

DIAGNOSTIC PROGRAM MANUAL

SIGMA 5
CPU DIAGNOSTIC (AUTO)

PROGRAM NO. 704287E

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Prepared by
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RELATED PUBLICATIONS

<u>Publication Title</u>	<u>Publication No.</u>
Sigma Symbol and Meta-Symbol Reference Manual, XDS Sigma Computers	900952
Sigma 5 Computer Reference Manual	900959
Sigma 5 Computer Technical Manual	901172
Sigma 5 and 7 Relocatable Diagnostic Program Loader Diagnostic Program Manual	900972

SECTION I INTRODUCTION

1-1 SCOPE OF MANUAL

This manual describes the Auto CPU diagnostic program designed for the Sigma 5 computer manufactured by Xerox Data Systems, El Segundo, California.

This manual is made up of five 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. Section V is a concordance listing.

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.

!!PRG CAL2 RELEASED

!BCKG RESTART

!!LOADED PRG WATCH

!BCKG USED BY FGD

!
!
!

!!KEY-IN
DM

SIGMA 5/7 DIAG PRG MAG TAPE LIBRARY
-5 AUTO

SIGMA 5 AUTO 704287-EO1
REVISION EO1

REVISED TO ADD A SINGLE PURPOSE TEST THAT
CHECK S REGISTER TO REGISTER OPERATION OF
STORE DOUBLE WORD.
AUTOMATICALLY RESETS THE ERROR COUNTER
WHEN LAS AND LMS ARE NOT INSTALLED
OR HAVE BEEN DISABLED

10/8/79
LAS } NOT
LMS } IMPLEMENTED

LIST	ERRORS	PASSES	AUTO ERROR DISPLAY		IS	SHOULD BE
			INST	IDENTIFIER		
32401DEE	00000001	00000209	26C00460	50000001	00000168	0000016A 0
32401DEE	00000002	00000209	26C00460	6000000C	26C00460	80000000 6

INSTRUCTIONS LOAD MEMORY STATUS (LMS) AND LOAD AND SET (LAS) ARE NOT
THEY WILL NOT BE CHECKED FURTHER.

FLOATING POINT OPTION IS INSTALLED

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 automatically branches to the starting location and begins running. If SENSE switch 1 is on during loading, a wait occurs at X'291' after the two waits during loading of the loader to permit program or loader relocation (reference XDS publication No. 900972). As a result, the count pulse interrupts are not armed. To continue, reset SS1 and clear the wait. If SSW1 is reset during loading, no waits occur and count pulse interrupts are armed.

2-3 OPERATING PROCEDURES

2-4 SUCCESS INDICATIONS

Provided no errors occur, the program runs continuously through all test modules. After completing the last module, the program starts 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 halts upon detecting an error. Before halting, however, the error is reported via the keyboard printer or line printer. If the printing device does not respond to a TIO, the program merely halts at location X'205' with the alarm on.

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 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 0078018R 25C00204 50000001 07300145 47300145 40000000
          32401102 00000002 0078018R 25C00204 6000000C 00000000 BCDEF01A BCDEF01A

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

Figure 2-2. Sample of Printout Showing Errors

no printout device is available, there are 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 resumes 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 resumes 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 are not 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 does not halt on errors. Errors are still 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 begins testing with the module addressed by R1. The first three hex characters must be 324. The last five hex characters are 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 pulse 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 normal 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 is 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 location X'444' 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.

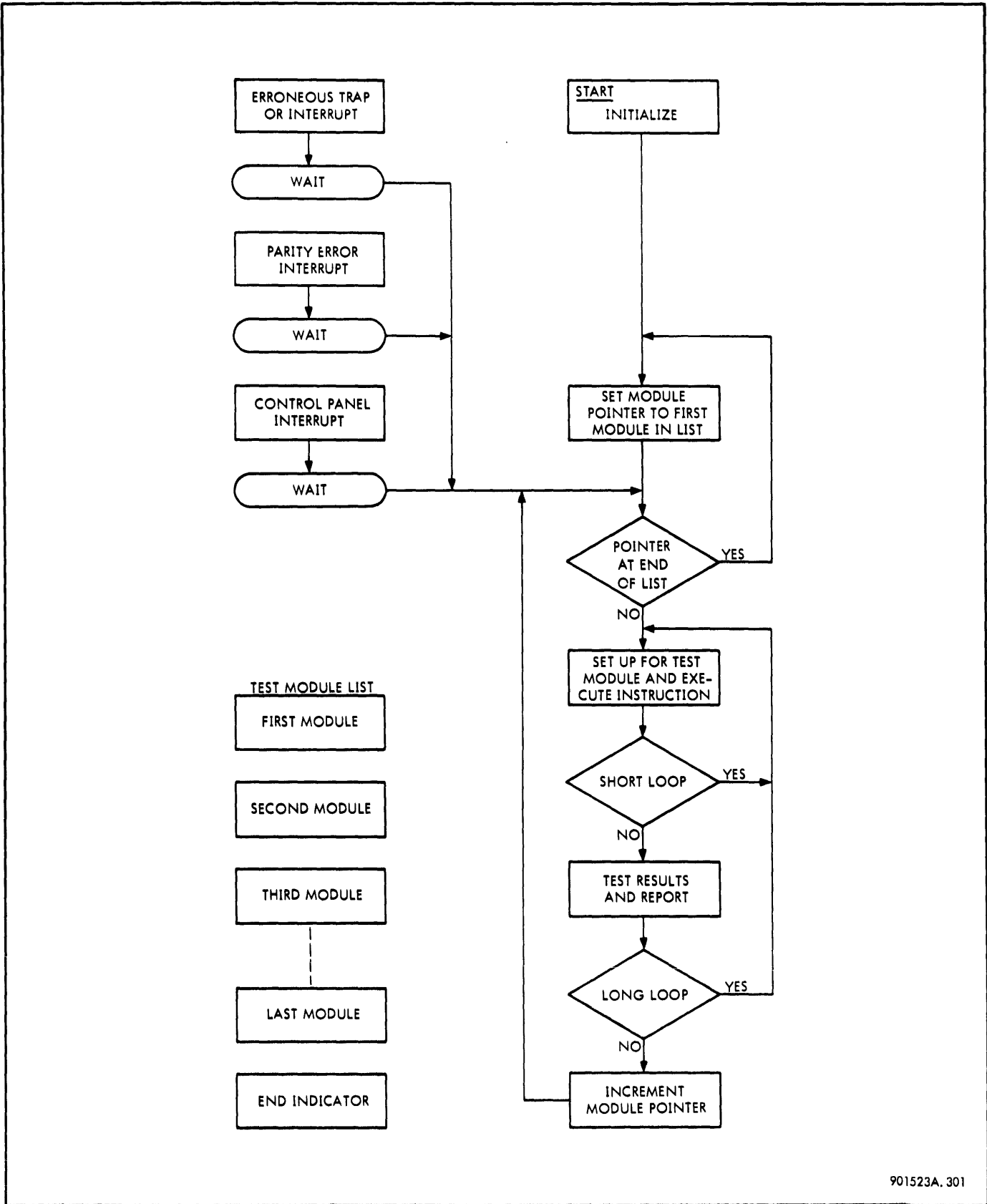
3-3 OUTPUT MESSAGE ANALYSIS

See figure 3-2 for a sample Auto error printout. The headings on the printout correspond to the register contents after error halts.

<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, on 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.



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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	FFFFFFFEE	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	CCCCCCC	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. 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
- K = Carry
- ⊕ = Exclusive OR
- = AND function

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 is displayed, which executes 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 develops in the truth table. For every failure, K5 should be true. If it were actually false, 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.

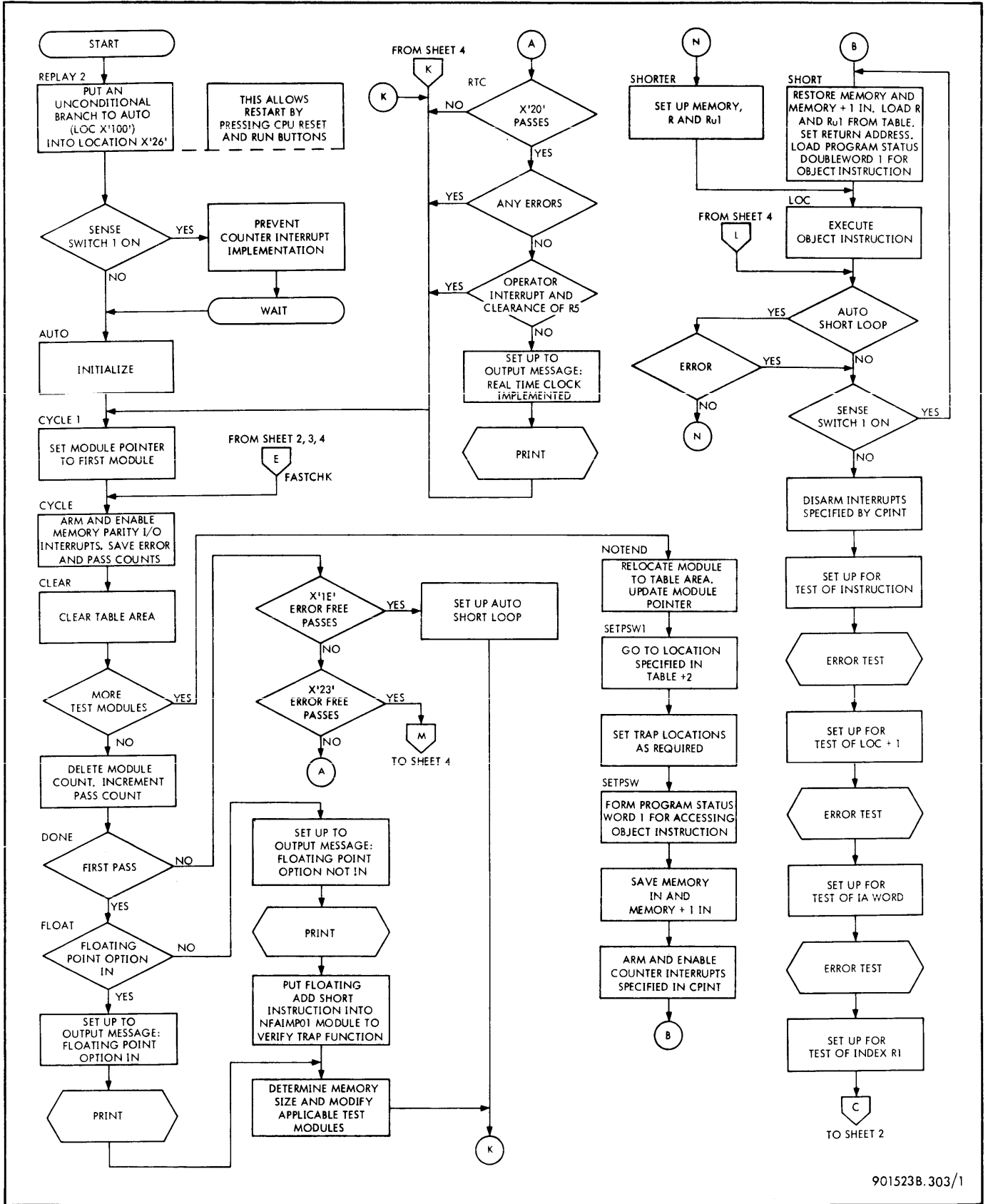


Figure 3-3. Auto Program, Detailed Flow Chart (Sheet 1 of 4)

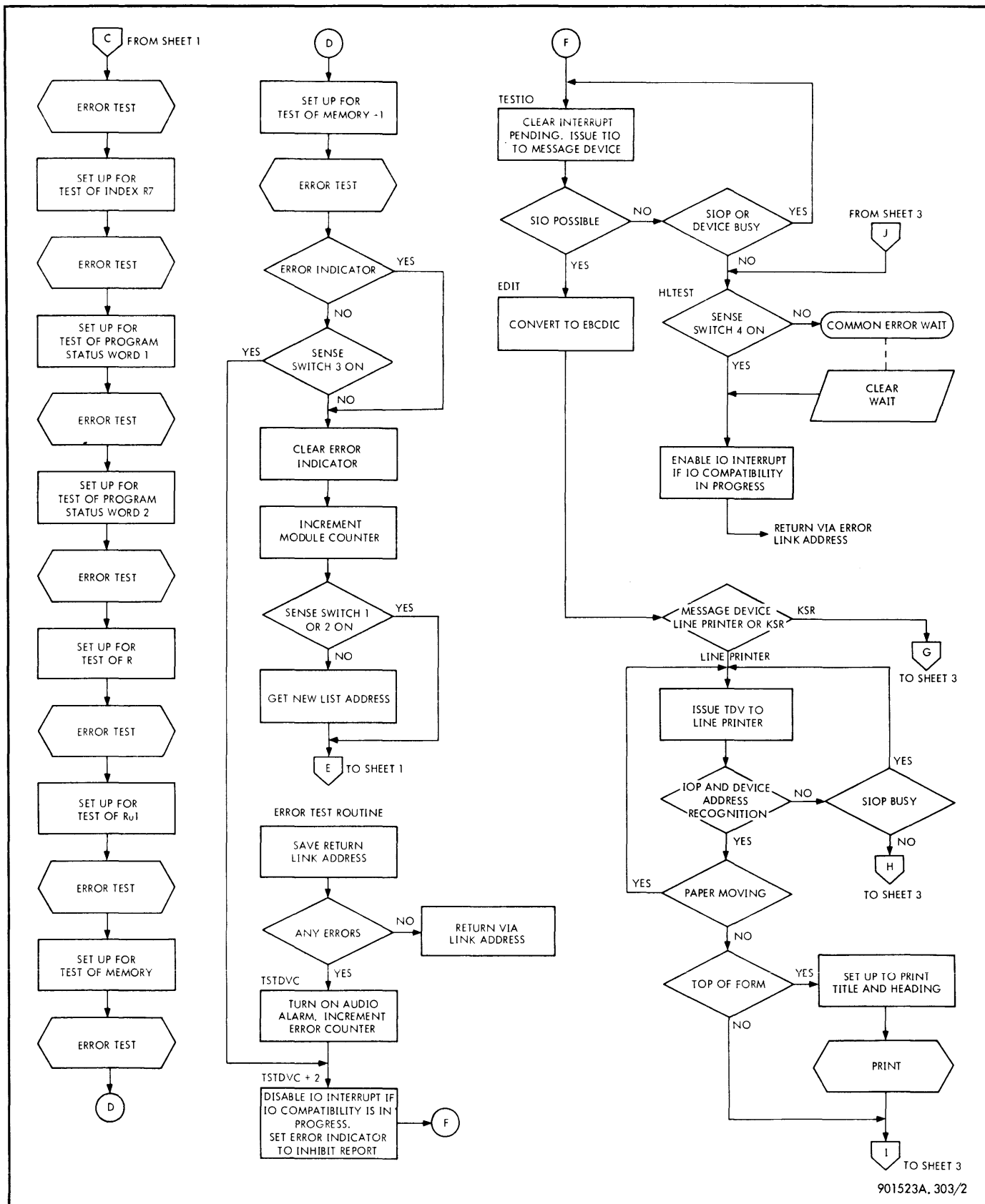


Figure 3-3. Auto Program, Detailed Flow Chart (Sheet 2 of 4)

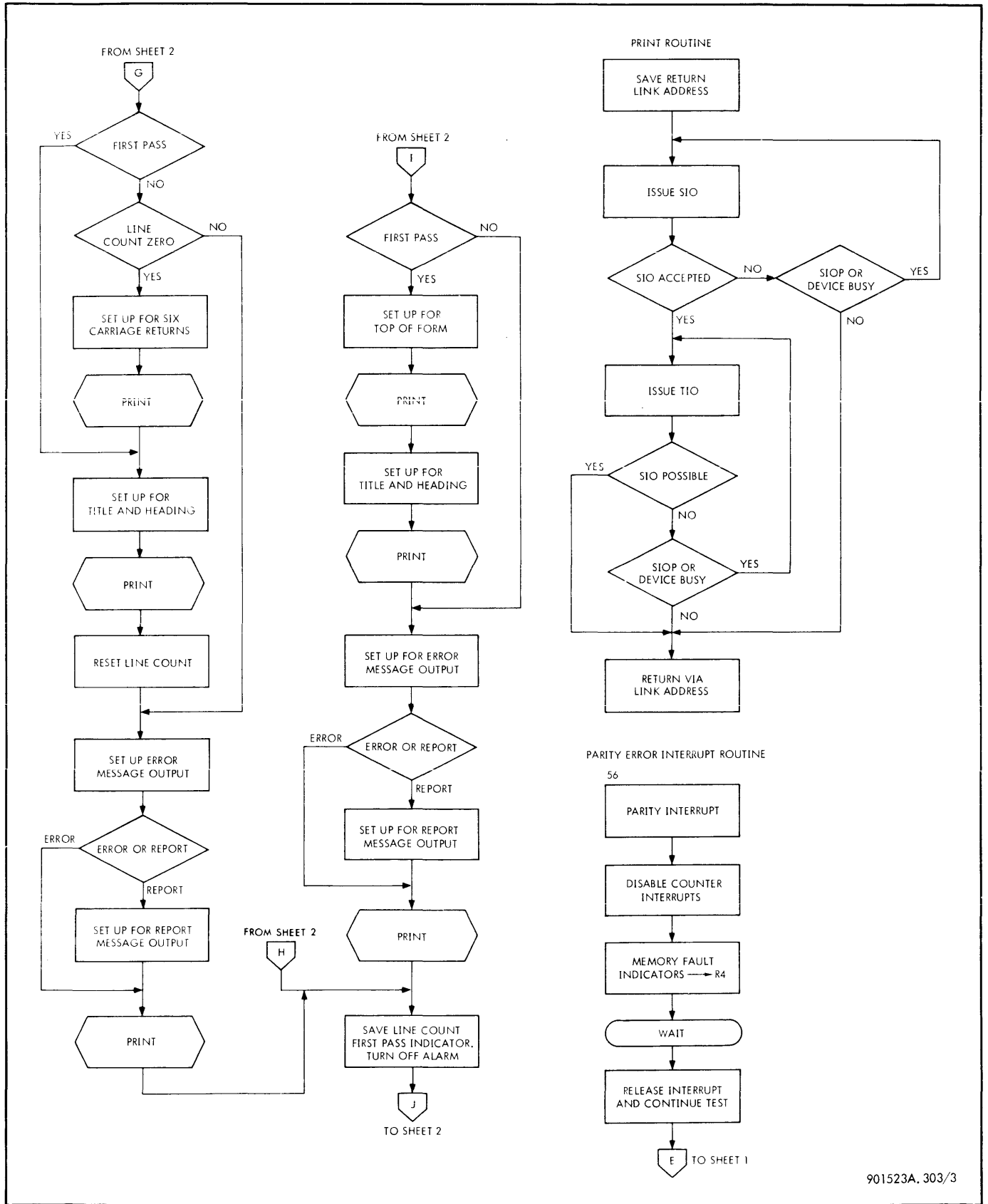


Figure 3-3. Auto Program, Detailed Flow Chart (Sheet 3 of 4)

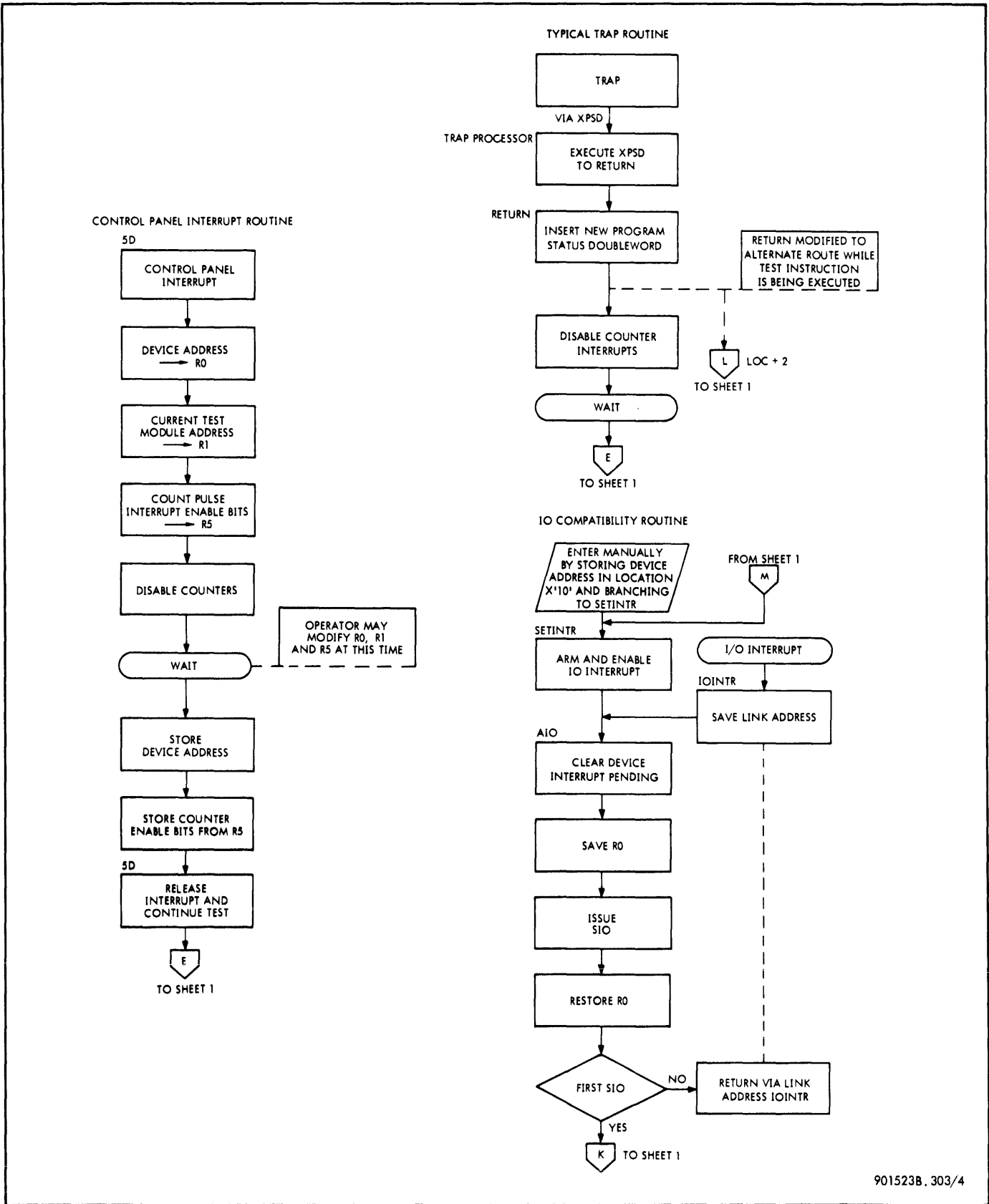


Figure 3-3. Auto Program, Detailed Flow Chart (Sheet 4 of 4)

XDS 901523

SECTION IV
PROGRAM LISTING

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
1								SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51E00 -
2								TITLE 'SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51E00 SEPT 15, 1969'
3								*
4								* REVISION E00 (12/1/69) PROGRAM CHANGES INDICATED IN COLS 71&72 BY *E
5								* PROGRAM REVISED TO 1. INCORPORATE ADDITIONAL TEST CASES FOR CLM IN- *E
6								STRUCTION *E
7								2. INCORPORATE LOAD AND SET AND LOAD MEMORY *E
8								STATUS INSTRUCTIONS SO THEY EXECUTE AND DO *E
9								NOT TRAP *E
10								3. USE CHECKSUM LOADER INSTEAD OF CPU SPECIAL *E
11								LOADER. SLIGHT CHANGE IN OPERATING PROCEDURE *E
12								REQUIRED IF COUNT PULSE INTERRUPTS ARE NOT TO *E
13								BE ARMED. REFER TO PARA 2.2 THIS MANUAL AND *E
14								LOADER MANUAL No. 900972 *E
15								*E
16								*
17								*
18								* REVISION D00 (7/11/69) DOCUMENTATION REFORMATTING CHANGE ONLY *D
19								*
20								*
21								*
22								*
23								* REVISION C1 CHANGES NOTED IN COL 71-72 BY . *C
24								* I/O COMPATIBILITY ROUTINE MODIFIED TO OPERATE ON COMPUTERS WITH *C
25								* ONLY ONE REGISTER PAGE. *C
26								*
27								*
28								*
29								* REVISION B1
30								A ROUTINE TO AUTOMATICALLY IMPLEMENT THE SHORT LOOP FOR 100
31								PASSES OF EACH TEST MODULE, A TEST FOR TRAPS CORRECTLY REPORTING
32								THE LOCATION TRAPPED FROM, ADDITIONAL TEST MODULES, IMPROVEMENT
33								OF THE INITIALIZE ROUTINE, COMPUTATION OF NON-EXISTENT MEMORY
34								TO AVOID REPORTING FALSE ERRORS AND AUTOMATIC IMPLEMENTATION OF
35								THE I/O COMPATIBILITY TEST (AFTER 35 ERROR FREE PASSES) WERE
36								THE MAJOR CHANGES INCORPORATED.
37								*
38								*
39								*
40								*
41								*
42								*
43								*
44								***** SEE PAGES FOUR THROUGH SIX FOR *****
45								*****
46								***** LOADING AND OPERATING INSTRUCTIONS *****
47								SYSTEM SIG7FDP
48		000000F			F		EQU 15	
49								*
50								FORMS THE ADDRESS FIELD SPECIFIECS HOW THE WORD IS DIVIDED AND
51								HOW MANY BITS THERE WILL BE IN EACH PART OF THE WORD.
52								EFFECTIVE AT ASSEMBLY TIME ONLY.
53					I		FORM 4,28	
54								*
55					K		FORM 4,4,4,20	
56								*
57								PROCS EFFECTIVE AT ASSEMBLY TIME ONLY
58								*
59								OPEN PAGE THIS INHIBITS *C
60		00000000			PAGE		PAGE	PAGE *C
61								DIRECTIVE *C
62								TO PERMIT MAX. LINAGE/PAGE *C
63								*
64								*
65								*
66								P SPECIFIES A DOUBLE WORD ADDRESS
67								*
68		00000000			P		CNAME	
69							PROC	
70					LF		GEN,32 DA(AF(1))	
71							PEND	
72								*

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
73				*	J	CONVERTS TO BYTE ADDRESS		
74		00000000		J	CNAME			
75					PR0C			
76				LF	GEN,8,24	AF(1),BA(AF(2))		
77					PEND			
78				*				
79				*	FILL	FILLS ALL LOCATIONS BETWEEN AF AND * WITH ZEROS.		
80		00000000		FILL	CNAME			
81					PR0C			
82					D0	ABSVAL(AF)-ABSVAL(*)		
83					GEN,32	0		
84					FIN			
85					PEND			
86				*				
87					PAGE			
88				*				
89					0PEN	LCFI,AI,CI,LI,MI,SF,S,LCF,STCF		
90		00000024		SF	CNAME	X'24'		
91		00000025		S	CNAME	X'25'		
92		00000070		LCF	CNAME	X'70'		
93		00000074		STCF	CNAME	X'74'		
94		LIST		G1	EQU	1,7,4,3,17		
95					PR0C			
96				LF	GEN,G1	AFA(1),NAME,CF(2),AF(2),AF(1)		
97					PEND			
98		00000002		LCFI	CNAME	X'2'		
99		00000020		AI	CNAME	X'20'		
100		00000021		CI	CNAME	X'21'		
101		00000022		LI	CNAME	X'22'		
102		00000023		MI	CNAME	X'23'		
103		LIST		G2	EQU	1,7,4,20		
104					PR0C			
105				LF	GEN,G2	AFA(1),NAME,CF(2),AF(1)		
106					PEND			
107				*				
108				*	BIND	CAUSES THE LOCATION COUNTERS TO ADVANCE TO A WORD BOUNDARY THAT IS SPECIFIED IN THE ARGUMENT FIELD.		
109					CNAME			
110		00000000		BIND	PR0C			
111					XP	SET	AF=(ABSVAL(*)-((ABSVAL(*)/AF)*AF))	*B
112					D0	AF=(ABSVAL(*)-((ABSVAL(*)/AF)*AF))>0		*B
113					0RG	ABSVAL(*)+XP		
114					FIN			
115					PEND			
116				*				
117				*				
118					0RG	X'40'		*B
119	01 00040							
	01 00040							
120				*				
121				*				
122				*	*****	LOADING OPTIONS		
123				*	SENSE SW1	SET* BYPASS AUTOMATIC IMPLEMENTATION OF REAL TIME		
124				*		CLOCKS, PROGRAM WILL COME TO A WAIT. RESET		
125				*		SENSE SWITCH 1. CLEAR THE WAIT.		
126				*		RESET* ENABLE RTC'S AFTER X'20' ERROR FREE PASSES		
127				*				
128				*				
129				*				
130				*	*****	I/O COMPATIBILITY		
131				*		THIS TEST IS DESIGNED TO TEST FOR CONFLICTS BETWEEN THE		
132				*		INTEGRAL IOP AND THE EXECUTION OF THE AUTO DIAGNOSTIC.		
133				*		THE TEST IS AUTOMATICALLY INITIATED AFTER 35 ERROR FREE PASSES		*B
134				***				*B
135				*		TO DELETE THE TEST :		*B
136				*		1. CP INTERRUPT		*B
137				*		2. ENTER A NON-EXISTENT DEVICE ADDRESS IN LOCATION X'10'.		*B
138				*		3. BRANCH TO ZI0AIN. SEE ADDRESS ON NEXT LINE		*B
139	01 00040		000002D0			DATA ZI0AIN		*B
140				*		TO REINITIALIZE THE TEST:		*B
141				*		1. CP INTERRUPT		
142				*		2. ENTER DEVICE ADDRESS INTO LOCATION X'10'		

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
143				*		3. BRANCH TO ZIBAIN. SEE ADDRESS ON NEXT LINE		*B
144	01 00041	00000200		*		DATA ZIBAIN		*B
145				*		(IF THE SELECTED DEVICE DOES NOT GENERATE AN INTERRUPT		
146				*		FOR ANY REASON, RESTART BY REPEATING STEP 3)		
147				*				
148				*				
149				*		***** OPERATING OPTIONS		
150				*				
151				*	SS1	SET=SHORT LOOP		
152				*		RESET=NORMAL OPERATION		
153				*				
154				*	SS2	SET=LONG LOOP		
155				*		RESET=NORMAL OPERATION		
156				*				
157				*	SS3	SET=REPORT		
158				*		RESET=NORMAL OPERATION		
159				*				
160				*	SS4	SET=NO HALT ON ERRORS		
161				*		RESET=HALT ON ERRORS AND AFTER REPORT		
162				*				
163				*		***** REGISTER CONTENTS AFTER HALT INITIATED BY:		
164				*		(WAIT AT X'1E81)		
165				*		REPORT		
166				*		OR		
167				*		ERRR		
168				*	R1	PRESENT LIST ADDRESS		
169				*	R2	ERROR COUNTER		
170				*	R3	PASS COUNTER (PASSES=0-15, MODULES=16-31)		
171				*	R4	INSTRUCTION		
172				*	R5	ERROR IDENTIFIER AND ADDRESS:		
173				*		10000000 = INSTRUCTION		
174				*		20000000 = LOCATION+1 OF THE EXECUTION LOCATION		
175				*		30000000 = INDIRECT ADDRESS		
176				*		4000000X = INDEX REGISTER X: X=1(NORMAL) OR 7(ONE)		
177				*		5000000X = PROGRAM STATUS WORD : X=1 OR 2		
178				*		6000000X = REGISTER X: X=C(12)OR D(13)		
179				*		7000WXYZ = MEMORY WORD IN LOCATION WXYZ (WXYZ=0-FFFF)		
180				*	R6	ERRONEOUS RESULT		
181				*	R7	PREDETERMINED RESULT		
182				*	R8	DIFFERENCE BETWEEN R6 AND R7		
183				*				
184				*				
185				*		***** REGISTER CONTENTS AFTER HALT INITIATED BY:		
186				*		CONTROL PANEL INTERRUPT (WAIT AT X'1FB')		
187				*		OR		
188				*		SPURIOUS TRAP (WAIT AT X'403')		
189				*				
190				*		*****R0 AND OR R5 MAY BE MODIFIED AFTER		
191				*		THE WAIT FROM CP INTERRUPT. R0 WILL		
192				*		SELECT THE MSG DEVICE AND R5 THE		
193				*		COUNT PULSE INTERRUPTS		
194				*	R0	T0000MSG T=0 FOR KSR MSG DEVICE ADDR		
195				*		T=8 FOR LINE PRINTER		
196				*	R1	3240YYYY LW#4 OBJECT ADDRESS		
197				*	R2	ERROR COUNTER		
198				*	R3	XXXXZZZ X=PASS COUNT Z= TEST COUNT		
199				*	R5	0000N000 N= ACTIVE COUNTER INTERRUPTS		
200				*		BIT POSITION ACTIVATES COUNTER		
201				*		16 1		
202				*		17 2		
203				*		18 3		
204				*		19 4		
205				*				
206				*				
207	01 00040			*	ORG	X'40'	TRAP LOCATIONS	
208	01 00040			*				
209				*		**** THE TRAP LOCATIONS WILL NOT ALWAYS CONTAIN THE INSTRUCTION		
210				*		**** SHOWN IN THIS LISTING.		
211				*		**** LOCATION 40 USUALLY CONTAINS :: XPSD,8 RETURN (SAME AS LOC 47)		
212	01 00040	0F00005E		*	NABTR	XPSD,0 NAB	NONALLOWED OPERATION	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
213	01	00041	0F000072		UIITR	XPSD,0	UII	UNIMPLEMENTED INSTRUCTION
214	01	00042	0F000078		SLTR	XPSD,0	SL	STACK LIMIT
215	01	00043	0F00007E		FXP0TR	XPSD,0	FXP0	FIXED POINT OVERFLOW
216	01	00044	0F000084		FLPFTR	XPSD,0	FLPF	FLOATING POINT FAULT
217	01	00045	0F00008A		DFTR	XPSD,0	DF	DECIMAL FAULT
218	01	00046	0F000090		WDTRTR	XPSD,0	WDTR	WATCHDOG TIMER RUNOUT
219	01	00047	0F800464		BRANCH	XPSD,8	RETURN	
220	01	00048	0F000096		CAL1TR	XPSD,0	CAL1	CALL ONE
221	01	00049	0F0000AA		CAL2TR	XPSD,0	CAL2	CALL TWO
222	01	0004A	0F0000BE		CAL3TR	XPSD,0	CAL3	CALL THREE
223	01	0004B	0F0000D2		CAL4TR	XPSD,0	CAL4	CALL FOUR
224					*			INTERRUPT LOCATIONS
225	01	0004C	00000000	A		FILL	X'52'	
	01	0004D	00000000	A				
	01	0004E	00000000	A				
	01	0004F	00000000	A				
	01	00050	00000000	A				
	01	00051	00000000	A				
226	01	00052	3310046E			MTW,1	CNT1CP	
227	01	00053	3310046F			MTW,1	CNT2CP	
228	01	00054	33100470			MTW,1	CNT3CP	
229	01	00055	33100471			MTW,1	CNT4CP	
230	01	00056	0F0000E6			XPSD,0	PARITY	MEMORY PARITY
231	01	00057	00000000	A		FILL	X'5C'	
	01	00058	00000000	A				
	01	00059	00000000	A				
	01	0005A	00000000	A				
	01	0005B	00000000	A				
232						PAGE		
233	01	0005C	0F8002DC			XPSD,8	I0INTR	I/O INTERRUPT LOCATION *C
234	01	0005D	0F0000F0			XPSD,0	RESET	INTERRUPT BUTTON
235					*			NON-ALLOWED OPERATION TRAP
236						BOUND 8		
237	01	0005E	00000000	A	NAB	PZE		
238	01	0005F	00000000	A		PZE		
239	01	00060	00000062			PZE,0	*+2	
240	01	00061	00000000	A		PZE		
241	01	00062	0F000464		NABRET	XPSD,0	RETURN	NONALLOWD OPERATION TRACC=1 19=
242	01	00063	0F000464		MPVRET	XPSD,0	RETURN	MEMORY PROTECT VIOLATION TRACC=1 19=
243	01	00064	0F000464		MVRET	XPSD,0	RETURN	MODE VIOLATION TRACC=2 19=
244	01	00065	0F000464			XPSD,0	RETURN	
245	01	00066	0F000464		NEARET	XPSD,0	RETURN	NONEXISTANT ADDRESS TRACC=4 19=
246	01	00067	0F000464			XPSD,0	RETURN	
247	01	00068	0F000464			XPSD,0	RETURN	
248	01	00069	0F000464			XPSD,0	RETURN	
249	01	0006A	0F000464		NEIRET	XPSD,0	RETURN	NONEXISTANT INSTRUCTION TRACC=8 19=
250	01	0006B	0F000464			XPSD,0	RETURN	
251	01	0006C	0F000464			XPSD,0	RETURN	
252	01	0006D	0F000464			XPSD,0	RETURN	
253	01	0006E	0F000464			XPSD,0	RETURN	
254	01	0006F	0F000464			XPSD,0	RETURN	
255	01	00070	0F000464			XPSD,0	RETURN	
256	01	00071	0F000464			XPSD,0	RETURN	
257						PAGE		
258					*			UNIMPLIMENTED INSTRUCTION TRAP
259						BOUND 8		
260	01	00072	00000000	A	UII	PZE		
261	01	00073	00000000	A		PZE		
262	01	00074	00000076			PZE,0	*+2	
263	01	00075	00000000	A		PZE		
264	01	00076	0F000464		UIIRET	XPSD,0	RETURN	
265					*			STACK LIMIT REACHED TRAP
266						BOUND 8		
267	01	00078	00000000	A	SL	PZE		
268	01	00079	00000000	A		PZE		
269	01	0007A	0000007C			PZE,0	*+2	
270	01	0007B	00000000	A		PZE		
271	01	0007C	0F000464		SLRET	XPSD,0	RETURN	
272						PAGE		
273					*			FIXED POINT ARITHMETIC OVERFLOW TRAP
274						BOUND 8		

