30	5D3F3590	20E2A713	7EEEEEEF	DE5046A2 C
	C6	31	BCA08D44	41C54E26	7EEEEEEF	388F7C32 1
	C6	32	771EF864	838A9C4D	7EEEEEEF	F8300976 C
	C7		F8300976	C715389A	771EF864	771EF864 1
	C8		771EF864	C715389A	771EF864	88E10790 C
	C9		771EF864	C715389A	771EF864	C715389A C
	10		C715389A	C715389A	771EF864	F8EAC766 C

		SIGMA 5 FIXED POINT DIVIDE SIMULATOR				PAGE 032
DW 32	PHASE	CL6CK	A(CO=31)	B(CO=31)	D(CO=31)	S(CO=31) <C
	C3		15555555	00000000	70000000	00000000 C
	C4		11111111	00000000	70000000	11111111 C
	C6	00	15555555	11111111	70000000	15555555 1
	C6	C1	2AAAAAAA	22222223	70000000	BAAAAAAA C
	C6	C2	75555554	44444446	70000000	E5555554 C
	C6	C3	CAAAAAA8	8888888C	70000000	3AAAAAA8 1
	C6	C4	75555551	11111119	70000000	0F555551 1
	C6	C5	CAAAAAA2	22222233	70000000	9AAAAAA2 C
	C6	C6	35555544	44444466	70000000	A5555544 C
	C6	C7	4AAAAA88	888888CC	70000000	BAAAAA88 C
	C6	C8	75555511	11111198	70000000	E5555511 C
	C6	C9	CAAAAA22	22222330	70000000	3AAAAA22 1
	C6	10	75555444	44444661	70000000	05555444 1
	C6	11	CAAAA888	88888CC3	70000000	9AAAA888 C
	C6	12	35555111	11111986	70000000	A5555111 C
	C6	13	4AAAA222	2222330C	70000000	BAAAA222 C
	C6	14	75554444	44446618	70000000	E5554444 C
	C6	15	CAAA8888	8888CC30	70000000	3AAA8888 1
	C6	16	75551111	11119861	70000000	05551111 1
	C6	17	CAAA2222	222330C3	70000000	9AAA2222 C
	C6	18	35544444	44466186	70000000	A5544444 C
	C6	19	4AA88888	888CC30C	70000000	BAA88888 C
	C6	20	75511111	11198618	70000000	E5511111 C
	C6	21	CAAA2222	22330C30	70000000	3AA2222 1
	C6	22	75444444	44661861	70000000	05444444 1
	C6	23	CA888888	88CC30C3	70000000	9A888888 C
	C6	24	35111111	11986186	70000000	A5111111 C
	C6	25	4A222222	2330C30C	70000000	BA222222 C
	C6	26	74444444	46618618	70000000	E4444444 C
	C6	27	C8888888	8CC30C30	70000000	38888888 1
	C6	28	71111111	19861861	70000000	C1111111 1
	C6	29	C2222222	330C30C3	70000000	92222222 C
	C6	30	24444444	66186186	70000000	94444444 C
	C6	31	28888888	CC30C30C	70000000	98888888 C
	C6	32	31111111	98618618	70000000	A1111111 C
	C7		A1111111	30C30C30	70000000	11111111 1
	C8		11111111	30C30C30	70000000	11111111 C
	C9		11111111	30C30C30	70000000	30C30C30 C
	10		30C30C30	30C30C30	70000000	30C30C30 C

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE 033

DN	PHASE	CLOCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	KCC
03			31111111	00000000	87777777	00000000	0
04			27222222	00000000	87777777	27222222	0
06	00		31111111	22222222	87777777	31111111	1
06	01		67222222	44444445	87777777	E9999999	0
06	02		03333332	8888888A	87777777	4888888B	1
06	03		97777777	11111115	87777777	1EEEEEEF	1
06	04		37DDDDDC	2222222B	87777777	CF555553	0
06	05		8AAAAAA6	44444456	87777777	C333332F	1
06	06		C666665E	888888AD	87777777	80DDDD05	0
06	07		188888AB	1111115A	87777777	94444434	0
06	08		28888868	222222B4	87777777	A11110F1	0
06	09		422221E2	44444568	87777777	BAAAAA63	0
06	10		755554D6	88888ADC	87777777	E0DDDD5F	0
06	11		C78888BF	111115AC	87777777	54444348	1
06	12		A8888690	22222B41	87777777	2FFFFFC7	1
06	13		5FFFFCCE	44445683	87777777	E7777385	0
06	14		FEEEE7CA	8888AD06	87777777	47776F93	1
06	15		8FEEDF27	11115ACD	87777777	1666569L	1
06	16		20CCAD3C	2222B419	87777777	B44424B3	0
06	17		68884966	44456636	87777777	E110D1EF	0
06	18		C221A3DE	888ADC6C	87777777	3AAA2C67	1
06	19		755458CF	1115ACD9	87777777	FCC8D046	0
06	20		F997AC8C	222B41R2	87777777	72202915	1
06	21		E440522A	44568365	87777777	68B7C9A1	1
06	22		C76F9342	88ADC6CB	87777777	5EC70A39	1
06	23		FDCE1573	115ACD97	87777777	45458CEA	1
06	24		8A8B19D4	22B41B2F	87777777	12C29143	1
06	25		24052296	4568365F	87777777	AB7C9A0D	0
06	26		56F9341A	8ADC6CBE	87777777	CF81BCA3	0
06	27		9FC37947	15A0D97C	87777777	178C01D0	1
06	28		2F18C3AC	2B41B2F9	87777777	B68F7B17	0
06	29		6D1EF62E	568365F2	87777777	ESA77F87	0
06	30		C84EFD6E	ADC6CBE4	87777777	43D785F7	1
06	31		87AF08EF	5A0D97C9	87777777	CF268366	1
06	32		1F4DC6CC	B41B2F93	87777777	A5C47E43	0
07			A5C47E43	68365F26	87777777	1E40C6CC	1
08			1E40C6CC	68365F26	87777777	1E40C6CC	0
09			1E40C6CC	68365F26	87777777	68365F26	0
10			68365F26	68365F26	87777777	97C9ACDA	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE 034

DN	PHASE	CLOCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	KCC
03			06666666	00000000	71111111	00000000	0
04			33333333	00000000	71111111	00000000	0
06	00		06666666	00000000	71111111	22222222	1
06	01		53333333	9999999A	71111111	E2222222	0
06	02		C4444445	33333336	71111111	35555556	1
06	03		6AAAAAAC	6666666D	71111111	F999999B	0
06	04		F3333336	000000DA	71111111	64444447	1
06	05		C888888F	99999995	71111111	5777777E	1
06	06		AEEEEEFD	33333368	71111111	30DDDDDC	1
06	07		788888D8	66666667	71111111	CAAAAAAC7	1
06	08		1555558E	000000AF	71111111	A444447D	0
06	09		4888888F	9999999E	71111111	B9999ACC	0
06	10		73333419	3333368C	71111111	E444452A	0
06	11		C8888A54	66666D78	71111111	35999965	1
06	12		733336CA	000000AF1	71111111	022225B9	1
06	13		C4444473	999999E3	71111111	93333A62	0
06	14		246674C5	333368C6	71111111	977785D6	0
06	15		2EEFC5AC	6666D78C	71111111	ACC01CB0	0
06	16		4000397A	0000AF18	71111111	B1114A83	0
06	17		62229517	99995E30	71111111	C333A624	0
06	18		A6674C51	33368C60	71111111	17785D62	1
06	19		2EFCBAC4	666D78C1	71111111	BDDFA9R3	0
06	20		788F5366	CCDAF182	71111111	ECC06477	0
06	21		C9A0C8EF	9999E304	71111111	4AB1DA0C	1
06	22		9563B4C1	3368C6C9	71111111	2452AF0C	0
06	23		48A545EC	66D78C13	71111111	C79434CF	1
06	24		AF28699E	0DAF1826	71111111	2C397AAF	0
06	25		4C72F55F	9999E304D	71111111	CF61E44E	1
06	26		9EC3C89D	368C6C9A	71111111	0FD4D9AE	1
06	27		1FA9838C	6D78C135	71111111	AE58A24B	0
06	28		5D314496	DAF1826A	71111111	CE4255A7	0
06	29		9C84AR4F	B5E304C4	71111111	0D958C60	0
06	30		1R2578C1	65C6C9A9	71111111	AA1A6730	1
06	31		5434CF60	078C1352	71111111	C545EC71	0
06	32		8A88C0E3	AF1826A4	71111111	FR9CD1F4	0
07			F89CD1F4	5E304D48	71111111	6CAD83C5	1
08			6CAD83C5	5E304D48	71111111	93521CFB	0
09			6CAD83C5	5E304D48	71111111	5E304D48	0
10			5E304D48	5E304D48	71111111	A1CFB236	0

		SIGMA 5 FIXED POINT DIVIDE SIMULATOR				PAGE 035	
DW 35	PHASE	CLOCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	KCC
	C3		36666666	00000000	89999999	00000000	0
	C4		44444444	00000000	89999999	44444444	0
	C6 C0		36666666	44444444	89999999	36666666	1
	C6 C1		60000000	88888889	89999999	66666665	0
	C6 C2		E000000B	11111112	89999999	63333332	1
	C6 C3		C6666664	22222225	89999999	4FFFFFFD	1
	C6 C4		9FFFFFFA	4444444B	89999999	29999993	1
	C6 C5		53333326	88888897	89999999	D00000BF	0
	C6 C6		B999997F	1111112E	89999999	2FFFFFFE6	1
	C6 C7		5FFFFFFC	2222225D	89999999	E9999965	0
	C6 C8		D33332CA	444444BA	89999999	49999931	1
	C6 C9		S3333262	88888975	89999999	1CCCCBF3	1
	C6 10		399997F7	111112EB	89999999	C3333190	0
	C6 11		86666320	222225D6	89999999	F0000987	0
	C6 12		F99993CE	444444BA	89999999	6FFFFFF75	1
	C6 13		DFFFFFFEA	88889759	89999999	699998C83	1
	C6 14		D3331907	11112EB3	89999999	5000B2A0	1
	C6 15		B999654C	22225D67	89999999	4332FED9	1
	C6 16		8665FDB2	4444BACF	89999999	0FFF974B	1
	C6 17		1FFF2E96	8889759F	89999999	A998C82F	C
	C6 18		5331905F	1112EB3E	89999999	C997F6C6	C
	C6 19		932FED8C	2225D67C	89999999	C99653F3	1
	C6 20		132CA7E6	444BACF9	89999999	9CC6417F	C
	C6 21		398C82FE	889759F2	89999999	AFF2E965	C
	C6 22		5FE5D2CB	112EB3E4	89999999	D64C3932	C
	C6 23		AC987264	225D67C8	89999999	22FEDFCB	1
	C6 24		45F8R196	44BACF91	89999999	CF974R2F	C
	C6 25		9F2E965E	89759F22	89999999	1594CC55	1
	C6 26		2B29F98B	12EB3E45	89999999	B4C39324	C
	C6 27		69872648	25D67C8A	89999999	DFED8CAF	C
	C6 28		BFDB195E	4BACF914	89999999	36417FC5	1
	C6 29		6C82FF8A	9759F229	89999999	F61C9023	C
	C6 30		EC393247	2EB3E452	89999999	629F98AE	1
	C6 31		C53F315C	5D67C8A5	89999999	4ED8CAF5	1
	C6 32		SDB195EA	BACF914B	89999999	274B2F83	1
	C7		274R2F83	759F2297	89999999	BCE4C01C	C
	C8		274R2F83	759F2297	89999999	274R2F83	C
	C9		274R2F83	759F2297	89999999	759F2297	C
	10		759F2297	759F2297	89999999	8A6CD069	C

		SIGMA 5 FIXED POINT DIVIDE SIMULATOR				PAGE 036	
DW 36	PHASE	CLOCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	KCC
	C3		C21871E7	00000000	70000000	00000000	0
	C4		88888888	00000000	70000000	88888888	0
	C6 C0		C21871E7	88888888	70000000	C21871E7	1
	C6 C1		C430E3CF	11111111	70000000	9430E3CF	C
	C6 C2		2861C79E	22222222	70000000	9861C79E	C
	C6 C3		3CC38F3C	44444444	70000000	ACC38F3C	C
	C6 C4		41871E78	88888888	70000000	B1871E78	C
	C6 C5		630E3CF1	11111110	70000000	D30E3CF1	C
	C6 C6		A61C79E2	22222220	70000000	161C79E2	1
	C6 C7		2C38F3C4	44444441	70000000	8C38F3C4	C
	C6 C8		7871E788	88888882	70000000	E871E788	C
	C6 C9		DCE3CF11	11111104	70000000	4CE3CF11	1
	C6 10		81C79E22	222222C9	70000000	11C79E22	1
	C6 11		238F3C44	44444413	70000000	B38F3C44	C
	C6 12		671E7888	88888826	70000000	D71E7888	C
	C6 13		AE3CF111	1111104C	70000000	1E3CF111	1
	C6 14		3C79E222	22222099	70000000	CC79E222	0
	C6 15		98F3C444	44444132	70000000	08F3C444	1
	C6 16		11E78888	8888E265	70000000	A1E78888	C
	C6 17		43CF1111	111104CA	70000000	B3CF1111	C
	C6 18		679E2222	22220994	70000000	D79E2222	C
	C6 19		AF3C4444	44441328	70000000	1F3C4444	1
	C6 20		3E788888	88882651	70000000	CE788888	C
	C6 21		9CF11111	11104CA2	70000000	0CF11111	1
	C6 22		19E22222	22209945	70000000	A9E22222	C
	C6 23		53C44444	4441328A	70000000	C3C44444	C
	C6 24		87888888	88826514	70000000	F7888888	C
	C6 25		EF111111	1104CA28	70000000	5F111111	1
	C6 26		EE222222	22099451	70000000	4E222222	1
	C6 27		9C444444	441328A3	70000000	2C444444	1
	C6 28		58888888	88265147	70000000	E8888888	C
	C6 29		11111111	104CA28E	70000000	41111111	1
	C6 30		8E222222	2099451D	70000000	1E222222	1
	C6 31		24444444	41328A39	70000000	B4444444	C
	C6 32		68888888	82651476	70000000	D8888888	0
	C7		88888888	04CA28EC	70000000	48888888	1
	C8		48888888	04CA28EC	70000000	88888888	C
	C9		48888888	04CA28EC	70000000	04CA28EC	C
	10		04CA28EC	04CA28EC	70000000	04CA28EC	C

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DN	PHASE	CLBCK	A(C0-31)	B(C0-31)	D(C0-31)	S(C0-31)	KCC
37	C3		E1111111	00000000	87777777	00000000	0
	C4		88888888	00000000	87777777	44444445	0
	C6	CC	E1111111	44444445	87777777	1EEEEEEE	1
	C6	C1	80DDDDDC	88888888	87777777	05555553	0
	C6	C2	8AAAAAA7	11111116	87777777	09333330	1
	C6	C3	06666660	22222220	87777777	80DDDDDC7	0
	C6	C4	18BBBBAE	4444445A	87777777	94444437	0
	C6	C5	2888888E	88888884	87777777	A11110F7	0
	C6	C6	422221EF	11111168	87777777	BAAAAA78	0
	C6	C7	755554FC	222222D0	87777777	E0000079	0
	C6	C8	08BBBAF2	444445A0	87777777	5444437A	1
	C6	C9	AR8886F6	88888541	87777777	2FFFFF6D	1
	C6	1C	5FFFFCDB	11111683	87777777	E7777452	1
	C6	11	0EEEE8A4	222220C6	87777777	47777120	0
	C6	12	8EEEE25A	44445ACD	87777777	16665901	1
	C6	13	2CCCB3A2	8888841B	87777777	B4442R19	0
	C6	14	68885633	11116836	87777777	E1100EBC	0
	C6	15	0221BD78	2222D0C6	87777777	3AAAA601	1
	C6	16	7554RC02	4445A0D9	87777777	F0000379	0
	C6	17	F99806F2	888841B2	87777777	72208F7B	1
	C6	18	E4411EF7	11168365	87777777	6888966E	1
	C6	19	07712DC0	222D06CR	87777777	5EE8A453	1
	C6	20	BDD148A6	445ACD97	87777777	4548CC1D	1
	C6	21	8A918C9A	88841B2F	87777777	1208F7B1	1
	C6	22	2411EF63	1168365F	87777777	A88966DA	0
	C6	23	5712CCB4	22D0C6BE	87777777	CF985A3D	0
	C6	24	9F36AC7A	45ACD97C	87777777	178F3503	1
	C6	25	2F7E6AC6	8841B2F9	87777777	B4F5E17D	0
	C6	26	6DE8C2FB	168365F2	87777777	E6744884	0
	C6	27	CCE897C8	2D0C6CE4	87777777	45711F91	1
	C6	28	8AE23F22	5ACD97C9	87777777	1259B699	1
	C6	29	24336C32	B41B2F93	87777777	AC2AE4A9	0
	C6	30	5855C953	68365F26	87777777	D00E51DC	0
	C6	31	A18CA3B8	0C6CBE4C	87777777	1A452C41	1
	C6	32	348A5883	ACD97C99	87777777	B0C1CFFA	0
	C7		BCC1CFFA	41B2F932	87777777	348A5883	1
	C8		348A5883	41B2F932	87777777	075A77D	0
	C9		348A5883	41B2F932	87777777	41B2F932	0
	1C		41B2F932	41B2F932	87777777	41B2F932	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DN	PHASE	CLBCK	A(C0-31)	B(C0-31)	D(C0-31)	S(C0-31)	KCC
38	C3		F1C3C731	00000000	79999999	00000000	0
	C4		00000000	00000000	79999999	33333334	0
	C6	CC	F1C3C731	33333334	79999999	0E3038CE	1
	C6	C1	1C78719C	66666669	79999999	A7DF0203	0
	C6	C2	45BDB0C6	00000002	79999999	BF57499F	0
	C6	C3	7EAE933F	999999A4	79999999	F8482F08	0
	C6	C4	FC9059B1	33333348	79999999	6A29F34A	1
	C6	C5	0453E694	66666691	79999999	5ABA4CFF	1
	C6	C6	B57493F6	00000023	79999999	30C00C5D	0
	C6	C7	77860CB8	99999A47	79999999	FE106722	1
	C6	C8	FC38CE45	3333348E	79999999	78D2670E	1
	C6	C9	EA4CFBC	6666691D	79999999	72053623	1
	C6	10	E4166C46	0000023B	79999999	6A7C07AD	1
	C6	11	04F9A5EB	9999A477	79999999	5E600C02	1
	C6	12	B6C01785	333348EF	79999999	302677EC	1
	C6	13	7A4CF4D8	666691DF	79999999	0CF3623F	1
	C6	14	C166C47E	000023BF	79999999	87C02AE5	0
	C6	15	CF9A55CR	999A477E	79999999	8933EF64	0
	C6	16	1267DEC9	33348LFC	79999999	8CC17862	0
	C6	17	18C2FCC4	66691DF8	79999999	919C8A5D	0
	C6	18	233914BA	00D23BF0	79999999	9CD2AF53	0
	C6	19	39A55CA7	99A477E0	79999999	B33EF64C	0
	C6	20	667DEC81	3348EFC0	79999999	EC17861A	0
	C6	21	002FCC34	6691DF80	79999999	39C8A5C0	1
	C6	22	73914B9A	0D23BFC1	79999999	F9F73201	0
	C6	23	F3EF64C3	9A477E02	79999999	6F88F09C	1
	C6	24	0811FB39	348EFC05	79999999	617861AC	1
	C6	25	02F0C340	691DF80R	79999999	495727A7	1
	C6	26	92AE534E	023BFC17	79999999	19143985	1
	C6	27	3229736B	A477E02F	79999999	B88FD0D2	0
	C6	28	711FB3A5	48EFC05E	79999999	EAB9403E	0
	C6	29	05729A7C	91DF80CR	79999999	4FC03415	1
	C6	30	9E18682B	23BFC179	79999999	247FC052	1
	C6	31	48FD5D24	477E02F3	79999999	CF64C38A	0
	C6	32	9EC8C716	8EFC05E6	79999999	1861ACAF	1
	C7		1861ACAF	1DF80CR0	79999999	9EC8C716	0
	C8		1861ACAF	1DF80CR0	79999999	E79E5F51	0
	C9		1861ACAF	1DF80CR0	79999999	1DF80CR0	0
	1C		1DF80CR0	1DF80CR0	79999999	E0C7F433	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW 39	PHASE	CLOCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	K00
	C3		CCCC0000	CC00C000	00000001	00000000	0
	C4		C0000002	0000C000	00000001	00000002	0
	C6 CC		C0000000	C0000002	00000001	00000000	1
	C6 C1		C0000000	C0000005	00000001	00000000	0
	C6 C2		FFFFFFFE	0000000A	00000001	FFFFFFFE	0
	C6 C3		FFFFFFFE	00000014	00000001	FFFFFFFE	0
	C6 C4		FFFFFFFE	00000028	00000001	FFFFFFFE	0
	C6 C5		FFFFFFFE	00000050	00000001	FFFFFFFE	0
	C6 C6		FFFFFFFE	000000A0	00000001	FFFFFFFE	0
	C6 C7		FFFFFFFE	0000C140	00000001	FFFFFFFE	0
	C6 C8		FFFFFFFE	00000280	00000001	FFFFFFFE	0
	C6 C9		FFFFFFFE	00000500	00000001	FFFFFFFE	0
	C6 10		FFFFFFFE	0000A000	00000001	FFFFFFFE	0
	C6 11		FFFFFFFE	00001400	00000001	FFFFFFFE	0
	C6 12		FFFFFFFE	00002800	00000001	FFFFFFFE	0
	C6 13		FFFFFFFE	00005000	00000001	FFFFFFFE	0
	C6 14		FFFFFFFE	0000A000	00000001	FFFFFFFE	0
	C6 15		FFFFFFFE	00014000	00000001	FFFFFFFE	0
	C6 16		FFFFFFFE	00028000	00000001	FFFFFFFE	0
	C6 17		FFFFFFFE	00050000	00000001	FFFFFFFE	0
	C6 18		FFFFFFFE	000A0000	00000001	FFFFFFFE	0
	C6 19		FFFFFFFE	00140000	00000001	FFFFFFFE	0
	C6 20		FFFFFFFE	00280000	00000001	FFFFFFFE	0
	C6 21		FFFFFFFE	00500000	00000001	FFFFFFFE	0
	C6 22		FFFFFFFE	00A00000	00000001	FFFFFFFE	0
	C6 23		FFFFFFFE	01400000	00000001	FFFFFFFE	0
	C6 24		FFFFFFFE	02800000	00000001	FFFFFFFE	0
	C6 25		FFFFFFFE	05000000	00000001	FFFFFFFE	0
	C6 26		FFFFFFFE	0A000000	00000001	FFFFFFFE	0
	C6 27		FFFFFFFE	14000000	00000001	FFFFFFFE	0
	C6 28		FFFFFFFE	28000000	00000001	FFFFFFFE	0
	C6 29		FFFFFFFE	50000000	00000001	FFFFFFFE	0
	C6 30		FFFFFFFE	A0000000	00000001	FFFFFFFE	0
	C6 31		FFFFFFFE	40000000	00000001	00000000	1
	C6 32		00000000	80000001	00000001	FFFFFFFE	0
	C7		FFFFFFFE	00000002	00000001	00000000	1
	C8		00000000	00000002	00000001	00000000	0
	C9		00000000	00000002	00000001	00000002	0
	10		00000002	00000002	00000001	00000002	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW 40	PHASE	CLOCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	K00
	C3		00000000	00000000	7FFFFFFF	00000000	0
	C4		7FFFFFFF	00000000	7FFFFFFF	7FFFFFFF	0
	C6 CC		00000000	7FFFFFFF	7FFFFFFF	00000000	1
	C6 C1		00000000	FFFFFFFE	7FFFFFFF	80000001	0
	C6 C2		00000003	FFFFFFFE	7FFFFFFF	80000002	0
	C6 C3		00000005	FFFFFFFC	7FFFFFFF	80000004	0
	C6 C4		00000009	FFFFFFF8	7FFFFFFF	80000008	0
	C6 C5		00000011	FFFFFFF0	7FFFFFFF	80000010	0
	C6 C6		00000021	FFFFFFEC	7FFFFFFF	80000020	0
	C6 C7		00000041	FFFFFFC0	7FFFFFFF	80000040	0
	C6 C8		00000081	FFFFFF80	7FFFFFFF	80000080	0
	C6 C9		00000101	FFFFFFC0	7FFFFFFF	80000100	0
	C6 10		00000201	FFFFFFE0	7FFFFFFF	80000200	0
	C6 11		00000401	FFFFFFC0	7FFFFFFF	80000400	0
	C6 12		00000801	FFFFFF80	7FFFFFFF	80000800	0
	C6 13		00001001	FFFFFFC0	7FFFFFFF	80001000	0
	C6 14		00002001	FFFFE000	7FFFFFFF	80002000	0
	C6 15		00004001	FFFFC000	7FFFFFFF	80004000	0
	C6 16		00008001	FFF80000	7FFFFFFF	80008000	0
	C6 17		00010001	FFF00000	7FFFFFFF	80010000	0
	C6 18		00020001	FFFE0000	7FFFFFFF	80020000	0
	C6 19		00040001	FFFC0000	7FFFFFFF	80040000	0
	C6 20		00080001	FFF80000	7FFFFFFF	80080000	0
	C6 21		00100001	FFF00000	7FFFFFFF	80100000	0
	C6 22		00200001	FFFE0000	7FFFFFFF	80200000	0
	C6 23		00400001	FFFC0000	7FFFFFFF	80400000	0
	C6 24		00800001	FF800000	7FFFFFFF	80800000	0
	C6 25		01000001	FFC00000	7FFFFFFF	81000000	0
	C6 26		02000001	FE000000	7FFFFFFF	82000000	0
	C6 27		04000001	FC000000	7FFFFFFF	84000000	0
	C6 28		08000001	F8000000	7FFFFFFF	88000000	0
	C6 29		10000001	F0000000	7FFFFFFF	90000000	0
	C6 30		20000001	E0000000	7FFFFFFF	A0000000	0
	C6 31		40000001	C0000000	7FFFFFFF	C0000000	0
	C6 32		80000001	80000000	7FFFFFFF	00000000	1
	C7		00000000	00000001	7FFFFFFF	80000001	0
	C8		00000000	00000001	7FFFFFFF	00000000	0
	C9		00000000	00000001	7FFFFFFF	00000001	0
	10		00000001	00000001	7FFFFFFF	00000001	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW 41	PHASE	CLOCK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	<CC
	C3		00000000	00000000	00000001	00000000	0
	C4		7FFFFFFF	00000000	00000001	7FFFFFFF	0
	C6	C0	00000000	7FFFFFFF	00000001	00000000	1
	C6	C1	00000000	FFFFFFFF	00000001	FFFFFFFF	0
	C6	C2	FFFFFFFF	FFFFFFFE	00000001	00000000	1
	C6	C3	00000001	FFFFFFFD	00000001	00000000	1
	C6	C4	00000001	FFFFFFFB	00000001	00000000	1
	C6	C5	00000001	FFFFFFF7	00000001	00000000	1
	C6	C6	00000001	FFFFFFEF	00000001	00000000	1
	C6	C7	00000001	FFFFFFDF	00000001	00000000	1
	C6	C8	00000001	FFFFFFBF	00000001	00000000	1
	C6	C9	00000001	FFFFFF7F	00000001	00000000	1
	C6	10	00000001	FFFFFFF7	00000001	00000000	1
	C6	11	00000001	FFFFFFDF	00000001	00000000	1
	C6	12	00000001	FFFFFFBF	00000001	00000000	1
	C6	13	00000001	FFFFFF7F	00000001	00000000	1
	C6	14	00000001	FFFFFFF7	00000001	00000000	1
	C6	15	00000001	FFFFFFDF	00000001	00000000	1
	C6	16	00000001	FFFFFFBF	00000001	00000000	1
	C6	17	00000001	FFFF7FFF	00000001	00000000	1
	C6	18	00000001	FFFFFFF7	00000001	00000000	1
	C6	19	00000001	FFFDFFFF	00000001	00000000	1
	C6	20	00000001	FFFBFFFF	00000001	00000000	1
	C6	21	00000001	FFF7FFFF	00000001	00000000	1
	C6	22	00000001	FFEFFFFF	00000001	00000000	1
	C6	23	00000001	FFDFFFFF	00000001	00000000	1
	C6	24	00000001	FFBFFFFF	00000001	00000000	1
	C6	25	00000001	FF7FFFFF	00000001	00000000	1
	C6	26	00000001	FEFFFFF7	00000001	00000000	1
	C6	27	00000001	FDFFFFF7	00000001	00000000	1
	C6	28	00000001	FBFFFFF7	00000001	00000000	1
	C6	29	00000001	F7FFFFF7	00000001	00000000	1
	C6	30	00000001	EFFFFFF7	00000001	00000000	1
	C6	31	00000001	DFFFFFF7	00000001	00000000	1
	C6	32	00000001	BFFFFFF7	00000001	00000000	1
	C7		00000000	7FFFFFFF	00000001	FFFFFFFF	0
	C8		00000000	7FFFFFFF	00000001	00000000	0
	C9		00000000	7FFFFFFF	00000001	7FFFFFFF	0
	10		7FFFFFFF	7FFFFFFF	00000001	7FFFFFFF	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW 42	PHASE	CLOCK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	<CC
	C3		FFFFFFFF	00000000	FFFFFFFF	00000000	0
	C4		FFFFFFFF	00000000	FFFFFFFF	00000002	0
	C6	C0	FFFFFFFF	00000002	FFFFFFFF	00000000	1
	C6	C1	00000000	00000005	FFFFFFFF	FFFFFFFF	0
	C6	C2	FFFFFFFF	0000000A	FFFFFFFF	FFFFFFFF	0
	C6	C3	FFFFFFFF	00000014	FFFFFFFF	FFFFFFFF	0
	C6	C4	FFFFFFFF	00000028	FFFFFFFF	FFFFFFFF	0
	C6	C5	FFFFFFFF	00000050	FFFFFFFF	FFFFFFFF	0
	C6	C6	FFFFFFFF	000000AC	FFFFFFFF	FFFFFFFF	0
	C6	C7	FFFFFFFF	00000140	FFFFFFFF	FFFFFFFF	0
	C6	C8	FFFFFFFF	00000280	FFFFFFFF	FFFFFFFF	0
	C6	C9	FFFFFFFF	00000500	FFFFFFFF	FFFFFFFF	0
	C6	10	FFFFFFFF	00000A00	FFFFFFFF	FFFFFFFF	0
	C6	11	FFFFFFFF	00001400	FFFFFFFF	FFFFFFFF	0
	C6	12	FFFFFFFF	00002800	FFFFFFFF	FFFFFFFF	0
	C6	13	FFFFFFFF	00005000	FFFFFFFF	FFFFFFFF	0
	C6	14	FFFFFFFF	0000A000	FFFFFFFF	FFFFFFFF	0
	C6	15	FFFFFFFF	00014000	FFFFFFFF	FFFFFFFF	0
	C6	16	FFFFFFFF	00028000	FFFFFFFF	FFFFFFFF	0
	C6	17	FFFFFFFF	00050000	FFFFFFFF	FFFFFFFF	0
	C6	18	FFFFFFFF	000AC000	FFFFFFFF	FFFFFFFF	0
	C6	19	FFFFFFFF	00140000	FFFFFFFF	FFFFFFFF	0
	C6	20	FFFFFFFF	00280000	FFFFFFFF	FFFFFFFF	0
	C6	21	FFFFFFFF	00500000	FFFFFFFF	FFFFFFFF	0
	C6	22	FFFFFFFF	00A00000	FFFFFFFF	FFFFFFFF	0
	C6	23	FFFFFFFF	01400000	FFFFFFFF	FFFFFFFF	0
	C6	24	FFFFFFFF	02800000	FFFFFFFF	FFFFFFFF	0
	C6	25	FFFFFFFF	05000000	FFFFFFFF	FFFFFFFF	0
	C6	26	FFFFFFFF	0A000000	FFFFFFFF	FFFFFFFF	0
	C6	27	FFFFFFFF	14000000	FFFFFFFF	FFFFFFFF	0
	C6	28	FFFFFFFF	28000000	FFFFFFFF	FFFFFFFF	0
	C6	29	FFFFFFFF	50000000	FFFFFFFF	FFFFFFFF	0
	C6	30	FFFFFFFF	AC000000	FFFFFFFF	FFFFFFFF	0
	C6	31	FFFFFFFF	40000000	FFFFFFFF	00000000	1
	C6	32	00000000	80000001	FFFFFFFF	FFFFFFFF	0
	C7		FFFFFFFF	00000002	FFFFFFFF	00000000	1
	C8		00000000	00000002	FFFFFFFF	00000000	0
	C9		00000000	00000002	FFFFFFFF	00000002	0
	10		00000002	00000002	FFFFFFFF	00000002	0

		SIGMA 5 FIXED POINT DIVIDE SIMULATOR				PAGE C43	
DW 43	PHASE	CLBCK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	<00
	C3		FFFFFFFF	00000000	80000001	00000000	0
	C4		80000001	00000000	80000001	7FFFFFFF	0
	C6	CC	FFFFFFFF	7FFFFFFF	80000001	00000000	1
	C6	C1	00000000	FFFFFFFF	80000001	80000001	0
	C6	C2	00000003	FFFFFFFE	80000001	80000002	0
	C6	C3	00000005	FFFFFFFC	80000001	80000004	0
	C6	C4	00000009	FFFFFFF8	80000001	80000008	0
	C6	C5	00000011	FFFFFFF0	80000001	80000010	0
	C6	C6	00000021	FFFFFFE0	80000001	80000020	0
	C6	C7	00000041	FFFFFFC0	80000001	80000040	0
	C6	C8	00000081	FFFFFF80	80000001	80000080	0
	C6	C9	00000101	FFFFFFC0	80000001	80000100	0
	C6	1C	00000201	FFFFFFE0	80000001	80000200	0
	C6	11	00000401	FFFFFFC0	80000001	80000400	0
	C6	12	00000801	FFFFFF80	80000001	80000800	0
	C6	13	00001001	FFFFFF00	80000001	80001000	0
	C6	14	00002001	FFFFFFE0	80000001	80002000	0
	C6	15	00004001	FFFFFFC0	80000001	80004000	0
	C6	16	00008001	FFFFFF80	80000001	80008000	0
	C6	17	00010001	FFFFFF00	80000001	80010000	0
	C6	18	00020001	FFFFFFE0	80000001	80020000	0
	C6	19	00040001	FFFFFFC0	80000001	80040000	0
	C6	2C	00080001	FFF80000	80000001	80080000	0
	C6	21	00100001	FFF00000	80000001	80100000	0
	C6	22	00200001	FFE00000	80000001	80200000	0
	C6	23	00400001	FFC00000	80000001	80400000	0
	C6	24	00800001	FF800000	80000001	80800000	0
	C6	25	01000001	FF000000	80000001	81000000	0
	C6	26	02000001	FE000000	80000001	82000000	0
	C6	27	04000001	FC000000	80000001	84000000	0
	C6	28	08000001	F8000000	80000001	88000000	0
	C6	29	10000001	F0000000	80000001	90000000	0
	C6	3C	20000001	E0000000	80000001	AC000000	0
	C6	31	40000001	C0000000	80000001	CC000000	0
	C6	32	80000001	80000000	80000001	00000000	1
	C7		00000000	00000001	80000001	80000001	0
	C8		00000000	00000001	80000001	00000000	0
	C9		00000000	00000001	80000001	00000001	0
	1C		00000001	00000001	80000001	00000001	0