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
275	01	0007E	00000000	A	FXPB	PZE		
276	01	0007F	00000000	A		PZE		
277	01	00080	00000082			PZE,0	#+2	
278	01	00081	00000000	A		PZE		
279	01	00082	7020007E			LCF,2	FXPB	
280	01	00083	0F000464		FPBRET	XPSD,0	RETURN	
281					*			FLOATING POINT ARITHMETIC FAULT TRAP
282						BBOUND 8		
283	01	00084	00000000	A	FLPF	PZE		
284	01	00085	00000000	A		PZE		
285	01	00086	00000088			PZE,0	#+2	
286	01	00087	00000000	A		PZE		
287	01	00088	70200084			LCF,2	FLPF	
288	01	00089	0F000464		FPFRET	XPSD,0	RETURN	
289					*			DECIMAL ARITHMETIC FAULT TRAP
290						BBOUND 8		
291	01	0008A	00000000	A	DF	PZE		
292	01	0008B	00000000	A		PZE		
293	01	0008C	0000008E			PZE,0	#+2	
294	01	0008D	00000000	A		PZE		
295	01	0008E	7020008A			LCF,2	DF	
296	01	0008F	0F000464		DFRET	XPSD,0	RETURN	
297					*			WATCHDOG TIMER RUNOUT TRAP
298						BBOUND 8		
299	01	00090	00000000	A	WDTR	PZE		
300	01	00091	00000000	A		PZE		
301	01	00092	00000094			PZE,0	#+2	
302	01	00093	00000000	A		PZE		
303	01	00094	0F000464		WDTRET	XPSD,0	RETURN	
304						PAGE		
305					*			CALL 1 TRAP
306						BBOUND 8		
307	01	00096	00000000	A	CAL1	PZE		
308	01	00097	00000000	A		PZE		
309	01	00098	0000009A			PZE,0	#+2	
310	01	00099	00000000	A		PZE		
311	01	0009A	0F000464		C1RET	XPSD,0	RETURN	TRACC=0
312	01	0009B	0F000464			XPSD,0	RETURN	TRACC=1 19=1
313	01	0009C	0F000464			XPSD,0	RETURN	TRACC=2 19=1
314	01	0009D	0F000464			XPSD,0	RETURN	TRACC=3 19=1
315	01	0009E	0F000464			XPSD,0	RETURN	TRACC=4 19=1
316	01	0009F	0F000464			XPSD,0	RETURN	TRACC=5 19=1
317	01	000A0	0F000464			XPSD,0	RETURN	TRACC=6 19=1
318	01	000A1	0F000464			XPSD,0	RETURN	TRACC=7 19=1
319	01	000A2	0F000464			XPSD,0	RETURN	TRACC=8 19=1
320	01	000A3	0F000464			XPSD,0	RETURN	TRACC=9 19=1
321	01	000A4	0F000464			XPSD,0	RETURN	TRACC=10 19=1
322	01	000A5	0F000464			XPSD,0	RETURN	TRACC=11 19=1
323	01	000A6	0F000464			XPSD,0	RETURN	TRACC=12 19=1
324	01	000A7	0F000464			XPSD,0	RETURN	TRACC=13 19=1
325	01	000A8	0F000464			XPSD,0	RETURN	TRACC=14 19=1
326	01	000A9	0F000464			XPSD,0	RETURN	TRACC=15 19=1
327						PAGE		
328					*			CALL 2 TRAP
329						BBOUND 8		
330	01	000AA	00000000	A	CAL2	PZE		
331	01	000AB	00000000	A		PZE		
332	01	000AC	000000AE			PZE,0	#+2	
333	01	000AD	00000000	A		PZE		
334	01	000AE	0F000464		C2RET	XPSD,0	RETURN	TRACC=0
335	01	000AF	0F000464			XPSD,0	RETURN	TRACC=1 19=1
336	01	000B0	0F000464			XPSD,0	RETURN	TRACC=2 19=1
337	01	000B1	0F000464			XPSD,0	RETURN	TRACC=3 19=1
338	01	000B2	0F000464			XPSD,0	RETURN	TRACC=4 19=1
339	01	000B3	0F000464			XPSD,0	RETURN	TRACC=5 19=1
340	01	000B4	0F000464			XPSD,0	RETURN	TRACC=6 19=1
341	01	000B5	0F000464			XPSD,0	RETURN	TRACC=7 19=1
342	01	000B6	0F000464			XPSD,0	RETURN	TRACC=8 19=1
343	01	000B7	0F000464			XPSD,0	RETURN	TRACC=9 19=1
344	01	000B8	0F000464			XPSD,0	RETURN	TRACC=10 19=1
345	01	000B9	0F000464			XPSD,0	RETURN	TRACC=11 19=1

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
346	01	000BA	0F000464			XPSD,0	RETURN	TRACC=12 19=1
347	01	000BB	0F000464			XPSD,0	RETURN	TRACC=13 19=1
348	01	000BC	0F000464			XPSD,0	RETURN	TRACC=14 19=1
349	01	000BD	0F000464			XPSD,0	RETURN	TRACC=15 19=1
350						PAGE		
351				*				CALL 3 TRAP
352						BBOUND 8		
353	01	000BE	00000000	A	CAL3	PZE		
354	01	000BF	00000000	A		PZE		
355	01	000C0	000000C2			PZE,0	**2	
356	01	000C1	00000000	A		PZE		
357	01	000C2	0F000464		C3RET	XPSD,0	RETURN	TRACC=0
358	01	000C3	0F000464			XPSD,0	RETURN	TRACC=1 19=1
359	01	000C4	0F000464			XPSD,0	RETURN	TRACC=2 19=1
360	01	000C5	0F000464			XPSD,0	RETURN	TRACC=3 19=1
361	01	000C6	0F000464			XPSD,0	RETURN	TRACC=4 19=1
362	01	000C7	0F000464			XPSD,0	RETURN	TRACC=5 19=1
363	01	000C8	0F000464			XPSD,0	RETURN	TRACC=6 19=1
364	01	000C9	0F000464			XPSD,0	RETURN	TRACC=7 19=1
365	01	000CA	0F000464			XPSD,0	RETURN	TRACC=8 19=1
366	01	000CB	0F000464			XPSD,0	RETURN	TRACC=9 19=1
367	01	000CC	0F000464			XPSD,0	RETURN	TRACC=10 19=1
368	01	000CD	0F000464			XPSD,0	RETURN	TRACC=11 19=1
369	01	000CE	0F000464			XPSD,0	RETURN	TRACC=12 19=1
370	01	000CF	0F000464			XPSD,0	RETURN	TRACC=13 19=1
371	01	000D0	0F000464			XPSD,0	RETURN	TRACC=14 19=1
372	01	000D1	0F000464			XPSD,0	RETURN	TRACC=15 19=1
373						PAGE		
374				*				CALL 4 TRAP
375						BBOUND 8		
376	01	000D2	00000000	A	CAL4	PZE		
377	01	000D3	00000000	A		PZE		
378	01	000D4	000000D6			PZE,0	**2	
379	01	000D5	00000000	A		PZE		
380	01	000D6	0F000464		C4RET	XPSD,0	RETURN	TRACC=0
381	01	000D7	0F000464			XPSD,0	RETURN	TRACC=1 19=1
382	01	000D8	0F000464			XPSD,0	RETURN	TRACC=2 19=1
383	01	000D9	0F000464			XPSD,0	RETURN	TRACC=3 19=1
384	01	000DA	0F000464			XPSD,0	RETURN	TRACC=4 19=1
385	01	000DB	0F000464			XPSD,0	RETURN	TRACC=5 19=1
386	01	000DC	0F000464			XPSD,0	RETURN	TRACC=6 19=1
387	01	000DD	0F000464			XPSD,0	RETURN	TRACC=7 19=1
388	01	000DE	0F000464			XPSD,0	RETURN	TRACC=8 19=1
389	01	000DF	0F000464			XPSD,0	RETURN	TRACC=9 19=1
390	01	000E0	0F000464			XPSD,0	RETURN	TRACC=10 19=1
391	01	000E1	0F000464			XPSD,0	RETURN	TRACC=11 19=1
392	01	000E2	0F000464			XPSD,0	RETURN	TRACC=12 19=1
393	01	000E3	0F000464			XPSD,0	RETURN	TRACC=13 19=1
394	01	000E4	0F000464			XPSD,0	RETURN	TRACC=14 19=1
395	01	000E5	0F000464			XPSD,0	RETURN	TRACC=15 19=1
396						PAGE		
397				*				PARITY INTERRUPT SERVICE ROUTINE
398						BBOUND 8		
399	01	000E6	00000000	A	PARITY	PZE		
400	01	000E7	00000000	A		PZE		
401	01	000E8	000000EA			PZE,0	**2	
402	01	000E9	00000000	A		PZE		
403	01	000EA	6C400010	A		RD,4	X'10'	RECORD PARITY ERROR PLANS
404	01	000EB	32500371			LW,5	CPINT	COUNT PULSE INTERRUPTS
405	01	000EC	6D501300	A		WD,5	X'1300'	ARM AND DISABLE
406	01	000ED	2E000000	A		WAIT,0	0	
407	01	000EE	0E30046A			LPSD,3	REPEAT	RELEASE PARITY INTERRUPT-REPEAT TEST
408				*				INTERUPT BUTTON SERVICE ROUTINE
409						BBOUND 8		
410	01	000F0	00000000	A	RESET	PZE		
411	01	000F1	00000000	A		PZE		
412	01	000F2	000000F4			PZE,0	**2	
413	01	000F3	07000000	A		DATA	X'07000000'	TURN ON INTERRUPT INHIBIT BITS
414	01	000F4	32500371			LW,5	CPINT	COUNT PULSE INTERRUPTS
415	01	000F5	6D501300	A		WD,5	X'1300'	ARM AND DISABLE
416	01	000F6	32300474			LW,3	PASSES	RESET PASSES TO LAST SETTING

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
417	01	000F7	32200473			LW,2	ERRORS	RESET ERRORS TO LAST SETTING
418	01	000F8	32100110			LW,1	SAVE	REINITIALIZE LOAD WITH LAST SETTING
419	01	000F9	3200037B			LW,0	TYPE	
420	01	000FA	2E000000	A		WAIT,0	0	
421	01	000FB	48500391			AND,5	MASK+4	
422	01	000FC	35500371			STW,5	CPINT	
423	01	000FD	3500037B			STW,0	TYPE	DEVICE ADDR IF BIT=0 KSR; =1 LP
424	01	000FE	35500372			STW,5	CPINTM	
425	01	000FF	0E30046A			LPSD,3	REPEAT	RELEASE PANEL INTERRUPT=REPEAT TEST
426						PAGE		
427								
428					*			AUTO-CONTROL
429	01	00100	322003C0		AUTO	FILL	X'100'	
430	01	00101	323003C0			LW,2	ZERO	ERRORS
431						LW,3	ZERO	PASSES
432	01	00102	321004E7					* REINITIATE MODULES DEPENDENT ON OPTIONS *B
433	01	00103	35100D14			LW,1	LW03+1	LW *IA = LEGAL MEMORY ADDRESS *B
434	01	00104	35100D15			STW,1	ANLZ08+6	*B
435	01	00105	32100332			STW,1	ANLZ08+7	*B
436	01	00106	35100D0F			LW,1	BEND	INST 'B END' BYPASS TEST MODULE *B
437	01	00107	351008D3			STW,1	ANLZ08+1	BYPASS TEST MODULE ON FIRST PASS *B
438	01	00108	35101651			STW,1	BAL05+1	BYPASS TEST MODULE ON FIRST PASS *B
439	01	00109	35300371			STW,1	NFAIMP01+1	BYPASS TEST MODULE ON FIRST PASS *B
440	01	0010A	35300331			STW,3	CPINT	CLEAR RTC OPTION *B
441	01	0010B	32100368			STW,3	ITERATE	CLEAR SHORT LOOP *B
442	01	0010C	35100369			LW,1	NEG51	
443	01	0010D	32100385			STW,1	LINE	INITIALIZE LINE COUNT
444	01	0010E	35100363			LW,1	NEG2	
445	01	0010F	32100356			STW,1	FIRST	RESET FIRST PASS COUNTER
446	01	00110	324003C0		CYCLE	LW,1	LOAD	INITIALIZE MODULE POINTER, SET C=0
447	01	00111	3510011D			LW,4	ZERO	CLEAR TRANSFER REGISTER
448	01	00112	3540046D			STW,1	SAVE	SAVE OLD POINTER FOR RESET
449	01	00113	3250037C			STW,4	PSW2	INITIALIZE FOR EACH MODULE *B
450	01	00114	6D501200	A		LW,5	PCPINT	PARITY AND CONTROL PANEL INTERRUPTS
451	01	00115	35200473			WD,5	X'1200'	ARM AND ENABLE
452	01	00116	35300474			STW,2	ERRORS	SAVE ERROR COUNTER IN MEMORY
453	01	00117	32500358			STW,3	PASSES	SAVE PASS COUNTER IN MEMORY
454	01	00118	32600367			LW,5	STORE	PREPARE TO CLEAR THE TABLE, SET I=0
455	01	00119	3550011A		CLEAR	LW,6	NEG20	
456	01	0011A	35400444			STW,5	\$\$1	STORE 0 INTO TABLE+I, I=0 TO 11
457	01	0011B	6550011C			STW,4	TABLE+I	I+1 INTO 1
458	01	0011C	65600119			BIR,5	\$\$1	
459						BIR,6	CLEAR	
460	01	0011D	32400488		SAVE	PAGE		PICK UP COUNT
461	01	0011E	69300122			LW,4	LIST+C	TEST FOR MODULE END
462	01	0011F	4830035C			BCS,3	NOTEND	DELETE MODULE COUNT
463	01	00120	20310000	A		AND,3	M1Q15	INCREMENT PASS COUNTER
464	01	00121	680002A0			AI,3	X'10000'	
465	01	00122	32500358			B	DONE	
466	01	00123	32600004	A	NOTEND	LW,5	STORE	PREPARE TO SET THE TABLE
467	01	00124	35100126		MOVE	LW,6	4	
468	01	00125	35500127			STW,1	FROM	SET LOAD
469	01	00126	32400488		FROM	STW,5	TO	SET STORE
470	01	00127	35400444		TO	LW,4	LIST+C	LOAD VEHICAL
471	01	00128	65100129			STW,4	TABLE+I	STORE VEHICAL
472	01	00129	6550012A			BIR,1	\$\$1	C+1 INTO C
473	01	0012A	65600124			BIR,5	\$\$1	I+1 INTO I
474	01	0012B	35100126			BIR,6	MOVE	
475						STW,1	FROM	SET MODULE POINTER = NEXT MODULE
476						PAGE		
477	01	0012C	32100448		*			AUTO-EXECUTE
478	01	0012D	32400047			LW,1	TABLE+4	PICK UP INDEX
479	01	0012E	35400168			LW,4	XPSD	PICK UP RETURN VEHICAL
480	01	0012F	35400040			STW,4	LOC+1	SET LOC+1 OF 'EXECUTE INSTRUCTION'
481	01	00130	32400446			STW,4	NABTR	SET RETURN FOR SLAVE MODE CASES
482	01	00131	4840035A			LW,4	TABLE+2	PSW1I
483	01	00132	3540046C			AND,4	LINKAD	SELECT LINK ADDRESS AND DELETE MS,MM
484	01	00133	325003C0			STW,4	PSW1	SET UP LINKAGE
485	01	00134	4840035B			LW,5	ZERO	CLEAR R5
486	01	00135	0E00046C			AND,4	COND	CLEAR ADDRESS PORTION OF PSW1
487					**	LPSD,0	PSW1	LINKAGE
								** LINKAGE IS TO NEXT INSTRUCTION OR TO VARIOUS TRAP SETUP AREAS START.

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
488					**	ING AT LOC 18C		
489	01	00136	32400446		SETPSW	LW,4	TABLE+2	
490	01	00137	4840035B			AND,4	C0ND	CLEAR ADDRESS
491	01	00138	4840033D			EOR,4	L0CADD	SET ADDRESS TO LOC
492	01	00139	3540046C			STW,4	PSW1	
493	01	0013A	32400450			LW,4	TABLE+12	
494	01	0013B	3540046D			STW,4	PSW2	
495	01	0013C	22200001	A		LI,2	1	
496	01	0013D	32400445			LW,4	TABLE+1	INSTRUCTION
497	01	0013E	35400459			STW,4	INST	
498	01	0013F	3250033B			LW,5	INDA	INDIRECT ADDRESS
499	01	00140	32700362			LW,7	0NE	SET HALF WORD (ODD MEMORY) INDEX
500	01	00141	3550045A			STW,5	IA	
501	01	00142	3280044B			LW,8	TABLE+7	STORE EXPECTED MEMORY RESULT *
502	01	00143	3290044F			LW,9	TABLE+11	INTO A DOUBLEWORD BOUNDARY *
503	01	00144	358001B6			STW,8	MEMOUT	FOR USE IN AUTOMATIC SHORT *
504	01	00145	359001B7			STW,9	MEMOUT+1	LOOP
505	01	00146	32800449			LW,8	TABLE+5	PUTS EXPECTED REGISTER *
506	01	00147	3290044D			LW,9	TABLE+9	RESULTS INTO AREA FOR *
507	01	00148	358001B8			STW,8	R0UTPUT	USE OF AUTOMATIC SHORT LOOP
508	01	00149	359001B9			STW,9	R0UTPUT+1	
509	01	0014A	32800448			LW,8	TABLE+4	REGISTER OPERANDS ARE *
510	01	0014B	3290044C			LW,9	TABLE+8	MOVED TO AN AREA UTILIZED *
511	01	0014C	358001BA			STW,8	RINPUT	BY THE AUTOMATIC SHORT LOOP
512	01	0014D	359001BB			STW,9	RINPUT+1	
513	01	0014E	32600331			LW,6	ITERATE	DETERMINES IF AUTO SHORT LOOP
514	01	0014F	3280044A			LW,8	TABLE+6	MWI
515	01	00150	3290044E			LW,9	TABLE+10	MW+1I
516	01	00151	32500371			LW,5	CPINT	COUNT PULSE INTERRUPTS
517	01	00152	6D501200	A		WD,5	X'1200'	ARM AND ENABLE
518							PAGE	
519					*			REGISTER 1 AND REG 7 ARE NOT RESTORED ON SHORT LOOP
520					*			IF THE ERROR IDENTIFIER IS = 4 = THEN THE PROGRAM SHOULD
521					*			BE RUN ON LONG LOOP OR MODIFIED TO RESTORE THE FAILING REGISTER
522	01	00153	35800460		SHORT	STW,8	MEMORY	
523	01	00154	35900461			STW,9	MEMORY+1	
524	01	00155	32C00448			LW,12	TABLE+4	R
525	01	00156	32D0044C			LW,13	TABLE+8	RU1
526	01	00157	32F0033C			LW,15	L0C2AD	
527	01	00158	35F00466			STW,15	RETURN+2	
528	01	00159	0E00046C		PREL0C	LPSD,0	PSW1	
529					*			
530	01	0015A	32500445		FASTCHK	LW,5	TABLE+1	
531	01	0015B	31501DF7			CW,5	LMS1+1	
532	01	0015C	6830015F			BE	FASTCHKA	
533	01	0015D	11C001B8			CD,12	R0UTPUT	
534	01	0015E	6930016A			BNE	ERREXIT	REPORT ERROR VIA NORMAL PATH
535					*			
536	01	0015F	12C001B6		FASTCHKA	LD,12	MEMOUT	
537	01	00160	11C00460			CD,12	MEMORY	
538	01	00161	68300164			BE	SHORTER	SUCCESSFUL = LOOP AGAIN
539	01	00162	12C001B8			LD,12	R0UTPUT	RESTORE R,RU1 SINCE MEMORY WAS BAD*
540	01	00163	6800016A			B	ERREXIT	REPORT ERROR VIA NORMAL PATH
541	01	00164	15800460		SHORTER	STD,8	MEMORY	RESTORE MEMORY OPERANDS
542	01	00165	12C001BA			LD,12	RINPUT	RESTORE REGISTERS
543	01	00166	0E00046C			LPSD,0	PSW1	GO TO OBJECT INSTRUCTION AT LOC
544	01	00167	67000459		L0C	EXU	INST	
545	01	00168	0F800464			XPSD,8	RETURN	GO TO LOC+2. ALSO X-FER 0 INTO RP
546	01	00169	6460015A			BDR,6	FASTCHK	TEST RESULTS OF SHORTER
547					*			
548					*			THIS INSTRUCTION WAS CHANGED TO ENABLE THE PROGRAM TO DETERMIN
549					*			WHEATHER LAS AND LMS INSTRUCTIONS ARE INSTALLED.
549	01	0016A	6AF01E2A		ERREXIT	BAL,15	LASLMS	
550	01	0016B	32600331			LW,6	ITERATE	
551	01	0016C	6C000000	A		RD,0	0	READ SENSE SWITCHES
552	01	0016D	69800153			BCS,8	SHORT	SS1=SHORT LOOP
553	01	0016E	6D501100	A		WD,5	X'1100'	DISARM
554	01	0016F	32200473			LW,2	ERRORS	
555							PAGE	
556					*			AUTO-TEST
557	01	00170	3510045B			STW,1	TEST+3	IX
558	01	00171	32100382			LW,1	00DBALL	SET RETURN FOR SPURIOUS TRAPS

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
559	01	00172	35100466			STW,1	RETURN+2	SET RETURN TO RESET+2
560	01	00173	3570045F			STW,7	TEST+7	SAVE HALF WORD INDEX
561	01	00174	32100110			LW,1	SAVE	PICK UP PRESENT LIST ADDRESS
562	01	00175	35C0045C			STW,12	TEST+4	R
563	01	00176	35D0045D			STW,13	TEST+5	RU1
564	01	00177	3250036A			LW,5	INSTID	PICK UP INSTRUCTION IDENTIFIED
565	01	00178	32600459			LW,6	TEST+1	INST(R)
566	01	00179	32700445			LW,7	TABLE+1	INST(0)
567	01	0017A	0F0001F0			XPSD,0	ERR0R	TEST INSTRUCTION
568	01	0017B	3250036B			LW,5	XPSDID	PICK LOCATION+1 IDENTIFIER
569	01	0017C	32600168			LW,6	L0C+1	L0C+1(R)
570	01	0017D	32700047			LW,7	XPSD	L0C+1(0)
571	01	0017E	0F0001F0			XPSD,0	ERR0R	TEST LOCATION+1
572	01	0017F	3250036C			LW,5	IAID	PICK UP INDIRECT ADDRESS IDENTIFIER
573	01	00180	3260045A			LW,6	IA	IA(R)
574	01	00181	3270033B			LW,7	INDA	IA(0)
575	01	00182	0F0001F0			XPSD,0	ERR0R	TEST INDIRECT ADDRESS WORD
576						PAGE		
577	01	00183	3250036D			LW,5	IXID	PICK UP INDEX IDENTIFIER
578	01	00184	3260045B			LW,6	TEST+3	IX(R)
579	01	00185	32700448			LW,7	TABLE+4	IX(0)
580	01	00186	0F0001F0			XPSD,0	ERR0R	TEXT INDEX R1
581	01	00187	48500361			E0R,5	SIX	SET INDEX 7 IDENTIFIER
582	01	00188	3260045F			LW,6	TEST+7	IX7(R)
583	01	00189	32700362			LW,7	ONE	IX7(0)
584	01	0018A	0F0001F0			XPSD,0	ERR0R	TEST INDEX R7
585	01	0018B	3250036E			LW,5	PSDWID	PICK UP PROGRAM STATUS IDENTIFIER
586	01	0018C	32600464			LW,6	TEST+12	PSW1(R)
587	01	0018D	32700447			LW,7	TABLE+3	PSW1(0)
588	01	0018E	0F0001F0			XPSD,0	ERR0R	TEST PSW1
589	01	0018F	65500190			BIR,5	*+1	INCREMENT PSDW IDENTIFIER
590	01	00190	32600465			LW,6	TEST+13	PSW2(R)
591	01	00191	32700451			LW,7	TABLE+13	PSW2(0)
592	01	00192	0F0001F0			XPSD,0	ERR0R	TEST PSW2
593						PAGE		
594	01	00193	3250036F			LW,5	REGID	PICK UP REGISTER IDENTIFIER
595	01	00194	48500360			E0R,5	CEE	SET REGISTER ADDRESS =C(12)
596	01	00195	3260045C			LW,6	TEST+4	R(R)
597	01	00196	32700449			LW,7	TABLE+5	R(0)
598								
599	01	00197	32500445			LW,5	TABLE+1	
600	01	00198	315010F7			CW,5	LMS1+1	*E
601	01	00199	683001A3			BE	MISSLMS	*E
602	01	0019A	0F0001F0			XPSD,0	ERR0R	TEST REGISTER
603	01	0019B	6550019C			BIR,5	*+1	INCREMENT REGISTER IDENTIFIER
604	01	0019C	3260045D			LW,6	TEST+5	RU1(R)
605	01	0019D	3270044D			LW,7	TABLE+9	RU1(0)
606	01	0019E	0F0001F0			XPSD,0	ERR0R	TEST REGISTER U 1
607	01	0019F	32500370			LW,5	MEMID	PICK UP MEMORY IDENTIFIER
608	01	001A0	32600460			LW,6	MEMORY	MW(R)
609	01	001A1	3270044B			LW,7	TABLE+7	MW(0)
610	01	001A2	0F0001F0			XPSD,0	ERR0R	TEST MEMORY WORD
611								
612	01	001A3	32500370		* MISSLMS	LW,5	MEMID	*E
613	01	001A4	32600461			LW,6	MEMORY+1	MW+1(R)
614	01	001A5	3270044F			LW,7	TABLE+11	MW+1(0)
615	01	001A6	0F0001F0			XPSD,0	ERR0R	TEST MEMORY WORD + 1
616	01	001A7	325003C0			LW,5	ZER0	SET IDENTIFIER FOR REPORT
617	01	001A8	326001B5			LW,6	ERRIND	
618	01	001A9	692001AC			BCS,2	*+3	
619	01	001AA	6C000000	A		RD,0	0	READ SENSE SWITCHES
620	01	001AB	692001FB			BCS,2	ZR	SS3 # REPORT
621	01	001AC	326003C0			LW,6	BYTE	
622	01	001AD	356001B5			STW,6	ERRIND	
623	01	001AE	6C000040	A	END	WD,0	X'40'	TURN OFF ALARM
624	01	001AF	32200473			LW,2	ERR0RS	C(R2) WOULD EQUAL 1 IF OBJECT INST
625								WAS A BRANCH TO END
626	01	001B0	653001B1			BIR,3	*+1	INCREMENT MODULE COUNTER
627	01	001B1	6C000000	A		RD,0	0	READ SENSE SWITCHES
628	01	001B2	69C00110			BCS,12	CYCLE	LOOP ON CURRENT TEST (SS1 OR 2)
629	01	001B3	32100126			LW,1	FROM	RESTORE NEW LIST ADDRESS

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
630	01	001B4	0E00046A			LPSD,0	MODULE	UPDATE POINTER
631	01	001B5	00000000	A	ERRIND	DATA	0	
632						PAGE	8	
633						BOUND	8	STORAGE OF DATA UTILIZED BY-
634	01	001B6	00000000	A	MEMOUT	DATA	0,0	THE AUTOMATIC SHORT LOOP *B
	01	001B7	00000000	A				
635	01	001B8	00000000	A	ROUTPUT	DATA	0,0	*B
	01	001B9	00000000	A				
636	01	001BA	00000000	A	RINPUT	DATA	0,0	*B
	01	001BB	00000000	A				
637					*			SET XPSD FOR N8A TRAP
638	01	001BC	3250035F		SIGNAB	LW,5	I9	SET I9=1
639	01	001BD	4850034E		RIGNAB	EOR,5	NA8XD	SET I9=0
640	01	001BE	35500040			STW,5	NA8TR	
641	01	001BF	48400346			EOR,4	NA8AD	
642	01	001C0	35400060			STW,4	NA8+2	SET PSW1 BITS 0=11 FOR NAB TRAP
643	01	001C1	68000136			BCR,0	SETPSW	
644					*			SET PSW1 BITS 0=11 FOR UII TRAP
645	01	001C2	48400348		UIISW	EOR,4	UIIAD	
646	01	001C3	35400074			STW,4	UII+2	
647	01	001C4	68000136			BCR,0	SETPSW	RETURN TO LONG
648					*			SET PSW1 BITS 0=11 FOR SL TRAP
649	01	001C5	48400347		SLSW	EOR,4	SLAD	
650	01	001C6	3540007A			STW,4	SL+2	
651	01	001C7	68000136			BCR,0	SETPSW	
652					*			SET PSW1 BITS 0=11 FOR EXP8 TRAP
653					*			* THIS ROUTINE ALLOWS VERIFICATION OF A TRAP TO THE PROPER LOCATION *B
654					*			* AND THE RETURNED COND CODE. IT DOES NOT VERIFY THE ADDRESS OF THE *B
655					*			* INSTRUCTION THAT TRAPPED. (SEE THE FOLLOWING ROUTINE) *B
656	01	001C8	48400344		FXP8SW	EOR,4	FXP8AD	
657	01	001C9	35400080			STW,4	FXP8+2	
658	01	001CA	4850038E			EOR,5	MASK+1	8P CODE FOR XPSD INST *B
659	01	001CB	485001CE			EOR,5	FXP8A	CREATES AN INST XPSD,0 FXP8 *B
660	01	001CC	35500043			STW,5	FXP8TR	TO TRAP LOCATION *B
661	01	001CD	68000136			BCR,0	SETPSW	
662	01	001CE	0000007E		FXP8A	DATA	FXP8	ADDRESS OF TRAP PROCESSOR *B
663					*			SET PSW1 BITS 0=11 FOR FLPF TRAP
664	01	001CF	48400343		FLPFSW	EOR,4	FLPFAD	
665	01	001D0	35400086			STW,4	FLPF+2	
666	01	001D1	680001C3			BCR,0	UIISW+1	
667					*			THIS ROUTINE ALLOWS VERIFICATION OF THE PSDW BUT DOES NOT CHECK *B
668					*			THAT THE INST CAUSED THE CORRECT TRAP TO OCCUR. (SEE ABOVE ROUTINE) *B
669	01	001D2	48500047		FXP8PSDW	EOR,5	BRANCH	XPSD,8 RETURN *B
670	01	001D3	35500043			STW,5	FXP8TR	TO TRAP LOCATION *B
671	01	001D4	68000136			B	SETPSW	*B
672						PAGE		
673					*			SET XPSD FOR CAL1
674	01	001D5	3250035F		S19CL1	LW,5	I9	SET I9=1
675	01	001D6	4850034A		R19CL1	EOR,5	CAL1XD	SET I9=0
676	01	001D7	35500048			STW,5	CAL1TR	
677	01	001D8	4840033E			EOR,4	CAL1AD	
678	01	001D9	35400098			STW,4	CAL1+2	
679	01	001DA	68000136			BCR,0	SETPSW	
680					*			SET XPSD FOR CAL2
681	01	001DB	3250035F		S19CL2	LW,5	I9	SET I9=1
682	01	001DC	48500348		R19CL2	EOR,5	CAL2XD	SET I9=0
683	01	001DD	35500049			STW,5	CAL2TR	
684	01	001DE	4840033F			EOR,4	CAL2AD	
685	01	001DF	354000AC			STW,4	CAL2+2	
686	01	001E0	68000136			BCR,0	SETPSW	
687					*			SET XPSD FOR CAL3
688	01	001E1	3250035F		S19CL3	LW,5	I9	SET I9=1
689	01	001E2	4850034C		R19CL3	EOR,5	CAL3XD	SET I9=0
690	01	001E3	3550004A			STW,5	CAL3TR	
691	01	001E4	48400340			EOR,4	CAL3AD	
692	01	001E5	354000C0			STW,4	CAL3+2	
693	01	001E6	68000136			BCR,0	SETPSW	
694					*			SET XPSD FOR CAL4
695	01	001E7	3250035F		S19CL4	LW,5	I9	SET I9=1
696	01	001E8	4850034D		R19CL4	EOR,5	CAL4XD	SET I9=0
697	01	001E9	3550004B			STW,5	CAL4TR	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
698	01	001EA	4840C341			EBR,4	CAL4AD	
699	01	001EB	354000C4			STW,4	CAL4+2	
700	01	001EC	68000136			HCR,0	SETPSW	
701								** STORE COND CBDE INTO PSW1 IN (TABLE+3) THIS IS NECESSARY FOR TEST OF
702								** FARWD WHICH ALWAYS READS THE SENSE SWITCHES, A FALSE ERROR MAY OCCUR
703								** IF SENSE SWITCHES ARE CHANGED DURING THIS SETUP.
704	01	001ED	6C000000	A	FARWD	RD,0	0	READ SENSE SWITCHES
705	01	001EE	74000447			STCF	TABLE+3	
706	01	001EF	6E000136			B	SETPSW	
707						PAGE		
708						BBOUND	8	
709						PAGE		
710								DECIMAL=ERROR
711	01	001F0	00000000	A	ERROR	PZE		
712	01	001F1	00000000	A		PZE		
713	01	001F2	000001F4			PZE,0	#+2	
714	01	001F3	00000000	A		PZE		
715	01	001F4	32800006	A		LW,8	6	PICK UP RESULT
716	01	001F5	48800007	A		EBR,8	7	COMPARE WITH PREDERMINED RESULT
717	01	001F6	693001F8			BCS,3	TSTDVC	DIFF # 0
718	01	001F7	0E0001F0			LPSD,0	ERROR	
719	01	001F8	652001F9		TSTDVC	BIR,2	#+1	INCREMENT ERROR COUNTER
720	01	001F9	35200473			STW,2	ERRORS	KEEP A RUNNING COUNT
721	01	001FA	6D000041	A		WD,0	X'41'	TURN ON AUDIO ALARM
722	01	001FB	32B002E6		ZR	LW,11	IOM	
723					**			IOM HAS I0 INTERRUPT BIT IF I0 COMPATIBILITY IS IN USE
724	01	001FC	6DB01500	A		WD,11	X'1500'	DISABLE I0 INTERRUPT
725	01	001FD	32B0035D			LW,11	6Q3	
726	01	001FE	35B001B5			STW,11	ERRIND	SET ERROR INDICATOR TO ALLOW RETURN
727					*			TO BYPASS SS 3 SETTING
728	01	001FF	6E000000	A	TESTI0	AIO,0	0	CLEAR INTERRUPT PENDING
729	01	00200	0DB0037B			TIO,11	*TYPE	
730	01	00201	68C0020E			BCR,12	EDIT	GO IF I0 ADDR RECG AND SIO POSSIBLE
731	01	00202	684001FF			BCR,4	TESTI0	REPEAT TIO IF SIO IS BUSY
732	01	00203	68800205			BCR,8	#+2	SIO NOT CURRENTLY POSSIBLE
733	01	00204	68000208			B	HLTEST	I0 ADDRESS NOT RECOGNIZED
734	01	00205	48B0035D			AND,11	6Q3	SAVE OPERATIONAL STATE BITS
735	01	00206	48B0035D			EBR,11	6Q3	
736	01	00207	683001FF			BEZ	TESTI0	DEVICE BUSY
737	01	00208	6C000000	A	HLTEST	RD,0	0	READ SENSE SWITCHES
738	01	00209	6910020B			BCS,1	N0HALT	
739	01	0020A	2E000000	A		WAIT		COMMON ERROR HALT
740	01	0020B	32B002E6		N0HALT	LW,11	IOM	
741	01	0020C	6DB01400	A		WD,11	X'1400'	ENABLE I0 INTERRUPT
742	01	0020D	0E0001F0			LPSD,0	ERROR	
743						PAGE		
744					*			EDIT=LEVEL 3
745	01	0020E	32C00359		EDIT	LW,12	STRMG1	SET STORAGE WORD
746	01	0020F	32900365			LW,9	NEG8	
747	01	00210	32A00005	A		LW,10	5	TEST R5=0
748	01	00211	69300213			BCS,3	REPORT+1	DISPLAY
749	01	00212	32900383		REPORT	LW,9	NEG4	
750	01	00213	32A00351			LW,10	L0ADR	SET REGISTER PICKUP
751	01	00214	35A00215			STW,10	LDREG	
752	01	00215	32A00001	A	LDREG	LW,10	1	PICK UP REGISTER 1 THRU 8(DIS) OR 4
753	01	00216	35A00476			STW,10	WORD	
754	01	00217	35900472			STW,9	COUNT	
755	01	00218	32F00385			LW,15	NEG2	SET WORD COUNT(M)=2
756	01	00219	32000352			LW,0	LWN	SET N=4,4
757	01	0021A	32A00354			LW,10	LWFRM	SET FRAME = F0F0F0F0, F0F0F0F0
758	01	0021B	32B00338			LW,11	ANFR0	SET CHAR POSITIONS 1234,5678
759	01	0021C	48900362			AND,9	0NE	TEST COUNT EVEN
760	01	0021D	69300222			BCS,3	0DD	
761	01	0021E	32F00364		EVEN	LW,15	NEG3	SET WORD COUNT(M)=3
762	01	0021F	32000353			LW,0	LWN2	SET N=2,4,2
763	01	00220	32A00355			LW,10	LWFRM2	SET FRAME=4040F0F0,F0F0F0F0,F0F04040
764	01	00221	32B00339			LW,11	ANFR2	SET CHAR POSITIONS 12,3456,78
765	01	00222	32E0033A		0DD	LW,14	ANMK	SET DIGIT +ICK = BITS 0-3, 4-7, ETC.
766	01	00223	35000226		WORDS	STW,0	SETN	SET NUMBER PICK UP
767	01	00224	35A00227			STW,10	SETFRM	SET FRAME PICK UP
768	01	00225	35C00242			STW,12	STRWD	SET STORAGE LOCATION