		SIGMA 5 FIXED POINT DIVIDE SIMULATOR				PAGE C44	
DW 44	PHASE	CLBCK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	<00
	C3		FFFFFFFF	00000000	FFFFFFFF	00000000	0
	C4		80000001	00000000	FFFFFFFF	7FFFFFFF	0
	C6	CC	FFFFFFFF	7FFFFFFF	FFFFFFFF	00000000	1
	C6	C1	00000000	FFFFFFFF	FFFFFFFF	FFFFFFFF	0
	C6	C2	FFFFFFFF	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C3	00000001	FFFFFFFFD	FFFFFFFF	00000000	1
	C6	C4	00000001	FFFFFFFFB	FFFFFFFF	00000000	1
	C6	C5	00000001	FFFFFFFF7	FFFFFFFF	00000000	1
	C6	C6	00000001	FFFFFFFFE	FFFFFFFF	00000000	1
	C6	C7	00000001	FFFFFFFFF	FFFFFFFF	00000000	1
	C6	C8	00000001	FFFFFFFFB	FFFFFFFF	00000000	1
	C6	C9	00000001	FFFFFFFF7	FFFFFFFF	00000000	1
	C6	1C	00000001	FFFFFFFFE	FFFFFFFF	00000000	1
	C6	11	00000001	FFFFFFFFF	FFFFFFFF	00000000	1
	C6	12	00000001	FFFFFFFFB	FFFFFFFF	00000000	1
	C6	13	00000001	FFFFFFFF7	FFFFFFFF	00000000	1
	C6	14	00000001	FFFFFFFFE	FFFFFFFF	00000000	1
	C6	15	00000001	FFFFFFFFB	FFFFFFFF	00000000	1
	C6	16	00000001	FFFFFFFF7	FFFFFFFF	00000000	1
	C6	17	00000001	FFFFFFFFE	FFFFFFFF	00000000	1
	C6	18	00000001	FFFFFFFFB	FFFFFFFF	00000000	1
	C6	19	00000001	FFFFFFFF7	FFFFFFFF	00000000	1
	C6	2C	00000001	FFFFFFFFE	FFFFFFFF	00000000	1
	C6	21	00000001	FFFFFFFFB	FFFFFFFF	00000000	1
	C6	22	00000001	FFFFFFFF7	FFFFFFFF	00000000	1
	C6	23	00000001	FFFFFFFFE	FFFFFFFF	00000000	1
	C6	24	00000001	FFFFFFFFB	FFFFFFFF	00000000	1
	C6	25	00000001	FFFFFFFF7	FFFFFFFF	00000000	1
	C6	26	00000001	FFFFFFFFE	FFFFFFFF	00000000	1
	C6	27	00000001	FFFFFFFFB	FFFFFFFF	00000000	1
	C6	28	00000001	FFFFFFFF7	FFFFFFFF	00000000	1
	C6	29	00000001	FFFFFFFFE	FFFFFFFF	00000000	1
	C6	3C	00000001	FFFFFFFFB	FFFFFFFF	00000000	1
	C6	31	00000001	FFFFFFFF7	FFFFFFFF	00000000	1
	C6	32	00000001	FFFFFFFFE	FFFFFFFF	00000000	1
	C7		00000000	7FFFFFFF	FFFFFFFF	FFFFFFFF	0
	C8		00000000	7FFFFFFF	FFFFFFFF	00000000	0
	C9		00000000	7FFFFFFF	FFFFFFFF	7FFFFFFF	0
	1C		7FFFFFFF	7FFFFFFF	FFFFFFFF	7FFFFFFF	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW	PHASE	CLBCK	A(C0-31)	B(C0-31)	D(C0-31)	S(C0-31)	<00
45	C3		0000000	0000000	FFFFFFFF	0000000	0
	C4		0000002	0000000	FFFFFFFF	0000002	0
	C6	CC	0000000	0000002	FFFFFFFF	0000000	1
	C6	C1	0000000	0000005	FFFFFFFF	0000000	0
	C6	C2	FFFFFFFF	000000A	FFFFFFFF	FFFFFFFF	0
	C6	C3	FFFFFFFF	0000014	FFFFFFFF	FFFFFFFF	0
	C6	C4	FFFFFFFF	0000028	FFFFFFFF	FFFFFFFF	0
	C6	C5	FFFFFFFF	0000050	FFFFFFFF	FFFFFFFF	0
	C6	C6	FFFFFFFF	00000A0	FFFFFFFF	FFFFFFFF	0
	C6	C7	FFFFFFFF	00000140	FFFFFFFF	FFFFFFFF	0
	C6	C8	FFFFFFFF	00000280	FFFFFFFF	FFFFFFFF	0
	C6	C9	FFFFFFFF	00000500	FFFFFFFF	FFFFFFFF	0
	C6	C10	FFFFFFFF	00000A00	FFFFFFFF	FFFFFFFF	0
	C6	C11	FFFFFFFF	00001400	FFFFFFFF	FFFFFFFF	0
	C6	C12	FFFFFFFF	00002800	FFFFFFFF	FFFFFFFF	0
	C6	C13	FFFFFFFF	00005000	FFFFFFFF	FFFFFFFF	0
	C6	C14	FFFFFFFF	0000A000	FFFFFFFF	FFFFFFFF	0
	C6	C15	FFFFFFFF	00014000	FFFFFFFF	FFFFFFFF	0
	C6	C16	FFFFFFFF	00028000	FFFFFFFF	FFFFFFFF	0
	C6	C17	FFFFFFFF	00050000	FFFFFFFF	FFFFFFFF	0
	C6	C18	FFFFFFFF	000A0000	FFFFFFFF	FFFFFFFF	0
	C6	C19	FFFFFFFF	00140000	FFFFFFFF	FFFFFFFF	0
	C6	C20	FFFFFFFF	00280000	FFFFFFFF	FFFFFFFF	0
	C6	C21	FFFFFFFF	00500000	FFFFFFFF	FFFFFFFF	0
	C6	C22	FFFFFFFF	00A00000	FFFFFFFF	FFFFFFFF	0
	C6	C23	FFFFFFFF	01400000	FFFFFFFF	FFFFFFFF	0
	C6	C24	FFFFFFFF	02800000	FFFFFFFF	FFFFFFFF	0
	C6	C25	FFFFFFFF	05000000	FFFFFFFF	FFFFFFFF	0
	C6	C26	FFFFFFFF	0A000000	FFFFFFFF	FFFFFFFF	0
	C6	C27	FFFFFFFF	14000000	FFFFFFFF	FFFFFFFF	0
	C6	C28	FFFFFFFF	28000000	FFFFFFFF	FFFFFFFF	0
	C6	C29	FFFFFFFF	50000000	FFFFFFFF	FFFFFFFF	0
	C6	C30	FFFFFFFF	A0000000	FFFFFFFF	FFFFFFFF	0
	C6	C31	FFFFFFFF	40000000	FFFFFFFF	00000000	1
	C6	C32	0000000	8000001	FFFFFFFF	FFFFFFFF	0
	C7		FFFFFFFF	0000002	FFFFFFFF	00000000	1
	C8		0000000	0000002	FFFFFFFF	00000000	0
	C9		0000000	0000002	FFFFFFFF	0000002	0
	C10		0000002	0000002	FFFFFFFF	FFFFFFFF	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW	PHASE	CLBCK	A(C0-31)	B(C0-31)	D(C0-31)	S(C0-31)	<00
46	C3		0000000	0000000	8000001	0000000	0
	C4		7FFFFFFF	0000000	8000001	7FFFFFFF	0
	C6	CC	0000000	7FFFFFFF	8000001	0000000	1
	C6	C1	0000000	FFFFFFFF	8000001	8000001	0
	C6	C2	0000003	FFFFFFFF	8000001	8000002	0
	C6	C3	0000005	FFFFFFFC	8000001	8000004	0
	C6	C4	0000009	FFFFFFF8	8000001	8000008	0
	C6	C5	0000011	FFFFFFFC	8000001	8000010	0
	C6	C6	0000021	FFFFFFEC	8000001	8000020	0
	C6	C7	0000041	FFFFFFC0	8000001	8000040	0
	C6	C8	0000081	FFFFFF80	8000001	8000080	0
	C6	C9	0000101	FFFFFFC0	8000001	8000100	0
	C6	C10	0000201	FFFFFFE0	8000001	8000200	0
	C6	C11	0000401	FFFFFFC0	8000001	8000400	0
	C6	C12	0000801	FFFFFF80	8000001	8000800	0
	C6	C13	0001001	FFFFFFC0	8000001	8001000	0
	C6	C14	0002001	FFFFFFC0	8000001	8002000	0
	C6	C15	0004001	FFFFFFC0	8000001	8004000	0
	C6	C16	0008001	FFFFFF80	8000001	8008000	0
	C6	C17	0010001	FFFFFFC0	8000001	8010000	0
	C6	C18	0020001	FFFE0000	8000001	8020000	0
	C6	C19	0040001	FFF00000	8000001	8040000	0
	C6	C20	0080001	FFF80000	8000001	8080000	0
	C6	C21	0100001	FFF00000	8000001	80100000	0
	C6	C22	0200001	FFE00000	8000001	80200000	0
	C6	C23	0400001	FFC00000	8000001	80400000	0
	C6	C24	0800001	FF800000	8000001	80800000	0
	C6	C25	1000001	FF000000	8000001	81000000	0
	C6	C26	2000001	FE000000	8000001	82000000	0
	C6	C27	4000001	FC000000	8000001	84000000	0
	C6	C28	8000001	F8000000	8000001	88000000	0
	C6	C29	1000001	F0000000	8000001	90000000	0
	C6	C30	2000001	E0000000	8000001	ACC00000	0
	C6	C31	4000001	C0000000	8000001	CCC00000	0
	C6	C32	8000001	80000000	8000001	00000000	1
	C7		0000000	0000001	8000001	8000001	0
	C8		0000000	0000001	8000001	00000000	0
	C9		0000000	0000001	8000001	0000001	0
	C10		0000001	0000001	8000001	FFFFFFFF	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW 47	PHASE	CLBCK	A(CO=31)	B(CO=31)	D(CO=31)	S(CO=31)	KCC
	C3		00000000	00000000	FFFFFFFF	00000000	0
	C4		7FFFFFFFFF	00000000	FFFFFFFF	7FFFFFFFFF	0
	C6	00	00000000	7FFFFFFFFF	FFFFFFFF	00000000	1
	C6	C1	00000000	FFFFFFFF	FFFFFFFF	FFFFFFFF	0
	C6	C2	FFFFFFFF	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C3	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C4	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C5	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C6	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C7	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C8	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C9	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C10	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C11	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C12	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C13	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C14	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C15	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C16	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C17	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C18	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C19	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C20	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C21	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C22	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C23	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C24	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C25	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C26	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C27	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C28	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C29	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C30	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C31	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C6	C32	00000001	FFFFFFFF	FFFFFFFF	00000000	1
	C7		00000000	7FFFFFFFFF	FFFFFFFF	FFFFFFFF	0
	C8		00000000	7FFFFFFFFF	FFFFFFFF	00000000	0
	C9		00000000	7FFFFFFFFF	FFFFFFFF	7FFFFFFFFF	0
	C10		7FFFFFFFFF	7FFFFFFFFF	FFFFFFFF	80000001	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW 48	PHASE	CLBCK	A(CO=31)	B(CO=31)	D(CO=31)	S(CO=31)	KCC
	C3		FFFFFFFF	00000000	00000001	00000000	0
	C4		FFFFFFFF	00000000	00000001	00000002	0
	C6	00	FFFFFFFF	00000002	00000001	00000000	1
	C6	C1	00000000	00000005	00000001	FFFFFFFF	0
	C6	C2	FFFFFFFF	0000000A	00000001	FFFFFFFF	0
	C6	C3	FFFFFFFF	00000014	00000001	FFFFFFFF	0
	C6	C4	FFFFFFFF	00000028	00000001	FFFFFFFF	0
	C6	C5	FFFFFFFF	00000050	00000001	FFFFFFFF	0
	C6	C6	FFFFFFFF	000000A0	00000001	FFFFFFFF	0
	C6	C7	FFFFFFFF	00000140	00000001	FFFFFFFF	0
	C6	C8	FFFFFFFF	00000280	00000001	FFFFFFFF	0
	C6	C9	FFFFFFFF	00000500	00000001	FFFFFFFF	0
	C6	C10	FFFFFFFF	00000A00	00000001	FFFFFFFF	0
	C6	C11	FFFFFFFF	00001400	00000001	FFFFFFFF	0
	C6	C12	FFFFFFFF	00002800	00000001	FFFFFFFF	0
	C6	C13	FFFFFFFF	00005000	00000001	FFFFFFFF	0
	C6	C14	FFFFFFFF	0000A000	00000001	FFFFFFFF	0
	C6	C15	FFFFFFFF	00014000	00000001	FFFFFFFF	0
	C6	C16	FFFFFFFF	00028000	00000001	FFFFFFFF	0
	C6	C17	FFFFFFFF	00050000	00000001	FFFFFFFF	0
	C6	C18	FFFFFFFF	000A0000	00000001	FFFFFFFF	0
	C6	C19	FFFFFFFF	00140000	00000001	FFFFFFFF	0
	C6	C20	FFFFFFFF	00280000	00000001	FFFFFFFF	0
	C6	C21	FFFFFFFF	00500000	00000001	FFFFFFFF	0
	C6	C22	FFFFFFFF	00A00000	00000001	FFFFFFFF	0
	C6	C23	FFFFFFFF	01400000	00000001	FFFFFFFF	0
	C6	C24	FFFFFFFF	02800000	00000001	FFFFFFFF	0
	C6	C25	FFFFFFFF	05000000	00000001	FFFFFFFF	0
	C6	C26	FFFFFFFF	0A000000	00000001	FFFFFFFF	0
	C6	C27	FFFFFFFF	14000000	00000001	FFFFFFFF	0
	C6	C28	FFFFFFFF	28000000	00000001	FFFFFFFF	0
	C6	C29	FFFFFFFF	50000000	00000001	FFFFFFFF	0
	C6	C30	FFFFFFFF	AC000000	00000001	FFFFFFFF	0
	C6	C31	FFFFFFFF	40000000	00000001	00000000	1
	C6	C32	00000000	80000001	00000001	FFFFFFFF	0
	C7		FFFFFFFF	00000002	00000001	00000000	1
	C8		00000000	00000002	00000001	00000000	0
	C9		00000000	00000002	00000001	00000002	0
	C10		00000002	00000002	00000001	FFFFFFFF	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW	PHASE	CLBCK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	<CC
49	C3		FFFFFFFF	00000000	7FFFFFFF	00000000	0
	C4		80000001	00000000	7FFFFFFF	7FFFFFFF	0
	C6	C0	FFFFFFFF	7FFFFFFF	7FFFFFFF	00000000	1
	C6	C1	CC000000	FFFFFFFF	7FFFFFFF	80000001	0
	C6	C2	CC000003	FFFFFFFFE	7FFFFFFF	80000002	0
	C6	C3	CC000005	FFFFFFFFC	7FFFFFFF	80000004	0
	C6	C4	CC000009	FFFFFFFF8	7FFFFFFF	80000008	0
	C6	C5	CC000011	FFFFFFFF0	7FFFFFFF	80000010	0
	C6	C6	CC000021	FFFFFFFFE0	7FFFFFFF	80000020	0
	C6	C7	CC000041	FFFFFFFFC0	7FFFFFFF	80000040	0
	C6	C8	CC000081	FFFFFFFF80	7FFFFFFF	80000080	0
	C6	C9	CC000101	FFFFFFFF00	7FFFFFFF	80000100	0
	C6	10	CC000201	FFFFFFFFE0	7FFFFFFF	80000200	0
	C6	11	CC000401	FFFFFFFFC0	7FFFFFFF	80000400	0
	C6	12	CC000801	FFFFFFFF80	7FFFFFFF	80000800	0
	C6	13	CC001001	FFFFFFFF00	7FFFFFFF	80001000	0
	C6	14	CC002001	FFFFFFFFE0	7FFFFFFF	80002000	0
	C6	15	CC004001	FFFFFFFFC0	7FFFFFFF	80004000	0
	C6	16	CC008001	FFFFFFFF80	7FFFFFFF	80008000	0
	C6	17	CC010001	FFFFFFFF00	7FFFFFFF	80010000	0
	C6	18	CC020001	FFFFFFFFE0	7FFFFFFF	80020000	0
	C6	19	CC040001	FFFFFFFFC0	7FFFFFFF	80040000	0
	C6	20	CC080001	FFFFFFFF80	7FFFFFFF	80080000	0
	C6	21	CC100001	FFFFFFFF00	7FFFFFFF	80100000	0
	C6	22	CC200001	FFFFFFFFE0	7FFFFFFF	80200000	0
	C6	23	CC400001	FFFFFFFFC0	7FFFFFFF	80400000	0
	C6	24	CC800001	FFFFFFFF80	7FFFFFFF	80800000	0
	C6	25	C1000001	FFFFFFFF00	7FFFFFFF	81000000	0
	C6	26	C2000001	FFFFFFFFE0	7FFFFFFF	82000000	0
	C6	27	C4000001	FFFFFFFFC0	7FFFFFFF	84000000	0
	C6	28	C8000001	FFFFFFFF80	7FFFFFFF	88000000	0
	C6	29	10000001	FFFFFFFF00	7FFFFFFF	90000000	0
	C6	30	20000001	FFFFFFFFE0	7FFFFFFF	ACC00000	0
	C6	31	40000001	FFFFFFFFC0	7FFFFFFF	CCC00000	0
	C6	32	80000001	FFFFFFFF80	7FFFFFFF	0CC00000	1
	C7		CC000000	00000001	7FFFFFFF	80000001	0
	C8		CC000000	00000001	7FFFFFFF	0CC00000	0
	C9		CC000000	00000001	7FFFFFFF	0CC00001	0
	10		CC000001	CC000001	7FFFFFFF	FFFFFFFF	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW	PHASE	CLBCK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	<CC
50	C3		FFFFFFFF	00000000	00000001	00000000	0
	C4		80000001	00000000	00000001	7FFFFFFF	0
	C6	C0	FFFFFFFF	7FFFFFFF	00000001	00000000	1
	C6	C1	CC000000	FFFFFFFF	00000001	FFFFFFFF	0
	C6	C2	CC000003	FFFFFFFFE	00000001	00000000	1
	C6	C3	CC000005	FFFFFFFFD	00000001	00000000	1
	C6	C4	CC000009	FFFFFFFFB	00000001	00000000	1
	C6	C5	CC000011	FFFFFFFF7	00000001	00000000	1
	C6	C6	CC000021	FFFFFFFFE0	00000001	00000000	1
	C6	C7	CC000041	FFFFFFFFC0	00000001	00000000	1
	C6	C8	CC000081	FFFFFFFF80	00000001	00000000	1
	C6	C9	CC000101	FFFFFFFF00	00000001	00000000	1
	C6	10	CC000201	FFFFFFFFE0	00000001	00000000	1
	C6	11	CC000401	FFFFFFFFC0	00000001	00000000	1
	C6	12	CC000801	FFFFFFFF80	00000001	00000000	1
	C6	13	CC001001	FFFFFFFF00	00000001	00000000	1
	C6	14	CC002001	FFFFFFFFE0	00000001	00000000	1
	C6	15	CC004001	FFFFFFFFC0	00000001	00000000	1
	C6	16	CC008001	FFFFFFFF80	00000001	00000000	1
	C6	17	CC010001	FFFFFFFF00	00000001	00000000	1
	C6	18	CC020001	FFFFFFFFE0	00000001	00000000	1
	C6	19	CC040001	FFFFFFFFC0	00000001	00000000	1
	C6	20	CC080001	FFFFFFFF80	00000001	00000000	1
	C6	21	CC100001	FFFFFFFF00	00000001	00000000	1
	C6	22	CC200001	FFFFFFFFE0	00000001	00000000	1
	C6	23	CC400001	FFFFFFFFC0	00000001	00000000	1
	C6	24	CC800001	FFFFFFFF80	00000001	00000000	1
	C6	25	C1000001	FFFFFFFF00	00000001	00000000	1
	C6	26	C2000001	FFFFFFFFE0	00000001	00000000	1
	C6	27	C4000001	FFFFFFFFC0	00000001	00000000	1
	C6	28	C8000001	FFFFFFFF80	00000001	00000000	1
	C6	29	10000001	FFFFFFFF00	00000001	00000000	1
	C6	30	20000001	FFFFFFFFE0	00000001	00000000	1
	C6	31	40000001	FFFFFFFFC0	00000001	00000000	1
	C6	32	80000001	FFFFFFFF80	00000001	00000000	1
	C7		CC000000	7FFFFFFF	00000001	FFFFFFFF	0
	C8		CC000000	7FFFFFFF	00000001	0CC00000	0
	C9		CC000000	7FFFFFFF	00000001	7FFFFFFF	0
	10		7FFFFFFF	7FFFFFFF	00000001	80000001	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR							PAGE 051
DW 51	PHASE	CLBCK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	K00
	03		C1234567	00000000	42468ACE	00000000	0
	04		89ABCDEF	00000000	42468ACE	89ABCDEF	0
	06	00	C1234567	89ABCDEF	42468ACE	C1234567	1
	06	C1	C2468ACF	13579BDF	42468ACE	CC000001	C
	06	C2	80000002	26AF37BE	42468ACE	C2468AD0	0
	06	C3	848D15AC	4D5E6F7C	42468ACE	C6D3AC0E	0
	06	C4	8DA74GDC	9ABCDEF8	42468ACE	CFEDCRAA	0
	06	C5	9FDB9755	3579BDF0	42468ACE	E2222223	0
	06	C6	C4444446	6AF37BE0	42468ACE	068ACF14	1
	06	C7	CD159E28	D5E6F7C1	42468ACE	CACF135A	0
	06	C8	959E26B5	ABCDEF82	42468ACE	D7E4B183	0
	06	C9	AFC96307	579BDF04	42468ACE	F20FDD5	0
	06	C10	E41FDBAA	AF37BE08	42468ACE	26666678	1
	06	C11	4CCCCCF1	5E6F7C11	42468ACE	0A864223	1
	06	C12	15CC8446	BCDEF823	42468ACE	D2C5F978	0
	06	C13	A58BF2F1	79BDF046	42468ACE	E7D27DBF	C
	06	C14	CFA4FB7E	F37BE08C	42468ACE	11EB864C	1
	06	C15	23070C99	E6F7C119	42468ACE	E19081CB	0
	06	C16	C3210397	CDEF8232	42468ACE	05678E65	1
	06	C17	CACF1CCB	98DFC465	42468ACE	C88891FD	0
	06	C18	911123FB	37BEC8CA	42468ACE	D357AEC9	0
	06	C19	A6AF5C92	6F7C1194	42468ACE	E8F5E860	0
	06	C20	D1EBD0C0	DEF82328	42468ACE	14325F8E	1
	06	C21	2864B71D	BDF04651	42468ACE	E61E2C4F	C
	06	C22	CC3C589F	7BE08CA2	42468ACE	0E82E36D	1
	06	C23	1D05C6DA	F7C11945	42468ACE	DABF3C0C	0
	06	C24	E57E7819	EF82328A	42468ACE	F7C502E7	0
	06	C25	EF8AC5CF	DFC46514	42468ACE	31D0C9D9	1
	06	C26	63A1213B	BE08CA29	42468ACE	215A966D	1
	06	C27	42B52CDB	7C119453	42468ACE	0C6EA2CD	1
	06	C28	CCDD441A	F82328A7	42468ACE	BE96B94C	0
	06	C29	7D2D7299	FC46514E	42468ACE	BF73FD67	0
	06	C30	7EE7FACF	EC8CA29C	42468ACE	C12E859D	0
	06	C31	825D0R3B	C1194538	42468ACE	C4A39609	0
	06	C32	89472C13	82328A70	42468ACE	CB8DB6E1	0
	C7		CB8DB6E1	C46514E0	42468ACE	0DD441AF	1
	C8		0DD441AF	C46514E0	42468ACE	0DD441AF	C
	C9		0DD441AF	C46514E0	42468ACE	C46514E0	C
	10		C46514E0	C46514E0	42468ACE	C46514E0	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR							PAGE 052
DW 52	PHASE	CLBCK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	K00
	C3		258BE147	00000000	56AE37BF	00000000	C
	C4		ADC369CF	00000000	56AE37BF	ADC369CF	0
	C6	00	258BE147	ADC369CF	56AE37BF	258BE147	1
	C6	C1	4B17C28F	5AC6D39F	56AE37BF	F4698ADC	0
	C6	C2	E8D315AC	B40DA73E	56AE37BF	3F81405F	1
	C6	C3	7FC29ABF	681B4E7D	56AE37BF	28546300	1
	C6	C4	ECA8C6C0	DC369CFB	56AE37BF	F9FABE41	0
	C6	C5	F3F51C83	AC6D39F6	56AE37BF	4AA35442	1
	C6	C6	9546A885	4CDA73ED	56AE37BF	3E987CC6	1
	C6	C7	7D30E18C	81B4E7DB	56AE37BF	2682A9CD	1
	C6	C8	4DC5539B	0369CFB7	56AE37BF	F65718DC	0
	C6	C9	ECAE37B8	06D39F6E	56AE37BF	435C6F77	1
	C6	C10	86B8DEEE	CDA73EDD	56AE37BF	30CAA72F	1
	C6	C11	6C154E5E	1B4E7DBB	56AE37BF	0967169F	1
	C6	C12	12CE2D3E	369CFB77	56AE37BF	BC1FF57F	C
	C6	C13	783FAFE	6D39F6EE	56AE37BF	CFEE22BD	C
	C6	C14	9DDC457A	DA73EDDC	56AE37BF	F48A7D39	0
	C6	C15	E914FA73	B4E7DBB8	56AE37BF	3FC33232	1
	C6	C16	7F866465	69CFB771	56AE37BF	28D82CA6	1
	C6	C17	E1B0594C	D39F6EE3	56AE37BF	FRC22180	C
	C6	C18	F604431B	A73EDDC6	56AE37BF	4CB27ADA	1
	C6	C19	9964F5B5	4E7DBB8D	56AE37BF	42R6BDF6	1
	C6	C20	856D7BEC	9CFB771B	56AE37BF	2EBF442D	1
	C6	C21	ED7E885B	39F6EE37	56AE37BF	C6D05C9C	1
	C6	C22	CDA0A138	73EDDC6F	56AE37BF	B6F26979	C
	C6	C23	6DE4D2F2	E7DBB8DE	56AE37BF	C4930AB1	C
	C6	C24	89261563	CFB771BC	56AE37BF	DFD44D22	C
	C6	C25	BFA89A45	9F6EE378	56AE37BF	1656D204	1
	C6	C26	2CADA409	3EDDC6F1	56AE37BF	D5FF6C4A	0
	C6	C27	ABFED894	7DBB8DE2	56AE37BF	02AD1C53	1
	C6	C28	C55A2CA6	FB771BC5	56AE37BF	AEAREE7	C
	C6	C29	ED57D1CF	F6EE378A	56AE37BF	B4C6098E	C
	C6	C30	68CC131D	EDDC6F14	56AE37BF	BEBA4ADC	C
	C6	C31	7D7495B9	DBB8DE28	56AE37BF	D422CD78	C
	C6	C32	A8459AF1	B771BC50	56AE37BF	FEF3D2B0	C
	C7		FEF3D2B0	6EE378A0	56AE37BF	55A20A6F	1
	C8		55A20A6F	6EE378A0	56AE37BF	55A20A6F	0
	C9		55A20A6F	6EE378A0	56AE37BF	6EE378A0	0
	10		6EE378A0	6EE378A0	56AE37BF	6EE378A0	C

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE 053

DW	PHASE	CLOCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	KCC
53	03		DF1357BD	00000000	E135798D	00000000	0
	04		F2468ACE	00000000	E135798D	0DB97532	0
	06	00	CF1357BD	0DB97532	E135798D	20ECA842	1
	06	01	41D95084	1B72EA65	E135798D	230CA41	1
	06	02	461D9482	36E5D4CB	E135798D	27530E3F	1
	10		461D9482	36E5D4CB	E135798D	00000000	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE 054

DW	PHASE	CLOCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	KCC
54	03		E26AE38D	00000000	8147ADC3	00000000	0
	04		27C16B05	00000000	8147ADC3	D83E94FB	0
	06	00	E26AE38D	D83E94FB	8147ADC3	1D951C72	1
	06	01	3B2A38E5	BC7D29F7	8147ADC3	8C71E5E8	0
	06	02	78E3CBD1	6CFA53EE	8147ADC3	F79C1ECE	0
	06	03	EF383D9C	C1F4A7DC	8147ADC3	6DF09099	1
	06	04	DBE12133	83E94FB9	8147ADC3	5D28CE36	1
	06	05	BA519C6D	C7D29F73	8147ADC3	3B994970	1
	06	06	773292EC	CFA53EE7	8147ADC3	F87A3FE3	0
	06	07	FCF47FC6	1F4A7DCE	8147ADC3	6FACD2C3	1
	06	08	CF59A586	3E94FB9D	8147ADC3	6CA15289	1
	06	09	C142A512	7D29F73B	8147ADC3	428A5215	1
	06	10	8514A42A	FA53EE77	8147ADC3	065C512D	1
	06	11	CCB8A25B	F4A7DCEF	8147ADC3	8ECC4F5E	0
	06	12	1C009E8D	E94FB9DE	8147ADC3	9AB8F1BA	0
	06	13	3571E375	D29F73BC	8147ADC3	B42A3672	0
	06	14	68546CE5	A53EE778	8147ADC3	E70CBFE2	0
	06	15	CE197FC5	4A7DCEFO	8147ADC3	4CD1D2C2	1
	06	16	99A3A584	94FB9DE1	8147ADC3	1AEB5287	1
	06	17	35D6A50F	29F73BC3	8147ADC3	B71E5212	0
	06	18	6E3CA424	53EE7786	8147ADC3	ECF4F721	0
	06	19	D9E9EE42	A7DCEFC0	8147ADC3	58A2413F	1
	06	20	B144827F	4FB9DE19	8147ADC3	328C2F82	1
	06	21	65185F04	9F73BC33	8147ADC3	E6600C07	0
	06	22	CCCC180F	3EE77866	8147ADC3	4B786R0C	1
	06	23	96F0D618	7DCEFOCD	8147ADC3	1838831A	1
	06	24	3C71C636	FB9DE199	8147ADC3	B1B8B339	0
	06	25	63716673	F73BC336	8147ADC3	E229B970	0
	06	26	C45372E1	EE77866C	8147ADC3	430AC5DE	1
	06	27	861788BD	DCEFCDD9	8147ADC3	075F38C0	1
	06	28	CEBE7181	B9DE19B3	8147ADC3	9CC61E84	0
	06	29	ZCCC30C9	73BC3366	8147ADC3	9EC49CC6	0
	06	30	3D8920CC	E77866CC	8147ADC3	BC417309	0
	06	31	7882E613	CEFCDD98	8147ADC3	F7363910	0
	06	32	EE767221	9DE19B30	8147ADC3	6D2EC51E	1
	07		6D2EC51E	3BC33661	8147ADC3	EE767221	0
	08		6D2EC51E	3BC33661	8147ADC3	92D13AE2	0
	09		6D2EC51E	3BC33661	8147ADC3	3BC33661	0
	10		3BC33661	3BC33661	8147ADC3	3BC33661	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE 055

DW	55	PHASE	CLOCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	KOC
		C3		148BF37B	00000000	E26AF49F	00000000	0
		C4		F37BF49E	00000000	E26AF49F	F37BF49E	0
		C6	00	148BF37B	F37BF49E	E26AF49F	148BF37B	1
		C6	01	2917E6F7	E6F7E93D	E26AF49F	0B82DB96	1
		06	02	1705B72D	CDEFD27B	E26AF49F	F970ABCC	0
		10		1705B72D	CDEFD27B	E26AF49F	00000000	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE 056

DW	56	PHASE	CLOCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	KOC
		C3		FC259E49	00000000	457AE39F	00000000	0
		C4		ABE159FC	00000000	457AE39F	541EA610	0
		C6	00	FC259E49	541EA610	457AE39F	0FDA61B6	1
		C6	01	1FB4C36C	A83D4C21	457AE39F	DA39DFCD	0
		C6	02	B473BF9B	507A9842	457AE39F	F9EEA33A	0
		C6	03	F3DD4674	ACF53084	457AE39F	39582A13	1
		C6	04	72B05427	41EA6109	457AE39F	2D357088	1
		C6	05	5A6AE11C	83D4C213	457AE39F	14EFFF71	1
		C6	06	29DFFAE3	07A98427	457AE39F	E4651744	0
		C6	07	RCACAE88	CF53C84E	457AE39F	0E451227	1
		C6	08	1C8A244E	1EA6109D	457AE39F	D7CF4CAF	0
		C6	09	AE1E815E	3D4C213A	457AE39F	F39964FD	0
		C6	10	E732C9FA	7A984274	457AE39F	2CADAD99	1
		C6	11	595B5B32	F53084E9	457AE39F	13EC7793	1
		C6	12	27C0EF27	EA6109D3	457AE39F	E2460B88	0
		C6	13	C48C1711	D4C213A6	457AE39F	0AC6FAB0	1
		C6	14	14CDF561	A984274D	457AE39F	CE9311C2	0
		C6	15	5D262385	53C84E9A	457AE39F	E2A10724	0
		C6	16	C5420E48	A6109D34	457AE39F	0ABCF1E7	1
		C6	17	1579E3CF	4C213A69	457AE39F	0FFF0030	0
		C6	18	9FFEC060	984274D2	457AE39F	E578E3FF	0
		C6	19	CAF1C7FF	3084E9A4	457AE39F	106CAP9E	1
		C6	20	2CD9573C	6109D349	457AE39F	DB5E739D	0
		C6	21	B68CE73A	C213A692	457AE39F	FC37CAD9	0
		C6	22	F86F95B3	84274D24	457AE39F	3DEA7952	1
		C6	23	7BD4F2A5	C84E9A49	457AE39F	365A0F06	1
		C6	24	6CB41E0C	109D3493	457AE39F	27393A6D	1
		C6	25	4E7274DA	213A6927	457AE39F	08F7913B	1
		C6	26	11EF2276	4274D24F	457AE39F	CC743ED7	0
		C6	27	58E87DAE	84E9A49E	457AE39F	DE63614D	0
		C6	28	ECC6C298	C9D3493C	457AE39F	0241A63A	1
		C6	29	C4834C74	13A69279	457AE39F	BFC868D5	0
		C6	30	7E10D1AA	274D24F2	457AE39F	C388B549	0
		C6	31	87176A92	4E9A49E4	457AE39F	CC924E31	0
		C6	32	99249C62	9D3493C8	457AE39F	DE9F8001	0
		C7		CE9F80C1	3A692790	457AE39F	241A63A0	1
		C8		241A63A0	3A692790	457AE39F	DBE59C60	0
		C9		241A63A0	3A692790	457AE39F	3A692790	0
		10		3A692790	3A692790	457AE39F	C596D870	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW	PHASE	CLOCK	A(CO=31)	B(CO=31)	D(CO=31)	S(CO=31)	<CO
57	C3		0000000	0000000	8000000	0000000	0
	C4		FFFFFFFF	0000000	8000000	FFFFFFFF	0
	C6	C0	0000000	FFFFFFFF	8000000	0000000	1
	C6	C1	0000001	FFFFFFFF	8000000	8000001	0
	C6	C2	0000003	FFFFFFFE	8000000	8000003	0
	C6	C3	0000007	FFFFFFFC	8000000	8000007	0
	C6	C4	000000F	FFFFFFF8	8000000	800000F	0
	C6	C5	000001F	FFFFFFF0	8000000	800001F	0
	C6	C6	000003F	FFFFFFE0	8000000	800003F	0
	C6	C7	000007F	FFFFFFC0	8000000	800007F	0
	C6	C8	00000FF	FFFFFF80	8000000	80000FF	0
	C6	C9	00001FF	FFFFFF00	8000000	80001FF	0
	C6	10	00003FF	FFFFFF00	8000000	80003FF	0
	C6	11	00007FF	FFFFFFC0	8000000	80007FF	0
	C6	12	0000FFF	FFFFFF80	8000000	8000FFF	0
	C6	13	0001FFF	FFFFFF00	8000000	8001FFF	C
	C6	14	0003FFF	FFFFFF00	8000000	8003FFF	0
	C6	15	0007FFF	FFFFC00	8000000	8007FFF	C
	C6	16	000FFFF	FFF8000	8000000	800FFFF	0
	C6	17	001FFFF	FFFCC00	8000000	801FFFF	C
	C6	18	003FFFF	FFE0000	8000000	803FFFF	C
	C6	19	007FFFF	FFC0000	8000000	807FFFF	C
	C6	20	00FFFFFF	FF80000	8000000	80FFFFFF	C
	C6	21	001FFFFFF	FF00000	8000000	801FFFFFF	C
	C6	22	003FFFFFF	FFE0000	8000000	803FFFFFF	C
	C6	23	007FFFFFF	FFC0000	8000000	807FFFFFF	C
	C6	24	00FFFFFFF	FF80000	8000000	80FFFFFFF	C
	C6	25	01FFFFFFF	FF00000	8000000	81FFFFFFF	C
	C6	26	03FFFFFFF	FE00000	8000000	83FFFFFFF	C
	C6	27	07FFFFFFF	FC00000	8000000	87FFFFFFF	C
	C6	28	0FFFFFFF	F800000	8000000	8FFFFFFF	0
	C6	29	1FFFFFFF	F000000	8000000	9FFFFFFF	0
	C6	30	3FFFFFFF	E000000	8000000	BFFFFFFF	0
	C6	31	7FFFFFFF	C000000	8000000	FFFFFFF	C
	C6	32	FFFFFFF	8000000	8000000	7FFFFFFF	1
	C7		7FFFFFFF	0000001	8000000	FFFFFFF	0
	C8		7FFFFFFF	0000001	8000000	7FFFFFFF	C
	C9		7FFFFFFF	0000001	8000000	0000001	0
	10		0000001	0000001	8000000	FFFFFFF	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW	PHASE	CLOCK	A(CO=31)	B(CO=31)	D(CO=31)	S(CO=31)	<CO
58	C3		0000000	0000000	8000000	0000000	0
	C4		0000001	0000000	8000000	FFFFFFFF	0
	C6	C0	0000000	FFFFFFFF	8000000	3FFFFFFF	1
	C6	C1	7FFFFFFF	FFFFFFFF	8000000	FFFFFFFF	0
	C6	C2	FFFFFFFF	FFFFFFFE	8000000	7FFFFFFF	1
	C6	C3	FFFFFFFF	FFFFFFFD	8000000	7FFFFFFF	1
	C6	C4	FFFFFFFF	FFFFFFF8	8000000	7FFFFFFF	1
	C6	C5	FFFFFFFF	FFFFFFF0	8000000	7FFFFFFF	1
	C6	C6	FFFFFFFF	FFFFFFE0	8000000	7FFFFFFF	1
	C6	C7	FFFFFFFF	FFFFFFD0	8000000	7FFFFFFF	1
	C6	C8	FFFFFFFF	FFFFFFBF	8000000	7FFFFFFF	1
	C6	C9	FFFFFFFF	FFFFFF7F	8000000	7FFFFFFF	1
	C6	10	FFFFFFFF	FFFFFFE0	8000000	7FFFFFFF	1
	C6	11	FFFFFFFF	FFFFFFD0	8000000	7FFFFFFF	1
	C6	12	FFFFFFFF	FFFFFFB0	8000000	7FFFFFFF	1
	C6	13	FFFFFFFF	FFFFFF7F	8000000	7FFFFFFF	1
	C6	14	FFFFFFFF	FFFEFFF	8000000	7FFFFFFF	1
	C6	15	FFFFFFFF	FFFDFFF	8000000	7FFFFFFF	1
	C6	16	FFFFFFFF	FFFBFFF	8000000	7FFFFFFF	1
	C6	17	FFFFFFFF	FFF7FFF	8000000	7FFFFFFF	1
	C6	18	FFFFFFFF	FFFEFFF	8000000	7FFFFFFF	1
	C6	19	FFFFFFFF	FFF0FFF	8000000	7FFFFFFF	1
	C6	20	FFFFFFFF	FFBFFF	8000000	7FFFFFFF	1
	C6	21	FFFFFFFF	FFF7FFF	8000000	7FFFFFFF	1
	C6	22	FFFFFFFF	FFEFFF	8000000	7FFFFFFF	1
	C6	23	FFFFFFFF	FFDFFF	8000000	7FFFFFFF	1
	C6	24	FFFFFFFF	FFBFFF	8000000	7FFFFFFF	1
	C6	25	FFFFFFFF	FF7FFF	8000000	7FFFFFFF	1
	C6	26	FFFFFFFF	FEFFF	8000000	7FFFFFFF	1
	C6	27	FFFFFFFF	FDFFF	8000000	7FFFFFFF	1
	C6	28	FFFFFFFF	FBFFF	8000000	7FFFFFFF	1
	C6	29	FFFFFFFF	F7FFF	8000000	7FFFFFFF	1
	C6	30	FFFFFFFF	EFFF	8000000	7FFFFFFF	1
	C6	31	FFFFFFFF	DFFF	8000000	7FFFFFFF	1
	C6	32	FFFFFFFF	BFFF	8000000	7FFFFFFF	1
	C7		7FFFFFFF	7FFFFFFF	8000000	FFFFFFF	C
	C8		7FFFFFFF	7FFFFFFF	8000000	8000001	0
	C9		7FFFFFFF	7FFFFFFF	8000000	7FFFFFFF	C
	10		7FFFFFFF	7FFFFFFF	8000000	7FFFFFFF	C

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE 059

DW	59	PHASE	CLBCK	A(C0=31)	B(C0=31)	D(C0=31)	S(C0=31)	K00
		C3		F0000000	00000000	80000000	00000000	0
		C4		C0000000	00000000	80000000	00000000	1
		C6	C0	F0000000	00000000	80000000	10000000	1
		C6	C1	20000000	00000001	80000000	A0000000	0
		C6	C2	40000000	00000002	80000000	C0000000	0
		C6	C3	80000000	00000004	80000000	00000000	1
		C6	C4	C0000000	00000009	80000000	80000000	0
		C6	C5	C0000000	00000012	80000000	80000000	0
		C6	C6	CC000000	00000024	80000000	80000000	0
		C6	C7	CC000000	00000048	80000000	80000000	0
		C6	C8	CC000000	00000090	80000000	80000000	0
		C6	C9	CC000000	00000120	80000000	80000000	0
		C6	10	CC000000	00000240	80000000	80000000	0
		C6	11	CC000000	00000480	80000000	80000000	0
		C6	12	CC000000	00000900	80000000	80000000	0
		C6	13	CC000000	00001200	80000000	80000000	0
		C6	14	CC000000	00002400	80000000	80000000	0
		C6	15	CC000000	00004800	80000000	80000000	0
		C6	16	CC000000	00009000	80000000	80000000	0
		C6	17	CC000000	00012000	80000000	80000000	0
		C6	18	CC000000	00024000	80000000	80000000	0
		C6	19	CC000000	00048000	80000000	80000000	0
		C6	20	CC000000	00090000	80000000	80000000	0
		C6	21	CC000000	00120000	80000000	80000000	0
		C6	22	CC000000	00240000	80000000	80000000	0
		C6	23	CC000000	00480000	80000000	80000000	0
		C6	24	CC000000	00900000	80000000	80000000	0
		C6	25	CC000000	01200000	80000000	80000000	0
		C6	26	CC000000	02400000	80000000	80000000	0
		C6	27	CC000000	04800000	80000000	80000000	0
		C6	28	CC000000	09000000	80000000	80000000	0
		C6	29	CC000000	12000000	80000000	80000000	0
		C6	30	CC000000	24000000	80000000	80000000	0
		C6	31	CC000000	48000000	80000000	80000000	0
		C6	32	CC000000	90000000	80000000	80000000	0
		C7		80000000	20000000	80000000	00000000	1
		C8		CC000000	20000000	80000000	00000000	0
		C9		CC000000	20000000	80000000	20000000	0
		10		20000000	20000000	80000000	20000000	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE 060

DW	60	PHASE	CLBCK	A(C0=31)	B(C0=31)	D(C0=31)	S(C0=31)	K00
		C3		30000000	00000000	AC000000	00000000	0
		C4		00000001	00000000	AC000000	00000001	0
		C6	C0	30000000	00000001	AC000000	30000000	1
		C6	C1	60000000	00000003	AC000000	00000000	1
		C6	C2	CC000000	00000007	AC000000	AC000000	0
		10		CC000000	00000007	AC000000	CC000000	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE C61

DW	61	PHASE	CLBCK	A(CC=31)	B(CC=31)	D(CC=31)	S(CC=31)	KCC
		C3		28CE5BDF	00000000	8ACE9FBD	00000000	C
		C4		5A3E6E7F	00000000	8ACE9FBD	5A3E6E7F	0
		C6	CC	28CE5BDF	5A3E6E7F	8ACE9FBD	28CE5BDF	1
		C6	C1	519CB78E	B47C0CFF	8ACE9FBD	DC68577B	0
		C6	C2	B8D6AEF7	68F9B9FE	8ACE9FBD	2E080F3A	1
		C6	C3	5C101E74	D1F373FD	8ACE9FBD	E6DEBE31	0
		C6	C4	CD8D7C63	A3E6E7FA	8ACE9FBD	42EEDCA6	1
		C6	C5	85DD894D	47C0CFF5	8ACE9FBD	10AC590A	1
		C6	C6	21588214	8F9B9FEB	8ACE9FBD	AC2751D1	0
		C6	C7	584EA3A3	1F373FD6	8ACE9FBD	CD8003E6	0
		C6	C8	9B0007CC	3E6E7FAC	8ACE9FBD	1031680F	1
		C6	C9	2062D01E	7C0CFF59	8ACE9FBD	AR316F03	0
		C6	10	5662DFB6	F9B9FEB2	8ACE9FBD	CB943FF9	0
		C6	11	57287FF3	F373FD64	8ACE9FBD	0C59EC36	1
		C6	12	18B3C06D	E6E7FAC9	8ACE9FBD	A3826C2A	C
		C6	13	47C4CC55	CDCFF592	8ACE9FBD	BC362098	0
		C6	14	786C4131	9B9FEA24	8ACE9FBD	ED9DA174	C
		C6	15	CB3B42E9	373FD648	8ACE9FBD	506CA32C	1
		C6	16	ACD94658	6E7FAC91	8ACE9FBD	2BA7E615	1
		C6	17	574FCC2A	DCFF5923	8ACE9FBD	E21E68E7	0
		C6	18	C43CD7CF	B9FEB246	8ACE9FBD	396E3812	1
		C6	19	72DC7025	73FD648D	8ACE9FBD	FDAB0FE2	0
		C6	20	FB561FC4	E7FAC91A	8ACE9FBD	708780C7	1
		C6	21	E1C0C0CF	CF592355	8ACE9FBD	68DD9FCC	1
		C6	22	C7BB3F99	9FEB246B	8ACE9FBD	6289DF56	1
		C6	23	C513BEAD	3FD648D7	8ACE9FBD	4FE25E6A	1
		C6	24	9FC4BCD4	7FAC91AF	8ACE9FBD	2A935C91	1
		C6	25	5526B922	FF59235F	8ACE9FBD	DF558DF	C
		C6	26	BFEAB1BF	FEB246BE	8ACE9FBD	351C1202	1
		C6	27	6A382405	FD648D7D	8ACE9FBD	F506C3C2	0
		C6	28	EACD8785	FAC91AFA	8ACE9FBD	5F3EE7C8	1
		C6	29	BE7DC9F1	F59235F5	8ACE9FBD	494C6F4E	1
		C6	30	5298DE9D	EB2468EB	8ACE9FBD	1D677E5A	1
		C6	31	3ACEFCB5	D648D7D7	8ACE9FBD	C59D9C72	0
		C6	32	8B3B38E5	AC91AFAE	8ACE9FBD	006C9928	1
		C7		006C9928	59235F5D	8ACE9FBD	8B3B38E5	C
		C8		006C9928	59235F5D	8ACE9FBD	006C9928	C
		C9		006C9928	59235F5D	8ACE9FBD	59235F5D	0
		10		59235F5D	59235F5D	8ACE9FBD	A6DCACA3	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE C62