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
769	01	00226	32000383		SETN	LW,0	NUMBER	SET NUMBER
770	01	00227	32D00388		SETFRM	LW,13	FRAME	SET FRAME (FINAL CHAR-BYTE POSITION)
771	01	00228	35B0023D		BYTES	STW,11	ANDF	SET FILTER
772	01	00229	35D00475			STW,13	WK0	SAVE FRAME
773	01	0022A	35E00232			STW,14	ANDM	SET MASK (ORIGINAL CHAR POSITION)
774	01	0022B	32A0034F			LW,10	LWBIT	SET BIT PICK UP
775	01	0022C	32C00383			LW,12	NEG4	SET BIT COUNT
776	01	0022D	32D003C0			LW,13	ZER0	SET CHAR GENERATOR TO ZERO
777							PAGE	
778	01	0022E	35A00230		BITS	STW,10	LWB	
779	01	0022F	35A00235			STW,10	LWBT	
780	01	00230	3290037E		LWB	LW,9	BIT	PICK UP BIT 1,2,40R 8
781	01	00231	4B900476			AND,9	WORD	(BIT)*(WORD)
782	01	00232	4B90038D		ANDM	AND,9	MASK	(BIT)*(WORD)*(MASK)
783	01	00233	69300235			BCS,3	LWBT	LWBT IF WORD HAS BIT IN MASK POSITION
784	01	00234	0E000468			LPSD,0	BUMP	
785	01	00235	3290037E		LWBT	LW,9	BIT	PICK UP BIT
786	01	00236	48D00009	A		EOR,13	9	MERGE BIT WITH CHAR BEING CONSTRUCTED
787	01	00237	65A00238		BUMPER	BIR,10	#+1	INCREMENT BIT PICK UP
788	01	00238	65C0022E			BIR,12	BITS	CONTINUE CHAR CONSTRUCTION
789	01	00239	4BD00394			AND,13	MASK+7	PICK OF BINARY 4 BIT CHAR
790	01	0023A	48D00350			EOR,13	LWBYTE	CONSTRUCT BYTE PICK UP WORD
791	01	0023B	35D0023C			STW,13	LWBY	
792	01	0023C	32D003C0		LWBY	LW,13	BYTE	PICK UP CONVERTED BYTE
793	01	0023D	4BD00395		ANDF	AND,13	FILTER	SELECT DESIRED BYTE
794	01	0023E	48D00475			EOR,13	WK0	MERGE BYTE INTO CONVERTED WORD
795	01	0023F	65B00240			BIR,11	#+1	INCREMENT CONVERTED BYTE POSITION
796	01	00240	65E00241			BIR,14	#+1	INCREMENT SELECTED CHAR POSITION
797	01	00241	65000228			BIR,0	BYTES	TEST FOR N CHAR'S
798	01	00242	35D0042F		STRWD	STW,13	IMAGE+1	STORE CONVERTED WORD
799	01	00243	32000226			LW,0	SETN	SET NUMBER PICK UP
800	01	00244	32A00227			LW,10	SETFRM	SET FRAME PICK UP
801	01	00245	32C00242			LW,12	STRWD	PICK UP STORE WORD
802	01	00246	65000247			BIR,0	#+1	INCREMENT NUMBER PICK UP
803	01	00247	65A00248			BIR,10	#+1	INCREMENT FRAME PICK UP
804	01	00248	65C00249			BIR,12	#+1	INCREMENT STORE LOCATION
805	01	00249	65F00223			BIR,15	WORDS	INCREMENT M = BRANCH IF M NOT ZERO
806	01	0024A	32900472			LW,9	COUNT	SET COUNT
807	01	0024B	32A00215			LW,10	LDREG	SET REGISTER PICK UP
808	01	0024C	65A0024D			BIR,10	#+1	INCREMENT REGISTER PICK UP
809	01	0024D	65900214			BIR,9	LDREG-1	BRANCH TO LDREG IF COUNT NOT ZERO
810							PAGE	
811					*			OUTPUT=LEVEL 3
812	01	0024E	32F00369			LW,15	LINE	LINE COUNT (=51)
813	01	0024F	32E00363			LW,14	FIRST	=2 FIRST TIME
814	01	00250	3200037B			LW,0	TYPE	TEST FOR OUTPUT DEVICE
815	01	00251	69100266				LP8	
816	01	00252	65E00256			BIR,14	SKIP6	FIRST TIME THRU
817	01	00253	65F0025B			BIR,15	LINOUT	LINE COUNT NOT ZERO
818	01	00254	320003D0			LW,0	PSIXCR	
819	01	00255	0F00027C			XPSD,0	PRINT	OUTPUT 6 CAR. RET.
820	01	00256	320003D1		SKIP6	LW,0	PTITLE	
821	01	00257	0F00027C			XPSD,0	PRINT	NEW PAGE TITLE
822	01	00258	320003D2			LW,0	PHEAD	
823	01	00259	0F00027C			XPSD,0	PRINT	NEW HEADING
824	01	0025A	32F00368			LW,15	NEG51	RESET LINE COUNT
825	01	0025B	320003D4		LINOUT	LW,0	PLONGL	SET UP DISPLAY PRINTOUT
826	01	0025C	32A00005	A		LW,10	5	PICK UP IDENTIFIER
827	01	0025D	6930025F			BCS,3	10	
828	01	0025E	320003D3			LW,0	PSHRTL	SET UP RECORD PRINTOUT
829	01	0025F	0F00027C		10	XPSD,0	PRINT	
830	01	00260	35F00369			STW,15	LINE	SAVE NEW LINE COUNT
831	01	00261	35E00363			STW,14	FIRST	SAVE NEW FIRST PASS INDICATOR
832	01	00262	6D000040	A		WD,0	X'40'	TURN OFF ALARM
833	01	00263	0E000264			LPSD,0	GETOUT	
834							PAGE	
835							BOUND 8	
836	01	00264	00300208		GETOUT	PZE,3	HLTEST	
837	01	00265	00000000	A		PZE		
838	01	00266	CEB0037B		LP8	TDV,11	*TYPE	
839	01	00267	68C0026A			BCR,12	#+3	GO IF IOP AND DEVICE ADDR RECOG

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
840	01	00268	68400266			BCR,4	*+2	GO IF SI0P BUSY
841	01	00269	68000260			B	I0+1	I0 OPERATION NOT POSSIBLE
842	01	0026A	35B00377			STW,11	TEMP	
843	01	0026B	4BB00376			AND,11	MOTION	PAPER IS MOVING
844	01	0026C	69300266			BNEZ	LP0	LOOP TILL PAPER STOPS
845	01	0026D	32B00377			LW,11	TEMP	
846	01	0026E	4BB00378			AND,11	T0P	CHECK FOR T0P OF F0RM
847	01	0026F	69300278			BNEZ	LPT0P	OUTPUT TITLE AND HEADING
848	01	00270	65E00276			BIR,14	G0T0P	GO TO T0P OF F0RM IF FIRST PASS
849	01	00271	32000307		LPMSG	LW,0	LPERR	ERROR MSG CDA
850	01	00272	32A00005	A		LW,10	5	PICK UP IDENTIFIER
851	01	00273	69300275			BCS,3	*+2	REPORT
852	01	00274	32000308			LW,0	LPREP0RT	REPORT MSG CDA
853	01	00275	6800025F			B	I0	
854	01	00276	32000305		G0T0P	LW,0	LPG0T0P	GO TO T0P OF F0RM
855	01	00277	0F00027C			XP0D,0	PRINT	
856	01	00278	32000306		LPT0P	LW,0	LPF0RMAT	PRINT TITLE AND HEADING
857	01	00279	0F00027C			XP0D,0	PRINT	
858	01	0027A	68000271			B	LPMSG	
859							PAGE	
860					*			PRINT-LEVEL 4
861						BOUND 8		
862	01	0027C	00000000	A	PRINT	PZE		
863	01	0027D	00000000	A		PZE		
864	01	0027E	00000280			PZE,0	*+2	
865	01	0027F	00000000	A		PZE		
866	01	00280	33101E5B			MTW,1	LASLMS2	*E
867	01	00281	CC80037B		BUZY	SI0,11	*TYPE	OUTPUT MSG
868	01	00282	68C0028A			BCR,12	D0NEMSG	SI0 ACCEPTED
869	01	00283	68400281			BCR,4	BUZY	SI0P BUSY, REPEAT SI0
870	01	00284	68800286			BCR,8	*+2	GO IF SI0 NOT ACCEPTED
871	01	00285	68000292			B	EXITI0	I0 ADDR NOT RECOGNIZED
872	01	00286	4BB0035D			AND,11	603	SAVE OPERATIONAL STATE BITS
873	01	00287	48B0035D			E0R,11	603	
874	01	00288	68300281			BEZ	BUZY	DEVICE BUSY, REPEAT SI0
875	01	00289	68000292			B	EXITI0	DEVICE NOT OPERATIONAL OR UNAVAIL
876	01	0028A	CDB0037B		D0NEMSG	TI0,11	*TYPE	
877	01	0028B	68C00292			BCR,12	EXITI0	
878	01	0028C	6840028A			BCR,4	D0NEMSG	SI0P BUSY
879	01	0028D	6880028F			BCR,8	*+2	ACCEPTABLE SI0 NOT CURRENTLY POSS
880	01	0028E	68000292			B	EXITI0	I0 ADDR NOT RECOGNIZED
881	01	0028F	4BB0035D			AND,11	603	SAVE OPERATIONAL STATE BITS
882	01	00290	48B0035D			E0R,11	603	
883	01	00291	6830028A			BEZ	D0NEMSG	DEVICE BUSY, REPEAT TI0
884	01	00292	0E00027C		EXITI0	LP0D,0	PRINT	
885	01	00293	3220029A		SETRPLY	LW,2	REPLAY	BRANCH TO AUTO IS STORED INTO LOC.26
886	01	00294	35200326	A		STW,2	38	
887	01	00295	6C000000	A		RD,0	0	READ THE SENSE SWITCHES
888	01	00296	68800100			BCR,8	AUTO	GO IF SS1 IS OFF
889					*****	PREVENT COUNTER INTERRUPT IMPLEMENTATION	*****	TURN SENSE SWITCH 1 OFF.
890	01	00297	2E000000	A		WAIT	0	
891	01	00298	322003C0			LW,2	ZER0	
892	01	00299	35200372			STW,2	CPINTM	
893	01	0029A	68000100		REPLAY	B	AUTO	
894						BOUND	8	
895						PAGE		
896					** TEST TO SEE IF	FL0ATING P0INT 0PTION IS INSTALLED (FIRST PASS ONLY)		
897	01	0029C	00000000	A	FLTRAP	DATA	0,0,FLNIN,0	
	01	0029D	00000000	A				
	01	0029E	000002A8	A				
	01	0029F	00000000	A				
898	01	002A0	21310C00	A	D0NE	CI,3	X'10000'	
899	01	002A1	6930032A			BNE	INITIATE	CHECK FOR IMPLEMENTING AUTO SHORT *B
900	01	002A2	320002FA			LW,0	NIMP	SETUP TRAP LOCATION
901	01	002A3	35000041			STW,0	UIITR	
902	01	002A4	32C003C1			LW,12	BYTE+1	
903	01	002A5	3DC003C1		FL0AT	FAS,12	BYTE+1	
904	01	002A6	320002FB			LW,0	PFLBATP	MSG FL0ATING P0INT 0PTION IS IN
905	01	002A7	680002AB			B	FLPRINT	
906	01	002A8	320002A5		FLNIN	LW,0	FL0AT	COMES HERE IF TRAP 0CCURRED AT X281
907	01	002A9	35001651			STW,0	NFAIMPO1+1	ALLOW TEST 0F TRAP EACH TIME

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
908	01	002AA	320002FC			LW,0	PNFLOATP	MSG FLOATING POINT NOT INSTALLED
909	01	002AB	0F00027C		FLPRINT	XPSD,0	PRINT	OUTPUT THE SELECTED MSG
910	01	002AC	320002F9			LW,0	IMP	
911	01	002AD	35000041			STW,0	UIITR	RESTORE ORIG XPSD TO LOC 41
912								* TEST FOR NON-EXISTENT MEMORY. IF ANY, SETUP BAL AND ANLZ TESTS
913	01	002AE	32000318			LW,0	RETADDR	MODIFY RETURN TO ENTER THIS
914	01	002AF	35000466			STW,0	RETURN+2	ROUTINE WHEN A TRAP OCCURS
915	01	002B0	22100FFF	A		LI,1	4095	ADDRESS
916	01	002B1	B2000001	A		LW,0	*1	TRY TO FIND MEM
917	01	002B2	30100333			AW,1	MINCR	ADD 4096 FOR NEXT 4K
918	01	002B3	21120FFF	A		CI,1	X'20FFF'	> POSSIBLE MEMORY SIZE
919	01	002B4	6830010F			BE	CYCLE=1	NO NON-EXISTENT MEMORY.
920	01	002B5	680002B1			B	*+4	TRY NEXT 4K
921							PAGE	
922								*THE FOLLOWING ROUTINE IMPLEMENTS THE COUNT PULSE INTERRUPTS AFTER X'20
923								*PASSES WITHOUT ERROR
924	01	002B6	31300379		RTC	CW,3	MAXCNT	
925	01	002B7	6930010F			BNE	CYCLE=1	
926	01	002B8	21200000	A		CI,2	0	
927	01	002B9	6930010F			BNE	CYCLE=1	
928	01	002BA	32000372			LW,0	CPINTM	
929	01	002BB	6830010F			BEZ	CYCLE=1	DO NOT OUTPUT MSG
930	01	002BC	320003D9			LW,0	PRTCMSG	
931	01	002BD	0F00027C			XPSD,0	PRINT	
932	01	002BE	32000391			LW,0	MASK+4	BITS FOR COUNTER 1,2,3 AND 4
933	01	002BF	35000371			STW,0	CPINT	STORED INTO CPINT
934	01	002C0	6800010F		XRTC	B	CYCLE=1	RESUME WITH FIRST MODULE
935							PAGE	
936								**
937								** ENTER AT THIS POINT TO BEGIN IO COMPATIBILITY TEST
938								** ENTER THE IO DEVICE ADDRESS IN MEMORY LOCATION X'10'.
939								**
940	01	002D0				BRG	X'2D0'	
941	01	002D0						
941	01	002D0	680002D1		ZI0AIN	B	*+1	
942	01	002D1	32E00010	A		LW,14	16	DEVICE ADDR IN X'10'
943	01	002D2	35E002D4			STW,14	ZI0A	SAVE
944	01	002D3	680002D5			B	SETINTR	
945	01	002D4	00000002	A	ZI0A	DATA	2	NORMAL LINE PRINTER ADDR
946	01	002D5	22E00020	A	SETINTR	LI,14	X'20'	
947	01	002D6	35E002E6			STW,14	I0M	PUT IO INTERRUPT BIT IN I0M
948	01	002D7	6DE01200	A		WD,14	X'1200'	ARM AND ENABLE IO INTERRUPT
949	01	002D8	670002E0			EXU	AIO	AIO INST TO CLEAR ANY PENDING INTR
950	01	002D9	670002E2			EXU	AIO+2	CDW ADDR
951	01	002DA	670002E3			EXU	AIO+3	SIO
952	01	002DB	6800010F			B	CYCLE=1	START A NEW PASS
953						BBOUND	8	
954	01	002DC	0000010F		I0INTR	DATA	CYCLE=1,0,AIO,0	ENTRY TO INTERRUPT ROUTINE
	01	002DD	00000000	A				
	01	002DE	000002E0					
	01	002DF	00000000	A				
955	01	002E0	6E000000	A	AIO	AIO,0	0	
956	01	002E1	350002E8			STW,0	SAVE0	
957	01	002E2	320002E7			LW,0	PI0CMP	COMMAND DOUBLEWORD ADDRESS
958								*** CDW SPECIFIES A SIMPLE WRITE ORDER. OPERATOR MAY CHANGE ANY PART OF
959								*** THE CDW PROVIDED THE FIRST 8K OF MEMORY IS NOT DISTURBED BY A READ
960								*** ORDER, CDW IS IN X'2AC' S X'2AD'
961	01	002E3	CC0002D4			SIO,0	*ZI0A	
962	01	002E4	320002E8			LW,0	SAVE0	RESTORE C(RO)
963	01	002E5	0EB002DC			LPSD,11	I0INTR	RETURN TO PROGRAM
964	01	002E6	00000000	A	I0M	DATA	0	CHANGED TO X'20' FOR IO COMPAT.
965	01	002E7	00000175		PI0CMP	P	I0CMP	CDA
966	01	002E8	00000000	A	SAVE0	DATA	0	
967							PAGE	
968							BBOUND	8
969	01	002EA	050008B1		I0CMP	GEN,8,24	5,BA(COMP)+1	
970	01	002EB	50000C31	A		GEN,4,28	5,49	IBCEZ & ICE + BYTE COUNT
971	01	002EC	31154040	A	COMP	TEXTC	'N	IO COMPATIBILITY TEST IS IN PROGRESS'
	01	002ED	40404040	A				
	01	002EE	40404040	A				
	01	002EF	4040C9D6	A				

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
	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				
972	01	002F9	0F000072		IMP	XPSD,0	UII	
973	01	002FA	0F00029C		NIMP	XPSD,0	FLTRAP	
974	01	002FB	0000017F		PFLB ATP	P	FLB ATP	
975	01	002FC	00000186		PNFLB ATP	P	NFLB ATP	
976						PAGE		
977						BBOUND	8	
978	01	002FE	05000C01		FLB ATP	GEN,8,24	5,8A(FLM)+1	*B
979	01	002FF	0800002F	A		GEN,8,24	8,47	*B
980	01	00300	2F154040	A	FLM	TEXTC	'N	FLOATING 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				
981						BBOUND	8	
982	01	0030C	05000C39		NFLB ATP	GEN,8,24	5,8A(NFLM)+1	*B
983	01	0030D	08000030	A		GEN,8,24	8,48	*B
984	01	0030E	30154040	A	NFLM	TEXTC	'N	FLOATING 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				
985						BBOUND	4	
986	01	0031B	0000031C		RETADDR	DATA	\$\$+1	*B
987						* TRAP COMES HERE. IMPLEMENT TESTS		*B
988	01	0031C	32000382		LW,0	BDDBALL		*B
989	01	0031D	35000466		STW,0	RETURN+2		RESTORE SPURIOUS TRAP CAPABILITY *B
990	01	0031E	320008B5		LW,0	BAL01+1		BAL,12 BRANCH *B
991	01	0031F	49000001	A	BR,0	1		PUT IN NON-EXISTENT MEMORY REF *B
992	01	00320	350008D3		STW,0	BAL05+1		*B
993	01	00321	320004E7		LW,0	LW03+1		LW,12 *IA *B
994	01	00322	49000001	A	BR,0	1		PUT IN NON-EXISTENT MEMORY REF *B
995	01	00323	35000D14		STW,0	ANLZ08+6		MEMORY IN *B
996	01	00324	35000D15		STW,0	ANLZ08+7		MEMORY OUT *B
997	01	00325	32000D17		LW,0	ANLZ09+1		ANLZ,12 MEMORY *B
998	01	00326	35000D0F		STW,0	ANLZ08+1		STORE INTO ANLZ08 TEST *B
999	01	00327	6800010F		B	CYCLE-1		NEXT PASS *B
1000	01	00328	00230000	A	I0CBUNT	DATA	X'1230000'	35 ERROR FREE PASSES
1001	01	00329	001E0000	A		DATA	X'1E0000'	PASS COUNT OF 3
1002	01	0032A	31300329		INITIATE	CW,3	\$\$+1	IMPLEMENT AUTO SHORT IF EQUAL *B
1003	01	0032B	69300334			BNE	COMPAT	*B
1004	01	0032C	21200000	A		CI,2	0	CHECK FOR ERRORS *B
1005	01	0032D	6930010F			BNE	CYCLE-1	START ANOTHER PASS *B
1006	01	0032E	22100064	A		LI,1	100	ITERATION COUNT *B
1007	01	0032F	35100331			STW,1	ITERATE	*B
1008	01	00330	6800010F			B	CYCLE-1	START A PASS UTILIZING THE AUTO- *B
1009					*			MATIC SHORT LOOP *B
1010	01	00331	00000000	A	ITERATE	DATA	0	ITERATION COUNT *B

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS	
1011	01	00332	680001AE		BEND	B	END	USED DURING INITIALIZE	*B
1012	01	00333	00001000	A	MINCR	DATA	4096	CONSTANT	
1013	01	00334	49300002	A	COMPAT	BR#3	2	ERROR COUNT BRID WITH PASS COUNT	*B
1014	01	00335	31300328			CW#3	100COUNT		*B
1015	01	00336	683002D5			BE	SETINTR	IMPLEMENT IO COMPATIBILITY	*B
1016	01	00337	68000286			B	RTC		*B
1017							PAGE		
1018					*			CONSTANTS AND WORKING STORAGE	
1019	01	00338	4BD00395		ANFR0	AND,13	FILTER	PICK OFF CONVERTED BYTE	
1020	01	00339	4BD00397		ANFR2	AND,13	FILTER+2		
1021	01	0033A	4B90038D		ANMK	AND,9	MASK	PICK OFF CHAR. TO BE CONVERTED	
1022	01	0033B	00000460		INDA	PZE,0	MEMORY	INDIRECT ADDRESS	
1023	01	0033C	00000169		L0C2AD	PZE,0	L0C+2		
1024	01	0033D	00000167		L0CADD	PZE,0	L0C		
1025	01	0033E	0000009A		CAL1AD	PZE,0	CAL1+4		
1026	01	0033F	000000AE		CAL2AD	PZE,0	CAL2+4		
1027	01	00340	000000C2		CAL3AD	PZE,0	CAL3+4		
1028	01	00341	000000D6		CAL4AD	PZE,0	CAL4+4		
1029	01	00342	0000008E		DFAD	PZE,0	DF+4		
1030	01	00343	00000088		FLPFAD	PZE,0	FLPF+4		
1031	01	00344	00000082		FXPAD	PZE,0	FXP0+4		
1032	01	00345	00000460		MEMAD	PZE,0	DA(MEMORY)		
1033	01	00346	00000062		NABAD	PZE,0	NAB+4		
1034	01	00347	0000007C		SLAD	PZE,0	SL+4		
1035	01	00348	00000076		UIIAD	PZE,0	UII+4		
1036	01	00349	00000094		WDTRAD	PZE,0	WDTR+4		
1037	01	0034A	0F000096		CAL1XD	XPSD,0	CAL1		
1038	01	0034B	0F0000AA		CAL2XD	XPSD,0	CAL2		
1039	01	0034C	0F0000BE		CAL3XD	XPSD,0	CAL3		
1040	01	0034D	0F0000D2		CAL4XD	XPSD,0	CAL4		
1041	01	0034E	0F00005E		NABXD	XPSD,0	NAB		
1042							PAGE		
1043	01	0034F	3290037E		LWBIT	LW,9	BIT	PICK UP MARCHING BITS	
1044	01	00350	32D003C0		LWBYTE	LW,13	BYTE	SELECT BYTE	
1045	01	00351	32A00001	A	L0ADR	LW,10	1	PICK UP REGISTERS FOR OUTPUT	
1046	01	00352	32000383		LWN	LW,0	NUMBER	PICK UP NUMBERS	
1047	01	00353	32000385		LWN2	LW,0	NUMBER+2		
1048	01	00354	32D00388		LWFRM	LW,13	FRAME	PICK UP FRAMES	
1049	01	00355	32D0038A		LWFRM2	LW,13	FRAME+2		
1050	01	00356	32400488		L0AD	LW,4	LIST	LOAD TRANSFER VEHICAL WITH DATA MODU	
1051	01	00357	0C0001AE		RETEND	PZE,0	END	RETURN TO END	
1052	01	00358	35400444		STORE	STW,4	TABLE	SET TABLE	
1053	01	00359	35D0042F		STRMG1	STW,13	IMAGE+1		
1054							PAGE		
1055	01	0035A	FF3FFFFF	A	LINKAD	DATA	X'FF3FFFFF'		
1056	01	0035B	FFF00000	A	C0ND	DATA	X'FFF00000'		
1057	01	0035C	FFFF0000	A	M1Q15	DATA	X'FFFF0000'		
1058	01	0035D	70000000	A	6Q3	GEN,4,28	7,0	CHECKS I/O FOR BUSY OR MANUAL	
1059	01	0035E	20000000	A	2Q3	DATA	X'20000000'		
1060	01	0035F	00400000	A	I9	DATA	X'400000'		
1061	01	00360	0000000C	A	CEE	DATA	12		
1062	01	00361	00000006	A	SIX	DATA	6		
1063	01	00362	00000001	A	ONE	DATA	1		
1064	01	00363	FFFFFFFE	A	FIRST	DATA	-2		
1065	01	00364	FFFFFFFD	A	NEG3	DATA	-3		
1066	01	00365	FFFFFFF8	A	NEG8	DATA	-8		
1067	01	00366	FFFFFFF4	A	NEG12	DATA	-12		
1068	01	00367	FFFFFFEC	A	NEG20	DATA	-20		
1069	01	00368	FFFFFFCD	A	NEG51	DATA	-51		
1070	01	00369	FFFFFFCD	A	LINE	DATA	-51		
1071	01	0036A	10000000	A	INSTID	I	1,0	INSTRUCTION	
1072	01	0036B	2C000168		XPSDID	I	2,L0C+1	LOCATION+1	
1073	01	0036C	30000000	A	IAID	I	3,0	INDIRECT ADDRESS	
1074	01	0036D	40000001	A	IXID	I	4,1	INDEX	
1075	01	0036E	50000001	A	PSDWID	I	5,1	PROGRAM STATUS DOUBLEWORD	
1076	01	0036F	60000000	A	REGID	I	6,0	REGISTERS	
1077	01	00370	7C000460		MEMID	I	7, MEMORY	MEMORY WORDS	
1078							PAGE		
1079					*CPINT	BECOMES	0000F000	AFTER X'20' ERROR FREE PASSES (SEE RTC)	
1080	01	00371	00000000	A	CPINT	DATA	0		
1081	01	00372	0000F000	A	CPINTM	DATA	X'F000'		

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
1082	01	00373	40404040	A	SPACE	TEXT	'	12 SPACES
	01	00374	40404040	A				
	01	00375	40404040	A				
1083	01	00376	08000000	A	MSTBN	DATA	X'8000000'	
1084	01	00377	00000000	A		TEMP	DATA 0	
1085	01	00378	10000000	A		TBP	DATA X'10000000'	
1086	01	00379	00200000	A		MAXCNT	DATA X'200000'	
1087	01	0037A	F1000000	A		PG8	DATA X'F1000000'	
1088	01	0037B	00000001	A		TYPE	DATA 1	OUTPUT MSG DEVICE ADDR
1089	01	0037C	00000810	A		PCPINT	DATA X'810'	
1090	01	0037D	00000020	A		IBINT	DATA X'20'	
1091	01	0037E	11111111	A		BIT	DATA X'11111111'	
1092	01	0037F	22222222	A			DATA X'22222222'	
1093	01	00380	44444444	A			DATA X'44444444'	
1094	01	00381	88888888	A			DATA X'88888888'	
1095	01	00382	00000477	A	80DBALL	DATA	SPURTRAP	
1096						PAGE		
1097	01	00383	FFFFFFFF	A	NUMBER	DATA	-4	
1098	01	00384	FFFFFFFF	A		DATA	-4	
1099	01	00385	FFFFFFFF	A		DATA	-2	
1100	01	00386	FFFFFFFF	A		DATA	-4	
1101	01	00387	FFFFFFFF	A		DATA	-2	
1102	01	00388	F0F0F0F0	A	FRAME	DATA	X'F0F0F0F0'	2 WORDS
1103	01	00389	F0F0F0F0	A		DATA	X'F0F0F0F0'	
1104	01	0038A	4040F0F0	A		DATA	X'4040F0F0'	3 WORDS
1105	01	0038B	F0F0F0F0	A		DATA	X'F0F0F0F0'	
1106	01	0038C	F0F04040	A		DATA	X'F0F04040'	
1107	01	0038D	F0000000	A	MASK	DATA	X'F0000000'	
1108	01	0038E	0F000000	A		DATA	X'F0000000'	
1109	01	0038F	00F00000	A		DATA	X'F000000'	
1110	01	00390	000F0000	A		DATA	X'F00000'	
1111	01	00391	0000F000	A		DATA	X'F000'	
1112	01	00392	00000F00	A		DATA	X'F00'	
1113	01	00393	000000F0	A		DATA	X'F0'	
1114	01	00394	0000000F	A		DATA	X'F'	
1115	01	00395	FF000000	A	FILTER	DATA	X'FF000000'	
1116	01	00396	00FF0000	A		DATA	X'FF0000'	
1117	01	00397	0000FF00	A		DATA	X'FF00'	
1118	01	00398	000000FF	A		DATA	X'FF'	
1119	01	00399	FF000000	A		DATA	X'FF000000'	
1120	01	0039A	00FF0000	A		DATA	X'FF0000'	
1121	01	0039B	0000FF00	A		DATA	X'FF00'	
1122	01	0039C	000000FF	A		DATA	X'FF'	
1123	01	0039D	FF000000	A		DATA	X'FF000000'	
1124	01	0039E	00FF0000	A		DATA	X'FF0000'	
1125						BIND	64	TO PROVIDE A 64 WORD BOUNDARY
1126					**			REQUIRED FOR THE FORMAT ROUTINE *B
1127						PAGE		
1128	01	003C0	00000000	A	BYTE	DATA	0	0
1129	01	003C1	01010101	A		DATA	X'01010101'	1
1130	01	003C2	02020202	A		DATA	X'02020202'	2
1131	01	003C3	03030303	A		DATA	X'03030303'	3
1132	01	003C4	04040404	A		DATA	X'04040404'	4
1133	01	003C5	05050505	A		DATA	X'05050505'	5
1134	01	003C6	06060606	A		DATA	X'06060606'	6
1135	01	003C7	07070707	A		DATA	X'07070707'	7
1136	01	003C8	08080808	A		DATA	X'08080808'	8
1137	01	003C9	09090909	A		DATA	X'09090909'	9
1138	01	003CA	31313131	A		DATA	X'31313131'	A
1139	01	003CB	32323232	A		DATA	X'32323232'	B
1140	01	003CC	33333333	A		DATA	X'33333333'	C
1141	01	003CD	34343434	A		DATA	X'34343434'	D
1142	01	003CE	35353535	A		DATA	X'35353535'	E
1143	01	003CF	36363636	A		DATA	X'36363636'	F
1144						PAGE		
1145					*			COMMAND PAIRS
1146	01	003D0	000001FD	A	PSIXCR	P	SIXCR	
1147	01	003D1	000001FE	A	PTITLE	P	TITLE	
1148	01	003D2	000001FF	A	PHEAD	P	HEAD	
1149	01	003D3	000001F0	A	PSHRTL	P	SHRTL	
1150	01	003D4	000001F1	A	PLONGL	P	LONGL	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
1204	01	00416	C5D9D9D6	A		DATA	X'C5D9D9D6'	
1205	01	00417	D940C4C9	A		DATA	X'D940C4C9'	
1206	01	00418	E2D7D3C1	A		DATA	X'E2D7D3C1'	
1207	01	00419	E8404040	A		DATA	X'E8404040'	
1208						PAGE		
1209	01	0041A	15404040	A	HDG	DATA	X'15404040'	
1210	01	0041B	40D3C9F2	A		DATA	X'40D3C9E2'	
1211	01	0041C	E3404040	A		DATA	X'E3404040'	
1212	01	0041D	4040C5D9	A		DATA	X'4040C5D9'	
1213	01	0041E	D9D6D9E2	A		DATA	X'D9D6D9E2'	
1214	01	0041F	40404040	A		DATA	X'40404040'	
1215	01	00420	D7C1E2E2	A		DATA	X'D7C1E2E2'	
1216	01	00421	C5E24040	A		DATA	X'C5E24040'	
1217	01	00422	404040C9	A		DATA	X'404040C9'	
1218	01	00423	D5E2E340	A		DATA	X'D5E2E340'	
1219	01	00424	4040C9C4	A		DATA	X'4040C9C4'	
1220	01	00425	C5D5E3C9	A		DATA	X'C5D5E3C9'	
1221	01	00426	C6C9C5D9	A		DATA	X'C6C9C5D9'	
1222	01	00427	40404040	A		DATA	X'40404040'	
1223	01	00428	C9E24040	A		DATA	X'C9E24040'	
1224	01	00429	4040E2C8	A		DATA	X'4040E2C8'	
1225	01	0042A	D6E4D3C4	A		DATA	X'D6E4D3C4'	
1226	01	0042B	40C2C540	A		DATA	X'40C2C540'	
1227	01	0042C	404040C4	A		DATA	X'404040C4'	
1228	01	0042D	C9C6C615	A		DATA	X'C9C6C615'	
1229						PAGE		
1230	01	0042E	40404015	A	IMAGE	DATA	X'40404015'	
1231	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				
1232	01	00442	40404040	A	BLANK	DATA	X'40404040'	
1233						PAGE		
1234						BOUND 8		
1235					TABLE	RES	0	
1236	01	00444	00000000	A		DATA	0	NEG COUNT OF WORDS IN CURRENT MODULE
1237	01	00445	00000000	A		DATA	0	INSTRUCTION BEING TESTED
1238	01	00446	00000000	A		DATA	0	PSW1 IN
1239	01	00447	00000000	A		DATA	0	PSW1 OUT
1240	01	00448	00000000	A		DATA	0	R IN
1241	01	00449	00000000	A		DATA	0	R OUT
1242	01	0044A	00000000	A		DATA	0	MEMORY IN
1243	01	0044B	00000000	A		DATA	0	MEMORY OUT
1244	01	0044C	00000000	A		DATA	0	RU1 IN
1245	01	0044D	00000000	A		DATA	0	RU1 OUT
1246	01	0044E	00000000	A		DATA	0	MEMORY+1 IN
1247	01	0044F	00000000	A		DATA	0	MEMORY+1 OUT
1248	01	00450	00000000	A		DATA	0	PSW2 IN
1249	01	00451	00000000	A		DATA	0	PSW2 OUT
1250	01	00452	00000000	A		DATA	0	OLD PSW1 • USED ONLY FOR XPSD TEST
1251	01	00453	00000000	A		DATA	0	OLD PSW2 • USED ONLY FOR XPSD TEST
1252	01	00454	00000000	A		DATA	0	NEW PSW2 • USED ONLY FOR XPSD TEST
1253	01	00455	00000000	A		DATA	0	NEW PSW1 • USED ONLY FOR EPSD TEST
1254	01	00456	00000000	A		DATA	0,0	
1255						PAGE		

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
1256	01	00458			TEST	RES	0	
1257	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				
1258						PAGE		
1259	01	00464	00000000	A	RETURN	PZE		
1260	01	00465	00000000	A		PZE		
1261	01	00466	00000169			PZE,0	L8C+2	
1262	01	00467	00000000	A		PZE		
1263	01	00468	00000237		BUMP	PZE,0	BUMPER	
1264	01	00469	00000000	A		PZE		
1265	01	0046A	00000110		REPEAT	PZE,0	CYCLE	
1266	01	0046B	00000000	A		PZE		
1267	01	0046C	00000000	A	PSW1	PZE		
1268	01	0046D	00000000	A	PSW2	PZE		
1269	01	0046E	00000000	A	CNT1CP	PZE		
1270	01	0046F	00000000	A	CNT2CP	PZE		
1271	01	00470	00000000	A	CNT3CP	PZE		
1272	01	00471	00000000	A	CNT4CP	PZE		
1273	01	00472	00000000	A	C8UNT	PZE		
1274	01	00473	00000000	A	ERR8RS	PZE		
1275	01	00474	00000000	A	PASSES	PZE		
1276	01	00475	00000000	A	WKB	PZE		
1277	01	00476	00000000	A	W8RD	PZE		
1278		01 003C0			ZER8	EQU	BYTE	
1279		01 00383			NEG4	EQU	NUMBER	
1280		01 00385			NEG2	EQU	NUMBER+2	
1281		01 00047			XPSD	EQU	BRANCH	
1282		00000000			C	EQU	0	
1283		00000000			I	EQU	0	
1284		00000000			Y	EQU	0	
1285		01 00459			INST	EQU	TEST+1	
1286		01 0045A			IA	EQU	TEST+2	
1287		01 00460			MEMORY	EQU	TEST+8	
1288		01 003C0			CNT3Z	EQU	ZER8	
1289		01 003C0			CNT4Z	EQU	ZER8	
1290		01 0046A			MODULE	EQU	REPEAT	
1291		01 0046A			PASS	EQU	REPEAT	
1292						PAGE		
1293	01	00477	0F000478		SPURTRAP	XPSD,0	SPUR	
1294						B8UND	8	
1295	01	00478	00000000	A	SPUR	PZE	0	
1296	01	00479	00000000	A		PZE	0	
1297	01	0047A	0000047C			PZE,0	\$\$+2	
1298	01	0047B	07000000	A		DATA	X'07000000'	TURN ON INTR INH BITS
1299	01	0047C	32500371			LW,5	CPINT	
1300	01	0047D	6D501300	A		WD,5	X'1300'	ARM AND DISABLE COUNT PULSE INTRs.
1301	01	0047E	32300474			LW,3	PASSES	RESET PASSES TO LAST SETTING
1302	01	0047F	32200473			LW,2	ERR8RS	RESET ERR8RS TO LAST SETTING
1303	01	00480	3210011D			LW,1	SAVE	MODULE POINTER
1304	01	00481	3200037B			LW,0	TYPE	I/O ADDR
1305	01	00482	2E000000	A		WAIT,0	0	ERR8R HALT
1306					*			
1307	01	00483	00000464			DATA	RETURN	ADDR FOR FOLLOWING COMMENT LINE *B
1308					*	CHECK THE CONTENTS OF IRETURN; TO DETERMINE THE LOCATION PLUS 1 OF		*B
1309					*	THE XPSD THAT WAS EXECUTED AS A RESULT OF A SPURIOUS TRAP.		
1310					*			
1311	01	00483				8RG	\$\$-1	ELIMINATE ABOVE DATA STATEMENT *B
	01	00483						
1312	01	00483	4B500391			AND,5	MASK**	SAVE ONLY BITS 16-19
1313	01	00484	35500371			STW,5	CPINT	SELECTED INTERRUPTS
1314	01	00485	3500037B			STW,0	TYPE	SELECTED I/O ADDR