DW	62	PHASE	CLBCK	A(CC=31)	B(CC=31)	D(CC=31)	S(CC=31)	KCC
		C3		28E45B17	00000000	A13BF37D	00000000	C
		C4		AC9CD39F	00000000	A13BF37D	AC9CD39F	C
		C6	CC	28E45B17	AC9CD39F	A13BF37D	28E45B17	1
		C6	C1	51C8B62F	4139A73F	A13BF37D	F304A9AC	0
		C6	C2	E6C95358	82734E7E	A13BF37D	44CD5FDB	1
		C6	C3	899ABFB7	04E69CFD	A13BF37D	2AD6B334	1
		C6	C4	55AD6668	C9CD39F3	A13BF37D	F6E959E5	C
		C6	C5	EDD2B3CA	139A73F6	A13BF37D	4C96CC4D	1
		C6	C6	992D8C9A	2734E7ED	A13BF37D	3A697417	1
		C6	C7	74D2E82E	4E69CFDB	A13BF37D	16CEDRAH	1
		C6	C8	2C1DB756	9CD39FB7	A13BF37D	CD59AAD3	C
		C6	C9	9AB355A7	39A73F6E	A13BF37D	F977622A	C
		C6	10	F2EEC454	734E7EDC	A13BF37D	51E2DCD7	1
		C6	11	A365A1AE	E69CFDB9	A13BF37D	44A1952A	1
		C6	12	89432A57	CD39FB73	A13BF37D	2A7F1DD4	1
		C6	13	54FE38A9	9A73F6E7	A13BF37D	F63A2F26	C
		C6	14	EC745E4D	34E7EDCE	A13BF37D	4B386AD0	1
		C6	15	5670D5AC	69CFDB9D	A13BF37D	37ACC91D	1
		C6	16	6F59923A	D39FB73B	A13BF37D	109585B7	1
		C6	17	212BCB6F	A73F6E77	A13BF37D	C266FFEC	C
		C6	18	84CDFDD9	4E7EDCEE	A13BF37D	E3920A5C	C
		C6	19	C724148B	9CFDB9DC	A13BF37D	25E82133	1
		C6	20	4BD04277	39FB73B9	A13BF37D	EDCC35F4	0
		C6	21	CA186BE8	73F6E772	A13BF37D	38DC7863	1
		C6	22	71B8F0D6	E7EDCEE5	A13BF37D	12F4E453	1
		C6	23	25E9C8A7	CFDB9DCB	A13BF37D	C725BC24	C
		C6	24	8E4B7849	9FB73B96	A13BF37D	EDCF84CC	C
		C6	25	CA1F0999	3F6E772C	A13BF37D	38E3161C	1
		C6	26	71C62C38	7EDCE459	A13BF37D	13021FB5	1
		C6	27	26C43F6A	FDB9DCB3	A13BF37D	C74C32E7	0
		C6	28	8E8065CF	FB73B966	A13BF37D	ED447252	C
		C6	29	CA88E4A5	F6E772CC	A13BF37D	394CF128	1
		C6	30	7299E251	EDCEE593	A13BF37D	13CF05CE	1
		C6	31	27ABAB9D	DB9DCB33	A13BF37D	C8E79F1A	C
		C6	32	91CF3E35	B73B9666	A13BF37D	F0934AB8	C
		C7		F0934AB8	6E772CCC	A13BF37D	4F57573A	1
		C8		4F57573B	6E772CCC	A13BF37D	4F57573B	0
		C9		4F57573B	6E772CCC	A13BF37D	6E772CCC	0
		10		6E772CCC	6E772CCC	A13BF37D	9188D334	C

		SIGMA 5 FIXED POINT DIVIDE SIMULATOR				PAGE 063	
DW 63	PHASE	CLOCK	A(CO=31)	B(CO=31)	D(CO=31)	S(CO=31)	KOC
	C3		FE8C26AE	00000000	F67B159D	00000000	0
	C4		F4A017D3	00000000	F67B159D	0B5FE82D	0
	C6	CC	FE8C26AE	0B5FE82D	F67B159D	0173D951	1
	C6	C1	C2E7B2A2	1BFD05B	F67B159D	F962C83F	0
	C6	C2	F2C5907E	2D7FA0B6	F67B159D	FC4A7AE1	0
	C6	C3	F894F5C2	5AFF416C	F67B159D	0219E025	1
	C6	C4	C433CC4A	B5FE82D9	F67B159D	FAAED5E7	0
	C6	C5	F55DABCF	6BFD05B2	F67B159D	FEE29632	0
	C6	C6	FDC52C64	D7FA0B64	F67B159D	074A16C7	1
	C6	C7	CE942D8F	AFF416C9	F67B159D	050F432C	1
	C6	C8	CA1E8659	5FE82D93	F67B159D	00999BF6	1
	C6	C9	C13337EC	BFDC5B27	F67B159D	F7AE4D89	0
	C6	10	EF5C9B13	7FA0B64E	F67B159D	F8E18576	0
	C6	11	F1C30AEC	FF416C9C	F67B159D	FB47F54F	0
	C6	12	F68FEA9F	FE82D938	F67B159D	0C14D502	1
	C6	13	CC29AA05	FDC5B271	F67B159D	F6A4BFA2	0
	C6	14	ED497F45	FA0B64E2	F67B159D	F6CE69A8	0
	C6	15	ED9CD351	F416C9C4	F67B159D	F721BDB4	0
	C6	16	EE437B69	E82D9388	F67B159D	F7C865CC	0
	C6	17	EF90CB99	DC5B2710	F67B159D	F915B5FC	0
	C6	18	F22B6BF9	A0B64E20	F67B159D	FB0565C0	0
	C6	19	F760ACB9	416C9C40	F67B159D	0CE5971C	1
	C6	20	C1CB2E38	82D93881	F67B159D	F84643D5	0
	C6	21	F08C87AB	C5B271C2	F67B159D	FA1172CE	0
	C6	22	F422E41C	CB64E2C4	F67B159D	FDA7CE7F	0
	C6	23	FB4F9CFE	16C9C4C8	F67B159D	04D48761	1
	C6	24	C9A90CF2	2D938811	F67B159D	0C24245F	1
	C6	25	CC4848BE	5B271C23	F67B159D	F6C35E5B	0
	C6	26	ED86BC86	B64E2C46	F67B159D	F70BA719	0
	C6	27	EE174E33	6C9C408C	F67B159D	F79C3896	0
	C6	28	EF38712C	D9388118	F67B159D	F8BD588F	0
	C6	29	F17AB71F	B271C230	F67B159D	FAFFA182	0
	C6	30	F5FF43C5	64E2C460	F67B159D	FB842D68	0
	C6	31	FFC85ADC	C9C408C0	F67B159D	088D4E33	1
	C6	32	111A8A67	93881181	F67B159D	C795ACC4	1
	C7		C795A0C4	271C23C3	F67B159D	FE10B5A1	0
	C8		C795A0C4	271023C3	F67B159D	F86A5FFC	0
	C9		C795A0C4	271023C3	F67B159D	271C23C3	0
	10		271023C3	271023C3	F67B159D	271023C3	0

		SIGMA 5 FIXED POINT DIVIDE SIMULATOR				PAGE 064	
DW 64	PHASE	CLOCK	A(CO=31)	B(CO=31)	D(CO=31)	S(CO=31)	KOC
	C3		E6E82A3D	00000000	78F74B3B	00000000	0
	C4		2C6071B5	00000000	78F74B3B	D39F8E4B	0
	C6	CC	E6E82A3D	D39F8E4B	78F74B3B	1917D5C2	1
	C6	C1	322FAB85	A73F1C97	78F74B3B	B9386C4A	0
	C6	C2	7270CC95	4E7E392E	78F74B3B	EB680R0D	0
	C6	C3	D6D017A0	9CFC7E5C	78F74B3B	4FC762D3	1
	C6	C4	9F8EC5B7	39F8E4B9	78F74B3B	26977A7C	1
	C6	C5	4D2EF4F8	73F1C973	78F74B3B	D437A9BD	0
	C6	C6	A86F537A	E7E392E6	78F74B3B	21669E85	1
	C6	C7	42CD3C6B	CF72B5CD	78F74B3B	C9D5F230	0
	C6	C8	93ABE461	9F8E4B9A	78F74B3B	0CA32F9C	1
	C6	C9	19465F39	3F1C9735	78F74B3B	AC4F13FE	0
	C6	10	4C9E27FC	7E392E6A	78F74B3B	B9957337	0
	C6	11	732AE66E	FC725C04	78F74B3B	EC2231A9	0
	C6	12	D8446353	F8E4B9A8	78F74B3B	513BAE8E	1
	C6	13	A2775D1D	F1C97351	78F74B3B	29R011E2	1
	C6	14	53C023C5	E392E6A3	78F74B3B	DAC8DF8A	0
	C6	15	B411B115	C725CD46	78F74B3B	2DC8FC50	1
	C6	16	EA11F8A1	8E4B9A8D	78F74B3B	E11AAD66	0
	C6	17	C2355ACD	1C97351A	78F74B3B	3R2CA6C8	1
	C6	18	76594C10	392E6A35	78F74B3B	FD62C0D5	0
	C6	19	FAC4C1AA	725CD46A	78F74B3B	73BB4CE5	1
	C6	20	E77699CA	E4B9A8D5	78F74B3B	6E7F4E8F	1
	C6	21	DCF9D1F	C97351A8	78F74B3B	64C751E4	1
	C6	22	C8CEA3C9	92E6A357	78F74B3B	4F17588E	1
	C6	23	9E2EB11D	25CD46AF	78F74B3B	253765E2	1
	C6	24	4A6ECBC4	4B9A8D5F	78F74B3B	D1778C89	0
	C6	25	A2EF0112	97351ABE	78F74B3B	18E64C4D	1
	C6	26	37CC989B	2E6A357D	78F74B3B	BE054D60	0
	C6	27	7DAA9ACC	5CD46AFA	78F74B3B	F6A1E5F3	0
	C6	28	ED43CBF6	B9A8D5F4	78F74B3B	663R1731	1
	C6	29	CC762E63	7351ABE9	78F74B3B	537EE328	1
	C6	30	A6FDC650	E6A357D3	78F74B3B	2EC67R15	1
	C6	31	5C0CF62B	CD46AFA7	78F74B3B	E315AAF0	0
	C6	32	C62B55E1	9A8D5F4E	78F74B3B	3F22A11C	1
	C7		3F22A11C	351ABE9D	78F74B3B	C62R55E1	0
	C8		3F22A11C	351ABE9D	78F74B3B	CCDD5EE4	0
	C9		3F22A11C	351ABE9D	78F74B3B	351ABE9D	0
	10		351ABE9D	351ABE9D	78F74B3B	CAE54163	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE 065

DW	65	PHASE	CLBCK	A(CO-31)	B(CO-31)	D(CO-31)	S(CO-31)	KCC
		C3		F7F93B4E	00000000	E6F22A4F	00000000	0
		C4		47E95A3F	00000000	E6F22A4F	B816A5C1	0
		C6	CC	F7F93B4E	B816A5C1	E6F22A4F	C806C4B1	1
		C6	C1	100D8963	702D4B83	E6F22A4F	F6FFB3B2	0
		C6	C2	EDFF6764	E05A9706	E6F22A4F	C70D3D15	1
		C6	C3	CE1A7A2B	COB52ECD	E6F22A4F	F50CA47A	0
		C6	C4	E4194BF5	816A5C1A	E6F22A4F	03271EA6	1
		C6	C5	C64E3D4D	C2D4B835	E6F22A4F	ED40679C	0
		C6	C6	CA80CF38	05A9706A	E6F22A4F	F38EA4E9	0
		C6	C7	E71D49D2	0B52ECD4	E6F22A4F	0C2B1F83	1
		C6	C8	CC563F06	16A5C1A9	E6F22A4F	E7486955	0
		C6	C9	CE90D2AA	2D4B8352	E6F22A4F	E79EA85B	0
		C6	10	CF3D5CB6	5A9706A4	E6F22A4F	E84B2667	0
		C6	11	CC964CCE	B52ECD48	E6F22A4F	E9A4227F	0
		C6	12	C34844FF	6A5C1A90	E6F22A4F	EC561A80	0
		C6	13	CAAC3560	D4B83520	E6F22A4F	F18A0B11	0
		C6	14	E3741623	A9706A40	E6F22A4F	FC81EBC4	0
		C6	15	F9C3D7A9	52E0D480	E6F22A4F	1211AD5A	1
		C6	16	24235AB4	A5C1A9C1	E6F22A4F	0B1585C3	1
		C6	17	162B0A07	4B8352C3	E6F22A4F	FD1D3456	0
		C6	18	FA3A68AC	97C6A4C6	E6F22A4F	13483E50	1
		C6	19	26907CBB	2ECD48CD	E6F22A4F	0D82A70A	1
		C6	20	1RC54E14	5C1A9C1B	E6F22A4F	01F77863	1
		C6	21	C3EEFC06	B8352C37	E6F22A4F	EAE11B15	0
		C6	22	C5C2362B	706A4C6E	E6F22A4F	EEDC00BDC	0
		C6	23	DDA017B8	E0D480DC	E6F22A4F	F6ADE069	0
		C6	24	ED5BBDAD3	C1A9C1B8	E6F22A4F	0669BC84	1
		C6	25	CCD36109	8352C371	E6F22A4F	F3C58B58	0
		C6	26	E78B16B1	C6A4C6E2	E6F22A4F	0C98EC62	1
		C6	27	C131D8C4	0D48CD05	E6F22A4F	E8240313	0
		C6	28	CC48C626	1A9C1B8A	E6F22A4F	E955D8D7	0
		C6	29	C2ABB7AE	352C3714	E6F22A4F	E8B98D5F	0
		C6	30	C7731ABE	6A4C6E28	E6F22A4F	FC80FC6F	0
		C6	31	E1C1ECDE	D480DC50	E6F22A4F	FACFB68F	0
		C6	32	F41F6C1F	A9C1B8A0	E6F22A4F	0D2D42D0	1
		C7		CD2D42DC	52C37141	E6F22A4F	F41F6D1F	0
		C8		CD2D42DC	52C37141	E6F22A4F	F2D2B30C	0
		C9		CD2D42DC	52C37141	E6F22A4F	52C37141	0
		10		52C37141	52C37141	E6F22A4F	52C37141	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE 066

DW	66	PHASE	CLBCK	A(CO-31)	B(CO-31)	D(CO-31)	S(CO-31)	KCC
		C3		F29405E9	00000000	69C87C52	00000000	0
		C4		AE58B19C	00000000	69C87C52	51A74E70	0
		C6	CC	F29405E9	51A74E70	69C87C52	0D68FA16	1
		C6	C1	1AD7F42C	A34E9CE1	69C87C52	B1CC77DA	0
		C6	C2	6398EFB5	469D39C2	69C87C52	CCA46C07	0
		C6	C3	9948D8CE	8D3A7384	69C87C52	02545460	1
		C6	C4	C4A8A8C1	1A74E709	69C87C52	9B9D2C6F	0
		C6	C5	373A58DE	34E9CE12	69C87C52	AC45D530	0
		C6	C6	4C88AA60	69D39C24	69C87C52	A99726B2	0
		C6	C7	532E4D64	D3A73848	69C87C52	BC39C9B6	0
		C6	C8	7873936D	A74E709C	69C87C52	E17F0FBF	0
		C6	C9	C2FE1F7F	4E9CE12C	69C87C52	2C0998D1	1
		C6	10	581337A2	9D39C241	69C87C52	EF078B50	0
		C6	11	DF0F76A1	3A738482	69C87C52	4714F2F3	1
		C6	12	8E35E5E6	74E7C905	69C87C52	252A6994	1
		C6	13	4A54D328	E9CE1208	69C87C52	E14956D6	0
		C6	14	C292ADAD	D39C2416	69C87C52	2B9E29FF	1
		C6	15	573C53FF	A738482D	69C87C52	EE30D7AD	0
		C6	16	CC61AF5B	4E709C5A	69C87C52	456D2RAD	1
		C6	17	8ADA575A	9CE12085	69C87C52	21CED808	1
		C6	18	439DB611	39C24163	69C87C52	DA9239BF	0
		C6	19	B524737E	738482D6	69C87C52	1E2FEFDD	1
		C6	20	3C5FDFAC	E7C9C5AD	69C87C52	D354634E	0
		C6	21	A6A8C69D	CE12CB5A	69C87C52	CFB442EF	1
		C6	22	1F6885DF	9C2416B5	69C87C52	B65D098D	0
		C6	23	6CBA131B	3E482D6A	69C87C52	D5C58F6D	0
		C6	24	AR8B1EDA	7C9C5AD4	69C87C52	1496982C	1
		C6	25	292D3658	E12CB5A9	69C87C52	CC21BA06	0
		C6	26	8C43740D	C2416B52	69C87C52	E94EFC5F	0
		C6	27	C29DE0BF	8482D6A4	69C87C52	3BA95D11	1
		C6	28	7752BA23	C9C5AD49	69C87C52	CE4738C1	1
		C6	29	1C8E78A2	12CB5A93	69C87C52	B382FF5C	0
		C6	30	67C5FEAC	2416B526	69C87C52	DC117AF2	0
		C6	31	AC22F5E4	482D6A4C	69C87C52	092E7236	1
		C6	32	125CE46C	9C5AD499	69C87C52	A951681A	0
		C7		A951681A	2CB5A932	69C87C52	125CE46C	1
		C8		125CE46C	2CB5A932	69C87C52	ECA31894	0
		C9		125CE46C	2CB5A932	69C87C52	2CB5A932	0
		10		2CB5A932	2CB5A932	69C87C52	DF4A56CE	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE 067

DW 67	PHASE	CLOCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	K00
	03		2D3297C8	00000000	77532167	00000000	0
	04		C237DAC1	00000000	77532167	C237DAC1	0
	06	00	2D3297C8	C237DAC1	77532167	2D3297C8	1
	06	01	5A652F91	846FB583	77532167	E3120E2A	0
	06	02	C6241C55	08DF6B06	77532167	3D773DBC	1
	06	03	7AEE7B78	11BED60D	77532167	039B5A11	1
	06	04	C736B422	237DAC1B	77532167	8FE392BB	0
	06	05	1FC72576	46FB5836	77532167	971A46DD	0
	06	06	2E348DBA	8DF6B06C	77532167	A587AF21	0
	06	07	4B0F5E43	1BED60D8	77532167	C2627FAA	0
	06	08	84C4FF54	37DAC1B0	77532167	FC1820BB	0
	06	09	F8304176	6FB58360	77532167	6F8362DD	1
	06	10	DF06C5BA	DF6B06C1	77532167	67B3A453	1
	06	11	CF6748A7	BED60D83	77532167	58142740	1
	06	12	BC284E81	7DAC1B07	77532167	38D52D1A	1
	06	13	71AA5A34	FB58360F	77532167	FA5738CD	0
	06	14	F4AE719B	F6B06C1E	77532167	6C019302	1
	06	15	D8C32605	ED60D83D	77532167	60B0049E	1
	06	16	C160093D	DAC1B07B	77532167	4ACCE7D6	1
	06	17	9419CFAD	B58360F7	77532167	1CC6AE46	1
	06	18	398D5C8D	6B06C1EF	77532167	C23A3826	0
	06	19	8474764C	D60D83DE	77532167	FBC797B3	0
	06	20	F78F2F67	AC1B07BC	77532167	6EE250CE	1
	06	21	DDC4A19D	5836CF79	77532167	66718036	1
	06	22	CCE3006C	B06C1EF3	77532167	558FDF05	1
	06	23	AB1FBE0B	6CD83DE7	77532167	33CC9CA4	1
	06	24	67993948	C1B07BCF	77532167	F04617E1	0
	06	25	E08C2FC3	836CF79E	77532167	57DF512A	1
	06	26	AFBEA255	06C1EF3D	77532167	386B80EE	1
	06	27	70D701DC	0D83DE7B	77532167	F983EC75	0
	06	28	F3C7CCEA	1B07BCF6	77532167	6A5AE251	1
	06	29	D4B5C4A2	36CF79ED	77532167	5D62A33B	1
	06	30	BAC54676	6C1EF3DB	77532167	4372250F	1
	06	31	86E44A1E	D83DE7B7	77532167	0F9128B7	1
	06	32	1F22516F	B07BCF6F	77532167	A7CF3008	0
	07		A7CF3008	6CF79EDE	77532167	1F22516F	1
	08		1F22516F	6CF79EDE	77532167	1F22516F	0
	09		1F22516F	6CF79EDE	77532167	6CF79EDE	0
	10		6CF79EDE	6CF79EDE	77532167	6CF79EDE	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE 068

DW 68	PHASE	CLOCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	K00
	03		FAC41382	00000000	ECFC7F1C	00000000	0
	04		446E28CA	00000000	ECFC7F1C	BB51D736	0
	06	00	FAC41382	BB91D736	ECFC7F1C	053BEC7D	1
	06	01	CA77D8FB	7723AE6D	ECFC7F1C	EF745817	0
	06	02	D6E8B02E	EE475CDA	ECFC7F1C	F5EC3112	0
	06	03	ERD86225	DC8EB9B4	ECFC7F1C	0AD9E309	1
	06	04	15B7C613	B91D7369	ECFC7F1C	F6B4452F	0
	06	05	ED688A5F	723AE6D2	ECFC7F1C	0C60B443	1
	06	06	18D81686	E475CDA5	ECFC7F1C	F9D495A2	0
	06	07	F3A92B45	C8EB9B4A	ECFC7F1C	12ACAC29	1
	06	08	25595853	91D73695	ECFC7F1C	0655D76F	1
	06	09	CCABAEDF	23AE6D2B	ECFC7F1C	EDAB20FB	0
	06	10	D85058F6	475CDA56	ECFC7F1C	FA53CCDA	0
	06	11	F4A7B9B4	8EB9B4AC	ECFC7F1C	13AB3A98	1
	06	12	27567531	1D736959	ECFC7F1C	0852F44D	1
	06	13	1CA5E89A	3AE6D2B3	ECFC7F1C	F1A267B6	0
	06	14	E344CF6C	75CDA566	ECFC7F1C	024850C0	1
	06	15	C490ACAC	EB9B4ACD	ECFC7F1C	E58D1FBC	0
	06	16	CB1A3F79	D736959A	ECFC7F1C	EA1DCC5D	0
	06	17	C43B80BB	AE6D2B34	ECFC7F1C	F33FC19F	0
	06	18	E67EC03F	5CDA5668	ECFC7F1C	05818423	1
	06	19	CB030846	B9B4ACD1	ECFC7F1C	EBFF8762	0
	06	20	C7FFCEC5	736959A2	ECFC7F1C	F7028FA9	0
	06	21	EE051F52	E6D2B344	ECFC7F1C	0D08AC36	1
	06	22	1A11406D	CDA56689	ECFC7F1C	FBC0BF89	0
	06	23	F61B7F13	9B4ACD12	ECFC7F1C	151EFFF7	1
	06	24	2A3DFFEF	36959A25	ECFC7F1C	0B3A7FC3	1
	06	25	1674FE16	6D2B344B	ECFC7F1C	F7717D32	0
	06	26	EEE2FA64	DA566896	ECFC7F1C	0DE67948	1
	06	27	18CCF691	B4ACD12D	ECFC7F1C	FCC975AD	0
	06	28	F992EB5B	6959A25A	ECFC7F1C	18966C3F	1
	06	29	312CD87E	D2B344B5	ECFC7F1C	1229579A	1
	06	30	24524F35	A566896B	ECFC7F1C	054F2E51	1
	06	31	CA9E5CA3	4ACD12D7	ECFC7F1C	EB9AD8BF	0
	06	32	C735B77E	959A25AE	ECFC7F1C	F6393862	0
	07		F6393862	2B344B5C	ECFC7F1C	153C3946	1
	08		153CB946	2B344B5C	ECFC7F1C	EAC346BA	0
	09		153CB946	2B344B5C	ECFC7F1C	2B344B5C	0
	10		2B344B5C	2B344B5C	ECFC7F1C	2B344B5C	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE 069