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
1315	01	00486	35500372			STW,5	CPINTM	MASK FOR SELECTED INTERRUPTS
1316	01	00487	0E30046A			LPSD,3	REPEAT	RELEASE PANEL INTERRUPT-REPEAT TEST
1317						PAGE		
1318						BBOUND 8		
1319	01	00488			LIST	RES	0	
1320	01	00488	FFFFFFFA A		EXU01	DATA	-6	EXU L8C+1 XPSD
1321	01	00489	67000168			EXU	L8C+1	
1322	01	0048A	F0000136			K	15,0,0,SETPSW	
1323	01	0048B	F0000168			K	15,0,0,L8C+1	
1324	01	0048C	FFFFFFFA A			DATA	-1	
1325	01	0048D	FFFFFFFA A			DATA	-1	
1326	01	0048E	FFFFFFFC A		EXU02	DATA	-4	EXU BRANCH XPSD
1327	01	0048F	67000047			EXU	BRANCH	
1328	01	00490	00000136			DATA	SETPSW	
1329	01	00491	00000168			DATA	L8C+1	
1330	01	00492	FFFFFFF8 A		EXU03	DATA	-8	EXU MEMORY LW
1331	01	00493	67000460			EXU	MEMORY	
1332	01	00494	93300136			K	9,3,3,SETPSW	
1333	01	00495	A3300169			K	10,3,3,L8C+2	
1334	01	00496	FFFFFFFA A			DATA	-1	
1335	01	00497	32C00460			LW,12	MEMORY	
1336	01	00498	32C00460			LW,12	MEMORY	
1337	01	00499	32C00460			LW,12	MEMORY	
1338	01	0049A	FFFFFFFA A		EXU04	DATA	-6	EXU X BRANCH XPSD
1339	01	0049B	67020460			EXU	MEMORY,1	
1340	01	0049C	F7300136			K	15,7,3,SETPSW	
1341	01	0049D	F7300168			K	15,7,3,L8C+1	
1342	01	0049E	FFFFFFBE7 A			DATA	BRANCH-MEMORY	
1343	01	0049F	FFFFFFBE7 A			DATA	BRANCH-MEMORY	
1344	01	004A0	FFFFFFF8 A		EXU05	DATA	-8	EXU * BRANCH XPSD
1345	01	004A1	E7000460			EXU	*MEMORY	
1346	01	004A2	00000136			K	0,0,0,SETPSW	
1347	01	004A3	00000168			K	0,0,0,L8C+1	
1348	01	004A4	00000001 A			DATA	1	
1349	01	004A5	00000001 A			DATA	1	
1350	01	004A6	00C20047			PZE,12	BRANCH,1	
1351	01	004A7	00C20047			PZE,12	BRANCH,1	
1352						PAGE		
1353	01	004A8	FFFFFFF6 A		EXU06	DATA	-10	EXU *X C1RET XPSD
1354	01	004A9	E7020460			EXU	*MEMORY,1	
1355	01	004AA	00000136			K	0,0,0,SETPSW	
1356	01	004AB	00000168			K	0,0,0,L8C+1	
1357	01	004AC	0000FACE A			DATA	X'FACE'	
1358	01	004AD	0000FACE A			DATA	X'FACE'	
1359	01	004AE	000105CC			PZE,0	C1RET=X'FACE'	
1360	01	004AF	000105CC			PZE,0	C1RET=X'FACE'	
1361	01	004B0	0000DEAF A			DATA	X'DEAF'	
1362	01	004B1	0000DEAF A			DATA	X'DEAF'	
1363	01	004B2	FFFFFFF8 A		EXU07	DATA	-8	EXU XPSD SLAVE MODE
1364	01	004B3	67000460			EXU	MEMORY	MV
1365	01	004B4	078001BC			K	0,7,8,SI9NA0	
1366	01	004B5	27000065			K	2,7,0,MVRET+1	
1367	01	004B6	FFFFFFFA A			DATA	-1	
1368	01	004B7	FFFFFFFA A			DATA	-1	
1369	01	004B8	0F000464			XPSD,0	RETURN	
1370	01	004B9	0F000464			XPSD,0	RETURN	
1371	01	004BA	FFFFFFFA A		EXU08	DATA	-6	EXU NEI SLAVE MODE (NEI=PRIV)
1372	01	004BB	6700000C A			EXU	12	MV
1373	01	004BC	078001BC			K	0,7,11,SI9NA0	
1374	01	004BD	A730006D			K	10,7,3,NEIRET+3	
1375	01	004BE	0C000460			K	0,12,0,MEMORY	
1376	01	004BF	0C000460			K	0,12,0,MEMORY	
1377						PAGE		
1378	01	004C0	FFFFFFFC A		LCF01	DATA	-4	LCF 0 00 INT0 F7 = F7 BYTE 0
1379	01	004C1	70000460			LCF,0	MEMORY	
1380	01	004C2	F7300136			K	15,7,3,SETPSW	
1381	01	004C3	F7300169			K	15,7,3,L8C+2	
1382	01	004C4	FFFFFFFC A		LCF02	DATA	-4	LCF 1 00 INT0 F7 = F0 BYTE 0
1383	01	004C5	70100460			LCF,1	MEMORY	
1384	01	004C6	F7200136			K	15,7,2,SETPSW	
1385	01	004C7	F0200169			K	15,0,2,L8C+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
1386	01	004C8	FFFFFFFC	A	LCF03	DATA	=4	LCF 2 00 INTB F7 = 07 BYTE 0
1387	01	004C9	70200460			LCF,2	MEMORY	
1388	01	004CA	F7100136			K	15,7,1,SETPSW	
1389	01	004CB	07100169			K	0,7,1,L8C+2	
1390	01	004CC	FFFFFFFC	A	LCF04	DATA	=4	LCF 3 00 INTB F7 = 00 BYTE 0
1391	01	004CD	70300460			LCF,3	MEMORY	
1392	01	004CE	F7300136			K	15,7,3,SETPSW	
1393	01	004CF	00300169			K	0,0,3,L8C+2	
1394	01	004D0	FFFFFFF8	A	LCF05	DATA	=8	LCF 3 * 5D INTB A2 = 55 BYTE 0
1395	01	004D1	F030045A			LCF,3	*IA	
1396	01	004D2	A2200136			K	10,2,2,SETPSW	
1397	01	004D3	55200169			K	5,5,2,L8C+2	
1398	01	004D4	01234567	A		DATA	X'01234567'	
1399	01	004D5	01234567	A		DATA	X'01234567'	
1400	01	004D6	5D4E6F70	A		DATA	X'5D4E6F70'	
1401	01	004D7	5D4E6F70	A		DATA	X'5D4E6F70'	
1402						PAGE		
1403						** TEST THAT =R CAN BE CLEARED. ANSWER OF ZERO		
1404	01	004D8	FFFFFFFA	A	LW01	DATA	=6	
1405	01	004D9	32C00460			LW,12	MEMORY	
1406	01	004DA	F7300136			K	15,7,3,SETPSW	
1407	01	004DB	C7300169			K	12,7,3,L8C+2	CC1 AND 2 UNAFFECTED CC3 AND 4 ZERO
1408	01	004DC	FFFFFFF7	A		DATA	=1	R IN
1409	01	004DD	00000000	A		DATA	0	R BUT
1410						** TEST X=FER OF ONES TO ONES. NEGATIVE RESULT		
1411	01	004DE	FFFFFFF8	A	LW02	DATA	=8	
1412	01	004DF	32C00460			LW,12	MEMORY	
1413	01	004E0	37300136			K	3,7,3,SETPSW	
1414	01	004E1	17300169			K	1,7,3,L8C+2	
1415	01	004E2	FFFFFFF7	A		DATA	=1	R IN
1416	01	004E3	FFFFFFF7	A		DATA	=1	R BUT
1417	01	004E4	FFFFFFF7	A		DATA	=1	M IN
1418	01	004E5	FFFFFFF7	A		DATA	=1	M BUT
1419						** CHECK X=FER OF ONES TO ZEROS. INDIRECT ADDRESSING. NEG RESULT		
1420						** INSURE RUI NOT AFFECTED		
1421	01	004E6	FFFFFFF4	A	LW03	DATA	=12	
1422	01	004E7	B2C0045A			LW,12	*IA	
1423	01	004E8	C6200136			K	12,6,2,SETPSW	
1424	01	004E9	D6200169			K	13,6,2,L8C+2	
1425	01	004EA	00000000	A		DATA	0	
1426	01	004EB	FFFFFFF7	A		DATA	=1	
1427	01	004EC	FFFFFFF7	A		DATA	=1	
1428	01	004ED	FFFFFFF7	A		DATA	=1	
1429	01	004EE	00000000	A		DATA	0	
1430	01	004EF	00000000	A		DATA	0	
1431	01	004F0	FFFFFFF7	A		DATA	=1	
1432	01	004F1	FFFFFFF7	A		DATA	=1	
1433						PAGE		
1434						** TEST SGTZ TERM BY LOADING A SINGLE BIT. SEQUENCE FROM BIT32 TO BIT01		
1435	01	004F2	FFFFFFF8	A	LW04	DATA	=8	
1436	01	004F3	32C00460			LW,12	MEMORY	
1437	01	004F4	30000136			K	3,0,0,SETPSW	
1438	01	004F5	20000169			K	2,0,0,L8C+2	
1439	01	004F6	00000000	A		DATA	0	
1440	01	004F7	00000001	A		DATA	1	
1441	01	004F8	00000001	A		DATA	1	
1442	01	004F9	00000001	A		DATA	1	
1443	01	004FA	FFFFFFF8	A	LW05	DATA	=8	
1444	01	004FB	32C00460			LW,12	MEMORY	
1445	01	004FC	10000136			K	1,0,0,SETPSW	
1446	01	004FD	20000169			K	2,0,0,L8C+2	
1447	01	004FE	00000000	A		DATA	0	
1448	01	004FF	00000002	A		DATA	2	
1449	01	00500	00000002	A		DATA	2	
1450	01	00501	00000002	A		DATA	2	
1451	01	00502	FFFFFFF8	A	LW06	DATA	=8	
1452	01	00503	32C00460			LW,12	MEMORY	
1453	01	00504	10000136			K	1,0,0,SETPSW	
1454	01	00505	20000169			K	2,0,0,L8C+2	
1455	01	00506	00000000	A		DATA	0	
1456	01	00507	00000004	A		DATA	4	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
1457	01	00508	00000004	A		DATA	4	
1458	01	00509	00000004	A		DATA	4	
1459	01	0050A	FFFFFFF8	A	LW07	DATA	=8	
1460	01	0050B	32C00460			LW,12	MEMORY	
1461	01	0050C	10000136			K	1,0,0,SETPSW	
1462	01	0050D	20000169			K	2,0,0,L8C+2	
1463	01	0050E	00000000	A		DATA	0	
1464	01	0050F	00000008	A		DATA	8	
1465	01	00510	00000008	A		DATA	8	
1466	01	00511	00000008	A		DATA	8	
1467						PAGE		
1468	01	00512	FFFFFFF8	A	LW08	DATA	=8	
1469	01	00513	32C00460			LW,12	MEMORY	
1470	01	00514	10000136			K	1,0,0,SETPSW	
1471	01	00515	20000169			K	2,0,0,L8C+2	
1472	01	00516	00000000	A		DATA	0	
1473	01	00517	00000010	A		DATA	X'10'	
1474	01	00518	00000010	A		DATA	X'10'	
1475	01	00519	00000010	A		DATA	X'10'	
1476	01	0051A	FFFFFFF8	A	LW09	DATA	=8	
1477	01	0051B	32C00460			LW,12	MEMORY	
1478	01	0051C	10000136			K	1,0,0,SETPSW	
1479	01	0051D	20000169			K	2,0,0,L8C+2	
1480	01	0051E	00000000	A		DATA	0	
1481	01	0051F	00000020	A		DATA	X'20'	
1482	01	00520	00000020	A		DATA	X'20'	
1483	01	00521	00000020	A		DATA	X'20'	
1484	01	00522	FFFFFFF8	A	LW10	DATA	=8	
1485	01	00523	32C00460			LW,12	MEMORY	
1486	01	00524	10000136			K	1,0,0,SETPSW	
1487	01	00525	20000169			K	2,0,0,L8C+2	
1488	01	00526	00000000	A		DATA	0	
1489	01	00527	00000040	A		DATA	X'40'	
1490	01	00528	00000040	A		DATA	X'40'	
1491	01	00529	00000040	A		DATA	X'40'	
1492	01	0052A	FFFFFFF8	A	LW11	DATA	=8	
1493	01	0052B	32C00460			LW,12	MEMORY	
1494	01	0052C	10000136			K	1,0,0,SETPSW	
1495	01	0052D	20000169			K	2,0,0,L8C+2	
1496	01	0052E	00000000	A		DATA	0	
1497	01	0052F	00000080	A		DATA	X'80'	
1498	01	00530	00000080	A		DATA	X'80'	
1499	01	00531	00000080	A		DATA	X'80'	
1500						PAGE		
1501	01	00532	FFFFFFF8	A	LW12	DATA	=8	
1502	01	00533	32C00460			LW,12	MEMORY	
1503	01	00534	10000136			K	1,0,0,SETPSW	
1504	01	00535	20000169			K	2,0,0,L8C+2	
1505	01	00536	00000000	A		DATA	0	
1506	01	00537	00000100	A		DATA	X'100'	
1507	01	00538	00000100	A		DATA	X'100'	
1508	01	00539	00000100	A		DATA	X'100'	
1509	01	0053A	FFFFFFF8	A	LW13	DATA	=8	
1510	01	0053B	32C00460			LW,12	MEMORY	
1511	01	0053C	10000136			K	1,0,0,SETPSW	
1512	01	0053D	20000169			K	2,0,0,L8C+2	
1513	01	0053E	00000000	A		DATA	0	
1514	01	0053F	00000200	A		DATA	X'200'	
1515	01	00540	00000200	A		DATA	X'200'	
1516	01	00541	00000200	A		DATA	X'200'	
1517	01	00542	FFFFFFF8	A	LW14	DATA	=8	
1518	01	00543	32C00460			LW,12	MEMORY	
1519	01	00544	10000136			K	1,0,0,SETPSW	
1520	01	00545	20000169			K	2,0,0,L8C+2	
1521	01	00546	00000000	A		DATA	0	
1522	01	00547	00000400	A		DATA	X'400'	
1523	01	00548	00000400	A		DATA	X'400'	
1524	01	00549	00000400	A		DATA	X'400'	
1525	01	0054A	FFFFFFF8	A	LW15	DATA	=8	
1526	01	0054B	32C00460			LW,12	MEMORY	
1527	01	0054C	10000136			K	1,0,0,SETPSW	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
1528	01	0054D	20000169			K	2,0,0,L8C+2	
1529	01	0054E	00000000	A		DATA	0	
1530	01	0054F	00000800	A		DATA	X'800'	
1531	01	00550	00000800	A		DATA	X'800'	
1532	01	00551	00000800	A		DATA	X'800'	
1533						PAGE		
1534	01	00552	FFFFFFF8	A	LW16	DATA	=8	
1535	01	00553	32C00460			LW,12	MEMORY	
1536	01	00554	10000136			K	1,0,0,SETPSW	
1537	01	00555	20000169			K	2,0,0,L8C+2	
1538	01	00556	00000000	A		DATA	0	
1539	01	00557	00001000	A		DATA	X'1000'	
1540	01	00558	00001000	A		DATA	X'1000'	
1541	01	00559	00001000	A		DATA	X'1000'	
1542	01	0055A	FFFFFFF8	A	LW17	DATA	=8	
1543	01	0055B	32C00460			LW,12	MEMORY	
1544	01	0055C	10000136			K	1,0,0,SETPSW	
1545	01	0055D	20000169			K	2,0,0,L8C+2	
1546	01	0055E	00000000	A		DATA	0	
1547	01	0055F	00002000	A		DATA	X'2000'	
1548	01	00560	00002000	A		DATA	X'2000'	
1549	01	00561	00002000	A		DATA	X'2000'	
1550	01	00562	FFFFFFF8	A	LW18	DATA	=8	
1551	01	00563	32C00460			LW,12	MEMORY	
1552	01	00564	10000136			K	1,0,0,SETPSW	
1553	01	00565	20000169			K	2,0,0,L8C+2	
1554	01	00566	00000000	A		DATA	0	
1555	01	00567	00004000	A		DATA	X'4000'	
1556	01	00568	00004000	A		DATA	X'4000'	
1557	01	00569	00004000	A		DATA	X'4000'	
1558	01	0056A	FFFFFFF8	A	LW19	DATA	=8	
1559	01	0056B	32C00460			LW,12	MEMORY	
1560	01	0056C	10000136			K	1,0,0,SETPSW	
1561	01	0056D	20000169			K	2,0,0,L8C+2	
1562	01	0056E	00000000	A		DATA	0	
1563	01	0056F	00008000	A		DATA	X'8000'	
1564	01	00570	00008000	A		DATA	X'8000'	
1565	01	00571	00008000	A		DATA	X'8000'	
1566						PAGE		
1567	01	00572	FFFFFFF8	A	LW20	DATA	=8	
1568	01	00573	32C00460			LW,12	MEMORY	
1569	01	00574	10000136			K	1,0,0,SETPSW	
1570	01	00575	20000169			K	2,0,0,L8C+2	
1571	01	00576	00000000	A		DATA	0	
1572	01	00577	00010000	A		DATA	X'10000'	
1573	01	00578	00010000	A		DATA	X'10000'	
1574	01	00579	00010000	A		DATA	X'10000'	
1575	01	0057A	FFFFFFF8	A	LW21	DATA	=8	
1576	01	0057B	32C00460			LW,12	MEMORY	
1577	01	0057C	10000136			K	1,0,0,SETPSW	
1578	01	0057D	20000169			K	2,0,0,L8C+2	
1579	01	0057E	00000000	A		DATA	0	
1580	01	0057F	00020000	A		DATA	X'20000'	
1581	01	00580	00020000	A		DATA	X'20000'	
1582	01	00581	00020000	A		DATA	X'20000'	
1583	01	00582	FFFFFFF8	A	LW22	DATA	=8	
1584	01	00583	32C00460			LW,12	MEMORY	
1585	01	00584	10000136			K	1,0,0,SETPSW	
1586	01	00585	20000169			K	2,0,0,L8C+2	
1587	01	00586	00000000	A		DATA	0	
1588	01	00587	00040000	A		DATA	X'40000'	
1589	01	00588	00040000	A		DATA	X'40000'	
1590	01	00589	00040000	A		DATA	X'40000'	
1591	01	0058A	FFFFFFF8	A	LW23	DATA	=8	
1592	01	0058B	32C00460			LW,12	MEMORY	
1593	01	0058C	10000136			K	1,0,0,SETPSW	
1594	01	0058D	20000169			K	2,0,0,L8C+2	
1595	01	0058E	00000000	A		DATA	0	
1596	01	0058F	00080000	A		DATA	X'80000'	
1597	01	00590	00080000	A		DATA	X'80000'	
1598	01	00591	00080000	A		DATA	X'80000'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
1599						PAGE		
1600	01	00592	FFFFFFF8	A	LW24	DATA	=8	
1601	01	00593	32C00460			LW,12	MEMORY	
1602	01	00594	10000136			K	1,0,0,SETPSW	
1603	01	00595	20000169			K	2,0,0,L8C+2	
1604	01	00596	00000000	A		DATA	0	
1605	01	00597	00100000	A		DATA	X'100000'	
1606	01	00598	00100000	A		DATA	X'100000'	
1607	01	00599	00100000	A		DATA	X'100000'	
1608	01	0059A	FFFFFFF8	A	LW25	DATA	=8	
1609	01	0059B	32C00460			LW,12	MEMORY	
1610	01	0059C	10000136			K	1,0,0,SETPSW	
1611	01	0059D	20000169			K	2,0,0,L8C+2	
1612	01	0059E	00000000	A		DATA	0	
1613	01	0059F	00200000	A		DATA	X'200000'	
1614	01	005A0	00200000	A		DATA	X'200000'	
1615	01	005A1	00200000	A		DATA	X'200000'	
1616	01	005A2	FFFFFFF8	A	LW26	DATA	=8	
1617	01	005A3	32C00460			LW,12	MEMORY	
1618	01	005A4	10000136			K	1,0,0,SETPSW	
1619	01	005A5	20000169			K	2,0,0,L8C+2	
1620	01	005A6	00000000	A		DATA	0	
1621	01	005A7	00400000	A		DATA	X'400000'	
1622	01	005A8	00400000	A		DATA	X'400000'	
1623	01	005A9	00400000	A		DATA	X'400000'	
1624	01	005AA	FFFFFFF8	A	LW27	DATA	=8	
1625	01	005AB	32C00460			LW,12	MEMORY	
1626	01	005AC	10000136			K	1,0,0,SETPSW	
1627	01	005AD	20000169			K	2,0,0,L8C+2	
1628	01	005AE	00000000	A		DATA	0	
1629	01	005AF	00800000	A		DATA	X'800000'	
1630	01	005B0	00800000	A		DATA	X'800000'	
1631	01	005B1	00800000	A		DATA	X'800000'	
1632						PAGE		
1633	01	005B2	FFFFFFF8	A	LW28	DATA	=8	
1634	01	005B3	32C00460			LW,12	MEMORY	
1635	01	005B4	10000136			K	1,0,0,SETPSW	
1636	01	005B5	20000169			K	2,0,0,L8C+2	
1637	01	005B6	00000000	A		DATA	0	
1638	01	005B7	01000000	A		DATA	X'1000000'	
1639	01	005B8	01000000	A		DATA	X'1000000'	
1640	01	005B9	01000000	A		DATA	X'1000000'	
1641	01	005BA	FFFFFFF8	A	LW29	DATA	=8	
1642	01	005BB	32C00460			LW,12	MEMORY	
1643	01	005BC	10000136			K	1,0,0,SETPSW	
1644	01	005BD	20000169			K	2,0,0,L8C+2	
1645	01	005BE	00000000	A		DATA	0	
1646	01	005BF	02000000	A		DATA	X'2000000'	
1647	01	005C0	02000000	A		DATA	X'2000000'	
1648	01	005C1	02000000	A		DATA	X'2000000'	
1649	01	005C2	FFFFFFF8	A	LW30	DATA	=8	
1650	01	005C3	32C00460			LW,12	MEMORY	
1651	01	005C4	10000136			K	1,0,0,SETPSW	
1652	01	005C5	20000169			K	2,0,0,L8C+2	
1653	01	005C6	00000000	A		DATA	0	
1654	01	005C7	04000000	A		DATA	X'4000000'	
1655	01	005C8	04000000	A		DATA	X'4000000'	
1656	01	005C9	04000000	A		DATA	X'4000000'	
1657	01	005CA	FFFFFFF8	A	LW31	DATA	=8	
1658	01	005CB	32C00460			LW,12	MEMORY	
1659	01	005CC	10000136			K	1,0,0,SETPSW	
1660	01	005CD	20000169			K	2,0,0,L8C+2	
1661	01	005CE	00000000	A		DATA	0	
1662	01	005CF	08000000	A		DATA	X'8000000',X'8000000',X'8000000'	
	01	005D0	08000000	A				
	01	005D1	08000000	A				
1663						PAGE		
1664	01	005D2	FFFFFFF8	A	LW32	DATA	=8	
1665	01	005D3	32C00460			LW,12	MEMORY	
1666	01	005D4	10000136			K	1,0,0,SETPSW	
1667	01	005D5	20000169			K	2,0,0,L8C+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
1668	01	00506	00000000	A		DATA	0	
1669	01	00507	10000000	A		DATA	X'10000000',X'10000000',X'10000000'	
	01	00508	10000000	A				
	01	00509	10000000	A				
1670	01	0050A	FFFFFFF8	A	LW33	DATA	=8	
1671	01	0050B	32C00460	A		LW,12	MEMORY	
1672	01	0050C	10000136	A		K	1,0,0,SETPSW	
1673	01	0050D	20000169	A		K	2,0,0,L8C+2	
1674	01	0050E	00000000	A		DATA	0	
1675	01	0050F	20000000	A		DATA	X'20000000',X'20000000',X'20000000'	
	01	005E0	20000000	A				
	01	005E1	20000000	A				
1676	01	005E2	FFFFFFF8	A	LW34	DATA	=8	
1677	01	005E3	32C00460	A		LW,12	MEMORY	
1678	01	005E4	10000136	A		K	1,0,0,SETPSW	
1679	01	005E5	20000169	A		K	2,0,0,L8C+2	
1680	01	005E6	00000000	A		DATA	0	
1681	01	005E7	40000000	A		DATA	X'40000000',X'40000000',X'40000000'	
	01	005E8	40000000	A				
	01	005E9	40000000	A				
1682						** TEST THAT BITS WILL INHIBIT SGTZ		
1683	01	005EA	FFFFFFF8	A	LW35	DATA	=8	
1684	01	005EB	32C00460	A		LW,12	MEMORY	
1685	01	005EC	30000136	A		K	3,0,0,SETPSW	
1686	01	005ED	10000169	A		K	1,0,0,L8C+2	
1687	01	005EE	00000000	A		DATA	0	
1688	01	005EF	80000000	A		DATA	X'80000000'	
1689	01	005F0	80000000	A		DATA	X'80000000'	
1690	01	005F1	80000000	A		DATA	X'80000000'	
1691						PAGE		
1692						** CONDITION CODE SETTINGS FOR 'BR'		
1693						** CC3 CC4 RESULT IN R		
1694						** 0 0 ZERO		
1695						** 0 1 NEGATIVE		
1696						** 1 0 POSITIVE		
1697	01	005F2	FFFFFFFC	A	BR01	DATA	=4	BR 010. RESULT = 0
1698	01	005F3	49C00460	A		BR,12	MEMORY	
1699	01	005F4	37300136	A		K	3,7,3,SETPSW	
1700	01	005F5	07300169	A		K	0,7,3,L8C+2	
1701	01	005F6	FFFFFFF8	A	BR02	DATA	=8	BR A010A RESULT =AA (EACH BYTE)
1702	01	005F7	49C00460	A		BR,12	MEMORY	
1703	01	005F8	07300136	A		K	0,7,3,SETPSW	
1704	01	005F9	17300169	A		K	1,7,3,L8C+2	
1705	01	005FA	A0A0A0A0	A		DATA	X'A0A0A0A0'	
1706	01	005FB	AAAAAAAA	A		DATA	X'AAAAAAAA'	
1707	01	005FC	0A0A0A0A	A		DATA	X'0A0A0A0A'	
1708	01	005FD	0A0A0A0A	A		DATA	X'0A0A0A0A'	
1709	01	005FE	FFFFFFF8	A	BR03	DATA	=8	BR DATA0. RESULT = AA (EACH BYTE)
1710	01	005FF	49C00460	A		BR,12	MEMORY	
1711	01	00600	F7300136	A		K	15,7,3,SETPSW	
1712	01	00601	D7300169	A		K	13,7,3,L8C+2	
1713	01	00602	0A0A0A0A	A		DATA	X'0A0A0A0A'	
1714	01	00603	AAAAAAAA	A		DATA	X'AAAAAAAA'	
1715	01	00604	A0A0A0A0	A		DATA	X'A0A0A0A0'	
1716	01	00605	A0A0A0A0	A		DATA	X'A0A0A0A0'	
1717						PAGE		
1718	01	00606	FFFFFFF8	A	BR04	DATA	=8	BR 05150. RESULT = 55 (EACH BYTE)
1719	01	00607	49C00460	A		BR,12	MEMORY	
1720	01	00608	07300136	A		K	0,7,3,SETPSW	
1721	01	00609	27300169	A		K	2,7,3,L8C+2	
1722	01	0060A	05050505	A		DATA	X'05050505'	
1723	01	0060B	55555555	A		DATA	X'55555555'	
1724	01	0060C	50505050	A		DATA	X'50505050'	
1725	01	0060D	50505050	A		DATA	X'50505050'	
1726	01	0060E	FFFFFFF8	A	BR05	DATA	=8	BR 50105. RESULT = 55 (EACH BYTE)
1727	01	0060F	49C00460	A		BR,12	MEMORY	
1728	01	00610	17300136	A		K	1,7,3,SETPSW	
1729	01	00611	27300169	A		K	2,7,3,L8C+2	
1730	01	00612	50505050	A		DATA	X'50505050'	
1731	01	00613	55555555	A		DATA	X'55555555'	
1732	01	00614	05050505	A		DATA	X'05050505'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
1733	01	00615	05050505	A		DATA	X'05050505'	
1734	01	00616	FFFFFFFF	A	BR06	DATA	=8	BR FF:FF, RESULT = FF (EACH BYTE)
1735	01	00617	49C00460			BR,12	MEMORY	
1736	01	00618	27300136			K	2,7,3,SETPSW	
1737	01	00619	17300169			K	1,7,3,LBC+2	
1738	01	0061A	FFFFFFFF	A		DATA	-1	
1739	01	0061B	FFFFFFFF	A		DATA	-1	
1740	01	0061C	FFFFFFFF	A		DATA	-1	
1741	01	0061D	FFFFFFFF	A		DATA	-1	
1742						PAGE		
1743	01	0061E	FFFFFFFF	A	STW01	DATA	=8	STORE -1
1744	01	0061F	35C00460			STW,12	MEMORY	
1745	01	00620	07300136			K	0,7,3,SETPSW	
1746	01	00621	07300169			K	0,7,3,LBC+2	
1747	01	00622	FFFFFFFF	A		DATA	-1	
1748	01	00623	FFFFFFFF	A		DATA	-1	
1749	01	00624	00000000	A		DATA	0	
1750	01	00625	FFFFFFFF	A		DATA	-1	
1751	01	00626	FFFFFFFF	A	STW02	DATA	=8	STORE 0
1752	01	00627	35C00460			STW,12	MEMORY	
1753	01	00628	F7300136			K	F,7,3,SETPSW	
1754	01	00629	F7300169			K	F,7,3,LBC+2	
1755	01	0062A	00000000	A		DATA	0	
1756	01	0062B	00000000	A		DATA	0	
1757	01	0062C	FFFFFFFF	A		DATA	-1	
1758	01	0062D	00000000	A		DATA	0	
1759						PAGE		
1760						** CONDITION CODE SETTINGS FOR AND INSTRUCTION		
1761						** CC3	CC4 RESULT IN R	
1762						** 0	0 ZERO	
1763						** 0	1 NEGATIVE	
1764						** 1	0 POSITIVE	
1765	01	0062E	FFFFFFFC	A	AND01	DATA	=4	AND 0:0 RESULT = 0
1766	01	0062F	4BC00460			AND,12	MEMORY	
1767	01	00630	F7300136			K	15,7,3,SETPSW	
1768	01	00631	C7300169			K	12,7,3,LBC+2	
1769	01	00632	FFFFFFFF	A	AND02	DATA	=8	AND C:A, RESULT = 8 (EACH HEX CHAR)
1770	01	00633	4BC00460			AND,12	MEMORY	
1771	01	00634	77300136			K	7,7,3,SETPSW	
1772	01	00635	57300169			K	5,7,3,LBC+2	
1773	01	00636	CCCCCCCC	A		DATA	X'CCCCCCCC'	
1774	01	00637	88888888	A		DATA	X'88888888'	
1775	01	00638	AAAAAAAA	A		DATA	X'AAAAAAAA'	
1776	01	00639	AAAAAAAA	A		DATA	X'AAAAAAAA'	
1777	01	0063A	FFFFFFFF	A	AND03	DATA	=8	AND 9:5, RESULT = 1 (EACH HEX CHAR)
1778	01	0063B	4BC00460			AND,12	MEMORY	
1779	01	0063C	07300136			K	0,7,3,SETPSW	
1780	01	0063D	27300169			K	2,7,3,LBC+2	
1781	01	0063E	99999999	A		DATA	X'99999999'	
1782	01	0063F	11111111	A		DATA	X'11111111'	
1783	01	00640	55555555	A		DATA	X'55555555'	
1784	01	00641	55555555	A		DATA	X'55555555'	
1785						PAGE		
1786	01	00642	FFFFFFFF	A	AND04	DATA	=8	AND 3:A, RESULT = 2 (EACH HEX CHAR)
1787	01	00643	4BC00460			AND,12	MEMORY	
1788	01	00644	37300136			K	3,7,3,SETPSW	
1789	01	00645	27300169			K	2,7,3,LBC+2	
1790	01	00646	33333333	A		DATA	X'33333333'	
1791	01	00647	22222222	A		DATA	X'22222222'	
1792	01	00648	AAAAAAAA	A		DATA	X'AAAAAAAA'	
1793	01	00649	AAAAAAAA	A		DATA	X'AAAAAAAA'	
1794	01	0064A	FFFFFFFF	A	AND05	DATA	=8	AND 6:5, RESULT = 4 (EACH HEX CHAR)
1795	01	0064B	4BC00460			AND,12	MEMORY	
1796	01	0064C	F7300136			K	15,7,3,SETPSW	
1797	01	0064D	E7300169			K	14,7,3,LBC+2	
1798	01	0064E	66666666	A		DATA	X'66666666'	
1799	01	0064F	44444444	A		DATA	X'44444444'	
1800	01	00650	55555555	A		DATA	X'55555555'	
1801	01	00651	55555555	A		DATA	X'55555555'	
1802	01	00652	FFFFFFFF	A	AND06	DATA	=6	AND C(R) WITH ITSELF, C(R) UNCHANGED
1803	01	00653	4BC0000C	A		AND,12	12	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
1804	01	00654	73300136			K	7,3,3,SETPSW	
1805	01	00655	53300169			K	5,3,3,L0C+2	
1806	01	00656	84214812 A			DATA	X'84214812'	
1807	01	00657	84214812 A			DATA	X'84214812'	
1808						PAGE		
1809						** CONDITION CODE SETTINGS FOR E0R		
1810						** CC3	CC4	RESULT IN R
1811						** 0	0	ZERO
1812						** 0	1	NEGATIVE
1813						** 1	0	POSITIVE
1814	01	00658	FFFFFFF8 A		E0R01	DATA	-8	E0R C19. RESULT = 5 (EACH HEX CHAR)
1815	01	00659	48C00460			E0R,12	MEMORY	
1816	01	0065A	87300136			K	11,7,3,SETPSW	
1817	01	0065B	A7300169			K	10,7,3,L0C+2	
1818	01	0065C	CCCCCCCC A			DATA	X'CCCCCCCC'	
1819	01	0065D	55555555 A			DATA	X'55555555'	
1820	01	0065E	99999999 A			DATA	X'99999999'	
1821	01	0065F	99999999 A			DATA	X'99999999'	
1822	01	00660	FFFFFFF8 A		E0R02	DATA	-8	E0R 917. RESULT = E (EACH HEX CHAR)
1823	01	00661	48C00460			E0R,12	MEMORY	
1824	01	00662	87300136			K	11,7,3,SETPSW	
1825	01	00663	97300169			K	9,7,3,L0C+2	
1826	01	00664	99999999 A			DATA	X'99999999'	
1827	01	00665	EEEEEEEE A			DATA	X'EEEEEEEE'	
1828	01	00666	77777777 A			DATA	X'77777777'	
1829	01	00667	77777777 A			DATA	X'77777777'	
1830						PAGE		
1831	01	00668	FFFFFFF8 A		E0R03	DATA	-8	E0R 31A. RESULT = 9 (EACH HEX CHAR)
1832	01	00669	48C00460			E0R,12	MEMORY	
1833	01	0066A	37300136			K	3,7,3,SETPSW	
1834	01	0066B	17300169			K	1,7,3,L0C+2	
1835	01	0066C	33333333 A			DATA	X'33333333'	
1836	01	0066D	99999999 A			DATA	X'99999999'	
1837	01	0066E	AAAAAAAA A			DATA	X'AAAAAAAA'	
1838	01	0066F	AAAAAAAA A			DATA	X'AAAAAAAA'	
1839	01	00670	FFFFFFF8 A		E0R04	DATA	-8	E0R 614. RESULT = 2 (EACH HEX CHAR)
1840	01	00671	48C00460			E0R,12	MEMORY	
1841	01	00672	17300136			K	1,7,3,SETPSW	
1842	01	00673	27300169			K	2,7,3,L0C+2	
1843	01	00674	66666666 A			DATA	X'66666666'	
1844	01	00675	22222222 A			DATA	X'22222222'	
1845	01	00676	44444444 A			DATA	X'44444444'	
1846	01	00677	44444444 A			DATA	X'44444444'	
1847						PAGE		
1848						** RP SHOULD NOT CHANGE. INTERRUPT INHIBITS SHOULD REMAIN SET		
1849	01	00678	FFFFFFEE A		FAPSD01	DATA	-18	
1850	01	00679	0F000452			XPSD,0	TABLE+14	
1851	01	0067A	F7300136			K	15,7,3,SETPSW	PSW1 IN
1852	01	0067B	00000169			K	0,0,0,L0C+2	PSW1 OUT
1853	01	0067C	00000000 A			DATA	0	
1854	01	0067D	00000000 A			DATA	0	
1855	01	0067E	00000000 A			DATA	0	
1856	01	0067F	00000000 A			DATA	0	
1857	01	00680	00000000 A			DATA	0	
1858	01	00681	00000000 A			DATA	0	
1859	01	00682	00000000 A			DATA	0	
1860	01	00683	00000000 A			DATA	0	
1861	01	00684	07000000 A			DATA	X'70000000'	PSW2 IN
1862	01	00685	07000000 A			DATA	X'70000000'	PSW2 OUT
1863	01	00686	00000000 A			DATA	0	TABLE+14
1864	01	00687	00000000 A			DATA	0	TABLE+15
1865	01	00688	00000168			K	0,0,0,L0C+1	TABLE+16
1866	01	00689	000000F0 A			DATA	X'F0'	TABLE+17
1867						PAGE		
1868						** CHANGE RP AND INTERRUPT INHIBITS		
1869	01	0068A	FFFFFFF2 A		FAPSD02	DATA	-14	
1870	01	0068B	0E800460			LPSD,8	MEMORY	
1871	01	0068C	30000136			K	3,0,0,SETPSW	PSW1 IN
1872	01	0068D	C7300169			K	12,7,3,L0C+2	PSW1 OUT
1873	01	0068E	00000000 A			DATA	0	
1874	01	0068F	00000000 A			DATA	0	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
1875	01	00690	C7300168			K	12,7,3,L8C+1	MEMORY: LOADED INTO PSW1 BY LPSD
1876	01	00691	C7300168			K	12,7,3,L8C+1	
1877	01	00692	00000300 A			DATA	0	
1878	01	00693	00000300 A			DATA	0	
1879	01	00694	020000A0 A			DATA	X'020000A0'	MEMORY+1 : LOADED INTO PSW2 BY LPSD
1880	01	00695	020000A0 A			DATA	X'020000A0'	
1881	01	00696	05000000 A			DATA	X'05000000'	PSW2 IN
1882	01	00697	020000A0 A			DATA	X'020000A0'	PSW2 OUT
1883					** CHANGE RP AND INTERRUPT INHIBITS			
1884	01	00698	FFFFFFF2 A		FAPSD03	DATA	=14	
1885	01	00699	0E800460			LPSD,8	MEMORY	
1886	01	0069A	C5100136			K	12,5,1,SETPSW	
1887	01	0069B	32200169			K	3,2,2,L8C+2	
1888	01	0069C	00000000 A			DATA	0	
1889	01	0069D	00000000 A			DATA	0	
1890	01	0069E	32200168			K	3,2,2,L8C+1	LOADED INTO PSW1 BY LPSD
1891	01	0069F	32200168			K	3,2,2,L8C+1	
1892	01	006A0	00000300 A			DATA	0	
1893	01	006A1	00000300 A			DATA	0	
1894	01	006A2	05000050 A			DATA	X'50000050'	LOADED INTO PSW2 BY LPSD
1895	01	006A3	05000050 A			DATA	X'50000050'	
1896	01	006A4	020000A0 A			DATA	X'200000A0'	PSW2 IN
1897	01	006A5	05000050 A			DATA	X'50000050'	PSW2 OUT
1898						PAGE		
1899					** LOAD FIVE INTO RP			
1900	01	006A6	FFFFFFF2 A		LRP01	DATA	=14	
1901	01	006A7	2F000460			LRP	MEMORY	
1902	01	006A8	00000136			K	0,0,0,SETPSW	
1903	01	006A9	00000169			K	0,0,0,L8C+2	
1904	01	006AA	00000000 A			DATA	0	
1905	01	006AB	00000000 A			DATA	0	
1906	01	006AC	00000050 A			DATA	X'50'	
1907	01	006AD	00000050 A			DATA	X'50'	
1908	01	006AE	00000000 A			DATA	0	
1909	01	006AF	00000000 A			DATA	0	
1910	01	006B0	00000000 A			DATA	0	
1911	01	006B1	00000000 A			DATA	0	
1912	01	006B2	000000A0 A			DATA	X'A0'	PSW2 IN
1913	01	006B3	00000050 A			DATA	X'50'	PSW2 OUT
1914					** LOAD A INTO REG POINTER FROM REG			
1915	01	006B4	FFFFFFF2 A		LRP02	DATA	=14	
1916	01	006B5	2F00000C A			LRP	12	
1917	01	006B6	F7300136			K	15,7,3,SETPSW	
1918	01	006B7	F7300169			K	15,7,3,L8C+2	
1919	01	006B8	000000A0 A			DATA	X'A0'	
1920	01	006B9	000000A0 A			DATA	X'A0'	
1921	01	006BA	00000000 A			DATA	0	
1922	01	006BB	00000000 A			DATA	0	
1923	01	006BC	00000000 A			DATA	0	
1924	01	006BD	00000000 A			DATA	0	
1925	01	006BE	00000000 A			DATA	0	
1926	01	006BF	00000000 A			DATA	0	
1927	01	006C0	00000050 A			DATA	X'50'	PSW2 IN
1928	01	006C1	000000A0 A			DATA	X'A0'	PSW2 OUT
1929						PAGE		
1930					** INSURE THAT (R,CC) IS FALSE WHEN R28-31 ARE ONES AND CC1-4 ARE ZEROS			
1931	01	006C2	FFFFFFF8 A		BCR01	DATA	=8	BRANCH R FIELD=F CC=0
1932	01	006C3	68F00460			BCR,15	MEMORY	
1933	01	006C4	07300136			K	0,7,3,SETPSW	
1934	01	006C5	07300461			K	0,7,3,MEMORY+1	
1935	01	006C6	00000000 A			DATA	0	
1936	01	006C7	00000000 A			DATA	0	
1937	01	006C8	0F000464			XPSD,0	RETURN	
1938	01	006C9	0F000464			XPSD,0	RETURN	
1939					** INSURE THAT (R,CC) IS FALSE WHEN R28-31 ARE ZEROS AND CC1-4 ARE ONES			
1940	01	006CA	FFFFFFFA A		BCR02	DATA	=6	BRANCH R FIELD=0 CC=F
1941	01	006CB	6800000C A			BCR,0	12	
1942	01	006CC	F0000136			K	15,0,0,SETPSW	
1943	01	006CD	F000000D A			K	15,0,0,13	
1944	01	006CE	0F000464			XPSD,0	RETURN	
1945	01	006CF	0F000464			XPSD,0	RETURN	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
1946						* CHECK (R,CC) = R28,CC1		
1947	01	006D0	FFFFFFFC	A	BCR03	DATA	-4	NBRANCH R=CC= 8
1948	01	006D1	68800047			BCR,8	BRANCH	
1949	01	006D2	80000136			K	8,0,0,SETPSW	
1950	01	006D3	80000169			K	8,0,0,L8C+2	
1951						PAGE		
1952						* CHECK (R,CC) = R29,CC2		
1953	01	006D4	FFFFFFFC	A	BCR04	DATA	-4	NBRANCH R=CC= 4
1954	01	006D5	68400047			BCR,4	BRANCH	
1955	01	006D6	40000136			K	4,0,0,SETPSW	
1956	01	006D7	40000169			K	4,0,0,L8C+2	
1957						* CHECK (R,CC) = R30,CC3		
1958	01	006D8	FFFFFFFC	A	BCR05	DATA	-4	NBRANCH R=CC= 2
1959	01	006D9	68200047			BCR,2	BRANCH	
1960	01	006DA	20000136			K	2,0,0,SETPSW	
1961	01	006DB	20000169			K	2,0,0,L8C+2	
1962						* CHECK (R,CC) = R31,CC4		
1963	01	006DC	FFFFFFFC	A	BCR06	DATA	-4	NBRANCH R=CC= 1
1964	01	006DD	68100047			BCR,1	BRANCH	
1965	01	006DE	10000136			K	1,0,0,SETPSW	
1966	01	006DF	10000169			K	1,0,0,L8C+2	
1967						PAGE		
1968						** CHECK THAT CC3 OR 4 IS NOT SHORTED TO CC1 OR 2 ALSO		
1969						** CHECK THAT R28 OR 29 IS NOT SHORTED TO R30 OR 31		
1970	01	006E0	FFFFFFFC	A	BCS01	DATA	-4	N BRANCH R FIELD = C CC= 3
1971	01	006E1	69C00047			BCS,12	BRANCH	
1972	01	006E2	30000136			K	3,0,0,SETPSW	
1973	01	006E3	30000169			K	3,0,0,L8C+2	
1974						** CHECK THAT CC2 OR 4 IS NOT SHORTED TO CC1 OR 3 ALSO		
1975						** CHECK THAT R28 OR 30 IS NOT SHORTED TO R29 OR 31		
1976	01	006E4	FFFFFFFC	A	BCS02	DATA	-4	NBRANCH R FIELD = A CC= 5
1977	01	006E5	69A00047			BCS,10	BRANCH	
1978	01	006E6	50000136			K	5,0,0,SETPSW	
1979	01	006E7	50000169			K	5,0,0,L8C+2	
1980						** CHECK THAT A BRANCH CONDITION WILL OCCUR		
1981	01	006E8	FFFFFFF8	A	BCS03	DATA	-8	
1982	01	006E9	69800460			BCS,8	MEMORY	
1983	01	006EA	80000136			K	8,0,0,SETPSW	
1984	01	006EB	80000461			K	8,0,0,MEMORY+1	
1985	01	006EC	00000000	A		DATA	0	
1986	01	006ED	00000000	A		DATA	0	
1987	01	006EE	0F000464			XPSD,0	RETURN	
1988	01	006EF	0F000464			XPSD,0	RETURN	
1989						PAGE		
1990						*		
1991						*		
1992						*		PRI=PROPAGATE THRU ITH BIT POSITION
1993						*		GI = GENERATE FROM THE ITH BIT
1994						*		KI = CARRY INTO THE ITH BIT
1995						*		I = BIT POSITIONS 0 THRU 31
1996						*		J=0,4,8,12,16,20,24,28
1997						*		K=1,5,9,13,17,21,25,29
1998						*		L=2,6,10,14,18,22,26,30
1999						*		M=3,7,11,15,19,23,27,31(31 OPTI0NAL)
2000	01	006F0	FFFFFFFC	A	AW01	DATA	-4	AW KI=0,GI=0,RI=0,AI=0,DI=0
2001	01	006F1	30C00460			AW,12	MEMORY	
2002	01	006F2	F7200136			K	15,7,2,SETPSW	
2003	01	006F3	07200169			K	0,7,2,L8C+2	
2004	01	006F4	FFFFFFF8	A	AW02	DATA	-8	AW * KI=0,GI=0,PRI=1,AI=1,DI=0
2005	01	006F5	B0C0045A			AW,12	*IA	
2006	01	006F6	E7200136			K	14,7,2,SETPSW	
2007	01	006F7	17200169			K	1,7,2,L8C+2	
2008	01	006F8	FFFFFFF7	A		DATA	-1	
2009	01	006F9	FFFFFFF7	A		DATA	-1	
2010	01	006FA	00000000	A		DATA	0	
2011	01	006FB	00000000	A		DATA	0	
2012	01	006FC	FFFFFFF8	A	AW03	DATA	-8	AW KI=0,GI=0,PRI=1,AI=0,DI=1
2013	01	006FD	30C00460			AW,12	MEMORY	
2014	01	006FE	07200136			K	0,7,2,SETPSW	
2015	01	006FF	17200169			K	1,7,2,L8C+2	
2016	01	00700	00000000	A		DATA	0	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
2017	01	00701	FFFFFFF	A		DATA	=1	
2018	01	00702	FFFFFFF	A		DATA	=1	
2019	01	00703	FFFFFFF	A		DATA	=1	
2020						PAGE		
2021						** AW04 TESTS: K(EVEN BIT POSITION) = G(ODD BIT POSITION)		
2022						** EXAMPLE K04= G05		
2023	01	00704	FFFFFFF8	A	AW04	DATA	=8	AW X KJ=1 GJ=0, PRI=0
2024	01	00705	30C2AF0B			AW,12	MEMORY=X'15555',1	KK=0,GK=1
2025	01	00706	97200136			K	9,7,2,SETPSW	KL=1,GL=0
2026	01	00707	57200169			K	5,7,2,L0C+2	KM=0,GM=1
2027	01	00708	55555555	A		DATA	X'55555555'	
2028	01	00709	AAAAAAAA	A		DATA	X'AAAAAAAA'	
2029	01	0070A	55555555	A		DATA	X'55555555'	
2030	01	0070B	55555555	A		DATA	X'55555555'	
2031						** AW05 TESTS THE FOLLOWING TERMS: G0003= G00, G0407= G04, G0811 = G08		
2032						** G12=15 = G12, G1619= G16, G2023= G20, G2427=G24, G2831=G28, K00=G003		
2033						** K03= G0407, K07= G0811, K11= G1215, K15=G1619, K19=G2023, K23=G2427		
2034						** K27= G2831,		
2035						** K01, 05, 09, 13, 17, 21, 25, 29, (EQUALS GEN TERM ON NEXT LINE)		
2036						** G02, 06, 10, 14, 18, 22, 26, 30		
2037	01	0070C	FFFFFFF8	A	AW05	DATA	=8	AW KJ=0,GJ=1, PRI=0
2038	01	0070D	30C00460			AW,12	MEMORY	KK=1,GK=0
2039	01	0070E	172001C8			K	1,7,2,FXP0SW	KL=0,GL=1
2040	01	0070F	E7200169			K	14,7,2,L0C+2	KM=1,GM=0
2041	01	00710	AAAAAAAA	A		DATA	X'AAAAAAAA'	
2042	01	00711	55555554	A		DATA	X'55555554'	
2043	01	00712	AAAAAAAA	A		DATA	X'AAAAAAAA'	
2044	01	00713	AAAAAAAA	A		DATA	X'AAAAAAAA'	
2045						PAGE		
2046						** AW06 TESTS: G2831= G31, PR28, PR29, PR30, K00= PR00, PR15, K15		
2047						** K03= PR04, PR15, K15, K07= PR08, PR15, K15, K11= PR1215, K15		
2048						** K15= PR16=27, G2831, K19= PR20=27, G2831, K23= PR24=27, G2831		
2049						** K04= PR05, PR06, PR07, K07, K05= PR06, PR07, K07, K06= PR07, K07		
2050						** K08= PR09, PR10, PR11, K11, K09= PR10, PR11, K11, K10= PR11, K11		
2051						** K12= PR13, PR14, PR15, K15, K13= PR14, PR15, K15, K14= PR15, K15		
2052						** K18= PR19, K19		
2053						** K20= PR21, PR22, PR23, K23, K21= PR22, PR23, K23, K22= PR23, K23		
2054						** K24= PR25, PR26, PR27, K27, K25= PR26, PR27, K27, K26= PR27, K27		
2055						** K28= PR29, PR30, G31, K29= PR30, G31		
2056	01	00714	FFFFFFF8	A	AW06	DATA	=8	AW KI=1,GI=0, PRI=1 (EXCEPT I=31)
2057	01	00715	30C00460			AW,12	MEMORY	
2058	01	00716	772001C8			K	7,7,2,FXP0SW	
2059	01	00717	87200169			K	8,7,2,L0C+2	
2060	01	00718	FFFFFFF	A		DATA	=1	
2061	01	00719	00000000	A		DATA	0	
2062	01	0071A	00000001	A		DATA	1	
2063	01	0071B	00000001	A		DATA	1	
2064	01	0071C	FFFFFFF8	A	AW07	DATA	=8	AW KI=1,GI=0, PRI=1 (EXCEPT I=31)
2065	01	0071D	30C00460			AW,12	MEMORY	
2066	01	0071E	072001C8			K	0,7,2,FXP0SW	
2067	01	0071F	87200169			K	8,7,2,L0C+2	
2068	01	00720	00000001	A		DATA	1	
2069	01	00721	00000000	A		DATA	0	
2070	01	00722	FFFFFFF	A		DATA	=1	
2071	01	00723	FFFFFFF	A		DATA	=1	
2072						PAGE		
2073	01	00724	FFFFFFF8	A	AW08	DATA	=8	AW KI=1,GI=1, PRI=0 (K31=0)
2074	01	00725	30C00460			AW,12	MEMORY	
2075	01	00726	072001C8			K	0,7,2,FXP0SW	
2076	01	00727	97200169			K	9,7,2,L0C+2	
2077	01	00728	FFFFFFF	A		DATA	=1	
2078	01	00729	FFFFFFFE	A		DATA	=2	
2079	01	0072A	FFFFFFF	A		DATA	=1	
2080	01	0072B	FFFFFFF	A		DATA	=1	
2081	01	0072C	FFFFFFF8	A	AW09	DATA	=8	AW KI=0,GI=0, PRI=1
2082	01	0072D	30C00460			AW,12	MEMORY	
2083	01	0072E	972001C8			K	9,7,2,FXP0SW	
2084	01	0072F	17200169			K	1,7,2,L0C+2	
2085	01	00730	AAAAAAAA	A		DATA	X'AAAAAAAA'	
2086	01	00731	FFFFFFF	A		DATA	=1	
2087	01	00732	55555555	A		DATA	X'55555555'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
2088	01	00733	55555555	A		DATA	X'55555555'	
2089	01	00734	FFFFFFFF	A	AW10	DATA	=8	AW KJ=0,GJ=0,PRJ=0
2090	01	00735	30C00460			AW,12	MEMORY	KK=1,GK=0
2091	01	00736	072001C8			K	0,7,2,FXP8SW	KL=0,GL=1,
2092	01	00737	27200169			K	2,7,2,L8C+2	KM=0,GM=0,
2093	01	00738	22222222	A		DATA	X'22222222'	
2094	01	00739	44444444	A		DATA	X'44444444'	
2095	01	0073A	22222222	A		DATA	X'22222222'	
2096	01	0073B	22222222	A		DATA	X'22222222'	
2097	01	0073C	FFFFFFFF	A	AW11	DATA	=8	AW KI=0,GJ=1,PRJ=0
2098	01	0073D	30C00460			AW,12	MEMORY	KK=1,GK=0,PRK=0
2099	01	0073E	F72001C8			K	15,7,2,FXP8SW	KL=1,GL=0,PRL=1
2100	01	0073F	E7200169			K	14,7,2,L8C+2	KM=1,GM=0,PRM=1
2101	01	00740	BBBBBBBB	A		DATA	X'BBBBBBBB'	
2102	01	00741	44444443	A		DATA	X'44444443'	
2103	01	00742	88888888	A		DATA	X'88888888'	
2104	01	00743	88888888	A		DATA	X'88888888'	
2105						PAGE		
2106	01	00744	FFFFFFFF	A	AW12	DATA	=8	AW KI=0,GJ=1,PRK=0
2107	01	00745	30C00460			AW,12	MEMORY	KK=0,GK=0,PRK=1
2108	01	00746	072001C8			K	0,7,2,FXP8SW	KL=1,GL=0,PRK=0
2109	01	00747	E7200169			K	14,7,2,L8C+2	KM=1,GM=0,PRK=1
2110	01	00748	DDDDDDDD	A		DATA	X'DDDDDDDD'	
2111	01	00749	66666665	A		DATA	X'66666665'	
2112	01	0074A	88888888	A		DATA	X'88888888'	
2113	01	0074B	88888888	A		DATA	X'88888888'	
2114	01	0074C	FFFFFFFF	A	AW13	DATA	=8	AW KJ=0,GJ=1,PRJ=0
2115	01	0074D	30C00460			AW,12	MEMORY	KK=0,GK=0,PRK=1
2116	01	0074E	F72001C8			K	15,7,2,FXP8SW	KL=0,GL=0,PRL=1
2117	01	0074F	E7200169			K	14,7,2,L8C+2	KM=1,GM=0,PRM=0
2118	01	00750	CCCCCCCC	A		DATA	X'CCCCCCCC'	
2119	01	00751	77777776	A		DATA	X'77777776'	
2120	01	00752	AAAAAAAA	A		DATA	X'AAAAAAAA'	
2121	01	00753	AAAAAAAA	A		DATA	X'AAAAAAAA'	
2122	01	00754	FFFFFFFF	A	AW14	DATA	=8	AW KI=0,GJ=0,PRJ=0
2123	01	00755	30C00460			AW,12	MEMORY	PRK=1
2124	01	00756	772001C8			K	7,7,2,FXP8SW	PRK=1
2125	01	00757	27200169			K	2,7,2,L8C+2	PRK=1
2126	01	00758	22222222	A		DATA	X'22222222'	
2127	01	00759	77777777	A		DATA	X'77777777'	
2128	01	0075A	55555555	A		DATA	X'55555555'	
2129	01	0075B	55555555	A		DATA	X'55555555'	
2130	01	0075C	FFFFFFFF	A	AW15	DATA	=8	AW KJ=0,GJ=0,PRJ=0
2131	01	0075D	30C00460			AW,12	MEMORY	KK=1,GK=0,PRK=0
2132	01	0075E	F72001C8			K	7,7,2,FXP8SW	KL=1,GL=0,PRL=1
2133	01	0075F	27200169			K	2,7,2,L8C+2	KM=0,GM=1,PRM=0
2134	01	00760	33333333	A		DATA	X'33333333'	
2135	01	00761	44444444	A		DATA	X'44444444'	
2136	01	00762	11111111	A		DATA	X'11111111'	
2137	01	00763	11111111	A		DATA	X'11111111'	
2138						PAGE		
2139	01	00764	FFFFFFFF	A	AW16	DATA	=8	AW KJ=0,GJ=0,PRJ=0
2140	01	00765	30C00460			AW,12	MEMORY	KK=0,GK=0,PRK=1
2141	01	00766	072001C8			K	0,7,2,FXP8SW	KL=1,GL=0,PRL=0
2142	01	00767	27200169			K	2,7,2,L8C+2	KM=0,GM=1,PRM=0
2143	01	00768	11111111	A		DATA	X'11111111'	
2144	01	00769	66666666	A		DATA	X'66666666'	
2145	01	0076A	55555555	A		DATA	X'55555555'	
2146	01	0076B	55555555	A		DATA	X'55555555'	
2147	01	0076C	FFFFFFFF	A	AW17	DATA	=8	AW KI=1,GJ=1,PRJ=0 (K31=0)
2148	01	0076D	30C00460			AW,12	MEMORY	GK=0 PRK=1
2149	01	0076E	772001C8			K	7,7,2,FXP8SW	GL=0,PRL=1
2150	01	0076F	97200169			K	9,7,2,L8C+2	GM=0,PRM=1
2151	01	00770	DDDDDDDD	A		DATA	X'DDDDDDDD'	
2152	01	00771	88888887	A		DATA	X'88888887'	
2153	01	00772	AAAAAAAA	A		DATA	X'AAAAAAAA'	
2154	01	00773	AAAAAAAA	A		DATA	X'AAAAAAAA'	
2155	01	00774	FFFFFFFF	A	AW18	DATA	=8	AW KJ=1,GJ=0,PRJ=0
2156	01	00775	30C00460			AW,12	MEMORY	KK=1,GK=0,PRK=1
2157	01	00776	F72001C8			K	15,7,2,FXP8SW	KL=1,GL=0,PRL=1
2158	01	00777	57200169			K	5,7,2,L8C+2	KM=0,GM=1,PRM=1

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
2159	01	00778	55555555	A		DATA	X'55555555'	
2160	01	00779	88888888	A		DATA	X'88888888'	
2161	01	0077A	33333333	A		DATA	X'33333333'	
2162	01	0077B	33333333	A		DATA	X'33333333'	
2163	01	0077C	FFFFFFF8	A	AW19	DATA	=8	AW KJ=1,GJ=0,PRJ=0
2164	01	0077D	30C00460			AW,12	MEMORY	KK=1,GK=0,PK=01
2165	01	0077E	072001C8			K	0,7,2,FXP8SW	KL=0,GL=1,PL=00
2166	01	0077F	57200169			K	5,7,2,L8C+2	KM=0,GM=0,PM=00
2167	01	00780	66666666	A		DATA	X'66666666'	
2168	01	00781	88888888	A		DATA	X'88888888'	
2169	01	00782	22222222	A		DATA	X'22222222'	
2170	01	00783	22222222	A		DATA	X'22222222'	
2171						PAGE		
2172	01	00784	FFFFFFF8	A	AW20	DATA	=8	AW KI=1,GJ=0,PRJ=0
2173	01	00785	30C00460			AW,12	MEMORY	KK=0,GK=1
2174	01	00786	272001C8			K	2,7,2,FXP8SW	KL=0,GL=0
2175	01	00787	57200169			K	5,7,2,L8C+2	KM=0,GM=0
2176	01	00788	44444444	A		DATA	X'44444444'	
2177	01	00789	88888888	A		DATA	X'88888888'	
2178	01	0078A	44444444	A		DATA	X'44444444'	
2179	01	0078B	44444444	A		DATA	X'44444444'	
2180	01	0078C	FFFFFFF8	A	AW21	DATA	=8	AW KK=1,GM=1,PR5=1
2181	01	0078D	30C00460			AW,12	MEMORY	KL=1 PRL=1
2182	01	0078E	072001C8			K	0,7,2,FXP8SW	
2183	01	0078F	17200169			K	1,7,2,L8C+2	
2184	01	00790	BBBBBBBB	A		DATA	X'BBBBBBBB'	
2185	01	00791	CCCCCCCC	A		DATA	X'CCCCCCCC'	
2186	01	00792	11111111	A		DATA	X'11111111'	
2187	01	00793	11111111	A		DATA	X'11111111'	
2188	01	00794	FFFFFFF8	A	AW22	DATA	=8	AW KL=1,GM=1,PRJ=1
2189	01	00795	30C00460			AW,12	MEMORY	PRK=1
2190	01	00796	072001C8			K	0,7,2,FXP8SW	
2191	01	00797	17200169			K	1,7,2,L8C+2	
2192	01	00798	DDDDDDDD	A		DATA	X'DDDDDDDD'	
2193	01	00799	EEEEEEEE	A		DATA	X'EEEEEEEE'	
2194	01	0079A	11111111	A		DATA	X'11111111'	
2195	01	0079B	11111111	A		DATA	X'11111111'	
2196	01	0079C	FFFFFFF8	A	AW23	DATA	=8	AW KI=0,GJ=0,PRJ=1
2197	01	0079D	30C00460			AW,12	MEMORY	PRK=1
2198	01	0079E	072001C8			K	0,7,2,FXP8SW	PRL=1
2199	01	0079F	17200169			K	1,7,2,L8C+2	
2200	01	007A0	88888888	A		DATA	X'88888888'	
2201	01	007A1	EEEEEEEE	A		DATA	X'EEEEEEEE'	
2202	01	007A2	66666666	A		DATA	X'66666666'	
2203	01	007A3	66666666	A		DATA	X'66666666'	
2204						PAGE		
2205	01	007A4	FFFFFFF8	A	AW24	DATA	=8	AW KK=1,GL=1,PRJ=1
2206	01	007A5	30C00460			AW,12	MEMORY	
2207	01	007A6	072001C8			K	0,7,2,FXP8SW	
2208	01	007A7	17200169			K	1,7,2,L8C+2	
2209	01	007A8	AAAAAAAA	A		DATA	X'AAAAAAAA'	
2210	01	007A9	CCCCCCCC	A		DATA	X'CCCCCCCC'	
2211	01	007AA	22222222	A		DATA	X'22222222'	
2212	01	007AB	22222222	A		DATA	X'22222222'	
2213	01	007AC	FFFFFFF8	A	AW25	DATA	=8	AW KI=0,GJ=0,PRJ=1
2214	01	007AD	30C00460			AW,12	MEMORY	PRK=1
2215	01	007AE	072001C8			K	0,7,2,FXP8SW	
2216	01	007AF	17200169			K	1,7,2,L8C+2	
2217	01	007B0	88888888	A		DATA	X'88888888'	
2218	01	007B1	CCCCCCCC	A		DATA	X'CCCCCCCC'	
2219	01	007B2	44444444	A		DATA	X'44444444'	
2220	01	007B3	44444444	A		DATA	X'44444444'	
2221						** AW26 TESTS:	G1215= G14*PR12,PR13, G2831= G30*PR28,PR29	
2222						** K00=	PR00*11.G1215, K03=PR04*11.G1215, K07= PR0811.G1215	
2223						** K0=	PR01,PR02,PR03,K03, K01= PR02,PR03,K03, K02= PR03,K03	
2224						** K12=	PR13*G14, K16= PR17*PR18*PR19*K19, K17= PR18*PR19*K19	
2225						** K28=	PR29,G30	
2226	01	007B4	FFFFFFF8	A	AW26	DATA	=8	AW KI=1(EXCEPT K14,K30,K31)
2227	01	007B5	30C00460			AW,12	MEMORY	TEST ALL CARRY(K) TERMS GATED
2228	01	007B6	072001C8			K	0,7,2,FXP8SW	BY G14 AND G30.
2229	01	007B7	A7200169			K	10,7,2,L8C+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
2230	01	007B8	FFFFFFF8	A		DATA	X'FFFFFFF8'	
2231	01	007B9	00010000	A		DATA	X'100001'	
2232	01	007BA	00020002	A		DATA	X'200021'	
2233	01	007BB	00020002	A		DATA	X'200021'	
2234						PAGE		
2235					** AW27	TESTS:	G1215= G13*PR12, G2831= G29*PR28	
2236	01	007BC	FFFFFFF8	A	AW27	DATA	=8	AW K1=1(EXCEPT K13,K29-K31)
2237	01	007BD	30C00460			AW,12	MEMORY	TEST ALL G13,G29 TERMS
2238	01	007BE	F72001C8			K	15,7,2,FXP8SW	
2239	01	007BF	A7200169			K	10,7,2,L8C+2	
2240	01	007C0	FFFDFFFC	A		DATA	X'FFFDFFFC'	
2241	01	007C1	00020000	A		DATA	X'200001'	
2242	01	007C2	00040004	A		DATA	X'400041'	
2243	01	007C3	00040004	A		DATA	X'400041'	
2244						PAGE		
2245	01	007C4	FFFFFFF8	A	AW28	DATA	=8	AW K1=1(EXCEPT K12,K28-K31)
2246	01	007C5	30C00460			AW,12	MEMORY	TEST G12,G28 TERMS
2247	01	007C6	F72001C8			K	15,7,2,FXP8SW	
2248	01	007C7	A7200169			K	10,7,2,L8C+2	
2249	01	007C8	FFFBFFF8	A		DATA	X'FFFBFFF8'	
2250	01	007C9	00040000	A		DATA	X'400001'	
2251	01	007CA	00080008	A		DATA	X'800081'	
2252	01	007CB	00080008	A		DATA	X'800081'	
2253					** AW29	TESTS:	G0811= G11*PR08*PR09*PR10, G2427= G27*PR24*PR25*PR26	
2254					** K00=	PR00*PR07*G0811, K03= PR0407*G0811, K15= PR16=23*G2427		
2255					** K19=	PR2023*G2427, K08= PR09*PR10*G11, K09= PR10*G11		
2256					** K24=	PR25*PR26*G27, K25= PR26*G27		
2257	01	007CC	FFFFFFF8	A	AW29	DATA	=8	AW 29=1,(EXCEPT K11,K27-K31)
2258	01	007CD	30C00460			AW,12	MEMORY	TEST G11,G27 TERMS
2259	01	007CE	F72001C8			K	15,7,2,FXP8SW	
2260	01	007CF	A7200169			K	10,7,2,L8C+2	
2261	01	007D0	FFF7FFF0	A		DATA	X'FFF7FFF0'	
2262	01	007D1	00080000	A		DATA	X'800001'	
2263	01	007D2	00100010	A		DATA	X'100010'	
2264	01	007D3	00100010	A		DATA	X'100010'	
2265						PAGE		
2266					** AW30	TESTS:	G0811= G10*PR08*PR09, G2427= G24*PR24*PR25, K24*PR25*G26	
2267	01	007D4	FFFFFFF8	A	AW30	DATA	=8	AW K1=1(EXCEPT K10,K26-K31)
2268	01	007D5	30C00460			AW,12	MEMORY	TEST G10,G26
2269	01	007D6	F72001C8			K	15,7,2,FXP8SW	
2270	01	007D7	A7200169			K	10,7,2,L8C+2	
2271	01	007D8	FFFEFFFE0	A		DATA	X'FFFEFFFE0'	
2272	01	007D9	00100000	A		DATA	X'1000001'	
2273	01	007DA	00200020	A		DATA	X'2000201'	
2274	01	007DB	00200020	A		DATA	X'2000201'	
2275					** AW31	TESTS:	G0811= G09*PR08, G2427= G25*PR24	
2276	01	007DC	FFFFFFF8	A	AW31	DATA	=8	AW K1=1(EXCEPT K9,K25-K31)
2277	01	007DD	30C00460			AW,12	MEMORY	TEST G9,G25
2278	01	007DE	072001C8			K	0,7,2,FXP8SW	
2279	01	007DF	A7200169			K	10,7,2,L8C+2	
2280	01	007E0	FFDFFFC0	A		DATA	X'FFDFFFC0'	
2281	01	007E1	00200000	A		DATA	X'2000001'	
2282	01	007E2	00400040	A		DATA	X'4000401'	
2283	01	007E3	00400040	A		DATA	X'4000401'	
2284						PAGE		
2285	01	007E4	FFFFFFF8	A	AW32	DATA	=8	AW K1=1(EXCEPT K8,K24-K31)
2286	01	007E5	30C00460			AW,12	MEMORY	TEST G8,G24
2287	01	007E6	F72001C8			K	15,7,2,FXP8SW	
2288	01	007E7	A7200169			K	10,7,2,L8C+2	
2289	01	007E8	FFBFFF80	A		DATA	X'FFBFFF80'	
2290	01	007E9	00400000	A		DATA	X'4000001'	
2291	01	007EA	00800080	A		DATA	X'8000801'	
2292	01	007EB	00800080	A		DATA	X'8000801'	
2293					** AW33	TESTS:	G0407= G07*PR04*PR05*PR06, G2023= G23*PR20*PR21*PR22	
2294					** K00=	PR0003*G0407, K15= PR1619*G2023, K4= PR05*PR06*G07, K5=PR06*G07		
2295					** K20=	PR21*PR22*G23, K21= PR22*G23		
2296	01	007EC	FFFFFFF8	A	AW33	DATA	=8	AW K1=1(EXCEPT K7,K23-K31)
2297	01	007ED	30C00460			AW,12	MEMORY	TEST G7,G23
2298	01	007EE	672001C8			K	6,7,2,FXP8SW	
2299	01	007EF	A7200169			K	10,7,2,L8C+2	
2300	01	007F0	FF7FFF00	A		DATA	X'FF7FFF00'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
2301	01	007F1	00800000	A		DATA	X'800000'	
2302	01	007F2	01000100	A		DATA	X'1000100'	
2303	01	007F3	01000100	A		DATA	X'1000100'	
2304					** AW34	TESTS:	G0407= G06,PR04,PR05, G2023= G22,PR20,PR21, K4=PR05,G06	
2305					** K20=	G22,PR21		
2306	01	007F4	FFFFFFF8	A	AW34	DATA	=8	AW * K1=(EXCEPT K6,K22=K31)
2307	01	007F5	80C0045A	A		AW,12	*IA	TEST G6,G22
2308	01	007F6	572001C8	A		K	5,7,2,FXP8SW	
2309	01	007F7	A7200169	A		K	10,7,2,L8C+2	
2310	01	007F8	FFFFFFF0	A		DATA	X'FFFFFFE0'	
2311	01	007F9	01000000	A		DATA	X'1000000'	
2312	01	007FA	02000200	A		DATA	X'2000200'	
2313	01	007FB	02000200	A		DATA	X'2000200'	
2314						PAGE		
2315					** AW35	TESTS:	G0407= G05,PR04, G2023= PR20,G21	
2316	01	007FC	FFFFFFF8	A	AW35	DATA	=8	AW K1=(EXCEPT K5,K21=K31)
2317	01	007FD	30C00460	A		AW,12	MEMORY	TEST G5,G21
2318	01	007FE	472001C8	A		K	4,7,2,FXP8SW	
2319	01	007FF	A7200169	A		K	10,7,2,L8C+2	
2320	01	00800	FDFDFC00	A		DATA	X'FDFDFC00'	
2321	01	00801	02000000	A		DATA	X'2000000'	
2322	01	00802	04000400	A		DATA	X'4000400'	
2323	01	00803	04000400	A		DATA	X'4000400'	
2324	01	00804	FFFFFFF8	A	AW36	DATA	=8	AW K1=(EXCEPT K4,K20=K31)
2325	01	00805	30C00460	A		AW,12	MEMORY	TEST G4,G20
2326	01	00806	072001C8	A		K	0,7,2,FXP8SW	
2327	01	00807	A7200169	A		K	10,7,2,L8C+2	
2328	01	00808	FBFFFF80	A		DATA	X'FBFFFF80'	
2329	01	00809	04000000	A		DATA	X'4000000'	
2330	01	0080A	08000800	A		DATA	X'8000800'	
2331	01	0080B	08000800	A		DATA	X'8000800'	
2332					** AW37	TESTS:	G1619= G19,PR16,PR17,PR18, K16= PR17,PR18,G19	
2333					** K17=	PR18,G19		
2334	01	0080C	FFFFFFF8	A	AW37	DATA	=8	AW K15,K16,K17,K18=1
2335	01	0080D	30C00460	A		AW,12	MEMORY	TEST G19
2336	01	0080E	B72001C8	A		K	11,7,2,FXP8SW	
2337	01	0080F	27200169	A		K	2,7,2,L8C+2	
2338	01	00810	0000F000	A		DATA	X'F000'	
2339	01	00811	00010000	A		DATA	X'10000'	
2340	01	00812	00001000	A		DATA	X'1000'	
2341	01	00813	00001000	A		DATA	X'1000'	
2342						PAGE		
2343					** AW38	TESTS:	G1619= G18,PR16,PR17, K16= PR17,G18	
2344	01	00814	FFFFFFF8	A	AW38	DATA	=8	AW K15,K16,K17=1
2345	01	00815	30C00460	A		AW,12	MEMORY	TEST G18
2346	01	00816	F72001C8	A		K	15,7,2,FXP8SW	
2347	01	00817	27200169	A		K	2,7,2,L8C+2	
2348	01	00818	0000E000	A		DATA	X'E000'	
2349	01	00819	00010000	A		DATA	X'10000'	
2350	01	0081A	00002000	A		DATA	X'2000'	
2351	01	0081B	00002000	A		DATA	X'2000'	
2352					** AW39	TESTS:	G1619= PR16,G17	
2353	01	0081C	FFFFFFF8	A	AW39	DATA	=8	AW K15,K16=1
2354	01	0081D	30C00460	A		AW,12	MEMORY	TEST G17
2355	01	0081E	072001C8	A		K	0,7,2,FXP8SW	
2356	01	0081F	27200169	A		K	2,7,2,L8C+2	
2357	01	00820	0000C000	A		DATA	X'C000'	
2358	01	00821	00010000	A		DATA	X'10000'	
2359	01	00822	00004000	A		DATA	X'4000'	
2360	01	00823	00004000	A		DATA	X'4000'	
2361						PAGE		
2362					** AW40	TESTS:	G1215= G15,PR12,PR13,PR14, K12= G15,PR13,PR14	
2363					** K13=	G15,PR14		
2364	01	00824	FFFFFFF8	A	AW40	DATA	=8	AW TEST G15
2365	01	00825	30C00460	A		AW,12	MEMORY	
2366	01	00826	072001C8	A		K	0,7,2,FXP8SW	
2367	01	00827	27200169	A		K	2,7,2,L8C+2	
2368	01	00828	0FFF0000	A		DATA	X'FFF0000'	
2369	01	00829	10000000	A		DATA	X'10000000'	
2370	01	0082A	00010000	A		DATA	X'10000'	
2371	01	0082B	00010000	A		DATA	X'10000'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
2372	01	0082C	FFFFFFF8	A	AW41	DATA	=8	AW TEST OVERFLOW TRAP = T0 +
2373	01	0082D	30C00460			AW,12	MEMORY	
2374	01	0082E	073001C8			K	0,7,3,FXP0SW	
2375	01	0082F	E7300084			K	14,7,3,FP0RET+1	
2376	01	00830	89ABEF17	A		DATA	X'89ABEF17'	
2377	01	00831	70FF0579	A		DATA	X'70FF0579'	
2378	01	00832	E7531662	A		DATA	X'E7531662'	
2379	01	00833	E7531662	A		DATA	X'E7531662'	
2380	01	00834	FFFFFFF8	A	AW42	DATA	=8	AW TEST OVERFLOW TRAP + T0 =
2381	01	00835	30C00460			AW,12	MEMORY	
2382	01	00836	073001D2			K	0,7,3,FXP0PSDW	CHECK RETURNED PSDW
2383	01	00837	57300167			K	5,7,3,L0C	
2384	01	00838	61754221	A		DATA	X'61754221'	
2385	01	00839	80000000	A		DATA	X'80000000'	
2386	01	0083A	1E8ABDDF	A		DATA	X'1E8ABDDF'	
2387	01	0083B	1E8ABDDF	A		DATA	X'1E8ABDDF'	
2388						PAGE		
2389						** TEST	G00=03=G03,PRO0,PRO1,PRO2 ,K0=PRO1,PRO2,G3, <1=PRO2,G03	
2390	01	0083C	FFFFFFF4	A	AW43	DATA	=12	
2391	01	0083D	30C00460			AW,12	MEMORY	
2392	01	0083E	77300136			K	7,7,3,SETPSW	
2393	01	0083F	87300169			K	8,7,3,L0C+2	
2394	01	00840	F0000000	A		DATA	X'F0000000'	
2395	01	00841	00000000	A		DATA	0	
2396	01	00842	10000000	A		DATA	X'10000000'	
2397	01	00843	10000000	A		DATA	X'10000000'	
2398	01	00844	FFFFFFF7	A		DATA	-1,-1,100,100	
	01	00845	FFFFFFF7	A				
	01	00846	00000064	A				
	01	00847	00000064	A				
2399						** NO OVERFLOW (-)+(+) T0 (+)		
2400						** TEST	G0003= G02,PRO0,PRO1, K0=PRO1,G02	
2401	01	00848	FFFFFFF4	A	AW44	DATA	=12	
2402	01	00849	30C00461			AW,12	MEMORY+1	
2403	01	0084A	07300136			K	0,7,3,SETPSW	
2404	01	0084B	87300169			K	8,7,3,L0C+2	
2405	01	0084C	E0000000	A		DATA	X'E0000000'	
2406	01	0084D	00000000	A		DATA	0	
2407	01	0084E	00000000	A		DATA	0,0,8,8,X'20000000',X'20000000'	
	01	0084F	00000000	A				
	01	00850	00000008	A				
	01	00851	00000008	A				
	01	00852	20000000	A				
	01	00853	20000000	A				
2408						PAGE		
2409						** TEST	G0003= G01,PRO0 NO OVERFLOW (+)+(=) T0 (+)	
2410	01	00854	FFFFFFF4	A	AW45	DATA	=12	
2411	01	00855	30D00461			AW,13	MEMORY+1	
2412	01	00856	07300136			K	0,7,3,SETPSW	
2413	01	00857	87300169			K	8,7,3,L0C+2	
2414	01	00858	00000001	A		DATA	1,1,100,100,X'40000000',0,X'c0000000',X'c0000000'	
	01	00859	00000001	A				
	01	0085A	00000064	A				
	01	0085B	00000064	A				
	01	0085C	40000000	A				
	01	0085D	00000000	A				
	01	0085E	C0000000	A				
	01	0085F	C0000000	A				
2415						** TEST	NO OVERFLOW (-)+(+) T0 (-)	
2416	01	00860	FFFFFFF8	A	AW46	DATA	=8	
2417	01	00861	30C00460			AW,12	MEMORY	
2418	01	00862	07300136			K	0,7,3,SETPSW	
2419	01	00863	17300169			K	1,7,3,L0C+2	
2420	01	00864	FFFFFFF9C	A		DATA	=100,=90,10,10	
	01	00865	FFFFFFFA6	A				
	01	00866	0000000A	A				
	01	00867	0000000A	A				
2421						** TEST	NO OVERFLOW (+)+(=) T0 (-)	
2422	01	00868	FFFFFFF8	A	AW47	DATA	=8	
2423	01	00869	30C00460			AW,12	MEMORY	
2424	01	0086A	07300136			K	0,7,3,SETPSW	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
2425	01	0086B	17300169			K	1,7,3,L8C+2	
2426	01	0086C	000000A	A		DATA	10,-90,-100,-100	
	01	0086D	FFFFFFA6	A				
	01	0086E	FFFFFF9C	A				
	01	0086F	FFFFFF9C	A				
2427						PAGE		
2428	01	00870	FFFFFFF8	A	SW01	DATA	-8	SW
2429	01	00871	38C00460			SW,12	MEMORY	
2430	01	00872	77300136			K	7,7,3,SETPSW	
2431	01	00873	87300169			K	8,7,3,L8C+2	
2432	01	00874	FFFFFFF8	A		DATA	-1	
2433	01	00875	00000000	A		DATA	0	
2434	01	00876	FFFFFFF8	A		DATA	-1	
2435	01	00877	FFFFFFF8	A		DATA	-1	
2436	01	00878	FFFFFFFC	A	SW02	DATA	-4	SW *
2437	01	00879	B8C0045A			SW,12	*IA	
2438	01	0087A	F73001C8			K	15,7,3,FXP8SW	
2439	01	0087B	87300169			K	8,7,3,L8C+2	
2440	01	0087C	FFFFFFF8	A	SW03	DATA	-8	SW
2441	01	0087D	38C00460			SW,12	MEMORY	
2442	01	0087E	273001C8			K	2,7,3,FXP8SW	
2443	01	0087F	57300084			K	5,7,3,FP8RET+1	
2444	01	00880	7FFFFFFF	A		DATA	X'7FFFFFFF'	
2445	01	00881	80000000	A		DATA	X'80000000'	
2446	01	00882	FFFFFFF8	A		DATA	-1	
2447	01	00883	FFFFFFF8	A		DATA	-1	
2448						PAGE		
2449	01	00884	FFFFFFFA	A	SW04	DATA	-6	SW
2450	01	00885	38C0000C	A		SW,12	12	
2451	01	00886	773001C8			K	7,7,3,FXP8SW	
2452	01	00887	87300169			K	8,7,3,L8C+2	
2453	01	00888	80000000	A		DATA	X'80000000'	
2454	01	00889	00000000	A		DATA	0	
2455	01	0088A	FFFFFFF8	A	SW05	DATA	-8	SW PRI=1
2456	01	0088B	38C00460			SW,12	MEMORY	TEST KM=1
2457	01	0088C	00000136			K	0,0,0,SETPSW	
2458	01	0088D	50000169			K	5,0,0,L8C+2	
2459	01	0088E	7FFFFFFF	A		DATA	X'7FFFFFFF'	
2460	01	0088F	80000000	A		DATA	X'80000000'	
2461	01	00890	FFFFFFF8	A		DATA	-1	
2462	01	00891	FFFFFFF8	A		DATA	-1	
2463						PAGE		
2464	01	00892	FFFFFFF8	A	SW06	DATA	-8	SW TEST K31 WITH RR16=PR31
2465	01	00893	38C00460			SW,12	MEMORY	
2466	01	00894	073001C8			K	0,7,3,FXP8SW	
2467	01	00895	27300169			K	2,7,3,L8C+2	
2468	01	00896	0000FFFF	A		DATA	X'FFFF'	
2469	01	00897	00010000	A		DATA	X'10000'	
2470	01	00898	FFFFFFF8	A		DATA	-1	
2471	01	00899	FFFFFFF8	A		DATA	-1	
2472						PAGE		
2473						** S/PH10 = FUBIR,PH1,NBRPH9; BRPH9 = FUBIR,PH1,NS0; S0=1 THUS S/PH10 = 1		
2474	01	0089A	FFFFFFF8	A	BIR01	DATA	-8	BRANCH
2475	01	0089B	65C00460			BIR,12	MEMORY	
2476	01	0089C	F7300136			K	15,7,3,SETPSW	
2477	01	0089D	F7300461			K	15,7,3,MEMORY+1	
2478	01	0089E	FFFFFFFE	A		DATA	-2	
2479	01	0089F	FFFFFFF8	A		DATA	-1	
2480	01	008A0	0F000464			XPSD,0	RETURN	
2481	01	008A1	0F000464			XPSD,0	RETURN	
2482						** S0=0 THUS BRPH9 IS TRUE		
2483	01	008A2	FFFFFFFA	A	BIR02	DATA	-6	NBRANCH
2484	01	008A3	65C00467			BIR,12	BRANCH	
2485	01	008A4	00000136			K	0,0,0,SETPSW	
2486	01	008A5	00000169			K	0,0,0,L8C+2	
2487	01	008A6	FFFFFFF8	A		DATA	-1	
2488	01	008A7	00000000	A		DATA	0	
2489						PAGE		
2490						** S/PH10 IS TRUE FROM FUBDR,PH1,SGTZ		
2491	01	008A8	FFFFFFFA	A	BDR01	DATA	-6	BRANCH
2492	01	008A9	64C00047			BDR,12	BRANCH	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
2493	01	008AA	00000136			K	0,0,0,SETPSW	
2494	01	008AB	00000048			K	0,0,0,BRANCH+1	
2495	01	008AC	00000002	A		DATA	2	
2496	01	008AD	00000001	A		DATA	1	
2497								** S/PH10 IS FALSE BECAUSE SGTZ IS FALSE
2498	01	008AE	FFFFFFFA	A	BDR02	DATA	=6	NBRANCH
2499	01	008AF	64C00047			BDR,12	BRANCH	
2500	01	008B0	00000136			K	0,0,0,SETPSW	
2501	01	008B1	00000169			K	0,0,0,L8C+2	
2502	01	008B2	FFFFFFF7	A		DATA	-1	
2503	01	008B3	FFFFFFFE	A		DATA	=2	
2504						PAGE		
2505	01	008B4	FFFFFFFA	A	BAL01	DATA	-6	BAL C BRANCH
2506	01	008B5	6AC00047			BAL,12	BRANCH	
2507	01	008B6	F7300136			K	15,7,3,SETPSW	
2508	01	008B7	F7300048			K	15,7,3,BRANCH+1	
2509	01	008B8	08C00000	A		K	0,8,12,0	
2510	01	008B9	00000168			DATA	L8C+1	
2511	01	008BA	FFFFFFF6	A	BAL02	DATA	-10	BAL D X MEMORY
2512	01	008BB	6AD325B3			BAL,13	MEMORY-X'DEAD,1	
2513	01	008BC	01300136			K	0,1,3,SETPSW	
2514	01	008BD	01300461			K	0,1,3,MEMORY+1	
2515	01	008BE	0000DEAD	A		DATA	X'DEAD'	
2516	01	008BF	0000DEAD	A		DATA	X'DEAD'	
2517	01	008C0	0F000464			XPSD,0	RETURN	
2518	01	008C1	0F000464			XPSD,0	RETURN	
2519	01	008C2	11112222	A		DATA	X'11112222'	
2520	01	008C3	00000168			DATA	L8C+1	
2521	01	008C4	FFFFFFF8	A	BAL03	DATA	-8	BAL D * MEMORY
2522	01	008C5	EAC0045A			BAL,12	*1A	
2523	01	008C6	00000136			DATA	SETPSW	
2524	01	008C7	00000461			DATA	MEMORY+1	
2525	01	008C8	FFFFFFF7	A		DATA	-1	
2526	01	008C9	00000168			DATA	L8C+1	
2527	01	008CA	0F000464			XPSD,0	RETURN	
2528	01	008CB	0F000464			XPSD,0	RETURN	
2529	01	008CC	FFFFFFFA	A	BAL04	DATA	-6	BAL C *X BRANCH
2530	01	008CD	EAC20460			BAL,12	*MEMORY,1	
2531	01	008CE	F7300136			K	15,7,3,SETPSW	
2532	01	008CF	F7300048			K	15,7,3,BRANCH+1	
2533	01	008D0	00000047			DATA	BRANCH	
2534	01	008D1	00000168			DATA	L8C+1	
2535						PAGE		
2536								** BAL TO NONEXISTENT MEMORY. C(R) WILL BE MODIFIED AND TRAP WILL OCCUR
2537								* ON FIRST PASS THE INST IS B END. IF NON-EXISTENT MEMORY IS *B
2538								* PRESENT A BAL,12 ----- WILL BE INSERTED. *B
2539	01	008D2	FFFFFFFA	A	BAL05	DATA	=6	
2540	01	008D3	6AC1FFFF	A		BAL,12	X'1FFFF'	
2541	01	008D4	B00001BC			K	11,0,0,SI9NA8	
2542	01	008D5	F0000067			K	15,0,0,NEARET+1	
2543	01	008D6	00000000	A		DATA	0	
2544	01	008D7	00000168			DATA	L8C+1	
2545						PAGE		
2546	01	008D8	FFFFFFF8	A	LH01	DATA	=8	LH HW 0 SE=1 1-1,1-0
2547	01	008D9	52C00460			LH,12	MEMORY	
2548	01	008DA	70200136			K	7,0,2,SETPSW	
2549	01	008DB	50200169			K	5,0,2,L8C+2	
2550	01	008DC	FFFFF000	A		DATA	X'FFFF0000'	
2551	01	008DD	FFFFFFF7	A		DATA	-1	
2552	01	008DE	FFFFF3210	A		DATA	X'FFFF3210'	
2553	01	008DF	FFFFF3210	A		DATA	X'FFFF3210'	
2554	01	008E0	FFFFFFF8	A	LH02	DATA	=8	LH HW 0 SE=1 1-0,0-1
2555	01	008E1	52C00460			LH,12	MEMORY	
2556	01	008E2	E0300136			K	14,0,3,SETPSW	
2557	01	008E3	D0300169			K	13,0,3,L8C+2	
2558	01	008E4	00007FFF	A		DATA	X'7FFF'	
2559	01	008E5	FFFF8000	A		DATA	X'FFFF8000'	
2560	01	008E6	80000000	A		DATA	X'80000000'	
2561	01	008E7	80000000	A		DATA	X'80000000'	
2562	01	008E8	FFFFFFF8	A	LH03	DATA	=8	LH * HW 0 SE=0 0-1,1-1
2563	01	008E9	D2C0045A			LH,12	*1A	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
2564	01	008EA	F7300136			K	15,7,3,SETPSW	
2565	01	008EB	E7300169			K	14,7,3,L8C+2	
2566	01	008EC	FFFFFFFF	A		DATA	=1	
2567	01	008ED	00007FFF	A		DATA	X'7FFF'	
2568	01	008EE	7FFF0000	A		DATA	X'7FFF0000'	
2569	01	008EF	7FFF0000	A		DATA	X'7FFF0000'	
2570						PAGE		
2571	01	008F0	FFFFFFFFA	A	LH04	DATA	=6	LH HW 0 SE=0 0=0,0=1
2572	01	008F1	52C0000C	A		LH,12	12	
2573	01	008F2	30300136			K	3,0,3,SETPSW	
2574	01	008F3	00300169			K	0,0,3,L8C+2	
2575	01	008F4	0000FFFF	A		DATA	X'FFFF'	
2576	01	008F5	00000000	A		DATA	0	
2577	01	008F6	FFFFFFFFA	A	LH05	DATA	=6	LH X HW 1 SE=0 0=1,0=0
2578	01	008F7	52CE000C	A		LH,12	12,7	
2579	01	008F8	77300136			K	7,7,3,SETPSW	
2580	01	008F9	67300169			K	6,7,3,L8C+2	
2581	01	008FA	FFF00001	A		DATA	X'FFF00001'	
2582	01	008FB	00000001	A		DATA	1	
2583						PAGE		
2584	01	008FC	FFFFFFFF8	A	LH06	DATA	=8	LH X HW 1 SE=0 0=0,1=1
2585	01	008FD	52C30461			LH,12	MEMORY=X'FFFF',1	
2586	01	008FE	70300136			K	7,0,3,SETPSW	
2587	01	008FF	60300169			K	6,0,3,L8C+2	
2588	01	00900	0001FFFF	A		DATA	X'1FFFF'	
2589	01	00901	00007FFF	A		DATA	X'7FFF'	
2590	01	00902	00007FFF	A		DATA	X'7FFF'	
2591	01	00903	00007FFF	A		DATA	X'7FFF'	
2592	01	00904	FFFFFFFF4	A	LH07	DATA	=12	LH *X HW=1 SE=1 1=1,0=1
2593	01	00905	D2D20460			LH,13	*MEMORY,1	
2594	01	00906	F7300136			K	15,7,3,SETPSW	
2595	01	00907	D7300169			K	13,7,3,L8C+2	
2596	01	00908	000006A3	A		DATA	2*(MEMORY=CYCLE)+3	
2597	01	00909	000006A3	A		DATA	2*(MEMORY=CYCLE)+3	
2598	01	0090A	00000110			DATA	CYCLE	
2599	01	0090B	00000110			DATA	CYCLE	
2600	01	0090C	FFFFFFFF	A		DATA	=1	
2601	01	0090D	FFFF8000	A		DATA	X'FFFF8000'	
2602	01	0090E	00008000	A		DATA	X'8000'	
2603	01	0090F	00008000	A		DATA	X'8000'	
2604	01	00910	FFFFFFFF4	A	LH08	DATA	=12	LH *X HW=1 SE=1 1=0,1=0
2605	01	00911	D2D20460			LH,13	*MEMORY,1	
2606	01	00912	03300136			K	0,3,3,SETPSW	
2607	01	00913	13300169			K	1,3,3,L8C+2	
2608	01	00914	00000235			DATA	HA(CLEAR)+3	
2609	01	00915	00000235			DATA	HA(CLEAR)+3	
2610	01	00916	00000347	A		DATA	MEMORY=CLEAR	
2611	01	00917	00000347	A		DATA	MEMORY=CLEAR	
2612	01	00918	00000000	A		DATA	0	
2613	01	00919	FFFFFFFF	A		DATA	=1	
2614	01	0091A	1234FFFF	A		DATA	X'1234FFFF'	
2615	01	0091B	1234FFFF	A		DATA	X'1234FFFF'	
2616						PAGE		
2617	01	0091C	FFFFFFFF8	A	LB01	DATA	=8	LB B 0 0=0,1=0
2618	01	0091D	72C00460			LB,12	MEMORY	
2619	01	0091E	F7200136			K	15,7,2,SETPSW	
2620	01	0091F	E7200169			K	14,7,2,L8C+2	
2621	01	00920	00000000	A		DATA	0	
2622	01	00921	000000FF	A		DATA	X'FF'	
2623	01	00922	FF000000	A		DATA	X'FF000000'	
2624	01	00923	FF000000	A		DATA	X'FF000000'	
2625	01	00924	FFFFFFFF8	A	LB02	DATA	=8	LB B 0 0=0,0=1
2626	01	00925	72C00460			LB,12	MEMORY	
2627	01	00926	F7300136			K	15,7,3,SETPSW	
2628	01	00927	C7300169			K	12,7,3,L8C+2	
2629	01	00928	000000FF	A		DATA	X'FF'	
2630	01	00929	00000000	A		DATA	0	
2631	01	0092A	00FFFFFF	A		DATA	X'FFFFFF'	
2632	01	0092B	00FFFFFF	A		DATA	X'FFFFFF'	
2633	01	0092C	FFFFFFFF8	A	LB03	DATA	=8	LB X B 0 0=1,0=0
2634	01	0092D	72C20480			LB,12	MEMORY+X'20',1	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
2635	01	0092E	F7300136			K	15,7,3,SETPSW	
2636	01	0092F	C7300169			K	12,7,3,L8C+2	
2637	01	00930	FFFFFF80	A		DATA	X'FFFFFF80'	
2638	01	00931	00000000	A		DATA	0	
2639	01	00932	00FFFFFF	A		DATA	X'FFFFFF'	
2640	01	00933	00FFFFFF	A		DATA	X'FFFFFF'	
2641	01	00934	FFFFFFF8	A	LB04	DATA	=8	LB * BYTE 0=1,1=1
2642	01	00935	F2C0045A			LB,12	*IA	
2643	01	00936	00200136			K	0,0,2,SETPSW	
2644	01	00937	20200169			K	2,0,2,L8C+2	
2645	01	00938	FFFFFFF8	A		DATA	=1	
2646	01	00939	000000FF	A		DATA	X'FF'	
2647	01	0093A	FF000000	A		DATA	X'FF000000'	
2648	01	0093B	FF000000	A		DATA	X'FF000000'	
2649						PAGE		
2650	01	0093C	FFFFFFF8	A	LB05	DATA	=8	LB * B 0 0-1,0=1,1=1
2651	01	0093D	F2C0045A			LB,12	*IA	
2652	01	0093E	37300136			K	3,7,3,SETPSW	
2653	01	0093F	27300169			K	2,7,3,L8C+2	
2654	01	00940	FFFFFFF8	A		DATA	=1	
2655	01	00941	000000A2	A		DATA	X'A2'	
2656	01	00942	A2FFFFFF	A		DATA	X'A2FFFFFF'	
2657	01	00943	A2FFFFFF	A		DATA	X'A2FFFFFF'	
2658	01	00944	FFFFFFF6	A	LB06	DATA	=10	LB X B 2
2659	01	00945	72D2046A			LB,13	PASS,1	
2660	01	00946	50300136			K	5,0,3,SETPSW	
2661	01	00947	60300169			K	6,0,3,L8C+2	
2662	01	00948	FFFFFFDA	A		DATA	4*(MEMORY+PASS)+2	
2663	01	00949	FFFFFFDA	A		DATA	4*(MEMORY+PASS)+2	
2664	01	0094A	FFFF89FF	A		DATA	X'FFFF89FF'	
2665	01	0094B	FFFF89FF	A		DATA	X'FFFF89FF'	
2666	01	0094C	FFFFFFF8	A		DATA	=1	
2667	01	0094D	00000089	A		DATA	X'89'	
2668	01	0094E	FFFFFFFA	A	LB07	DATA	=6	LB X B 1
2669	01	0094F	72C3800D	A		LB,12	12+X'18001',1	
2670	01	00950	15200136			K	1,5,2,SETPSW	
2671	01	00951	25200169			K	2,5,2,L8C+2	
2672	01	00952	FF99FFFD	A		DATA	X'FF99FFFD'	
2673	01	00953	00000099	A		DATA	X'99'	
2674	01	00954	FFFFFFF8	A	LB08	DATA	=8	LB X B 3
2675	01	00955	72C20460			LB,12	MEMORY,1	
2676	01	00956	01300136			K	0,1,3,SETPSW	
2677	01	00957	21300169			K	2,1,3,L8C+2	
2678	01	00958	00000003	A		DATA	3	
2679	01	00959	000000FF	A		DATA	X'FF'	
2680	01	0095A	FFFFFFF8	A		DATA	=1	
2681	01	0095B	FFFFFFF8	A		DATA	=1	
2682						PAGE		
2683	01	0095C	FFFFFFF4	A	LB09	DATA	=12	LB *,IX
2684	01	0095D	F2CE0460			LB,12	*MEMORY,7	
2685	01	0095E	10000136			K	1,0,0,SETPSW	
2686	01	0095F	20000169			K	2,0,0,L8C+2	
2687	01	00960	FFFFFFF8	A		DATA	=1,X'27',MEMORY+1,MEMORY+1,X'F027F2F3',X'F027F2F3'	
	01	00961	00000027	A				
	01	00962	00000461					
	01	00963	00000461					
	01	00964	F027F2F3	A				
	01	00965	F027F2F3	A				
2688	01	00966	F027F2F3	A		DATA	X'F027F2F3',X'F027F2F3'	
	01	00967	F027F2F3	A				
2689						PAGE		
2690	01	00968	FFFFFFF6	A	LD01	DATA	=10	LD RE ME
2691	01	00969	12C00460			LD,12	MEMORY	
2692	01	0096A	F7300136			K	15,7,3,SETPSW	
2693	01	0096B	C7300169			K	12,7,3,L8C+2	
2694	01	0096C	FFFFFFF8	A		DATA	=1	
2695	01	0096D	00000000	A		DATA	0	
2696	01	0096E	00000000	A		DATA	0	
2697	01	0096F	00000000	A		DATA	0	
2698	01	00970	FFFFFFF8	A		DATA	=1	
2699	01	00971	00000000	A		DATA	0	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
2700	01	00972	FFFFFFF4	A	LD02	DATA	-12	LD * RE ME
2701	01	00973	92C0045A			LD,12	*IA	
2702	01	00974	77300136			K	7,7,3,SETPSW	
2703	01	00975	57300169			K	5,7,3,L0C+2	
2704	01	00976	00000000	A		DATA	0	
2705	01	00977	FFFFFFF7	A		DATA	-1	
2706	01	00978	FFFFFFF7	A		DATA	-1	
2707	01	00979	FFFFFFF7	A		DATA	-1	
2708	01	0097A	00000000	A		DATA	0	
2709	01	0097B	FFFFFFF7	A		DATA	-1	
2710	01	0097C	FFFFFFF7	A		DATA	-1	
2711	01	0097D	FFFFFFF7	A		DATA	-1	
2712	01	0097E	FFFFFFF4	A	LD03	DATA	-12	LD X RE ME
2713	01	0097F	12C20048			LD,12	BRANCH+1,1	
2714	01	00980	07300136			K	0,7,3,SETPSW	
2715	01	00981	27300169			K	2,7,3,L0C+2	
2716	01	00982	0000020C	A		DATA	(MEMORY=BRANCH+1)/2	
2717	01	00983	00000000	A		DATA	0	
2718	01	00984	00000000	A		DATA	0	
2719	01	00985	00000000	A		DATA	0	
2720	01	00986	ACEBEDAD	A		DATA	X'ACEBEDAD'	
2721	01	00987	BEADFADE	A		DATA	X'BEADFADE'	
2722	01	00988	BEADFADE	A		DATA	X'BEADFADE'	
2723	01	00989	BEADFADE	A		DATA	X'BEADFADE'	
2724						PAGE		
2725	01	0098A	FFFFFFF4	A	LD04	DATA	-12	LD * RE ME
2726	01	0098B	92C0045A			LD,12	*IA	
2727	01	0098C	F7300136			K	15,7,3,SETPSW	
2728	01	0098D	D7300169			K	13,7,3,L0C+2	
2729	01	0098E	0000020C	A		DATA	(MEMORY=BRANCH+1)/2	
2730	01	0098F	F234ABCD	A		DATA	X'F234ABCD'	
2731	01	00990	F234ABCD	A		DATA	X'F234ABCD'	
2732	01	00991	F234ABCD	A		DATA	X'F234ABCD'	
2733	01	00992	F2397572	A		DATA	X'F2397572'	
2734	01	00993	1E2783F9	A		DATA	X'1E2783F9'	
2735	01	00994	1E2783F9	A		DATA	X'1E2783F9'	
2736	01	00995	1E2783F9	A		DATA	X'1E2783F9'	
2737	01	00996	FFFFFFF4	A	LD05	DATA	-12	LD RB ME
2738	01	00997	12D00461			LD,13	MEMORY+1	
2739	01	00998	D7300136			K	13,7,3,SETPSW	
2740	01	00999	E7300169			K	14,7,3,L0C+2	
2741	01	0099A	ABCDEF01	A		DATA	X'ABCDEF01'	
2742	01	0099B	ABCDEF01	A		DATA	X'ABCDEF01'	
2743	01	0099C	543210FE	A		DATA	X'543210FE'	
2744	01	0099D	543210FE	A		DATA	X'543210FE'	
2745	01	0099E	12345678	A		DATA	X'12345678'	
2746	01	0099F	543210FE	A		DATA	X'543210FE'	
2747	01	009A0	EDCBA987	A		DATA	X'EDCBA987'	
2748	01	009A1	EDCBA987	A		DATA	X'EDCBA987'	
2749						PAGE		
2750	01	009A2	FFFFFFF4	A	LD06	DATA	-12	LD X RB ME
2751	01	009A3	12D2CCA2			LD,13	MEMORY=2*X'9BDF',1	
2752	01	009A4	27300136			K	2,7,3,SETPSW	
2753	01	009A5	17300169			K	1,7,3,L0C+2	
2754	01	009A6	13579BDF	A		DATA	X'13579BDF'	
2755	01	009A7	13579BDF	A		DATA	X'13579BDF'	
2756	01	009A8	ECA86420	A		DATA	X'ECA86420'	
2757	01	009A9	ECA86420	A		DATA	X'ECA86420'	
2758	01	009AA	2468ACE0	A		DATA	X'2468ACE0'	
2759	01	009AB	ECA86420	A		DATA	X'ECA86420'	
2760	01	009AC	DB97531F	A		DATA	X'DB97531F'	
2761	01	009AD	DB97531F	A		DATA	X'DB97531F'	
2762	01	009AE	FFFFFFF4	A	LD07	DATA	-12	LD * RB ME
2763	01	009AF	92D0045A			LD,13	*IA	
2764	01	009B0	07300136			K	0,7,3,SETPSW	
2765	01	009B1	27300169			K	2,7,3,L0C+2	
2766	01	009B2	FFFFFFFD	A		DATA	-3	
2767	01	009B3	FFFFFFFD	A		DATA	-3	
2768	01	009B4	00000000	A		DATA	0	
2769	01	009B5	00000000	A		DATA	0	
2770	01	009B6	FFFFFFF7	A		DATA	-1	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
2771	01	00937	00000000	A		DATA	0	
2772	01	00938	00000001	A		DATA	1	
2773	01	00939	00000001	A		DATA	1	
2774						PAGE		
2775	01	0098A	FFFFFFF4	A	LD08	DATA	=12	LD M0
2776	01	0098B	12C00461			LD,12	MEMORY+1	
2777	01	0093C	97300136			K	9,7,3,SETPSW	
2778	01	0098D	A7300169			K	10,7,3,L0C+2	
2779	01	0098E	EDCBA987	A		DATA	X'EDCBA987'	
2780	01	0093F	12345678	A		DATA	X'12345678'	
2781	01	009C0	12345678	A		DATA	X'12345678'	
2782	01	009C1	12345678	A		DATA	X'12345678'	
2783	01	009C2	6543210F	A		DATA	X'6543210F'	
2784	01	009C3	9ABCDEF0	A		DATA	X'9ABCDEF0'	
2785	01	009C4	9ABCDEF0	A		DATA	X'9ABCDEF0'	
2786	01	009C5	9ABCDEF0	A		DATA	X'9ABCDEF0'	
2787	01	009C6	FFFFFFF4	A	LD09	DATA	=12	LD RE RE
2788	01	009C7	12C00008	A		LD,12	8	
2789	01	009C8	70000136			K	7,0,0,SETPSW	
2790	01	009C9	60000169			K	6,0,0,L0C+2	
2791	01	009CA	12345678	A		DATA	X'12345678'	
2792	01	009CB	0FEDCBA9	A		DATA	X'0FEDCBA9'	
2793	01	009CC	0FEDCBA9	A		DATA	X'0FEDCBA9'	
2794	01	009CD	0FEDCBA9	A		DATA	X'0FEDCBA9'	
2795	01	009CE	9ABCDEF0	A		DATA	X'9ABCDEF0'	
2796	01	009CF	87654321	A		DATA	X'87654321'	
2797	01	009D0	87654321	A		DATA	X'87654321'	
2798	01	009D1	87654321	A		DATA	X'87654321'	
2799						PAGE		
2800	01	009D2	FFFFFFF4	A	LD10	DATA	=12	LD R0 RE
2801	01	009D3	12D00008	A		LD,13	8	
2802	01	009D4	10000136			K	1,0,0,SETPSW	
2803	01	009D5	20000169			K	2,0,0,L0C+2	
2804	01	009D6	13579BDF	A		DATA	X'13579BDF'	
2805	01	009D7	13579BDF	A		DATA	X'13579BDF'	
2806	01	009D8	02468ACE	A		DATA	X'02468ACE'	
2807	01	009D9	02468ACE	A		DATA	X'02468ACE'	
2808	01	009DA	ECA86420	A		DATA	X'ECA86420'	
2809	01	009DB	02468ACE	A		DATA	X'02468ACE'	
2810	01	009DC	ECA86420	A		DATA	X'ECA86420'	
2811	01	009DD	ECA86420	A		DATA	X'ECA86420'	
2812	01	009DE	FFFFFFF4	A	LD11	DATA	=12	LD RE R0
2813	01	009DF	12C00009	A		LD,12	9	
2814	01	009E0	10000136			K	1,0,0,SETPSW	
2815	01	009E1	20000169			K	2,0,0,L0C+2	
2816	01	009E2	ABCDEF01	A		DATA	X'ABCDEF01'	
2817	01	009E3	12347956	A		DATA	X'12347956'	
2818	01	009E4	12347956	A		DATA	X'12347956'	
2819	01	009E5	12347956	A		DATA	X'12347956'	
2820	01	009E6	10345768	A		DATA	X'10345768'	
2821	01	009E7	ACDEFB29	A		DATA	X'ACDEFB29'	
2822	01	009E8	ACDEFB29	A		DATA	X'ACDEFB29'	
2823	01	009E9	ACDEFB29	A		DATA	X'ACDEFB29'	
2824						PAGE		
2825	01	009EA	FFFFFFF4	A	LD12	DATA	=12	LD R0 R0
2826	01	009EB	12D00009	A		LD,13	9	
2827	01	009EC	00000136			K	0,0,0,SETPSW	
2828	01	009ED	20000169			K	2,0,0,L0C+2	
2829	01	009EE	11111111	A		DATA	X'11111111'	
2830	01	009EF	11111111	A		DATA	X'11111111'	
2831	01	009F0	5AB91233	A		DATA	X'5AB91233'	