DW	PHASE	CL0CK	A(CO-31)	B(CO-31)	D(CO-31)	S(CO-31)	<OO
69	C3		253F7EA9	00000000	67B5C610	00000000	0
	C4		3D7182C6	00000000	67B5C610	3D7182C6	0
	C6	CC	253F7EA9	3D7182C6	67B5C610	253F7EA9	1
	C6	C1	4A7EFD52	7AE3058D	67B5C610	E2C93742	C
	C6	C2	5926E84	F5C6CB1A	67B5C610	2D483494	1
	C6	C3	5A906929	EB8C1635	67B5C610	F2DA319	0
	C6	C4	5B54633	D7182C6A	67B5C610	4D680C43	1
	C6	C5	9AD61887	AE3C58D5	67B5C610	33205277	1
	C6	C6	6640A4EF	5C6CB1AB	67B5C610	FE8AEDDF	0
	C6	C7	FD15BDBE	B8C16356	67B5C610	64CB83CE	1
	C6	C8	C997C79D	7182C6AD	67B5C610	61E1418D	1
	C6	C9	C3C2831A	E3C58D5B	67B5C610	5CC0B00A	1
	C6	10	B8197A15	C6CB1AB7	67B5C610	50E3B405	1
	C6	11	ACC7680B	8C16356F	67B5C610	3911A1FB	1
	C6	12	722343F7	182C6ADF	67B5C610	0A6D7DE7	1
	C6	13	14DAFBCE	3C58D5BF	67B5C610	AD2535BE	C
	C6	14	5A4A6B7C	6CB1AB7E	67B5C610	C2C0318C	C
	C6	15	84006318	C16356FC	67B5C610	EBB62928	0
	C6	16	D76C5251	82C6ADF8	67B5C610	3F221861	1
	C6	17	7E4430C3	C58D5BF1	67B5C610	168E6AB3	1
	C6	18	2D1CD566	CB1AB7E3	67B5C610	C5670F56	C
	C6	19	8ACE1EAC	16356FC6	67B5C610	F283E4BC	1
	C6	20	E507C978	2C6ADF8C	67B5C610	4CB08F88	1
	C6	21	997B1F10	58D5BF19	67B5C610	31C55900	0
	C6	22	638AB200	B1AB7E33	67B5C610	FBD4ERF0	1
	C6	23	F7A9D7E1	6356FC66	67B5C610	5F5F9DF1	1
	C6	24	8EBF3BE2	C6ADF8CD	67B5C610	570975D2	1
	C6	25	AE12EBA5	8D5BF19B	67B5C610	465D2595	1
	C6	26	8CBA4B2B	1AB7E337	67B5C610	2504851B	1
	C6	27	4AC90A36	356FC66F	67B5C610	E2534426	0
	C6	28	C4A6884C	6ADF8CDE	67B5C610	2C5C4E5C	1
	C6	29	5B889CB8	D5BF19BD	67B5C610	F1C2D6A8	C
	C6	30	E205AD51	AB7E337A	67B5C610	49B87361	1
	C6	31	5376E6C3	56FC66F5	67B5C610	2BC12CB3	1
	C6	32	57824166	ADF8CDEB	67B5C610	EFC77B56	0
	C7		EFCC7B56	5BF19BD6	67B5C610	57824166	1
	C8		57824166	5BF19BD6	67B5C610	57824166	0
	C9		57824166	5BF19BD6	67B5C610	5BF19BD6	0
	10		5BF19BD6	5BF19BD6	67B5C610	5BF19BD6	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PAGE 070

DW	PHASE	CL0CK	A(CO-31)	B(CO-31)	D(CO-31)	S(CO-31)	<OO
70	C3		135BDF7D	00000000	67B980C1	00000000	0
	C4		9RAE18C5	00000000	67B980C1	9RAE18C5	0
	C6	CC	135BDF7D	9RAE18C5	67B980C1	135BDF7D	1
	C6	C1	26B7BEFB	375C36CB	67B980C1	BEFE3E3A	C
	C6	C2	7DFC7C74	6E886C16	67B980C1	E5B5FD35	0
	C6	C3	CB6RFA6A	DD70D82C	67B980C1	3325742B	1
	C6	C4	664AF657	BAE1B059	67B980C1	FE917596	0
	C6	C5	FD22ER2D	75C36CB2	67B980C1	64DC6AEE	1
	C6	C6	C9B8D70C	EB86C165	67B980C1	61FF571B	1
	C6	C7	C3FAE37	D7CD82CB	67B980C1	5C45276	1
	C6	C8	B88A5AED	AE18C597	67B980C1	50C0DA2C	1
	C6	C9	A1A1B459	5C36CB2F	67B980C1	39E83398	1
	C6	10	73D06730	886C165F	67B980C1	0C16E66F	1
	C6	11	182DCCDF	7CD82CBF	67B980C1	B0744C1E	C
	C6	12	6CE8983C	E18C597E	67B980C1	C8A218FD	C
	C6	13	914431FB	C36CB2FC	67B980C1	F8FDB2BC	0
	C6	14	F1FB6579	86C165F8	67B980C1	59A4E43A	1
	C6	15	B369CC75	0D82CBF1	67B980C1	4BB048B4	1
	C6	16	97609768	18C597E3	67B980C1	2FA716A7	1
	C6	17	5F4E2D4E	36CB2FC7	67B980C1	F794AC8D	C
	C6	18	EF29591A	6C165F8E	67B980C1	56E2D9DB	1
	C6	19	ADC5B3B6	D82CBF1D	67B980C1	460C32F5	1
	C6	20	8C1865EB	B0597E3B	67B980C1	245EE52A	1
	C6	21	48BDCA55	60B2FC77	67B980C1	E1C44994	0
	C6	22	C2C89328	C165F8EE	67B980C1	29C213E9	1
	C6	23	538427D3	82CBF1DD	67B980C1	ERCA712	C
	C6	24	D7954E25	C597E3BA	67B980C1	3F4ECEEE	1
	C6	25	7E9D9DCC	0B2FC775	67B980C1	16E41D0B	1
	C6	26	2DC83A16	165F8EEB	67B980C1	C6CEB955	0
	C6	27	8C1D72AA	2CBF1DD6	67B980C1	F3C6F36B	0
	C6	28	E7ADE6D6	597E3BAC	67B980C1	4F676797	1
	C6	29	9ECECF2E	B2FC7759	67B980C1	37154F6D	1
	C6	30	6E2A9CDB	65F8EEB3	67B980C1	C6711C1A	1
	C6	31	CCE23834	CBF1DD67	67B980C1	A528B773	C
	C6	32	4A516EE7	97E3BACE	67B980C1	B2CAEFA8	0
	C7		B2CAEFA8	2FC7759C	67B980C1	19C47069	1
	C8		19C47069	2FC7759C	67B980C1	19C47069	0
	C9		19C47069	2FC7759C	67B980C1	2FC7759C	0
	10		2FC7759C	2FC7759C	67B980C1	2FC7759C	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR						PAGE 071
DW 71	PHASE	CLOCK	A(00=31)	B(00=31)	D(00=31)	S(00=31) K00
	03		59D73C28	00000000	26106573	00000000 0
	04		59D73C28	00000000	26106573	59D73C28 0
	06	CC	59D73C28	59D73C28	26106573	00000000 1
	06	C1	C0000000	B3AE7851	26106573	D9EF9A8D 0
	06	02	B3DF351B	675CF0A2	26106573	D9EF9A8E 0
	06	03	B3DF351C	CE89E144	26106573	D9EF9A8F 0
	06	04	B3DF351F	9D73C288	26106573	D9EF9A92 0
	06	05	B3DF3525	3AE78510	26106573	D9EF9A98 0
	06	06	B3DF3530	75CF0A20	26106573	D9EF9AA3 0
	06	07	B3DF3546	EB9E1440	26106573	D9EF9AB9 0
	06	08	B3DF3573	D73C2880	26106573	D9EF9AE6 0
	06	09	B3DF35CD	AE785100	26106573	D9EF9B40 0
	06	10	B3DF3681	5CF0A200	26106573	D9EF9BF4 0
	06	11	B3DF37E8	B9E14400	26106573	D9EF9D5B 0
	06	12	B3DF3AB7	73C28800	26106573	D9EFA02A 0
	06	13	B3DF4054	E7851000	26106573	D9EFA5C7 0
	06	14	B3DF4B8F	CF0A2000	26106573	D9EFB102 0
	06	15	B3DF6205	9E144000	26106573	D9EFC778 0
	06	16	B3DF8EF1	3C288000	26106573	D9EFF464 0
	06	17	B3DFE8C8	78510000	26106573	D9F04E3B 0
	06	18	B3E09C76	F0A20000	26106573	D9F101E9 0
	06	19	B3E203D3	E1440000	26106573	D9F26946 0
	06	20	B3E4D28D	C2880000	26106573	D9F538C0 0
	06	21	B3FA7001	85100000	26106573	D9FAD574 0
	06	22	B3F5AAE9	CA200000	26106573	DA061C5C 0
	06	23	B4CC20B8	14400000	26106573	DA1C862B 0
	06	24	B4390F56	28800000	26106573	DA4971C9 0
	06	25	B492E392	51000000	26106573	DAA34905 0
	06	26	B546920A	A2000000	26106573	DB56F77D 0
	06	27	B6ADEEFB	44000000	26106573	DCBE546E 0
	06	28	B97CA8DC	88000000	26106573	DF8D0E4F 0
	06	29	BF1A1C9F	10000000	26106573	E52A8212 0
	06	30	CA550424	20000000	26106573	FC656997 0
	06	31	ECCAD32E	40000000	26106573	06DB38A1 1
	06	32	CD867142	80000001	26106573	E7A60BFC 0
	C9		E7A60BCF	00000002	26106573	00000002 1
	10		00000002	00000002	26106573	00000002 1

SIGMA 5 FIXED POINT DIVIDE SIMULATOR						PAGE 072
DW 72	PHASE	CLOCK	A(00=31)	B(00=31)	D(00=31)	S(00=31) K00
	03		CD2A3C71	00000000	F1A3C842	00000000 1
	04		CD2A3C71	00000000	F1A3C842	32D5C38F 0
	06	CC	CD2A3C71	32D5C38F	F1A3C842	00000000 1
	06	C1	C0000000	65AB871F	F1A3C842	F1A3C842 0
	06	02	E3479C84	CB570L3E	F1A3C842	F1A3C842 0
	06	03	E3479C85	96AE1C7C	F1A3C842	F1A3C843 0
	06	04	E3479C87	2D5C38F8	F1A3C842	F1A3C845 0
	06	05	E3479C8A	5AB871FC	F1A3C842	F1A3C848 0
	06	06	E3479C90	B570E3E0	F1A3C842	F1A3C84E 0
	06	07	E3479C9D	6AE1C7C0	F1A3C842	F1A3C859 0
	06	08	E3479CB6	D5C38F80	F1A3C842	F1A3C874 0
	06	09	E3479CE9	AB871FC0	F1A3C842	F1A3C8A7 0
	06	10	E347914F	570E3E00	F1A3C842	F1A3C90D 0
	06	11	E347921A	AE1C7C00	F1A3C842	F1A3C9D8 0
	06	12	E34793B1	5C38F800	F1A3C842	F1A3CB6F 0
	06	13	E34796DE	B871F000	F1A3C842	F1A3CE9C 0
	06	14	E3479D39	7CE3E000	F1A3C842	F1A3D4F7 0
	06	15	E347A9EE	E1C7C000	F1A3C842	F1A3E1AC 0
	06	16	E347C359	C38F8000	F1A3C842	F1A3FB17 0
	06	17	E347F62F	871FC000	F1A3C842	F1A42DED 0
	06	18	E34858DB	0E3E0000	F1A3C842	F1A49399 0
	06	19	E3492732	1C7C0000	F1A3C842	F1A55EF0 0
	06	20	E34ABDE0	38F80000	F1A3C842	F1A6F59E 0
	06	21	E34DEB3C	71F0C000	F1A3C842	F1AA22FA 0
	06	22	E35445F4	E3E00000	F1A3C842	F1B07DB2 0
	06	23	E360FB65	C7C00000	F1A3C842	F1BD3323 0
	06	24	E37A6647	8F800000	F1A3C842	F1D69E05 0
	06	25	E3AD3CCB	1F000000	F1A3C842	F20973C9 0
	06	26	E412E792	3E000000	F1A3C842	F26F1F50 0
	06	27	E4DE3EA0	7C000000	F1A3C842	F33A765E 0
	06	28	E674ECBC	F8000000	F1A3C842	F4D1247A 0
	06	29	E9A248F5	F0000000	F1A3C842	F7FE80B3 0
	06	30	FFFD0167	E0000000	F1A3C842	FE593925 0
	06	31	FCB2724B	C0000000	F1A3C842	0BCEAA09 1
	06	32	161D5413	80000001	F1A3C842	07C11C55 1
	C9		C7C11C55	00000003	F1A3C842	00000003 0
	10		00000003	00000003	F1A3C842	00000003 0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW	PHASE	CLBCK	A(CO-31)	B(CO-31)	D(CO-31)	S(CO-31)	<CC
73	C3		7FFFFFFF	00000000	00000002	00000000	0
	C4		7FFFFFFF	00000000	00000002	7FFFFFFF	0
	C6	C0	7FFFFFFF	7FFFFFFF	00000002	00000000	1
	C6	C1	00000000	FFFFFFFF	00000002	FFFFFFFF	0
	C6	C2	FFFFFFFFD	FFFFFFFE	00000002	FFFFFFFF	0
	C6	C3	FFFFFFFFF	FFFFFFFC	00000002	00000001	1
	C6	C4	00000003	FFFFFFF9	00000002	00000001	1
	C6	C5	00000003	FFFFFFF3	00000002	00000001	1
	C6	C6	00000003	FFFFFFE7	00000002	00000001	1
	C6	C7	00000003	FFFFFFCF	00000002	00000001	1
	C6	C8	00000003	FFFFFF9F	00000002	00000001	1
	C6	C9	00000003	FFFFFF3F	00000002	00000001	1
	C6	10	00000003	FFFFFFE7F	00000002	00000001	1
	C6	11	00000003	FFFFFFCF	00000002	00000001	1
	C6	12	00000003	FFFFFF9FF	00000002	00000001	1
	C6	13	00000003	FFFFFF3FF	00000002	00000001	1
	C6	14	00000003	FFFFFFE7FF	00000002	00000001	1
	C6	15	00000003	FFFFFFCFFF	00000002	00000001	1
	C6	16	00000003	FFFFFF9FFF	00000002	00000001	1
	C6	17	00000003	FFFFFF3FFF	00000002	00000001	1
	C6	18	00000003	FFFE7FFF	00000002	00000001	1
	C6	19	00000003	FFF9FFF	00000002	00000001	1
	C6	20	00000003	FFF3FFF	00000002	00000001	1
	C6	21	00000003	FFF7FFF	00000002	00000001	1
	C6	22	00000003	FFE7FFF	00000002	00000001	1
	C6	23	00000003	FFC7FFF	00000002	00000001	1
	C6	24	00000003	FF97FFF	00000002	00000001	1
	C6	25	00000003	FF37FFF	00000002	00000001	1
	C6	26	00000003	FE77FFF	00000002	00000001	1
	C6	27	00000003	FC77FFF	00000002	00000001	1
	C6	28	00000003	F977FFF	00000002	00000001	1
	C6	29	00000003	F377FFF	00000002	00000001	1
	C6	30	00000003	E777FFF	00000002	00000001	1
	C6	31	00000003	CF77FFF	00000002	00000001	1
	C6	32	00000003	9F77FFF	00000002	00000001	1
	C9		00000001	3FFFFFFF	00000002	3FFFFFFF	0
	10		3FFFFFFF	3FFFFFFF	00000002	3FFFFFFF	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW	PHASE	CLBCK	A(CO-31)	B(CO-31)	D(CO-31)	S(CO-31)	<CC
74	C3		FC7CF1CC	00000000	42486CEA	00000000	0
	C4		FC7CF1CC	00000000	42486CEA	03830E34	0
	C6	C0	FC7CF1CC	03830E34	42486CEA	00000000	1
	C6	C1	00000000	07061C69	42486CEA	BDB79316	C
	C6	C2	7B6F262C	0E0C38D2	42486CEA	BDB79316	0
	C6	C3	7B6F262C	1C1871A4	42486CEA	BDB79316	0
	C6	C4	7B6F262C	3830E348	42486CEA	BDR79316	0
	C6	C5	7B6F262C	7061C690	42486CEA	BDB79316	0
	C6	C6	7B6F262C	E0C38D20	42486CEA	BDR79316	0
	C6	C7	7B6F262D	C1871A40	42486CEA	BDB79317	0
	C6	C8	7B6F262F	830E3480	42486CEA	BDR79319	0
	C6	C9	7B6F2633	061C6900	42486CEA	BDR7931D	0
	C6	10	7B6F263A	0C38D200	42486CEA	BDR79324	0
	C6	11	7B6F2648	1871A400	42486CEA	BDR79332	0
	C6	12	7B6F2664	30E34800	42486CEA	BDB7934E	0
	C6	13	7B6F265C	61C69000	42486CEA	BDR79386	0
	C6	14	7B6F270C	C38D2000	42486CEA	BDR793F6	0
	C6	15	7B6F27ED	871A4000	42486CEA	BDR794D7	0
	C6	16	7B6F29AF	0E348000	42486CEA	BDR79699	0
	C6	17	7B6F2D32	10690000	42486CEA	BDR79A1C	0
	C6	18	7B6F3438	38D20000	42486CEA	BDB7A122	0
	C6	19	7B6F4244	71A40000	42486CEA	BDB7AF2E	0
	C6	20	7B6F5E5C	E3480000	42486CEA	BDR7C846	0
	C6	21	7B6F968D	C6900000	42486CEA	BDB80377	0
	C6	22	7B7006EF	8D200000	42486CEA	BDB873D9	0
	C6	23	7B70E7B3	1A400000	42486CEA	BDB9549D	0
	C6	24	7B72A93A	34800000	42486CEA	BDBB1624	0
	C6	25	7B762C48	69000000	42486CEA	BDBE9932	0
	C6	26	7B7D3264	D2000000	42486CEA	BDC59F4E	0
	C6	27	7B853E9D	A4000000	42486CEA	BDD3AR87	0
	C6	28	7BA7570F	48000000	42486CEA	BDEF03F9	0
	C6	29	7BDF87F2	90000000	42486CEA	BE27F4DC	0
	C6	30	7C4FE9B9	20000000	42486CEA	BE9856A3	0
	C6	31	7D30AD46	40000000	42486CEA	BF791A30	0
	C6	32	7EF23460	80000000	42486CEA	C13AA14A	0
	C9		C13AA14A	00000000	42486CEA	00000000	1
	10		00000000	00000000	42486CEA	00000000	1

		SIGMA 5 FIXED POINT DIVIDE SIMULATOR				PAGE 075	
DW 75	PHASE	CLBCK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	KCC
	C3		475E3AF9	00000000	2C76B150	00000000	1
	C4		475E3AF9	00000000	2C76B150	475E3AF9	0
	C6	C0	475E3AF9	475E3AF9	2C76B150	00000000	1
	C6	C1	CC000000	8EBC75F3	2C76B150	D3894EB0	0
	C6	C2	A7129D61	1D78E6E6	2C76B150	D3894EB1	0
	C6	C3	A7129D62	3AF1D7CC	2C76B150	D3894EB2	0
	C6	C4	A7129D64	75E3AF98	2C76B150	D3894EB4	0
	C6	C5	A7129D68	EBC75F30	2C76B150	D3894EB8	0
	C6	C6	A7129D71	D78E6E60	2C76B150	D3894EC1	0
	C6	C7	A7129D83	AF1D7CC0	2C76B150	D3894ED3	0
	C6	C8	A7129DA7	5E3AF980	2C76B150	D3894EF7	0
	C6	C9	A7129DEE	BC75F300	2C76B150	D3894F3E	0
	C6	10	A7129E7D	78E6E600	2C76B150	D3894FCD	0
	C6	11	A7129F9A	F1D7CC00	2C76B150	D38950EA	0
	C6	12	A712A1D5	E3AF9800	2C76B150	D3895325	0
	C6	13	A712A64B	C75F3000	2C76B150	D389579B	0
	C6	14	A712AF37	8E6E6000	2C76B150	D3896087	0
	C6	15	A712C10F	1D7CC000	2C76B150	D389725F	0
	C6	16	A712E48E	3AF98000	2C76B150	D389960E	0
	C6	17	A7132C1C	75F3C000	2C76B150	D389D06C	0
	C6	18	A713BAD8	EBE6C000	2C76B150	D38A6C28	0
	C6	19	A714D851	D7CC0000	2C76B150	D38B89A1	0
	C6	20	A7171343	AF980000	2C76B150	D38DC493	0
	C6	21	A71B8927	5F300000	2C76B150	D3923A77	0
	C6	22	A72474EE	BE600000	2C76B150	D39B263E	0
	C6	23	A7364C7D	7CC00000	2C76B150	D3ACFDCC	0
	C6	24	A759FB9A	F9800000	2C76B150	D3C0ACEA	0
	C6	25	A7A159D5	F3000000	2C76B150	D4180B25	0
	C6	26	A830164B	E6000000	2C76B150	D4A6C79B	0
	C6	27	A94D8F37	CC000000	2C76B150	D5C44C87	0
	C6	28	AB88810F	98000000	2C76B150	D7FF325F	0
	C6	29	AFFE648F	30000000	2C76B150	DC75160F	0
	C6	30	B8EA2C1E	60000000	2C76B150	E560DD6E	0
	C6	31	CAC1BADC	C0000000	2C76B150	F7386C2C	0
	C6	32	EE70D859	80000000	2C76B150	1AE789A9	1
	C9		1AE789A9	00000001	2C76B150	00000001	0
	1C		00000001	00000001	2C76B150	00000001	0