2832	01	009F1	5AB91233	A		DATA	X'5AB91233'	
2833	01	009F2	33445566	A		DATA	X'33445566'	
2834	01	009F3	5AB91233	A		DATA	X'5AB91233'	
2835	01	009F4	FFFFFFF4	A		DATA	=1	
2836	01	009F5	FFFFFFF4	A		DATA	=1	
2837	01	009F6	FFFFFFF4	A	LD13	DATA	=12	LD *,IX
2838	01	009F7	92CE046C			LD,12	*MEMORY,7	
2839	01	009F8	00000136			K	0,0,0,SETPSW	
2840	01	009F9	20000169			K	2,0,0,L0C+2	
2841	01	009FA	FFFFFFF4	A		DATA	=1,MEMORY-1,MEMORY-1,MEMORY-1,-1,-16,-16,-16	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
	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				
2842						PAGE		
2843					** LW WITH INDEXING			
2844	01	00A02	FFFFFFFF	A	LWIX	DATA	=12	
2845	01	00A03	32CE000C	A		LW,12	12,7	
2846	01	00A04	00000136			K	0,0,0,SETPSW	
2847	01	00A05	10000169			K	1,0,0,L8C+2	
2848	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					
	01	00A0D	00000460					
2849					** LW WITH INDEXING AND IA			
2850	01	00A0E	FFFFFFFF	A	LWIXIA	DATA	=12	
2851	01	00A0F	32D2045A			LW,13	*IA,1	
2852	01	00A10	00000136			K	0,0,0,SETPSW	
2853	01	00A11	20000169			K	2,0,0,L8C+2	
2854	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				
2855						PAGE		
2856	01	00A1A	FFFFFFFF	A	LI01	DATA	=6	LI SE=1 1=0,1=0
2857	01	00A1B	22C9FFFF	A		LI,12	X'9FFFF'	
2858	01	00A1C	F7300136			K	15,7,3,SETPSW	
2859	01	00A1D	D7300169			K	13,7,3,L8C+2	
2860	01	00A1E	00000000	A		DATA	0	
2861	01	00A1F	FFF9FFFF	A		DATA	X'FFF9FFFF'	
2862	01	00A20	FFFFFFFF	A	LI02	DATA	=6	LI SE=0 0=1,0=1
2863	01	00A21	22C40001	A		LI,12	X'40001'	
2864	01	00A22	07300136			K	0,7,3,SETPSW	
2865	01	00A23	27300169			K	2,7,3,L8C+2	
2866	01	00A24	FFFFFFFF	A		DATA	=1	
2867	01	00A25	00040001	A		DATA	X'40001'	
2868	01	00A26	FFFFFFFF	A	LI03	DATA	=6	LI SE=1 1=1,0=0
2869	01	00A27	22C80000	A		LI,12	X'80000'	
2870	01	00A28	F7300136			K	15,7,3,SETPSW	
2871	01	00A29	D7300169			K	13,7,3,L8C+2	
2872	01	00A2A	FFF00000	A		DATA	X'FFF00000'	
2873	01	00A2B	FFF80000	A		DATA	X'FFF80000'	
2874	01	00A2C	FFFFFFFF	A	LI04	DATA	=6	LI SE=0 0=0 1=1
2875	01	00A2D	22C7FFFF	A		LI,12	X'7FFFF'	
2876	01	00A2E	F7300136			K	15,7,3,SETPSW	
2877	01	00A2F	E7300169			K	14,7,3,L8C+2	
2878	01	00A30	00FFFFFF	A		DATA	X'FFFFFF'	
2879	01	00A31	0007FFFF	A		DATA	X'7FFFF'	
2880	01	00A32	FFFFFFFF	A	LI05	DATA	=6	LI *
2881	01	00A33	A2C00460			LI,12	*MEMORY	
2882	01	00A34	173001BC			K	1,7,3,SI9NA0	
2883	01	00A35	9730006B			K	9,7,3,NEIRET+1	
2884	01	00A36	FFFFFFFF	A		DATA	=1	
2885	01	00A37	FFFFFFFF	A		DATA	=1	
2886						PAGE		
2887	01	00A38	FFFFFFFF	A	LS01	DATA	=10	
2888	01	00A39	4AC00460			LS,12	MEMORY	PH1 : C(S) = EW*RU1 = 18181818
2889	01	00A3A	F7300136			K	15,7,3,SETPSW	
2890	01	00A3B	D7300169			K	13,7,3,L8C+2	PH3 : C(S) = R*NRJ1 = 81818181
2891	01	00A3C	C3C3C3C3	A		DATA	X'C3C3C3C3'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
2892	01	00A3D	99999999	A		DATA	X'99999999'	PH4 : C(S) = PH1+PH3 = 99999999
2893	01	00A3E	3C3C3C3C	A		DATA	X'3C3C3C3C'	
2894	01	00A3F	3C3C3C3C	A		DATA	X'3C3C3C3C'	
2895	01	00A40	5A5A5A5A	A		DATA	X'5A5A5A5A'	
2896	01	00A41	5A5A5A5A	A		DATA	X'5A5A5A5A'	
2897	01	00A42	FFFFFFF6	A	LS02	DATA	-10	
2898	01	00A43	4AC00460	A		LS,12	MEMORY	PH1 : C(S) = EW*RU1 = 81818181
2899	01	00A44	07300136	A		K	0,7,3,SETPSW	
2900	01	00A45	17300169	A		K	1,7,3,L8C+2	PH3 : C(S) = R*NRU1 = 18181818
2901	01	00A46	3C3C3C3C	A		DATA	X'3C3C3C3C'	
2902	01	00A47	99999999	A		DATA	X'99999999'	PH4 : C(S) = PH1+PH3 = 99999999
2903	01	00A48	C3C3C3C3	A		DATA	X'C3C3C3C3'	
2904	01	00A49	C3C3C3C3	A		DATA	X'C3C3C3C3'	
2905	01	00A4A	A5A5A5A5	A		DATA	X'A5A5A5A5'	
2906	01	00A4B	A5A5A5A5	A		DATA	X'A5A5A5A5'	
2907	01	00A4C	FFFFFFF6	A	LS03	DATA	-10	
2908	01	00A4D	4AC00460	A		LS,12	MEMORY	PH1 : C(S) = EW*RU1 = 24242424
2909	01	00A4E	F7300136	A		K	15,7,3,SETPSW	
2910	01	00A4F	E7300169	A		K	14,7,3,L8C+2	PH3 : C(S) = R*NRU1 = 42424242
2911	01	00A50	5A5A5A5A	A		DATA	X'5A5A5A5A'	
2912	01	00A51	66666666	A		DATA	X'66666666'	PH4 : C(S) = PH1+PH3 = 66666666
2913	01	00A52	A5A5A5A5	A		DATA	X'A5A5A5A5'	
2914	01	00A53	A5A5A5A5	A		DATA	X'A5A5A5A5'	
2915	01	00A54	3C3C3C3C	A		DATA	X'3C3C3C3C'	
2916	01	00A55	3C3C3C3C	A		DATA	X'3C3C3C3C'	
2917						PAGE		
2918	01	00A56	FFFFFFF6	A	LS04	DATA	-10	
2919	01	00A57	4AC00460	A		LS,12	MEMORY	PH1 : C(S) = EW*RU1 = 42424242
2920	01	00A58	07300136	A		K	0,7,3,SETPSW	
2921	01	00A59	27300169	A		K	2,7,3,L8C+2	PH3 : C(S) = R*NRU1 = 24242424
2922	01	00A5A	A5A5A5A5	A		DATA	X'A5A5A5A5'	
2923	01	00A5B	66666666	A		DATA	X'66666666'	PH4 : C(S) = PH1+PH3 = 66666666
2924	01	00A5C	5A5A5A5A	A		DATA	X'5A5A5A5A'	
2925	01	00A5D	5A5A5A5A	A		DATA	X'5A5A5A5A'	
2926	01	00A5E	C3C3C3C3	A		DATA	X'C3C3C3C3'	
2927	01	00A5F	C3C3C3C3	A		DATA	X'C3C3C3C3'	
2928						** BDD R FIELD CAUSING R AND RU1 TO BE THE SAME. ALSO USES R AS EW		
2929	01	00A60	FFFFFFFA	A	LS05	DATA	-6	
2930	01	00A61	4AD0000C	A		LS,13	12	PH1 : C(S) = EW*RU1 = 0
2931	01	00A62	37300136	A		K	3,7,3,SETPSW	
2932	01	00A63	07300169	A		K	0,7,3,L8C+2	PH3 : C(S) = R*NRU1 = 0
2933	01	00A64	FFFFFFF6	A		DATA	-1	
2934	01	00A65	FFFFFFF6	A		DATA	-1	PH4 : C(S) = PH1+PH3 = 0
2935						PAGE		
2936	01	00A66	FFFFFFFA	A	LCF06	DATA	-6	LCF 3 X 10 INTO E7 = 10 BYTE 1
2937	01	00A67	70320041	A		LCF,3	BRANCH=6,1	
2938	01	00A68	E7300136	A		K	14,7,3,SETPSW	
2939	01	00A69	17300169	A		K	1,7,3,L8C+2	
2940	01	00A6A	1117FF2D	A		DATA	X'1117FF2D'	
2941	01	00A6B	1117FF2D	A		DATA	X'1117FF2D'	
2942	01	00A6C	FFFFFFF4	A	LCF07	DATA	-12	LCF 3 *X FF INTO 00 = F7 BYTE 3
2943	01	00A6D	F0320460	A		LCF,3	*MEMORY,1	
2944	01	00A6E	00300136	A		K	0,0,3,SETPSW	
2945	01	00A6F	F7300169	A		K	15,7,3,L8C+2	
2946	01	00A70	00000123	A		DATA	BA(BRANCH)+7	
2947	01	00A71	00000123	A		DATA	BA(BRANCH)+7	
2948	01	00A72	00000419	A		DATA	MEMORY=BRANCH	
2949	01	00A73	00000419	A		DATA	MEMORY=BRANCH	
2950	01	00A74	4537FE21	A		DATA	X'4537FE21'	
2951	01	00A75	4537FE21	A		DATA	X'4537FE21'	
2952	01	00A76	000000FF	A		DATA	X'FF'	
2953	01	00A77	000000FF	A		DATA	X'FF'	
2954	01	00A78	FFFFFFF8	A	LCF08	DATA	-8	LCF 3 X 56 INTO A1 = 56 BYTE 2
2955	01	00A79	70320119	A		LCF,3	CLEAR,1	
2956	01	00A7A	A1300136	A		K	10,1,3,SETPSW	
2957	01	00A7B	56300169	A		K	5,6,3,L8C+2	
2958	01	00A7C	00000D1E	A		DATA	4*(MEMORY=CLEAR)+2	
2959	01	00A7D	00000D1E	A		DATA	4*(MEMORY=CLEAR)+2	
2960	01	00A7E	12345678	A		DATA	X'12345678'	
2961	01	00A7F	12345678	A		DATA	X'12345678'	
2962	01	00A80	FFFFFFF8	A	LCF09	DATA	-8	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
2963	01	00A81	7C000460			LCF,12	MEMORY	
2964	01	00A82	00000136			K	0,0,0,SETPSW	
2965	01	00A83	00000169			K	0,0,0,L8C+2	
2966	01	00A84	00000300	A		DATA	0,0,-1,-1	
	01	00A85	00000000	A				
	01	00A86	FFFFFFFF	A				
	01	00A87	FFFFFFFF	A				
2967						PAGE		
2968	01	00A88	FFFFFFFF	A	LCF101	DATA	-4	LCFI 0 FF INT0 00 IS 00
2969	01	00A89	020003FF	A		LCFI,0	X'FF'	
2970	01	00A8A	00000136			DATA	SETPSW	
2971	01	00A8B	00000169			DATA	L8C+2	
2972	01	00A8C	FFFFFFFF	A	LCF102	DATA	-4	LCFI 3 00 INT0 F7 IS 00
2973	01	00A8D	02300300	A		LCFI,3	0	
2974	01	00A8E	F7300136			K	15,7,3,SETPSW	
2975	01	00A8F	00300169			K	0,0,3,L8C+2	
2976	01	00A90	FFFFFFFF	A	LCF103	DATA	-4	LCFI 2 57 INT0 A0 IS 50
2977	01	00A91	02200357	A		LCFI,2	X'57'	
2978	01	00A92	A0200136			K	10,0,2,SETPSW	
2979	01	00A93	50200169			K	5,0,2,L8C+2	
2980	01	00A94	FFFFFFFF	A	LCF104	DATA	-4	LCFI 1 D9 INT0 26 IS 21
2981	01	00A95	021000D9	A		LCFI,1	X'D9'	
2982	01	00A96	26100136			K	2,6,1,SETPSW	
2983	01	00A97	21100169			K	2,1,1,L8C+2	
2984	01	00A98	FFFFFFFF	A	LCF105	DATA	-8	LCFI 3 FF INT0 00 IS FF INDEX
2985	01	00A99	023003FF	A		LCFI,3	X'FF',1	
2986	01	00A9A	00000136			DATA	SETPSW	
2987	01	00A9B	F7000169			K	15,7,0,L8C+2	
2988	01	00A9C	12345678	A		DATA	X'12345678'	
2989	01	00A9D	12345678	A		DATA	X'12345678'	
2990	01	00A9E	9ABCDEF0	A		DATA	X'9ABCDEF0'	
2991	01	00A9F	9ABCDEF0	A		DATA	X'9ABCDEF0'	
2992	01	00AA0	FFFFFFFF	A	LCF106	DATA	-4	LCFI *
2993	01	00AA1	82300460			LCFI,3	*MEMORY	
2994	01	00AA2	773001BC			K	7,7,3,SIGNAB	
2995	01	00AA3	F730006B			K	15,7,3,NEIRET+1	
2996	01	00AA4	FFFFFFFF	A	LCF107	DATA	-4	
2997	01	00AA5	02120011	A		LCFI,1	X'20011'	
2998	01	00AA6	80000136			K	8,0,0,SETPSW	
2999	01	00AA7	81000169			K	8,1,0,L8C+2	
3000						PAGE		
3001	01	00AA8	FFFFFFFF	A	LAW01	DATA	-8	LAW
3002	01	00AA9	3BC00460			LAW,12	MEMORY	
3003	01	00AAA	F7300136			K	15,7,3,SETPSW	
3004	01	00AAB	87300169			K	8,7,3,L8C+2	
3005	01	00AAC	FFFFFFFF	A		DATA	-1	
3006	01	00AAD	00000300	A		DATA	0	
3007	01	00AAE	00000000	A		DATA	0	
3008	01	00AAF	00000000	A		DATA	0	
3009	01	00AB0	FFFFFFFF	A	LAW02	DATA	-8	LAW X
3010	01	00AB1	3BC20461			LAW,12	MEMORY+1,1	
3011	01	00AB2	17300136			K	1,7,3,SETPSW	
3012	01	00AB3	27300169			K	2,7,3,L8C+2	
3013	01	00AB4	FFFFFFFF	A		DATA	-1	
3014	01	00AB5	00000001	A		DATA	1	
3015	01	00AB6	FFFFFFFF	A		DATA	-1	
3016	01	00AB7	FFFFFFFF	A		DATA	-1	
3017	01	00AB8	FFFFFFFF	A	LAW03	DATA	-8	LAW * 0F NTRAP
3018	01	00AB9	BBC0045A			LAW,12	*IA	
3019	01	00ABA	37200136			K	3,7,2,SETPSW	
3020	01	00ABB	57200169			K	5,7,2,L8C+2	
3021	01	00ABC	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3022	01	00ABD	80000000	A		DATA	X'80000000'	
3023	01	00ABE	80000000	A		DATA	X'80000000'	
3024	01	00ABF	80000000	A		DATA	X'80000000'	
3025						PAGE		
3026	01	00AC0	FFFFFFFF	A	LAW04	DATA	-12	LAW *X 0F TRAP
3027	01	00AC1	BBD20461			LAW,13	*MEMORY+1,1	
3028	01	00AC2	F73001C8			K	15,7,3,FXPBSW	
3029	01	00AC3	07300084			K	13,7,3,FPBRET+1	
3030	01	00AC4	0000046A			DATA	REPEAT	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
3031	01	00AC5	0000046A			DATA	REPEAT	
3032	01	00AC6	80000000	A		DATA	X'80000000'	
3033	01	00AC7	80000000	A		DATA	X'80000000'	
3034	01	00AC8	FDBCA972	A		DATA	X'FDBCA972'	
3035	01	00AC9	80000000	A		DATA	X'80000000'	
3036	01	00ACA	FFFFFFFF	A		DATA	MEMORY=REPEAT	
3037	01	00ACB	FFFFFFFF	A		DATA	MEMORY=REPEAT	
3038	01	00ACC	FFFFFFFF	A	LAW05	DATA	-8	LAW
3039	01	00ACD	3BC00460			LAW,12	MEMORY	
3040	01	00ACE	07300136			K	0,7,3,SETPSW	
3041	01	00ACF	27300169			K	2,7,3,LBC+2	
3042	01	00AD0	00000000	A		DATA	0	
3043	01	00AD1	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3044	01	00AD2	80000001	A		DATA	X'80000001'	
3045	01	00AD3	80000001	A		DATA	X'80000001'	
3046						PAGE		
3047						** INSURE THAT PROBEVER/H IS DISABLED BY FAMT		
3048	01	00AD4	FFFFFFFF	A	LAH01	DATA	-8	LAH
3049	01	00AD5	5BC00460			LAH,12	MEMORY	
3050	01	00AD6	07300136			K	0,7,3,SETPSW	
3051	01	00AD7	27300169			K	2,7,3,LBC+2	
3052	01	00AD8	FFFFFFFF	A		DATA	+1	
3053	01	00AD9	00008000	A		DATA	X'8000'	
3054	01	00ADA	8000FFFF	A		DATA	X'8000FFFF'	
3055	01	00ADB	8000FFFF	A		DATA	X'8000FFFF'	
3056	01	00ADC	FFFFFFFF	A	LAH02	DATA	-8	LAH X
3057	01	00ADD	5BC3FFF6	A		LAH,12	MEMORY=REPEAT,1	
3058	01	00ADE	37300136			K	3,7,3,SETPSW	
3059	01	00ADF	07300169			K	0,7,3,LBC+2	
3060	01	00AE0	000080D5			DATA	HA(REPEAT)+1	
3061	01	00AE1	00000000	A		DATA	0	
3062	01	00AE2	FFFF0000	A		DATA	X'FFFF0000'	
3063	01	00AE3	FFFF0000	A		DATA	X'FFFF0000'	
3064	01	00AE4	FFFFFFFF	A	LAH03	DATA	-8	LAH 8
3065	01	00AE5	0BC0045A			LAH,12	+IA	
3066	01	00AE6	17300136			K	1,7,3,SETPSW	
3067	01	00AE7	27300169			K	2,7,3,LBC+2	
3068	01	00AE8	FFFFFFFF	A		DATA	-1	
3069	01	00AE9	00000001	A		DATA	1	
3070	01	00AEA	FFFF0000	A		DATA	X'FFFF0000'	
3071	01	00AEB	FFFF0000	A		DATA	X'FFFF0000'	
3072						PAGE		
3073	01	00AEC	FFFFFFFF	A	LAD01	DATA	-12	LAD RE
3074	01	00AED	1BC00460			LAD,12	MEMORY	
3075	01	00AEE	17300136			K	1,7,3,SETPSW	
3076	01	00AEF	27300169			K	2,7,3,LBC+2	
3077	01	00AF0	9ABCDEF0	A		DATA	X'9ABCDEF0'	
3078	01	00AF1	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3079	01	00AF2	80000000	A		DATA	X'80000000'	
3080	01	00AF3	80000000	A		DATA	X'80000000'	
3081	01	00AF4	12345678	A		DATA	X'12345678'	
3082	01	00AF5	FFFFFFFF	A		DATA	-1	
3083	01	00AF6	00000001	A		DATA	1	
3084	01	00AF7	00000001	A		DATA	1	
3085	01	00AF8	FFFFFFFF	A	LAD02	DATA	-12	LAD M8 RE
3086	01	00AF9	1BC00461			LAD,12	MEMORY+1	
3087	01	00AFA	37300136			K	3,7,3,SETPSW	
3088	01	00AFB	07300169			K	0,7,3,LBC+2	
3089	01	00AFC	FFFFFFFF	A		DATA	-1	
3090	01	00AFD	00000000	A		DATA	0	
3091	01	00AFE	00000000	A		DATA	0	
3092	01	00AFF	00000000	A		DATA	0	
3093	01	00B00	FFFFFFFF	A		DATA	-1	
3094	01	00B01	00000000	A		DATA	0	
3095	01	00B02	00000000	A		DATA	0	
3096	01	00B03	00000000	A		DATA	0	
3097						PAGE		
3098	01	00B04	FFFFFFFF	A	LAD03	DATA	-12	LAD X RE
3099	01	00B05	1BC2046A			LAD,12	REPEAT,1	
3100	01	00B06	37300136			K	3,7,3,SETPSW	
3101	01	00B07	27300169			K	2,7,3,LBC+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
3102	01	00B08	FFFFFFFF	A		DATA	(MEMORY*REPEAT)/2	
3103	01	00B09	6789ABCD	A		DATA	X'6789ABCD'	
3104	01	00B0A	98765432	A		DATA	X'98765432'	
3105	01	00B0B	98765432	A		DATA	X'98765432'	
3106	01	00B0C	FFFFFFFF	A		DATA	-1	
3107	01	00B0D	EF012346	A		DATA	X'EF012346'	
3108	01	00B0E	10FEDCBA	A		DATA	X'10FEDCBA'	
3109	01	00B0F	10FEDCBA	A		DATA	X'10FEDCBA'	
3110	01	00B10	FFFFFFFF	A	LAD04	DATA	*12	LAD * RE OF NTRAP
3111	01	00B11	98C0045A	A		LAD,12	*1A	
3112	01	00B12	27200136	A		K	2,7,2,SETPSW	
3113	01	00B13	57200169	A		K	5,7,2,L8C+2	
3114	01	00B14	76543210	A		DATA	X'76543210'	
3115	01	00B15	80000000	A		DATA	X'80000000'	
3116	01	00B16	80000000	A		DATA	X'80000000'	
3117	01	00B17	80000000	A		DATA	X'80000000'	
3118	01	00B18	12345678	A		DATA	X'12345678'	
3119	01	00B19	00000000	A		DATA	0	
3120	01	00B1A	00000000	A		DATA	0	
3121	01	00B1B	00000000	A		DATA	0	
3122						PAGE		
3123	01	00B1C	FFFFFFFF	A	LAD05	DATA	*12	LAD RE OF TRAP
3124	01	00B1D	18C00460	A		LAD,12	MEMORY	
3125	01	00B1E	073001C8	A		K	0,7,3,FXP8SW	
3126	01	00B1F	57300084	A		K	5,7,3,FP8RET+1	
3127	01	00B20	00000000	A		DATA	0	
3128	01	00B21	80000000	A		DATA	X'80000000'	
3129	01	00B22	80000000	A		DATA	X'80000000'	
3130	01	00B23	80000000	A		DATA	X'80000000'	
3131	01	00B24	FFFFFFFF	A		DATA	*1	
3132	01	00B25	00000000	A		DATA	0	
3133	01	00B26	00000000	A		DATA	0	
3134	01	00B27	00000000	A		DATA	0	
3135	01	00B28	FFFFFFFF	A	LAD06	DATA	*12	LAD R8
3136	01	00B29	18D00460	A		LAD,13	MEMORY	
3137	01	00B2A	B7300136	A		K	11,7,3,SETPSW	
3138	01	00B2B	A7300169	A		K	10,7,3,L8C+2	
3139	01	00B2C	92345678	A		DATA	X'92345678'	
3140	01	00B2D	92345678	A		DATA	X'92345678'	
3141	01	00B2E	80000000	A		DATA	X'80000000'	
3142	01	00B2F	80000000	A		DATA	X'80000000'	
3143	01	00B30	0CBADBED	A		DATA	X'BADBED'	
3144	01	00B31	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3145	01	00B32	00000001	A		DATA	1	
3146	01	00B33	00000001	A		DATA	1	
3147						PAGE		
3148	01	00B34	FFFFFFFF	A	LAD07	DATA	*12	LAD R8
3149	01	00B35	18D00460	A		LAD,13	MEMORY	
3150	01	00B36	A7300136	A		K	10,7,3,SETPSW	
3151	01	00B37	A7300169	A		K	10,7,3,L8C+2	
3152	01	00B38	CCCCCCCC	A		DATA	X'CCCCCCCC'	
3153	01	00B39	CCCCCCCC	A		DATA	X'CCCCCCCC'	
3154	01	00B3A	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3155	01	00B3B	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3156	01	00B3C	BCDEFA98	A		DATA	X'BCDEFA98'	
3157	01	00B3D	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3158	01	00B3E	FFFFFFFF	A		DATA	-1	
3159	01	00B3F	FFFFFFFF	A		DATA	-1	
3160						PAGE		
3161	01	00B40	FFFFFFFF	A	LCW01	DATA	*8	LCW
3162	01	00B41	3AC00460	A		LCW,12	MEMORY	
3163	01	00B42	87300136	A		K	8,7,3,SETPSW	
3164	01	00B43	97300169	A		K	9,7,3,L8C+2	
3165	01	00B44	12345678	A		DATA	X'12345678'	
3166	01	00B45	E8CD431E	A		DATA	X'E8CD431E'	
3167	01	00B46	1732BCE2	A		DATA	X'1732BCE2'	
3168	01	00B47	1732BCE2	A		DATA	X'1732BCE2'	
3169	01	00B48	FFFFFFFF	A	LCW02	DATA	*8	LCW OF NTRAP
3170	01	00B49	3AC00460	A		LCW,12	MEMORY	
3171	01	00B4A	07200136	A		K	0,7,2,SETPSW	
3172	01	00B4B	57200169	A		K	5,7,2,L8C+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
3173	01	00B4C	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3174	01	00B4D	80000000	A		DATA	X'80000000'	
3175	01	00B4E	80000000	A		DATA	X'80000000'	
3176	01	00B4F	80000000	A		DATA	X'80000000'	
3177	01	00B50	FFFFFFFA	A	LCW03	DATA	-6	LCW REGISTER TO REGISTER
3178	01	00B51	3AC0000C	A		LCW,12	12	
3179	01	00B52	27300136	A		K	2,7,3,SETPSW	
3180	01	00B53	17300169	A		K	1,7,3,L0C+2	
3181	01	00B54	12345678	A		DATA	X'12345678'	
3182	01	00B55	EDCBA988	A		DATA	X'EDCBA988'	
3183	01	00B56	FFFFFFF8	A	LCW04	DATA	-8	LCW X OF TRAP
3184	01	00B57	3AC20464	A		LCW,12	RETURN,1	
3185	01	00B58	F73001C8	A		K	15,7,3,FXP0SW	
3186	01	00B59	D7300084	A		K	13,7,3,FP0RET+1	
3187	01	00B5A	FFFFFFFF	A		DATA	MEMORY←RETURN	
3188	01	00B5B	80000000	A		DATA	X'80000000'	
3189	01	00B5C	80000000	A		DATA	X'80000000'	
3190	01	00B5D	80000000	A		DATA	X'80000000'	
3191						PAGE		
3192	01	00B5E	FFFFFFF8	A	LCW05	DATA	-8	LCW * ZERO
3193	01	00B5F	BAC0045A	A		LCW,12	*IA	
3194	01	00B60	77300136	A		K	7,7,3,SETPSW	
3195	01	00B61	07300169	A		K	0,7,3,L0C+2	
3196	01	00B62	FFFFFFF8	A		DATA	-1	
3197	01	00B63	00000000	A		DATA	0	
3198	01	00B64	00000000	A		DATA	0	
3199	01	00B65	00000000	A		DATA	0	
3200	01	00B66	FFFFFFF8	A	LCW06	DATA	-8	LCW
3201	01	00B67	3AC00460	A		LCW,12	MEMORY	
3202	01	00B68	07300136	A		K	0,7,3,SETPSW	
3203	01	00B69	27300169	A		K	2,7,3,L0C+2	
3204	01	00B6A	00000000	A		DATA	0	
3205	01	00B6B	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3206	01	00B6C	80000001	A		DATA	X'80000001'	
3207	01	00B6D	80000001	A		DATA	X'80000001'	
3208						PAGE		
3209	01	00B6E	FFFFFFF8	A	LCH01	DATA	-8	LCH ME
3210	01	00B6F	5AC00460	A		LCH,12	MEMORY	
3211	01	00B70	07300136	A		K	0,7,3,SETPSW	
3212	01	00B71	17300169	A		K	1,7,3,L0C+2	
3213	01	00B72	FFFFFFF8	A		DATA	-1	
3214	01	00B73	FFFFFFDCC	A		DATA	X'FFFFFFDCC'	
3215	01	00B74	12345678	A		DATA	X'12345678'	
3216	01	00B75	12345678	A		DATA	X'12345678'	
3217	01	00B76	FFFFFFF8	A	LCH02	DATA	-8	LCH X ME
3218	01	00B77	5AC2046A	A		LCH,12	REPEAT,1	
3219	01	00B78	07300136	A		K	0,7,3,SETPSW	
3220	01	00B79	27300169	A		K	2,7,3,L0C+2	
3221	01	00B7A	FFFFFFF8	A		DATA	2*(MEMORY←REPEAT)	
3222	01	00B7B	0000789B	A		DATA	X'789B'	
3223	01	00B7C	87654321	A		DATA	X'87654321'	
3224	01	00B7D	87654321	A		DATA	X'87654321'	
3225	01	00B7E	FFFFFFF8	A	LCH03	DATA	-8	LCH * ME
3226	01	00B7F	DAC0045A	A		LCH,12	*IA	
3227	01	00B80	37300136	A		K	3,7,3,SETPSW	
3228	01	00B81	07300169	A		K	0,7,3,L0C+2	
3229	01	00B82	FFFFFFF8	A		DATA	-1	
3230	01	00B83	00000000	A		DATA	0	
3231	01	00B84	0000FFFF	A		DATA	X'FFFF'	
3232	01	00B85	0000FFFF	A		DATA	X'FFFF'	
3233	01	00B86	FFFFFFF8	A	LCH04	DATA	-8	LCH X ME
3234	01	00B87	5AC20047	A		LCH,12	BRANCH,1	
3235	01	00B88	37300136	A		K	3,7,3,SETPSW	
3236	01	00B89	17300169	A		K	1,7,3,L0C+2	
3237	01	00B8A	0000833	A		DATA	2*(MEMORY←BRANCH)+1	
3238	01	00B8B	FFFF89AC	A		DATA	X'FFFF89AC'	
3239	01	00B8C	FFFF7654	A		DATA	X'FFFF7654'	
3240	01	00B8D	FFFF7654	A		DATA	X'FFFF7654'	
3241						PAGE		
3242	01	00B8E	FFFFFFF8	A	LCH05	DATA	-8	LCH X ME
3243	01	00B8F	5AC2046A	A		LCH,12	REPEAT,1	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
3244	01	00B90	37300136			K	3,7,3,SETPSW	
3245	01	00B91	27300169			K	2,7,3,L8C+2	
3246	01	00B92	FFFFFFFF A			DATA	2*(MEMORY*REPEAT)+1	
3247	01	00B93	00007FFF A			DATA	X'7FFF'	
3248	01	00B94	00008001 A			DATA	X'8001'	
3249	01	00B95	00008001 A			DATA	X'8001'	
3250						PAGE		
3251	01	00B96	FFFFFFFF4 A		LCD01	DATA	-12	LCD RE
3252	01	00B97	1AC00460			LCD,12	MEMORY	
3253	01	00B98	17300136			K	1,7,3,SETPSW	
3254	01	00B99	27300169			K	2,7,3,L8C+2	
3255	01	00B9A	BBBBBB3BB A			DATA	X'BBBBBBB'	
3256	01	00B9B	7FFFFFFF A			DATA	X'7FFFFFFF'	
3257	01	00B9C	80000000 A			DATA	X'80000000'	
3258	01	00B9D	80000000 A			DATA	X'80000000'	
3259	01	00B9E	CCCCCCCC A			DATA	X'CCCCCCCC'	
3260	01	00B9F	FFFFFFFF A			DATA	-1	
3261	01	00BA0	00000001 A			DATA	1	
3262	01	00BA1	00000001 A			DATA	1	
3263	01	00BA2	FFFFFFFF4 A		LCD02	DATA	-12	LCD X RE
3264	01	00BA3	1AC2046A			LCD,12	REPEAT,1	
3265	01	00BA4	27300136			K	2,7,3,SETPSW	
3266	01	00BA5	17300169			K	1,7,3,L8C+2	
3267	01	00BA6	FFFFFFFFB A			DATA	(MEMORY*REPEAT)/2	
3268	01	00BA7	80000000 A			DATA	X'80000000'	
3269	01	00BA8	7FFFFFFF A			DATA	X'7FFFFFFF'	
3270	01	00BA9	7FFFFFFF A			DATA	X'7FFFFFFF'	
3271	01	00BAA	23476B9E A			DATA	X'23476B9E'	
3272	01	00BAB	00000001 A			DATA	1	
3273	01	00BAC	FFFFFFFF A			DATA	-1	
3274	01	00BAD	FFFFFFFF A			DATA	-1	
3275						PAGE		
3276	01	00BAE	FFFFFFFF4 A		LCD03	DATA	-12	LCD * RE
3277	01	00BAF	9AC0045A			LCD,12	*1A	
3278	01	00BB0	37300136			K	3,7,3,SETPSW	
3279	01	00BB1	07300169			K	0,7,3,L8C+2	
3280	01	00BB2	FFFFFFFF A			DATA	-1	
3281	01	00BB3	00000000 A			DATA	0	
3282	01	00BB4	00000000 A			DATA	0	
3283	01	00BB5	00000000 A			DATA	0	
3284	01	00BB6	FFFFFFFF A			DATA	-1	
3285	01	00BB7	00000000 A			DATA	0	
3286	01	00BB8	00000000 A			DATA	0	
3287	01	00BB9	00000000 A			DATA	0	
3288						PAGE		
3289	01	00BBA	FFFFFFFF4 A		LCD04	DATA	-12	LCD RE OF NTRAP
3290	01	00BBB	1AC00460			LCD,12	MEMORY	
3291	01	00BBC	27200136			K	2,7,2,SETPSW	
3292	01	00BBD	57200169			K	5,7,2,L8C+2	
3293	01	00BBE	FFFFFFFF A			DATA	-1	
3294	01	00BBF	80000000 A			DATA	X'80000000'	
3295	01	00BC0	80000000 A			DATA	X'80000000'	
3296	01	00BC1	80000000 A			DATA	X'80000000'	
3297	01	00BC2	FFFFFFFF A			DATA	-1	
3298	01	00BC3	00000000 A			DATA	0	
3299	01	00BC4	00000000 A			DATA	0	
3300	01	00BC5	00000000 A			DATA	0	
3301	01	00BC6	FFFFFFFF4 A		LCD05	DATA	-12	LCD R8 OF TRAP
3302	01	00BC7	1AD00460			LCD,13	MEMORY	
3303	01	00BC8	973001C8			K	9,7,3,FXP8SW	
3304	01	00BC9	D7300084			K	13,7,3,FP8RET+1	
3305	01	00BCA	FEEDBEAD A			DATA	X'FEEDBEAD'	
3306	01	00BCB	FEEDBEAD A			DATA	X'FEEDBEAD'	
3307	01	00BCC	80000000 A			DATA	X'80000000'	
3308	01	00BCD	80000000 A			DATA	X'80000000'	
3309	01	00BCE	FFFFFFFF A			DATA	-1	
3310	01	00BCF	80000000 A			DATA	X'80000000'	
3311	01	00BD0	00000000 A			DATA	0	
3312	01	00BD1	00000000 A			DATA	0	
3313	01	00BD2	FFFFFFFF6 A		LCD06	DATA	-10	LCD REGISTER T9 REGISTER
3314	01	00BD3	1AC00000 A			LCD,12	12	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
3315	01	00BD4	F7300136			K	15,7,3,SETPSW	
3316	01	00BD5	A7300169			K	10,7,3,L8C+2	
3317	01	00BD6	FFFFFFF A			DATA	=1	
3318	01	00BD7	0000000 A			DATA	0	
3319	01	00BD8	0000000 A			DATA	0	
3320	01	00BD9	0000000 A			DATA	0	
3321	01	00BDA	FFFFFFF A			DATA	=1	
3322	01	00BDB	00000001 A			DATA	1	
3323						PAGE		
3324	01	00BDC	FFFFFFF8 A		STH01	DATA	=8	STH
3325	01	00BDD	55C00460			STH,12	MEMORY	
3326	01	00BDE	F7300136			K	15,7,3,SETPSW	
3327	01	00BDF	B7300169			K	11,7,3,L8C+2	
3328	01	00BE0	FFFF8000 A			DATA	X'FFFF8000'	
3329	01	00BE1	FFFF8000 A			DATA	X'FFFF8000'	
3330	01	00BE2	FFFFFFF A			DATA	=1	
3331	01	00BE3	8000FFFF A			DATA	X'8000FFFF'	
3332	01	00BE4	FFFFFFF8 A		STH02	DATA	=8	STH X
3333	01	00BE5	55C3C461			STH,12	MEMORY=X'3FFF',1	
3334	01	00BE6	67300136			K	6,7,3,SETPSW	
3335	01	00BE7	27300169			K	2,7,3,L8C+2	
3336	01	00BE8	00007FFF A			DATA	X'7FFF'	
3337	01	00BE9	00007FFF A			DATA	X'7FFF'	
3338	01	00BEA	12345678 A			DATA	X'12345678'	
3339	01	00BEB	12347FFF A			DATA	X'12347FFF'	
3340	01	00BEC	FFFFFFF8 A		STH03	DATA	=8	STH *
3341	01	00BED	D5C0045A			STH,12	*1A	
3342	01	00BEE	A7300136			K	10,7,3,SETPSW	
3343	01	00BEF	E7300169			K	14,7,3,L8C+2	
3344	01	00BF0	0000FFFF A			DATA	X'FFFF'	
3345	01	00BF1	0000FFFF A			DATA	X'FFFF'	
3346	01	00BF2	00000000 A			DATA	0	
3347	01	00BF3	FFFF0000 A			DATA	X'FFFF0000'	
3348	01	00BF4	FFFFFFF8 A		STH04	DATA	=8	STH
3349	01	00BF5	55C00460			STH,12	MEMORY	
3350	01	00BF6	37300136			K	3,7,3,SETPSW	
3351	01	00BF7	77300169			K	7,7,3,L8C+2	
3352	01	00BF8	80001234 A			DATA	X'80001234'	
3353	01	00BF9	80001234 A			DATA	X'80001234'	
3354	01	00BFA	56781234 A			DATA	X'56781234'	
3355	01	00BFB	12341234 A			DATA	X'12341234'	
3356						PAGE		
3357	01	00BFC	FFFFFFF8 A		STH05	DATA	=8	STH
3358	01	00BFD	55CE0460			STH,12	MEMORY,7	
3359	01	00BFE	97300136			K	9,7,3,SETPSW	
3360	01	00BFF	D7300169			K	13,7,3,L8C+2	
3361	01	00C00	FFFFF379 A			DATA	X'FFFFF379'	
3362	01	00C01	FFFFF379 A			DATA	X'FFFFF379'	
3363	01	00C02	67921113 A			DATA	X'67921113'	
3364	01	00C03	6792F379 A			DATA	X'6792F379'	
3365	01	00C04	FFFFFFF8 A		STH06	DATA	=8	STH
3366	01	00C05	55C00460			STH,12	MEMORY	
3367	01	00C06	07300136			K	0,7,3,SETPSW	
3368	01	00C07	47300169			K	4,7,3,L8C+2	
3369	01	00C08	7FFF1692 A			DATA	X'7FFF1692'	
3370	01	00C09	7FFF1692 A			DATA	X'7FFF1692'	
3371	01	00C0A	00000000 A			DATA	0	
3372	01	00C0B	16920000 A			DATA	X'16920000'	
3373						PAGE		
3374	01	00C0C	FFFFFFF8 A		STB01	DATA	=8	STB
3375	01	00C0D	75C00460			STB,12	MEMORY	BYTE 0
3376	01	00C0E	F7300136			K	15,7,3,SETPSW	
3377	01	00C0F	F7300169			K	15,7,3,L8C+2	
3378	01	00C10	12345678 A			DATA	X'12345678'	
3379	01	00C11	12345678 A			DATA	X'12345678'	
3380	01	00C12	FFFFFFF A			DATA	=1	
3381	01	00C13	78FFFFFF A			DATA	X'78FFFFFF'	
3382	01	00C14	FFFFFFF8 A		STB02	DATA	=8	STB X
3383	01	00C15	75C20440			STB,12	MEMORY=X'20',1	BYTE 1
3384	01	00C16	E7300136			K	14,7,3,SETPSW	
3385	01	00C17	E7300169			K	14,7,3,L8C+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
3386	01	00C18	00000081	A		DATA	X'81'	
3387	01	00C19	00000081	A		DATA	X'81'	
3388	01	00C1A	FFFFFFF	A		DATA	=1	
3389	01	00C1B	FF81FFFF	A		DATA	X'FF81FFFF'	
3390	01	00C1C	FFFFFFFA	A	STB03	DATA	=6	STB X BYTE 2
3391	01	00C1D	75C20048	A		STB,12	12=X'1FFC4',1	
3392	01	00C1E	D7300136			K	13,7,3,SETPSW	
3393	01	00C1F	D7300169			K	13,7,3,L0C+2	
3394	01	00C20	FFFFFF12	A		DATA	X'FFFFFF12'	
3395	01	00C21	FFFF1212	A		DATA	X'FFFF1212'	
3396	01	00C22	FFFFFFF8	A	STB04	DATA	=8	STB BYTE 3
3397	01	00C23	75C28FCB			STB,12	MEMORY=X'17495',1	
3398	01	00C24	C7300136			K	12,7,3,SETPSW	
3399	01	00C25	C7300169			K	12,7,3,L0C+2	
3400	01	00C26	6375D257	A		DATA	X'6375D257'	
3401	01	00C27	6375D257	A		DATA	X'6375D257'	
3402	01	00C28	FFFFFFF	A		DATA	=1	
3403	01	00C29	FFFFFFF57	A		DATA	X'FFFFFFF57'	
3404						PAGE		
3405	01	00C2A	FFFFFFF8	A	STB05	DATA	=8	STB BYTE 0 ZERO
3406	01	00C2B	F5C0045A			STB,12	*IA	
3407	01	00C2C	F7300136			K	15,7,3,SETPSW	
3408	01	00C2D	F7300169			K	15,7,3,L0C+2	
3409	01	00C2E	000000FF	A		DATA	X'FF'	
3410	01	00C2F	000000FF	A		DATA	X'FF'	
3411	01	00C30	00000000	A		DATA	0	
3412	01	00C31	FF000000	A		DATA	X'FF000000'	
3413						PAGE		
3414	01	00C32	FFFFFFF4	A	STD01	DATA	=12	STD
3415	01	00C33	15C00460			STD,12	MEMORY	
3416	01	00C34	B7300136			K	11,7,3,SETPSW	
3417	01	00C35	B7300169			K	11,7,3,L0C+2	
3418	01	00C36	80000000	A		DATA	X'80000000'	
3419	01	00C37	80000000	A		DATA	X'80000000'	
3420	01	00C38	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3421	01	00C39	80000000	A		DATA	X'80000000'	
3422	01	00C3A	00000000	A		DATA	0	
3423	01	00C3B	00000000	A		DATA	0	
3424	01	00C3C	FFFFFFF	A		DATA	=1	
3425	01	00C3D	00000000	A		DATA	0	
3426	01	00C3E	FFFFFFF4	A	STD02	DATA	=12	STD X
3427	01	00C3F	15C2023C			STD,12	MEMORY=548,1	
3428	01	00C40	A7300136			K	10,7,3,SETPSW	
3429	01	00C41	A7300169			K	10,7,3,L0C+2	
3430	01	00C42	00000112	A		DATA	274	
3431	01	00C43	00000112	A		DATA	274	
3432	01	00C44	FFFFFFF	A		DATA	=1	
3433	01	00C45	00000112	A		DATA	274	
3434	01	00C46	FFFFFFF	A		DATA	=1	
3435	01	00C47	FFFFFFF	A		DATA	=1	
3436	01	00C48	00000000	A		DATA	0	
3437	01	00C49	FFFFFFF	A		DATA	=1	
3438						PAGE		
3439	01	00C4A	FFFFFFF4	A	STD03	DATA	=12	STD * RB
3440	01	00C4B	95D0045A			STD,13	*IA	
3441	01	00C4C	97300136			K	9,7,3,SETPSW	
3442	01	00C4D	97300169			K	9,7,3,L0C+2	
3443	01	00C4E	12345678	A		DATA	X'12345678'	
3444	01	00C4F	12345678	A		DATA	X'12345678'	
3445	01	00C50	ECBD129E	A		DATA	X'ECBD129E'	
3446	01	00C51	9ABCDEF0	A		DATA	X'9ABCDEF0'	
3447	01	00C52	9ABCDEF0	A		DATA	X'9ABCDEF0'	
3448	01	00C53	9ABCDEF0	A		DATA	X'9ABCDEF0'	
3449	01	00C54	56782349	A		DATA	X'56782349'	
3450	01	00C55	9ABCDEF0	A		DATA	X'9ABCDEF0'	
3451	01	00C56	FFFFFFF4	A	STD04	DATA	=12	STD MB
3452	01	00C57	15C00461			STD,12	MEMORY+1	
3453	01	00C58	87300136			K	8,7,3,SETPSW	
3454	01	00C59	87300169			K	8,7,3,L0C+2	
3455	01	00C5A	00000000	A		DATA	0	
3456	01	00C5B	00000000	A		DATA	0	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
3457	01	00C5C	FFFFFFFF	A		DATA	-1	
3458	01	00C5D	00000000	A		DATA	0	
3459	01	00C5E	00000001	A		DATA	1	
3460	01	00C5F	00000001	A		DATA	1	
3461	01	00C60	FFFFFFFFE	A		DATA	-2	
3462	01	00C61	00000001	A		DATA	1	
3463						PAGE		
3464	01	00C62	FFFFFFFF6	A	STS01	DATA	-10	
3465	01	00C63	47C00460	A		STS,12	MEMORY	PH1:C(S) = EW,NRJ1 = FFFF0000
3466	01	00C64	F7300136	A		K	15,7,3,SETPSW	
3467	01	00C65	F7300169	A		K	15,7,3,L0C+2	PH3:C(S) = RR,RJ1 = 0000FFFF
3468	01	00C66	0000FFFF	A		DATA	X'FFFF'	
3469	01	00C67	0000FFFF	A		DATA	X'FFFF'	PH4:C(S) = PH1+PH3 = FFFFFFFF
3470	01	00C68	FFFFFFFF0000	A		DATA	X'FFFFFF0000'	
3471	01	00C69	FFFFFFFF	A		DATA	-1	
3472	01	00C6A	0000FFFF	A		DATA	X'FFFF'	
3473	01	00C6B	0000FFFF	A		DATA	X'FFFF'	
3474						** USE ODD R FIELD AND EVEN R AS THE EW		
3475	01	00C6C	FFFFFFFF6	A	STS02	DATA	-10	
3476	01	00C6D	47D0000C	A		STS,13	12	PH1:C(S) = EW,NRJ1 = 0000FFFF
3477	01	00C6E	07300136	A		K	0,7,3,SETPSW	
3478	01	00C6F	07300169	A		K	0,7,3,L0C+2	PH3:C(S) = RR,RJ1 = FFFF0000
3479	01	00C70	0000FFFF	A		DATA	X'FFFF'	
3480	01	00C71	FFFFFFFF	A		DATA	-1	PH4:C(S) = PH1+PH3 = FFFFFFFF
3481	01	00C72	00000000	A		DATA	0	
3482	01	00C73	00000000	A		DATA	0	
3483	01	00C74	FFFFFFFF0000	A		DATA	X'FFFFFF0000'	
3484	01	00C75	FFFFFFFF0000	A		DATA	X'FFFFFF0000'	
3485						PAGE		
3486	01	00C76	FFFFFFFF8	A	STCF01	DATA	-8	STFC BYTE 0
3487	01	00C77	74000460	A		STCF,0	MEMORY	
3488	01	00C78	F7300136	A		K	15,7,3,SETPSW	
3489	01	00C79	F7300169	A		K	15,7,3,L0C+2	
3490	01	00C7A	00000000	A		DATA	0	
3491	01	00C7B	00000000	A		DATA	0	
3492	01	00C7C	00000000	A		DATA	0	
3493	01	00C7D	F7000000	A		DATA	X'F7000000'	
3494	01	00C7E	FFFFFFFF8	A	STCF02	DATA	-8	STFC X BYTE 1
3495	01	00C7F	74F2006A	A		STCF,15	NEIRET,1	
3496	01	00C80	E6200136	A		K	14,6,2,SETPSW	
3497	01	00C81	E6200169	A		K	14,6,2,L0C+2	
3498	01	00C82	0000FD9	A		DATA	4*(MEMORY-NEIRET)+1	
3499	01	00C83	0000FD9	A		DATA	4*(MEMORY-NEIRET)+1	
3500	01	00C84	00000000	A		DATA	0	
3501	01	00C85	00E60000	A		DATA	X'E60000'	
3502	01	00C86	FFFFFFFF8	A	STCF03	DATA	-8	STFC *X BYTE 2
3503	01	00C87	F432045A	A		STCF,3	*IA,1	
3504	01	00C88	D5300136	A		K	13,5,3,SETPSW	
3505	01	00C89	D5300169	A		K	13,5,3,L0C+2	
3506	01	00C8A	00000002	A		DATA	2	
3507	01	00C8B	00000002	A		DATA	2	
3508	01	00C8C	FFFFFFFF	A		DATA	-1	
3509	01	00C8D	FFFFD5FF	A		DATA	X'FFFFD5FF'	
3510	01	00C8E	FFFFFFFF8	A	STCF04	DATA	-8	STFC X BYTE 3
3511	01	00C8F	74120460	A		STCF,1	MEMORY,1	
3512	01	00C90	34300136	A		K	3,4,3,SETPSW	
3513	01	00C91	34300169	A		K	3,4,3,L0C+2	
3514	01	00C92	00000003	A		DATA	3	
3515	01	00C93	00000003	A		DATA	3	
3516	01	00C94	FFFFFFFF	A		DATA	-1	
3517	01	00C95	FFFFFFFF34	A		DATA	X'FFFFFFFF34'	
3518						PAGE		
3519	01	00C96	FFFFFFFF8	A	XW01	DATA	-8	XW RESULT IN R IS ZERO
3520	01	00C97	46C00460	A		XW,12	MEMORY	
3521	01	00C98	F7300136	A		K	15,7,3,SETPSW	
3522	01	00C99	C7300169	A		K	12,7,3,L0C+2	
3523	01	00C9A	FFFFFFFF	A		DATA	-1	
3524	01	00C9B	00000000	A		DATA	0	
3525	01	00C9C	00000000	A		DATA	0	
3526	01	00C9D	FFFFFFFF	A		DATA	-1	
3527	01	00C9E	FFFFFFFF8	A	XW02	DATA	-8	XW RESULT IN R IS P08