		SIGMA 5 FIXED POINT DIVIDE SIMULATOR				PAGE 076	
DW 76	PHASE	CLBCK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	KCC
	C3		C1F375DB	00000000	00004444	00000000	0
	C4		C1F375DB	00000000	00004444	2ECC8A25	0
	C6	C0	C1F375DB	2E0C8A25	00004444	00000000	1
	C6	C1	CC000000	5C19144B	00004444	FFFFB8BC	0
	C6	C2	FFFF7778	B8322896	00004444	FFFFB8BC	0
	C6	C3	FFFF7779	7C64512C	00004444	FFFFB8BD	0
	C6	C4	FFFF777A	E0C8A258	00004444	FFFFB8BE	0
	C6	C5	FFFF777D	C19144B0	00004444	FFFFB8C1	0
	C6	C6	FFFF7783	83228960	00004444	FFFFB8C7	0
	C6	C7	FFFF778F	064512C0	00004444	FFFFB8D3	0
	C6	C8	FFFF77A6	0C8A2580	00004444	FFFFB8EA	0
	C6	C9	FFFF77D4	19144B00	00004444	FFFFB8F1	0
	C6	10	FFFF7830	32289600	00004444	FFFFB874	0
	C6	11	FFFF78E8	64512C00	00004444	FFFFB8D2	0
	C6	12	FFFF7A58	C8A25800	00004444	FFFFB89C	0
	C6	13	FFFF7C39	9144B000	00004444	FFFFC17D	0
	C6	14	FFFF82FB	22896000	00004444	FFFFC73F	0
	C6	15	FFFF8E7E	4512C000	00004444	FFFFD2C2	0
	C6	16	FFFFA584	8A258000	00004444	FFFFE9C8	0
	C6	17	FFFFD391	144B0000	00004444	000017D5	1
	C6	18	CC002FAA	28960001	00004444	FFFFE666	0
	C6	19	FFFFD6CC	512C0002	00004444	00001B10	1
	C6	20	CC00362C	A2580005	00004444	FFFFF1DC	0
	C6	21	FFFFE3B9	4480000A	00004444	000027FD	1
	C6	22	CC004FFA	89600015	00004444	000008B6	1
	C6	23	CC00176D	12C0002B	00004444	FFFFD329	0
	C6	24	FFFFA652	25800056	00004444	FFFFEA96	0
	C6	25	FFFFD52C	480000AC	00004444	00001970	1
	C6	26	CC0032E0	96000159	00004444	FFFFE99C	0
	C6	27	FFFFDD39	2C0002B2	00004444	0000217D	1
	C6	28	CC0042FA	58000565	00004444	FFFFFEB6	0
	C6	29	FFFFFD6C	B000CACB	00004444	000041B0	1
	C6	30	CC008361	60001595	00004444	00003F1D	1
	C6	31	CC007E3A	00002B2B	00004444	000039F6	1
	C6	32	CC0073ED	80005657	00004444	00002FA9	1
	C9		CC002FA9	0000ACAF	00004444	0000ACAF	0
	1C		0000ACAF	0000ACAF	00004444	FFFF5351	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW	PHASE	CLOCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	KCC
77	C3		7FFFFFFF	00000000	7FFFFFFF	00000000	0
	C4		7FFFFFFF	00000000	7FFFFFFF	7FFFFFFF	0
	C6	CC	7FFFFFFF	7FFFFFFF	7FFFFFFF	00000000	1
	C6	C1	00000000	FFFFFFFF	7FFFFFFF	80000001	0
	C6	C2	00000003	FFFFFFFE	7FFFFFFF	80000002	0
	C6	C3	00000005	FFFFFFFC	7FFFFFFF	80000004	0
	C6	C4	00000009	FFFFFFF8	7FFFFFFF	80000008	0
	C6	C5	00000011	FFFFFFF0	7FFFFFFF	80000010	0
	C6	C6	00000021	FFFFFFE0	7FFFFFFF	80000020	0
	C6	C7	00000041	FFFFFFC0	7FFFFFFF	80000040	0
	C6	C8	00000081	FFFFFF80	7FFFFFFF	80000080	0
	C6	C9	00000101	FFFFFF00	7FFFFFFF	80000100	0
	C6	10	00000201	FFFFFF00	7FFFFFFF	80000200	0
	C6	11	00000401	FFFFFF00	7FFFFFFF	80000400	0
	C6	12	00000801	FFFFFF80	7FFFFFFF	80000800	0
	C6	13	00010001	FFFFFF00	7FFFFFFF	80001000	0
	C6	14	00020001	FFFFE000	7FFFFFFF	80002000	0
	C6	15	00040001	FFFFC000	7FFFFFFF	80004000	0
	C6	16	00080001	FFF80000	7FFFFFFF	80008000	0
	C6	17	00100001	FFF00000	7FFFFFFF	80010000	0
	C6	18	00200001	FFE00000	7FFFFFFF	80020000	0
	C6	19	00400001	FFC00000	7FFFFFFF	80040000	0
	C6	20	00800001	FF800000	7FFFFFFF	80080000	0
	C6	21	00100001	FF000000	7FFFFFFF	80100000	0
	C6	22	00200001	F0000000	7FFFFFFF	80200000	0
	C6	23	00400001	FF000000	7FFFFFFF	80400000	0
	C6	24	00800001	FF800000	7FFFFFFF	80800000	0
	C6	25	01000001	FFC00000	7FFFFFFF	81000000	0
	C6	26	02000001	FE000000	7FFFFFFF	82000000	0
	C6	27	04000001	FC000000	7FFFFFFF	84000000	0
	C6	28	08000001	F8000000	7FFFFFFF	88000000	0
	C6	29	10000001	F0000000	7FFFFFFF	90000000	0
	C6	30	20000001	E0000000	7FFFFFFF	A0000000	0
	C6	31	40000001	C0000000	7FFFFFFF	C0000000	0
	C6	32	80000001	80000000	7FFFFFFF	00000000	1
	C9		00000000	00000001	7FFFFFFF	00000001	0
	10		00000001	00000001	7FFFFFFF	00000001	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW	PHASE	CLOCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	KCC
78	C3		FFFFFFE1	00000000	00000004	00000000	0
	C4		FFFFFFE1	00000000	00000004	0000001F	0
	C6	CC	FFFFFFE1	0000001F	00000004	00000000	1
	C6	C1	00000000	0000003F	00000004	FFFFFFFC	0
	C6	C2	FFFFFFF8	0000007E	00000004	FFFFFFFC	0
	C6	C3	FFFFFFF8	000000FC	00000004	FFFFFFFC	0
	C6	C4	FFFFFFF8	000001F8	00000004	FFFFFFFC	0
	C6	C5	FFFFFFF8	000003FC	00000004	FFFFFFFC	0
	C6	C6	FFFFFFF8	000007E0	00000004	FFFFFFFC	0
	C6	C7	FFFFFFF8	00000FC0	00000004	FFFFFFFC	0
	C6	C8	FFFFFFF8	00001F80	00000004	FFFFFFFC	0
	C6	C9	FFFFFFF8	00003FC0	00000004	FFFFFFFC	0
	C6	10	FFFFFFF8	00007E00	00000004	FFFFFFFC	0
	C6	11	FFFFFFF8	0000FC00	00000004	FFFFFFFC	0
	C6	12	FFFFFFF8	0001F800	00000004	FFFFFFFC	0
	C6	13	FFFFFFF8	0003FC00	00000004	FFFFFFFC	0
	C6	14	FFFFFFF8	0007E000	00000004	FFFFFFFC	0
	C6	15	FFFFFFF8	000FC000	00000004	FFFFFFFC	0
	C6	16	FFFFFFF8	001F8000	00000004	FFFFFFFC	0
	C6	17	FFFFFFF8	003FC000	00000004	FFFFFFFC	0
	C6	18	FFFFFFF8	007E0000	00000004	FFFFFFFC	0
	C6	19	FFFFFFF8	00FC0000	00000004	FFFFFFFC	0
	C6	20	FFFFFFF8	01F80000	00000004	FFFFFFFC	0
	C6	21	FFFFFFF8	03FC0000	00000004	FFFFFFFC	0
	C6	22	FFFFFFF8	07E00000	00000004	FFFFFFFC	0
	C6	23	FFFFFFF8	0FC00000	00000004	FFFFFFFC	0
	C6	24	FFFFFFF8	1F800000	00000004	FFFFFFFC	0
	C6	25	FFFFFFF8	3FC00000	00000004	FFFFFFFC	0
	C6	26	FFFFFFF8	7E000000	00000004	FFFFFFFC	0
	C6	27	FFFFFFF8	FC000000	00000004	FFFFFFFC	0
	C6	28	FFFFFFF9	F8000000	00000004	FFFFFFFD	0
	C6	29	FFFFFFF9	FC000000	00000004	FFFFFFFD	0
	C6	30	FFFFFFF9	E0000000	00000004	FFFFFFFD	0
	C6	31	00000007	00000001	00000004	00000003	1
	C6	32	00000007	80000003	00000004	00000003	1
	C9		00000003	00000007	00000004	00000007	0
	10		00000007	00000007	00000004	FFFFFFF9	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW 79	PHASE	CLCK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	K00
	C3		CD0396FC	00000000	55555555	00000000	0
	C4		CD0396FC	00000000	55555555	000396FC	0
	C6	C0	CD0396FC	0D0396FC	55555555	00000000	1
	C6	C1	CC000000	1A072DF9	55555555	AAAAAAAB	0
	C6	C2	55555556	340E5BF2	55555555	AAAAAAAB	0
	C6	C3	55555556	681CB7E4	55555555	AAAAAAAB	0
	C6	C4	55555556	D0396FC8	55555555	AAAAAAAB	0
	C6	C5	55555557	AD72DF90	55555555	AAAAAAAC	0
	C6	C6	55555559	40E5BF20	55555555	AAAAAAAE	0
	C6	C7	5555555C	81CB7E40	55555555	AAAAAAB1	0
	C6	C8	55555563	0396FC80	55555555	AAAAAAB8	0
	C6	C9	55555570	072DF900	55555555	AAAAAAC5	0
	C6	C10	5555558A	0E5BF200	55555555	AAAAAADF	0
	C6	C11	555555BE	1CB7E400	55555555	AAAAAB13	0
	C6	C12	55555626	396FC800	55555555	AAAAAP7B	0
	C6	C13	555556F6	72DF9000	55555555	AAAAAC4B	0
	C6	C14	55555896	E5BF2000	55555555	AAAAAD8B	0
	C6	C15	555558D7	CB7E4000	55555555	AAAAAB12C	0
	C6	C16	55556259	96FC8000	55555555	AAAAAB7AE	0
	C6	C17	55556F5D	2DF90000	55555555	AAAAAC4B2	0
	C6	C18	55558964	5BF20000	55555555	AAAADEB9	0
	C6	C19	5555BD72	B7E4C000	55555555	AAAR12C7	0
	C6	C20	5556258F	6FC80000	55555555	AAAB7AE4	0
	C6	C21	5556F5C8	DF900000	55555555	AAAC4B1D	0
	C6	C22	5558963B	BF200000	55555555	AAADER90	0
	C6	C23	555BD721	7E400000	55555555	AAB12C76	0
	C6	C24	556258EC	FC800000	55555555	AA67AF41	0
	C6	C25	556F5C83	F9000000	55555555	AAC4B1D8	0
	C6	C26	558963B1	F2000000	55555555	AADEB906	0
	C6	C27	55BD72CD	E4000000	55555555	AB12C762	0
	C6	C28	56258EC5	C8000000	55555555	AB7AE41A	0
	C6	C29	56F5C835	90000000	55555555	AC4B1D8A	0
	C6	C30	58963B15	20000000	55555555	ADEB906A	0
	C6	C31	5BD72CD4	40000000	55555555	B12C7629	0
	C6	C32	6258EC52	80000000	55555555	B7AE41A7	0
	C9		B7AE41A7	00000000	55555555	00000000	1
	1C		00000000	00000000	55555555	00000000	1

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DW 80	PHASE	CLCK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	K00
	C3		80000000	00000000	FFFFFFFF	00000000	1
	C4		80000000	00000000	FFFFFFFF	7FFFFFFF	0
	C6	C0	80000000	7FFFFFFF	FFFFFFFF	00000000	1
	C6	C1	00000000	FFFFFFFF	FFFFFFFF	FFFFFFFF	0
	C6	C2	FFFFFFFF	FFFFFFFE	FFFFFFFF	FFFFFFFB	0
	C6	C3	FFFFFFF7	FFFFFFFC	FFFFFFFF	FFFFFFFD	0
	C6	C4	FFFFFFFB	FFFFFFF8	FFFFFFFF	00000001	1
	C6	C5	00000003	FFFFFFF1	FFFFFFFF	FFFFFFFD	0
	C6	C6	FFFFFFFB	FFFFFFE2	FFFFFFFF	00000001	1
	C6	C7	00000003	FFFFFFC5	FFFFFFFF	FFFFFFFD	0
	C6	C8	FFFFFFFB	FFFFFF8A	FFFFFFFF	00000001	1
	C6	C9	00000003	FFFFFF15	FFFFFFFF	FFFFFFFD	0
	C6	C10	FFFFFFFB	FFFFFL2A	FFFFFFFF	00000001	1
	C6	C11	00000003	FFFFFC55	FFFFFFFF	FFFFFFFD	0
	C6	C12	FFFFFFFB	FFFFF8AA	FFFFFFFF	00000001	1
	C6	C13	00000003	FFFFF155	FFFFFFFF	FFFFFFFD	0
	C6	C14	FFFFFFFB	FFFFE2AA	FFFFFFFF	00000001	1
	C6	C15	00000003	FFFFC555	FFFFFFFF	FFFFFFFD	0
	C6	C16	FFFFFFFB	FFFF8AAA	FFFFFFFF	00000001	1
	C6	C17	00000003	FFFF1555	FFFFFFFF	FFFFFFFD	0
	C6	C18	FFFFFFFB	FFFFE2AA	FFFFFFFF	00000001	1
	C6	C19	00000003	FFFC5555	FFFFFFFF	FFFFFFFD	0
	C6	C20	FFFFFFFB	FF8AAAAA	FFFFFFFF	00000001	1
	C6	C21	00000003	FF155555	FFFFFFFF	FFFFFFFD	0
	C6	C22	FFFFFFFB	FFE2AAAA	FFFFFFFF	00000001	1
	C6	C23	00000003	FFC55555	FFFFFFFF	FFFFFFFD	0
	C6	C24	FFFFFFFB	FF8AAAAA	FFFFFFFF	00000001	1
	C6	C25	00000003	FF155555	FFFFFFFF	FFFFFFFD	0
	C6	C26	FFFFFFFB	FE2AAAAA	FFFFFFFF	00000001	1
	C6	C27	00000003	FC555555	FFFFFFFF	FFFFFFFD	0
	C6	C28	FFFFFFFB	F8AAAAAA	FFFFFFFF	00000001	1
	C6	C29	00000003	F1555555	FFFFFFFF	FFFFFFFD	0
	C6	C30	FFFFFFFB	E2AAAAAA	FFFFFFFF	00000001	1
	C6	C31	00000003	C5555555	FFFFFFFF	FFFFFFFD	0
	C6	C32	FFFFFFFB	8AAAAAAA	FFFFFFFF	00000001	1
	C9		00000001	15555555	FFFFFFFF	15555555	0
	1C		15555555	15555555	FFFFFFFF	15555555	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PH	CL	BACK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	<00
PRE4			3FFFFFFF	00000000	00010000	00010000	1
PRE4			3FFFFFFF	00000000	00000100	00000000	1
PRE4			3FFFFFFF	00000000	00000100	00000001	1
C3			3FFFFFFF	00000000	00000001	00000001	1
C4			3FFFFFFF	00000000	00000001	3FFFFFFF	0
C6	CC		3FFFFFFF	3FFFFFFF	00000001	00000000	1
C6	C1		00000000	7FFFFFFF	00000001	FFFFFFFF	0
C6	C2		FFFFFFFFE	FFFFFFFFE	00000001	FFFFFFFF	0
C6	C3		FFFFFFFF	FFFFFFFC	00000001	00000000	1
C6	C4		00000001	FFFFFFF9	00000001	00000000	1
C6	C5		00000001	FFFFFFF3	00000001	00000000	1
C6	C6		00000001	FFFFFFF7	00000001	00000000	1
C6	C7		00000001	FFFFFFCF	00000001	00000000	1
C6	C8		00000001	FFFFFF9F	00000001	00000000	1
C6	C9		00000001	FFFFFF3F	00000001	00000000	1
C6	10		00000001	FFFFFF7F	00000001	00000000	1
C6	11		00000001	FFFFFFCF	00000001	00000000	1
C6	12		00000001	FFFFFF9F	00000001	00000000	1
C6	13		00000001	FFFFFF3F	00000001	00000000	1
C6	14		00000001	FFFFFF7F	00000001	00000000	1
C6	15		00000001	FFFFFFCF	00000001	00000000	1
C6	16		00000001	FFFFFF9F	00000001	00000000	1
C6	17		00000001	FFFFFF3F	00000001	00000000	1
C6	18		00000001	FFFFFF7F	00000001	00000000	1
C6	19		00000001	FFFFFFCF	00000001	00000000	1
C6	20		00000001	FFFFFF9F	00000001	00000000	1
C6	21		00000001	FFFFFF3F	00000001	00000000	1
C6	22		00000001	FFFFFF7F	00000001	00000000	1
C6	23		00000001	FFFFFFCF	00000001	00000000	1
C6	24		00000001	FFFFFF9F	00000001	00000000	1
C6	25		00000001	FFFFFF3F	00000001	00000000	1
C6	26		00000001	FFFFFF7F	00000001	00000000	1
C6	27		00000001	FFFFFFCF	00000001	00000000	1
C6	28		00000001	FFFFFF9F	00000001	00000000	1
C6	29		00000001	FFFFFF3F	00000001	00000000	1
C6	30		00000001	FFFFFF7F	00000001	00000000	1
C6	31		00000001	FFFFFFCF	00000001	00000000	1
C6	32		00000001	FFFFFF9F	00000001	00000000	1
C9			00000000	3FFFFFFF	00000001	3FFFFFFF	0
10			3FFFFFFF	3FFFFFFF	00000001	3FFFFFFF	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

PH	CL	BACK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	<00
PRE4			00000000	00000000	FFFE0000	FFFE0000	0
PRE4			00000000	00000000	00FFFE00	00000000	0
PRE4			00000000	00000000	00FFFE00	FFFFFFFF	0
C3			00000000	00000000	FFFFFFFF	FFFFFFFF	0
C4			00000000	00000000	FFFFFFFF	40000000	0
C6	CC		00000000	40000000	FFFFFFFF	00000000	1
C6	C1		00000000	80000001	FFFFFFFF	FFFFFFFF	0
C6	C2		FFFFFFFFD	00000002	FFFFFFFF	FFFFFFFF	0
C6	C3		FFFFFFFFE	00000004	FFFFFFFF	00000000	1
C6	C4		00000000	00000009	FFFFFFFF	FFFFFFFF	0
C6	C5		FFFFFFFFC	00000012	FFFFFFFF	FFFFFFFF	0
C6	C6		FFFFFFFFC	00000024	FFFFFFFF	FFFFFFFF	0
C6	C7		FFFFFFFFC	00000048	FFFFFFFF	FFFFFFFF	0
C6	C8		FFFFFFFFC	00000090	FFFFFFFF	FFFFFFFF	0
C6	C9		FFFFFFFFC	00000120	FFFFFFFF	FFFFFFFF	0
C6	10		FFFFFFFFC	00000240	FFFFFFFF	FFFFFFFF	0
C6	11		FFFFFFFFC	00000480	FFFFFFFF	FFFFFFFF	0
C6	12		FFFFFFFFC	00000900	FFFFFFFF	FFFFFFFF	0
C6	13		FFFFFFFFC	00001200	FFFFFFFF	FFFFFFFF	0
C6	14		FFFFFFFFC	00002400	FFFFFFFF	FFFFFFFF	0
C6	15		FFFFFFFFC	00004800	FFFFFFFF	FFFFFFFF	0
C6	16		FFFFFFFFC	00009000	FFFFFFFF	FFFFFFFF	0
C6	17		FFFFFFFFC	00012000	FFFFFFFF	FFFFFFFF	0
C6	18		FFFFFFFFC	00024000	FFFFFFFF	FFFFFFFF	0
C6	19		FFFFFFFFC	00048000	FFFFFFFF	FFFFFFFF	0
C6	20		FFFFFFFFC	00090000	FFFFFFFF	FFFFFFFF	0
C6	21		FFFFFFFFC	00120000	FFFFFFFF	FFFFFFFF	0
C6	22		FFFFFFFFC	00240000	FFFFFFFF	FFFFFFFF	0
C6	23		FFFFFFFFC	00480000	FFFFFFFF	FFFFFFFF	0
C6	24		FFFFFFFFC	00900000	FFFFFFFF	FFFFFFFF	0
C6	25		FFFFFFFFC	01200000	FFFFFFFF	FFFFFFFF	0
C6	26		FFFFFFFFC	02400000	FFFFFFFF	FFFFFFFF	0
C6	27		FFFFFFFFC	04800000	FFFFFFFF	FFFFFFFF	0
C6	28		FFFFFFFFC	09000000	FFFFFFFF	FFFFFFFF	0
C6	29		FFFFFFFFC	12000000	FFFFFFFF	FFFFFFFF	0
C6	30		FFFFFFFFC	24000000	FFFFFFFF	FFFFFFFF	0
C6	31		FFFFFFFFC	48000000	FFFFFFFF	FFFFFFFF	0
C6	32		FFFFFFFFC	90000000	FFFFFFFF	FFFFFFFF	0
C9			FFFFFFFFE	20000000	FFFFFFFF	20000000	1
10			20000000	20000000	FFFFFFFF	20000000	1

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DH	PHASE	CLBCK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	K00
	PRE4		AAAAAAAA	0000000	00000001	00000001	1
03			AAAAAAAA	0000000	00000001	00000001	1
04			AAAAAAAA	0000000	00000001	55555556	0
06	00		AAAAAAAA	55555556	00000001	00000000	1
06	01		00000000	AAAAAAD	00000001	FFFFFFF	0
06	02		FFFFFFF	5555555A	00000001	00000000	1
06	03		00000000	AAAAAAB5	00000001	FFFFFFF	0
06	04		FFFFFFF	5555556A	00000001	00000000	1
06	05		00000000	AAAAAAD5	00000001	FFFFFFF	0
06	06		FFFFFFF	555555AA	00000001	00000000	1
06	07		00000000	AAAAAAB55	00000001	FFFFFFF	0
06	08		FFFFFFF	555556AA	00000001	00000000	1
06	09		00000000	AAAAAD55	00000001	FFFFFFF	0
06	10		FFFFFFF	55555AAA	00000001	00000000	1
06	11		00000000	AAAAB555	00000001	FFFFFFF	0
06	12		FFFFFFF	55556AAA	00000001	00000000	1
06	13		00000000	AAAAD555	00000001	FFFFFFF	0
06	14		FFFFFFF	5555AAAA	00000001	00000000	1
06	15		00000000	AAAAB5555	00000001	FFFFFFF	0
06	16		FFFFFFF	5556AAAA	00000001	00000000	1
06	17		00000000	AAAD5555	00000001	FFFFFFF	0
06	18		FFFFFFF	555AAAAA	00000001	00000000	1
06	19		00000000	AAB55555	00000001	FFFFFFF	0
06	20		FFFFFFF	556AAAAA	00000001	00000000	1
06	21		00000000	AAD55555	00000001	FFFFFFF	0
06	22		FFFFFFF	55AAAAAA	00000001	00000000	1
06	23		00000000	AB555555	00000001	FFFFFFF	0
06	24		FFFFFFF	56AAAAAA	00000001	00000000	1
06	25		00000000	AD555555	00000001	FFFFFFF	0
06	26		FFFFFFF	5AAAAAAA	00000001	00000000	1
06	27		00000000	B5555555	00000001	FFFFFFF	0
06	28		FFFFFFF	6AAAAAAA	00000001	00000000	1
06	29		00000000	D5555555	00000001	FFFFFFF	0
06	30		FFFFFFF	AAAAAAA	00000001	00000000	1
06	31		00000001	55555555	00000001	00000000	1
06	32		00000000	AAAAAAB	00000001	FFFFFFF	0
09			FFFFFFF	55555556	00000001	55555556	1
10			55555556	55555556	00000001	AAAAAAA	1

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DH	PHASE	CLBCK	A(00=31)	B(00=31)	D(00=31)	S(00=31)	K00
	PRE4		25555555	0000000	00000001	FFFFFFF	1
03			25555555	0000000	FFFFFFF	FFFFFFF	1
04			25555555	0000000	FFFFFFF	25555555	0
06	00		25555555	25555555	FFFFFFF	00000000	1
06	01		00000000	4AAAAAA	FFFFFFF	FFFFFFF	0
06	02		FFFFFFF	95555556	FFFFFFF	FFFFFFF	0
06	03		FFFFFFFD	2AAAAAA	FFFFFFF	FFFFFFF	0
06	04		FFFFFFF	55555558	FFFFFFF	00000000	1
06	05		00000000	AAAAAAB1	FFFFFFF	FFFFFFF	0
06	06		FFFFFFFD	55555562	FFFFFFF	FFFFFFF	0
06	07		FFFFFFF	AAAAAAC4	FFFFFFF	00000000	1
06	08		00000001	55555589	FFFFFFF	FFFFFFF	0
06	09		FFFFFFF	AAAAAB12	FFFFFFF	00000000	1
06	10		00000001	55555625	FFFFFFF	FFFFFFF	0
06	11		FFFFFFF	AAAAAC4A	FFFFFFF	00000000	1
06	12		00000001	55555895	FFFFFFF	FFFFFFF	0
06	13		FFFFFFF	AAAAAB12A	FFFFFFF	00000000	1
06	14		00000001	55556255	FFFFFFF	FFFFFFF	0
06	15		FFFFFFF	AAAC4AA	FFFFFFF	00000000	1
06	16		00000001	55558955	FFFFFFF	FFFFFFF	0
06	17		FFFFFFF	AAAB12AA	FFFFFFF	00000000	1
06	18		00000001	55562555	FFFFFFF	FFFFFFF	0
06	19		FFFFFFF	AAAC4AAA	FFFFFFF	00000000	1
06	20		00000001	55589555	FFFFFFF	FFFFFFF	0
06	21		FFFFFFF	AAB12AAA	FFFFFFF	00000000	1
06	22		00000001	55625555	FFFFFFF	FFFFFFF	0
06	23		FFFFFFF	AAC4AAA	FFFFFFF	00000000	1
06	24		00000001	55895555	FFFFFFF	FFFFFFF	0
06	25		FFFFFFF	AB12AAA	FFFFFFF	00000000	1
06	26		00000001	56255555	FFFFFFF	FFFFFFF	0
06	27		FFFFFFF	AC4AAAA	FFFFFFF	00000000	1
06	28		00000001	58955555	FFFFFFF	FFFFFFF	0
06	29		FFFFFFF	B12AAAA	FFFFFFF	00000000	1
06	30		00000001	62555555	FFFFFFF	FFFFFFF	0
06	31		FFFFFFF	C4AAAAA	FFFFFFF	00000000	1
06	32		00000001	89555555	FFFFFFF	FFFFFFF	0
09			FFFFFFF	12AAAAA	FFFFFFF	12AAAAA	1
10			12AAAAA	12AAAAA	FFFFFFF	ED555556	1

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DN	C5	PHASE	CLOCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	KCC
		PRE4		3FFFFFFF	00000000	40000000	40000000	1
		PRE4		3FFFFFFF	00000000	00400000	00000000	1
		PRE4		3FFFFFFF	00000000	00004000	00004000	1
		03		3FFFFFFF	00000000	00004000	00004000	1
		C4		3FFFFFFF	00000000	00004000	3FFFFFFF	0
		C6 CC		3FFFFFFF	3FFFFFFF	00004000	00000000	1
		C6 C1		00000000	7FFFFFFF	00004000	FFFFC000	0
		C6 C2		FFFF8000	FFFFFFFE	00004000	FFFFC000	0
		C6 C3		FFFF8001	FFFFFFFC	00004000	FFFFC001	0
		C6 C4		FFFF8003	FFFFFFF8	00004000	FFFFC003	0
		C6 C5		FFFF8007	FFFFFFF0	00004000	FFFFC007	0
		C6 C6		FFFF800F	FFFFFFE0	00004000	FFFFC00F	0
		C6 C7		FFFF801F	FFFFFFC0	00004000	FFFFC01F	0
		C6 C8		FFFF803F	FFFFFF80	00004000	FFFFC03F	0
		C6 C9		FFFF807F	FFFFFF00	00004000	FFFFC07F	0
		C6 10		FFFF80FF	FFFFFF00	00004000	FFFFC0FF	0
		C6 11		FFFF81FF	FFFFFFC0	00004000	FFFFC1FF	0
		C6 12		FFFF83FF	FFFFFF80	00004000	FFFFC3FF	0
		C6 13		FFFF87FF	FFFFFF00	00004000	FFFFC7FF	0
		C6 14		FFFF8FFF	FFFFE000	00004000	FFFFCFFF	0
		C6 15		FFFF9FFF	FFFFC000	00004000	FFFFDFFF	0
		C6 16		FFFFBFFF	FFFF8000	00004000	FFFFFFFF	0
		C6 17		FFFFFFF	FFFF0000	00004000	00003FFF	1
		C6 18		00007FFF	FFFE0001	00004000	00003FFF	1
		C6 19		00007FFF	FFFC0003	00004000	00003FFF	1
		C6 20		00007FFF	FFF80007	00004000	00003FFF	1
		C6 21		00007FFF	FFF0000F	00004000	00003FFF	1
		C6 22		00007FFF	FFE0001F	00004000	00003FFF	1
		C6 23		00007FFF	FFC0003F	00004000	00003FFF	1
		C6 24		00007FFF	FF80007F	00004000	00003FFF	1
		C6 25		00007FFF	FF0000FF	00004000	00003FFF	1
		C6 26		00007FFF	FE0001FF	00004000	00003FFF	1
		C6 27		00007FFF	FC0003FF	00004000	00003FFF	1
		C6 28		00007FFF	F80007FF	00004000	00003FFF	1
		C6 29		00007FFF	F0000FFF	00004000	00003FFF	1
		C6 30		00007FFF	E0001FFF	00004000	00003FFF	1
		C6 31		00007FFF	C0003FFF	00004000	00003FFF	1
		C6 32		00007FFF	80007FFF	00004000	00003FFF	1
		C9		00003FFF	0000FFFF	00004000	0000FFFF	0
		10		0000FFFF	0000FFFF	00004000	0000FFFF	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DN	C6	PHASE	CLOCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	KCC
		PRE4		00000000	00000000	B7770000	B7770000	0
		PRE4		00000000	00000000	00B77700	00000000	0
		PRE4		00000000	00000000	00B77700	FFFFB777	0
		C3		00000000	00000000	FFFFB777	FFFFB777	0
		C4		00000000	00000000	FFFFB777	40000000	0
		C6 CC		00000000	40000000	FFFFB777	00000000	1
		C6 C1		00000000	80000001	FFFFB777	FFFFB777	0
		C6 C2		FFFF6E0F	00000002	FFFFB777	FFFFB778	0
		C6 C3		FFFF6E0C	00000004	FFFFB777	FFFFB779	0
		C6 C4		FFFF6E0F	00000008	FFFFB777	FFFFB77A	0
		C6 C5		FFFF6E06	00000010	FFFFB777	FFFFB77F	0
		C6 C6		FFFF6E0E	00000020	FFFFB777	FFFFB787	0
		C6 C7		FFFF6F0E	00000040	FFFFB777	FFFFB797	0
		C6 C8		FFFF6F2E	00000080	FFFFB777	FFFFB7B7	0
		C6 C9		FFFF6F6E	00000100	FFFFB777	FFFFB7F7	0
		C6 10		FFFF6FEE	00000200	FFFFB777	FFFFB877	0
		C6 11		FFFF70EE	00000400	FFFFB777	FFFFB977	0
		C6 12		FFFF72EE	00000800	FFFFB777	FFFFBA77	0
		C6 13		FFFF76EE	00001000	FFFFB777	FFFFBB77	0
		C6 14		FFFF7EEE	00002000	FFFFB777	FFFFC777	0
		C6 15		FFFF8EEE	00004000	FFFFB777	FFFFD777	0
		C6 16		FFFFAEEE	00008000	FFFFB777	FFFFF777	0
		C6 17		FFFFEEEE	00010000	FFFFB777	00003777	1
		C6 18		00006EEE	00020001	FFFFB777	00002665	1
		C6 19		00004CCA	00040003	FFFFB777	00000441	1
		C6 20		00000882	00080007	FFFFB777	FFFFBFF9	0
		C6 21		FFFF7FF2	0010000E	FFFFB777	FFFFC87B	0
		C6 22		FFFF90F6	00200010	FFFFB777	FFFFD97F	0
		C6 23		FFFFB2FE	00400038	FFFFB777	FFFFFA87	0
		C6 24		FFFFF70E	00800070	FFFFB777	00003F97	1
		C6 25		00007F2E	010000E1	FFFFB777	000036A5	1
		C6 26		0000604A	020001C3	FFFFB777	000024C1	1
		C6 27		00004982	04000387	FFFFB777	000000F9	1
		C6 28		000001F2	080007CF	FFFFB777	FFFFB969	0
		C6 29		FFFF72D2	10000L1E	FFFFB777	FFFFBA5A	0
		C6 30		FFFF76B6	20001C30	FFFFB777	FFFFBF3F	0
		C6 31		FFFF7E7E	40003678	FFFFB777	FFFFC707	0
		C6 32		FFFF8E0E	800070F0	FFFFB777	FFFFD697	0
		C9		FFFFD697	0000E100	FFFFB777	0000E100	1
		10		0000E100	0000E100	FFFFB777	0000E100	1

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DH	PHASE	CLBCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	KCC
C7	PRE4		AAAAAAAA	00000000	00004000	00004000	1
	C3		AAAAAAAA	00000000	00004000	00004000	1
	C4		AAAAAAAA	00000000	00004000	55555556	0
	C6	CC	AAAAAAAA	55555556	00004000	00000000	1
	C6	C1	00000000	AAAAAAAAAD	00004000	FFFFC000	0
	C6	C2	FFFF8001	5555555A	00004000	FFFFC001	0
	C6	C3	FFFF8002	AAAAAAB4	00004000	FFFFC002	0
	C6	C4	FFFF8005	55555568	00004000	FFFFC005	0
	C6	C5	FFFF800A	AAAAAAD0	00004000	FFFFC00A	0
	C6	C6	FFFF8015	555555A0	00004000	FFFFC015	0
	C6	C7	FFFF802A	AAAAAB40	00004000	FFFFC02A	0
	C6	C8	FFFF8055	55555680	00004000	FFFFC055	0
	C6	C9	FFFF80AA	AAAAAD00	00004000	FFFFC0AA	0
	C6	10	FFFF8155	55555A00	00004000	FFFFC155	0
	C6	11	FFFF82AA	AAAAB400	00004000	FFFFC2AA	0
	C6	12	FFFF8555	55556800	00004000	FFFFC555	0
	C6	13	FFFF8AAA	AAAAD000	00004000	FFFFCAAA	0
	C6	14	FFFF9555	5555A000	00004000	FFFFD555	0
	C6	15	FFFFAAAA	AAAB4000	00004000	FFFFEAAA	0
	C6	16	FFFFD555	55568000	00004000	00015555	1
	C6	17	CC002AAA	AAADCC01	00004000	FFFFEAAA	0
	C6	18	FFFFD555	555AC002	00004000	00015555	1
	C6	19	CC002AAA	AAB40005	00004000	FFFFEAAA	0
	C6	20	FFFFD555	556800CA	00004000	00015555	1
	C6	21	CC002AAA	AADCC015	00004000	FFFFEAAA	0
	C6	22	FFFFD555	55AC002A	00004000	00015555	1
	C6	23	CC002AAA	AB400055	00004000	FFFFEAAA	0
	C6	24	FFFFD555	56800CAA	00004000	00015555	1
	C6	25	CC002AAA	ADCC0155	00004000	FFFFEAAA	0
	C6	26	FFFFD555	5A0002AA	00004000	00015555	1
	C6	27	CC002AAA	B4000555	00004000	FFFFEAAA	0
	C6	28	FFFFD555	6800CAAA	00004000	00015555	1
	C6	29	CC002AAA	DCC01555	00004000	FFFFEAAA	0
	C6	30	FFFFD555	ACC02AAA	00004000	00015555	1
	C6	31	CC002AAB	40005555	00004000	FFFFEAA8	0
	C6	32	FFFFD556	800CAAAA	00004000	00015556	1
	C9		00015556	00015555	00004000	00015555	0
	10		00015555	00015555	00004000	FFFFEAA8	0

SIGMA 5 FIXED POINT DIVIDE SIMULATOR

DH	PHASE	CLBCK	A(00-31)	B(00-31)	D(00-31)	S(00-31)	KCC
C8	PRE4		25555555	00000000	0000B777	FFFFB777	0
	C3		25555555	00000000	FFFFB777	FFFFB777	0
	C4		25555555	00000000	FFFFB777	25555555	0
	C6	CC	25555555	25555555	FFFFB777	00000000	1
	C6	C1	00000000	4AAAAAAB	FFFFB777	FFFFB777	0
	C6	C2	FFFF6EEC	95555556	FFFFB777	FFFFB777	0
	C6	C3	FFFF6EEF	2AAAAAAC	FFFFB777	FFFFB778	0
	C6	C4	FFFF6EF0	55555558	FFFFB777	FFFFB779	0
	C6	C5	FFFF6EF2	AAAAAAB0	FFFFB777	FFFFB77B	0
	C6	C6	FFFF6EF7	55555560	FFFFB777	FFFFB780	0
	C6	C7	FFFF6F00	AAAAAAC0	FFFFB777	FFFFB789	0
	C6	C8	FFFF6F13	55555580	FFFFB777	FFFFB79C	0
	C6	C9	FFFF6F38	AAAAAAB0	FFFFB777	FFFFB7C1	0
	C6	10	FFFF6F83	55555600	FFFFB777	FFFFB80C	0
	C6	11	FFFF7018	AAAAACC0	FFFFB777	FFFFB8A1	0
	C6	12	FFFF7143	55555800	FFFFB777	FFFFB90C	0
	C6	13	FFFF7398	AAAAAB00	FFFFB777	FFFFBC21	0
	C6	14	FFFF7843	55556000	FFFFB777	FFFFC0CC	0
	C6	15	FFFF8198	AAAAC000	FFFFB777	FFFFCA21	0
	C6	16	FFFF9443	55558000	FFFFB777	FFFFDCCC	0
	C6	17	FFFFB998	AAABCC00	FFFFB777	0000221	1
	C6	18	CC000443	55560001	FFFFB777	FFFFB8BA	0
	C6	19	FFFF7774	AAACCC02	FFFFB777	FFFFBFFD	0
	C6	20	FFFF7FFB	55580004	FFFFB777	FFFFC884	0
	C6	21	FFFF9108	AAB00008	FFFFB777	FFFFD991	0
	C6	22	FFFFB323	55600010	FFFFB777	FFFFFRAC	0
	C6	23	FFFFF758	AAC00020	FFFFB777	00003FE1	1
	C6	24	CC007FC3	55800041	FFFFB777	0000373A	1
	C6	25	CC006E74	AB000083	FFFFB777	000025E3	1
	C6	26	CC004BD7	56000107	FFFFB777	0000034E	1
	C6	27	CC00069C	AC00020F	FFFFB777	FFFFBE13	0
	C6	28	FFFF7C27	5800041E	FFFFB777	FFFFC4B0	0
	C6	29	FFFF896C	8000083C	FFFFB777	FFFFD1E9	0
	C6	30	FFFFA3D3	60001078	FFFFB777	FFFFEC5C	0
	C6	31	FFFFD8B8	CC0020FC	FFFFB777	00002141	1
	C6	32	CC004283	800041E1	FFFFB777	FFFFF9FA	0
	C9		FFFFF9FA	000083C2	FFFFB777	000083C2	1
	10		CC0083C2	000083C2	FFFFB777	FFFF7C3E	1



READER SURVEY

PUBLICATION NO. _____ TITLE: _____

IS MATERIAL PRESENTED PROPERLY:

- FULLY COVERED ?
- CLEARLY EXPLAINED ?
- WELL ILLUSTRATED ?
- WELL ORGANIZED ?
- OTHER _____

HOW DID YOU USE THIS PUBLICATION?

- FOR TROUBLESHOOTING AND REPAIR
- FOR PROGRAMMING INFORMATION
- FOR OPERATING INFORMATION
- AS A STUDENT
- AS AN INSTRUCTOR
- OTHER _____

WHAT IS YOUR POSITION?

CUSTOMER PERSONNEL

CUSTOMER ORGANIZATION _____

- TECHNICIAN
- ANALYST
- MANAGER
- OPERATOR
- PROGRAMMER
- STUDENT
- OTHER _____

SDS PERSONNEL

- CUSTOMER ENGINEER
- SALES REPRESENTATIVE
- SYSTEMS ENGINEER
- INSTRUCTOR
- STUDENT
- OTHER _____

COMMENTS: _____

STAPLE

STAPLE

FOLD

FIRST CLASS
PERMIT NO. 1026
SANTA MONICA, CALIF.

BUSINESS REPLY MAIL
NO POSTAGE STAMP NECESSARY IF MAILED IN THE UNITED STATES

POSTAGE WILL BE PAID BY

SCIENTIFIC DATA SYSTEMS

701 So. Aviation Boulevard
El Segundo, California 90245

ATTN: TECHNICAL PUBLICATIONS DEPT.



CUT ALONG LINE

FOLD