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
3528	01	00C9F	46C00460			XW,12	MEMORY	
3529	01	00CA0	37300136			K	3,7,3,SETPSW	
3530	01	00CA1	27300169			K	2,7,3,L8C+2	
3531	01	00CA2	FFFFFFFF	A		DATA	MEMORY=REPEAT	
3532	01	00CA3	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3533	01	00CA4	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3534	01	00CA5	FFFFFFFF	A		DATA	MEMORY=REPEAT	
3535	01	00CA6	FFFFFFFF	A	XW03	DATA	-8	XW RESULT IN R IS NEG
3536	01	00CA7	46C00460			XW,12	MEMORY	
3537	01	00CA8	27300136			K	2,7,3,SETPSW	
3538	01	00CA9	17300169			K	1,7,3,L8C+2	
3539	01	00CAA	00000000	A		DATA	0	
3540	01	00CAB	FFFFFFFF	A		DATA	-1	
3541	01	00CAC	FFFFFFFF	A		DATA	-1	
3542	01	00CAD	00000000	A		DATA	0	
3543	01	00CAE	FFFFFFFF	A	XW04	DATA	-10	XW REGISTER TO REGISTER. RESULT NEG.
3544	01	00CAF	46C00000	A		XW,12	13	
3545	01	00CB0	07300136			K	0,7,3,SETPSW	
3546	01	00CB1	17300169			K	1,7,3,L8C+2	
3547	01	00CB2	00000001	A		DATA	1	
3548	01	00CB3	FFFFFFFF	A		DATA	-1	
3549	01	00CB4	00000000	A		DATA	0	
3550	01	00CB5	00000000	A		DATA	0	
3551	01	00CB6	FFFFFFFF	A		DATA	-1	
3552	01	00CB7	00000001	A		DATA	1	
3553						PAGE		
3554	01	00CB8	FFFFFFFF	A	INT01	DATA	-10	INT
3555	01	00CB9	68C00460			INT,12	MEMORY	
3556	01	00CBA	77300136			K	7,7,3,SETPSW	
3557	01	00CBB	17300169			K	1,7,3,L8C+2	
3558	01	00CBC	FFFFFFFF	A		DATA	-1	
3559	01	00CBD	00000234	A		DATA	X'234'	
3560	01	00CBE	12345678	A		DATA	X'12345678'	
3561	01	00CBF	12345678	A		DATA	X'12345678'	
3562	01	00CC0	FFFFFFFF	A		DATA	-1	
3563	01	00CC1	00005678	A		DATA	X'5678'	
3564	01	00CC2	FFFFFFFF	A	INT02	DATA	-10	INT
3565	01	00CC3	68C00460			INT,12	MEMORY	
3566	01	00CC4	07300136			K	0,7,3,SETPSW	
3567	01	00CC5	F7300169			K	15,7,3,L8C+2	
3568	01	00CC6	000002B2	A		DATA	MEMORY=END	
3569	01	00CC7	00000EDC	A		DATA	X'EDC'	
3570	01	00CC8	FEDCBA98	A		DATA	X'FEDCBA98'	
3571	01	00CC9	FEDCBA98	A		DATA	X'FEDCBA98'	
3572	01	00CCA	12345678	A		DATA	X'12345678'	
3573	01	00CCB	0000BA98	A		DATA	X'BA98'	
3574	01	00CCC	FFFFFFFF	A	INT03	DATA	-10	INT ODD REG
3575	01	00CCD	68D00460			INT,13	MEMORY	
3576	01	00CCE	77300136			K	7,7,3,SETPSW	
3577	01	00CCF	87300169			K	8,7,3,L8C+2	
3578	01	00CD0	FFFFFFFF	A		DATA	-1	
3579	01	00CD1	FFFFFFFF	A		DATA	-1	
3580	01	00CD2	89ABCDEF	A		DATA	X'89ABCDEF'	
3581	01	00CD3	89ABCDEF	A		DATA	X'89ABCDEF'	
3582	01	00CD4	FFFFFFFF	A		DATA	-1	
3583	01	00CD5	0000CDEF	A		DATA	X'CDEF'	
3584						PAGE		
3585	01	00CD6	FFFFFFFF	A	ANLZ01	DATA	-8	ANLZ HALFWORD *X
3586	01	00CD7	44C00460			ANLZ,12	MEMORY	PXS= FAS10.NFAIM.NANLZ.PRE3
3587					*			S/MRG/2 = PRE0PER.PRE/12
3588					*			PRE0PER IS QUALIFIED WITH NANLZ
3589					*			BRPHS= ANLZ.PRE3
3590	01	00CD8	F7300136			K	15,7,3,SETPSW	
3591	01	00CD9	67300169			K	6,7,3,L8C+2	
3592	01	00CDA	0000035D			DATA	HA(END)+1	
3593	01	00CDB	0000057D	A		DATA	ABSVAL(HA(CYCLE))+ABSVAL(HA(END)+1)	
3594	01	00CDC	D2F2046A			LH,15	*REPEAT,1	
3595	01	00CDD	D2F2046A			LH,15	*REPEAT,1	
3596	01	00CDE	FFFFFFFF	A	ANLZ02	DATA	-8	ANLZ X WORD *
3597	01	00CDF	44C2046A			ANLZ,12	REPEAT,1	
3598	01	00CE0	77300136			K	7,7,3,SETPSW	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
3599	01	00CE1	A7300169			K	10,7,3,L8C+2	
3600	01	00CE2	FFFFFFF6	A		DATA	MEMORY-REPEAT	
3601	01	00CE3	00000460			DATA	MEMORY	
3602	01	00CE4	B530045A			STW,3	*IA	
3603	01	00CE5	B530045A			STW,3	*IA	
3604	01	00CE6	FFFFFFF8	A	ANLZ03	DATA	-8	ANLZ * BYTE *X
3605	01	00CE7	C4C0045A			ANLZ,12	*IA	
3606	01	00CE8	77300136			K	7,7,3,SETPSW	
3607	01	00CE9	27300169			K	2,7,3,L8C+2	
3608	01	00CEA	00000143	A		DATA	X'143'	
3609	01	00CEB	000012C3			DATA	BA(MEMORY)+X'143'	
3610	01	00CEC	F102045A			CB,0	*IA,1	
3611	01	00CED	F102045A			CB,0	*IA,1	
3612	01	00CEE	FFFFFFF8	A	ANLZ04	DATA	-8	ANLZ DOUBLEWORD X
3613	01	00CEF	44C00460			ANLZ,12	MEMORY	
3614	01	00CF0	07300136			K	0,7,3,SETPSW	
3615	01	00CF1	C7300169			K	12,7,3,L8C+2	
3616	01	00CF2	00000725	A		DATA	X'725'	
3617	01	00CF3	00000955			DATA	DA(MEMORY+1)+X'725'	
3618	01	00CF4	1B420461			LAD,4	MEMORY+1,1	
3619	01	00CF5	1B420461			LAD,4	MEMORY+1,1	
3620						PAGE		
3621	01	00CF6	FFFFFFF8	A	ANLZ05	DATA	-8	ANLZ IMMED WORD *X
3622	01	00CF7	44C00460			ANLZ,12	MEMORY	
3623	01	00CF8	07300136			K	0,7,3,SETPSW	
3624	01	00CF9	B7300169			K	11,7,3,L8C+2	
3625	01	00CFA	00001234	A		DATA	X'1234'	
3626	01	00CFB	00001234	A		DATA	X'1234'	
3627	01	00CFC	A2C0045A			LI,12	*IA,1	
3628	01	00CFD	A2C0045A			LI,12	*IA,1	
3629						* S/PRETR = PRE1.NANLZ		
3630	01	00CFE	FFFFFFF8	A	ANLZ06	DATA	-8	ANLZ ILLEGAL FAMILY (IMMEDIATE=BYTE)
3631	01	00CFF	44C00460			ANLZ,12	MEMORY	
3632	01	00D00	07300136			K	0,7,3,SETPSW	
3633	01	00D01	17300169			K	1,7,3,L8C+2	
3634	01	00D02	FFFFFFF8	A		DATA	-1	
3635	01	00D03	FFFFFFF8	A		DATA	-1	
3636	01	00D04	61700752	A		MBS,7	X'752'	
3637	01	00D05	61700752	A		MBS,7	X'752'	
3638	01	00D06	FFFFFFF8	A	ANLZ07	DATA	-8	ANLZ PRIV INST IN SLAVE MODE
3639	01	00D07	44C00460			ANLZ,12	MEMORY	DOUBLEWORD, DIRECT ADDRESSING
3640	01	00D08	07900136			K	0,7,9,SETPSW	
3641	01	00D09	C7900168			K	12,7,9,L8C+1	
3642	01	00D0A	00000000	A		DATA	0	
3643	01	00D0B	00000232			GEN	DA(RETURN)	
3644	01	00D0C	0F000464			XPSD,0	RETURN	
3645	01	00D0D	0F000464			XPSD,0	RETURN	
3646						PAGE		
3647						* BN FIRST PASS THE INST IS B END. IF NON-EXSISTENT MEMORY IS		*B
3648						* PRESENT AN ANLZ,12 MEMORY INSTRUCTION WILL BE INSERTED		*B
3649	01	00D0E	FFFFFFF8	A	ANLZ08	DATA	-8	
3650	01	00D0F	44C00460			ANLZ,12	MEMORY	
3651	01	00D10	07300136			K	0,7,3,SETPSW	
3652	01	00D11	07300167			K	0,7,3,L8C	
3653	01	00D12	00000000	A		DATA	0	
3654	01	00D13	00000000	A		DATA	0	
3655	01	00D14	B2C00000	A		LW,12	*0	CHANGED TO LW,12 *(NON-EXSISTENT,*B
3656	01	00D15	B2C00000	A		LW,12	*0	MEMORY) AFTER ONE PASS *B
3657						* S/MRQ/1 = FABRANCH.PRE/12.NANLZ		
3658						* S/RW = FUBDR.PRE3.NANLZ		
3659	01	00D16	FFFFFFF6	A	ANLZ09	DATA	-10	ANALYZE A BRANCH THAT WILL BRANCH
3660	01	00D17	44C00460			ANLZ,12	MEMORY	
3661	01	00D18	00000136			K	0,0,0,SETPSW	
3662	01	00D19	A0000169			K	10,0,0,L8C+2	
3663	01	00D1A	00000002	A		DATA	2	
3664	01	00D1B	00001001	A		DATA	X'1001'	
3665	01	00D1C	E4CE0000	A		DATA	X'E4CE0000'	BDR,12 *13,7
3666	01	00D1D	E4CE0000	A		DATA	X'E4CE0000'	
3667	01	00D1E	00001000	A		DATA	X'1000'	
3668	01	00D1F	00001000	A		DATA	X'1000'	
3669	01	00D20	FFFFFFF8	A	ANLZ10	DATA	-8	ANALYZE A BRANCH THAT WONT BRANCH

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
3670	01	00D21	44C00460			ANLZ,12	MEMORY	
3671	01	00D22	00000136			K	0,0,0,SETPSW	
3672	01	00D23	A0000169			K	10,0,0,L0C+2	
3673	01	00D24	00000300 A			DATA	0,1	
	01	00D25	00000001 A					
3674	01	00D26	E4CE000C A			DATA	X'E4CE000C'	BDR,12 *12,7
3675	01	00D27	E4CE000C A			DATA	X'E4CE000C'	
3676						PAGE		
3677						** ANLZ11 THROUGH ANLZ23 TEST NUMERBUS PRE PHASE TERMS: PXS, S/RW,		
3678						** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS		
3679						* PXS = FASEL.PRE3.N0L7.NANLZ		
3680	01	00D28	FFFFFFF4 A		ANLZ11	DATA	=12	
3681	01	00D29	44C00460			ANLZ,12	MEMORY	
3682	01	00D2A	F7300136			K	15,7,3,SETPSW	
3683	01	00D2B	87300169			K	8,7,3,L0C+2	
3684	01	00D2C	00000000 A			DATA	0	
3685	01	00D2D	00000466			DATA	RETURN+2	
3686	01	00D2E	4AC00466			LS,12	RETURN+2	
3687	01	00D2F	4AC00466			LS,12	RETURN+2	
3688	01	00D30	FFFFFFF A			DATA	-1	
3689	01	00D31	FFFFFFF A			DATA	-1	
3690	01	00D32	0F000464			XPSD,0	RETURN	
3691	01	00D33	0F000464			XPSD,0	RETURN	
3692						** ANLZ11 THROUGH ANLZ23 TEST NUMERBUS PRE PHASE TERMS: PXS, S/RW,		
3693						** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS		
3694						* PXS = FUEXU.PRE3.NANLZ		
3695						* BRP10 = FUEXU.PRE3.NANLZ		
3696	01	00D34	FFFFFFF4 A		ANLZ12	DATA	=12	
3697	01	00D35	44C00460			ANLZ,12	MEMORY	
3698	01	00D36	00000136			K	0,0,0,SETPSW	
3699	01	00D37	80000169			K	8,0,0,L0C+2	
3700	01	00D38	00000000 A			DATA	0	
3701	01	00D39	00000460			DATA	MEMORY	
3702	01	00D3A	67000460			EXU	MEMORY	
3703	01	00D3B	67000460			EXU	MEMORY	
3704	01	00D3C	FFFFFFF A			DATA	-1,-1	
	01	00D3D	FFFFFFF A					
3705	01	00D3E	0F000464			XPSD,0	RETURN	
3706	01	00D3F	0F000464			XPSD,0	RETURN	
3707						PAGE		
3708						** ANLZ11 THROUGH ANLZ23 TEST NUMERBUS PRE PHASE TERMS: PXS, S/RW,		
3709						** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS		
3710						* PXS = FARWD.PRE3.NANLZ		
3711	01	00D40	FFFFFFF4 A		ANLZ13	DATA	=12	
3712	01	00D41	44C00460			ANLZ,12	MEMORY	
3713	01	00D42	00000136			K	0,0,0,SETPSW	
3714	01	00D43	80000169			K	8,0,0,L0C+2	
3715	01	00D44	FFFFFFF A			DATA	-1	
3716	01	00D45	00000041 A			DATA	X'41'	
3717	01	00D46	6DC00041 A			WD,12	X'41'	
3718	01	00D47	6DC00041 A			WD,12	X'41'	
3719	01	00D48	5A5A5A5A A			DATA	X'5A5A5A5A'	
3720	01	00D49	5A5A5A5A A			DATA	X'5A5A5A5A'	
3721	01	00D4A	0F000464			XPSD,0	RETURN	
3722	01	00D4B	0F000464			XPSD,0	RETURN	
3723						** ANLZ11 THROUGH ANLZ23 TEST NUMERBUS PRE PHASE TERMS: PXS, S/RW,		
3724						** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS		
3725						* PXS = FAMDS.PRE3.NANLZ.NFAIM		
3726						* BRPH3 = FAMDS.PRE/34.NBRPH5.NANLZ		
3727	01	00D4C	FFFFFFF4 A		ANLZ14	DATA	=12	
3728	01	00D4D	44C00460			ANLZ,12	MEMORY	
3729	01	00D4E	00000136			K	0,0,0,SETPSW	
3730	01	00D4F	80000169			K	8,0,0,L0C+2	
3731	01	00D50	00000000 A			DATA	0	
3732	01	00D51	00000047			DATA	BRANCH	
3733	01	00D52	37C00047			MW,12	BRANCH	
3734	01	00D53	37C00047			MW,12	BRANCH	
3735	01	00D54	5A5A5A5A A			DATA	X'5A5A5A5A'	
3736	01	00D55	5A5A5A5A A			DATA	X'5A5A5A5A'	
3737	01	00D56	0F000464			XPSD,0	RETURN	
3738	01	00D57	0F000464			XPSD,0	RETURN	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
3739						PAGE		
3740						** ANLZ11 THROUGH ANLZ23 TEST NUMERBUS PRE PHASE TERMS: PXS, S/RW,		
3741						** BRPH3, BRPH6, AND BRPH10, REFERENCE PHASE SEQUENCE CHARTS		
3742						* S/RW = FUXW.PRE3.NANLZ		
3743	01	00D58	FFFFFFF4	A	ANLZ15	DATA	-12	
3744	01	00D59	44C00460			ANLZ,12	MEMORY	
3745	01	00D5A	00000136			K	0,0,0,SETPSW	
3746	01	00D5B	80000169			K	8,0,0,L8C+2	
3747	01	00D5C	FFFFFFC18	A		DATA	-1000	
3748	01	00D5D	00000460			DATA	MEMORY	
3749	01	00D5E	46D00460			XW,13	MEMORY	
3750	01	00D5F	46D00460			XW,13	MEMORY	
3751	01	00D60	5A5A5A5A	A		DATA	X'5A5A5A5A'	
3752	01	00D61	5A5A5A5A	A		DATA	X'5A5A5A5A'	
3753	01	00D62	0F000464			XPSD,0	RETURN	
3754	01	00D63	0F000464			XPSD,0	RETURN	
3755						** ANLZ11 THROUGH ANLZ23 TEST NUMERBUS PRE PHASE TERMS: PXS, S/RW,		
3756						** BRPH3, BRPH6, AND BRPH10, REFERENCE PHASE SEQUENCE CHARTS		
3757						* S/RW = FUBAL.PRE3.NANLZ		
3758	01	00D64	FFFFFFF4	A	ANLZ16	DATA	-12	
3759	01	00D65	44C00460			ANLZ,12	MEMORY	
3760	01	00D66	00000136			K	0,0,0,SETPSW	
3761	01	00D67	80000169			K	8,0,0,L8C+2	
3762	01	00D68	000003E8	A		DATA	1000	
3763	01	00D69	00000047			DATA	BRANCH	
3764	01	00D6A	6AD00047			BAL,13	BRANCH	
3765	01	00D6B	6AD00047			BAL,13	BRANCH	
3766	01	00D6C	5A5A5A5A	A		DATA	X'5A5A5A5A'	
3767	01	00D6D	5A5A5A5A	A		DATA	X'5A5A5A5A'	
3768	01	00D6E	0F000464			XPSD,0	RETURN	
3769	01	00D6F	0F000464			XPSD,0	RETURN	
3770						PAGE		
3771						** ANLZ11 THROUGH ANLZ23 TEST NUMERBUS PRE PHASE TERMS: PXS, S/RW,		
3772						** BRPH3, BRPH6, AND BRPH10, REFERENCE PHASE SEQUENCE CHARTS		
3773						* ANALYZE A BIR THAT WILL BRANCH		
3774						* S/RW = FUBIR.PRE3.NANLZ		
3775	01	00D70	FFFFFFF4	A	ANLZ17	DATA	-12	
3776	01	00D71	44C00460			ANLZ,12	MEMORY	
3777	01	00D72	00000136			K	0,0,0,SETPSW	
3778	01	00D73	80000169			K	8,0,0,L8C+2	
3779	01	00D74	FFFFFFFE	A		DATA	-2	
3780	01	00D75	00000047			DATA	BRANCH	
3781	01	00D76	65C00047			BIR,12	BRANCH	
3782	01	00D77	65C00047			BIR,12	BRANCH	
3783	01	00D78	5A5A5A5A	A		DATA	X'5A5A5A5A'	
3784	01	00D79	5A5A5A5A	A		DATA	X'5A5A5A5A'	
3785	01	00D7A	0F000464			XPSD,0	RETURN	
3786	01	00D7B	0F000464			XPSD,0	RETURN	
3787						** ANLZ11 THROUGH ANLZ23 TEST NUMERBUS PRE PHASE TERMS: PXS, S/RW,		
3788						** BRPH3, BRPH6, AND BRPH10, REFERENCE PHASE SEQUENCE CHARTS		
3789						* ANALYZE A BIR THAT WILL NOT BRANCH		
3790	01	00D7C	FFFFFFF4	A	ANLZ18	DATA	-12	
3791	01	00D7D	44C00460			ANLZ,12	MEMORY	
3792	01	00D7E	00000136			K	0,0,0,SETPSW	
3793	01	00D7F	80000169			K	8,0,0,L8C+2	
3794	01	00D80	00000001	A		DATA	1	
3795	01	00D81	00000047			DATA	BRANCH	
3796	01	00D82	65C00047			BIR,12	BRANCH	
3797	01	00D83	65C00047			BIR,12	BRANCH	
3798	01	00D84	5A5A5A5A	A		DATA	X'5A5A5A5A'	
3799	01	00D85	5A5A5A5A	A		DATA	X'5A5A5A5A'	
3800	01	00D86	0F000464			XPSD,0	RETURN	
3801	01	00D87	0F000464			XPSD,0	RETURN	
3802						PAGE		
3803						** ANLZ11 THROUGH ANLZ23 TEST NUMERBUS PRE PHASE TERMS: PXS, S/RW,		
3804						** BRPH3, BRPH6, AND BRPH10, REFERENCE PHASE SEQUENCE CHARTS		
3805						* BRPH3 = FUSF.PRE3.NANLZ.D23		
3806	01	00D88	FFFFFFF4	A	ANLZ19	DATA	-12	
3807	01	00D89	44C00460			ANLZ,12	MEMORY	
3808	01	00D8A	00000136			K	0,0,0,SETPSW	
3809	01	00D8B	80000169			K	8,0,0,L8C+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
3810	01	00D8C	00000064	A		DATA	100	
3811	01	00D8D	00000177	A		DATA	X'177'	
3812	01	00D8E	24D00177	A		SF,13	X'177'	
3813	01	00D8F	24D00177	A		SF,13	X'177'	
3814	01	00D90	5A5A5A5A	A		DATA	X'5A5A5A5A'	
3815	01	00D91	5A5A5A5A	A		DATA	X'5A5A5A5A'	
3816	01	00D92	0F000464			XPSD,0	RETURN	
3817	01	00D93	0F000464			XPSD,0	RETURN	
3818								** ANLZ11 THROUGH ANLZ23 TEST NUMERBUS PRE PHASE TERMS: PXS, S/RW,
3819								** BRPH3, BRPH6, AND BRPH10, REFERENCE PHASE SEQUENCE CHARTS
3820								* BRPH3 = FAPSD.PRE3.NANLZ.N07
3821	01	00D94	FFFFFFF4	A	ANLZ20	DATA	-12	
3822	01	00D95	44C00460			ANLZ,12	MEMORY	
3823	01	00D96	00000136			K	0,0,0,SETPSW	
3824	01	00D97	C0000169			K	12,0,0,L0C+2	
3825	01	00D98	00000168			DATA	L0C+1	
3826	01	00D99	00000006	A		DATA	6	
3827	01	00D9A	0E00000C	A		LPSD,0	12	
3828	01	00D9B	0E00000C	A		LPSD,0	12	
3829	01	00D9C	00000000	A		DATA	0	
3830	01	00D9D	00000000	A		DATA	0	
3831	01	00D9E	0F000464			XPSD,0	RETURN	
3832	01	00D9F	0F000464			XPSD,0	RETURN	
3833								PAGE
3834								** ANLZ11 THROUGH ANLZ23 TEST NUMERBUS PRE PHASE TERMS: PXS, S/RW,
3835								** BRPH3, BRPH6, AND BRPH10, REFERENCE PHASE SEQUENCE CHARTS
3836								* PXS = FAMDS.NFAIM.PRE3.NANLZ
3837	01	00DA0	FFFFFFF4	A	ANLZ21	DATA	-12	
3838	01	00DA1	44C00460			ANLZ,12	MEMORY	
3839	01	00DA2	00000136			K	0,0,0,SETPSW	
3840	01	00DA3	A0000169			K	10,0,0,L0C+2	
3841	01	00DA4	FFFFFFF4	A		DATA	-1	
3842	01	00DA5	0001FFFF	A		DATA	X'1FFFF'	
3843	01	00DA6	A5D0000C	A		S,13	*12	
3844	01	00DA7	A5D0000C	A		S,13	*12	
3845	01	00DA8	5A5A5A5A	A		DATA	X'5A5A5A5A'	
3846	01	00DA9	5A5A5A5A	A		DATA	X'5A5A5A5A'	
3847	01	00DAA	0F000464			XPSD,0	RETURN	
3848	01	00DAB	0F000464			XPSD,0	RETURN	
3849								** ANLZ11 THROUGH ANLZ23 TEST NUMERBUS PRE PHASE TERMS: PXS, S/RW,
3850								** BRPH3, BRPH6, AND BRPH10, REFERENCE PHASE SEQUENCE CHARTS
3851								* BRPH6 = FAST/M.PRE3.NBU0.NANLZ
3852	01	00DAC	FFFFFFF4	A	ANLZ22	DATA	-12	
3853	01	00DAD	44C00460			ANLZ,12	MEMORY	
3854	01	00DAE	10000136			K	1,0,0,SETPSW	
3855	01	00DAF	80000169			K	8,0,0,L0C+2	
3856	01	00DB0	00000000	A		DATA	0	
3857	01	00DB1	00000047			DATA	BRANCH	
3858	01	00DB2	2AD00047			LM,13	BRANCH	
3859	01	00DB3	2AD00047			LM,13	BRANCH	
3860	01	00DB4	00000000	A		DATA	0,0	
	01	00DB5	00000000	A				
3861	01	00DB6	0F000464			XPSD,0	RETURN	
3862	01	00DB7	0F000464			XPSD,0	RETURN	
3863								PAGE
3864								** ANLZ11 THROUGH ANLZ23 TEST NUMERBUS PRE PHASE TERMS: PXS, S/RW,
3865								** BRPH3, BRPH6, AND BRPH10, REFERENCE PHASE SEQUENCE CHARTS
3866								* PXS = FUWAIT.PRE3.NANLZ
3867	01	00DB8	FFFFFFF4	A	ANLZ23	DATA	-12	
3868	01	00DB9	44C00460			ANLZ,12	MEMORY	
3869	01	00DBA	73300136			K	7,3,3,SETPSW	
3870	01	00DBB	83300169			K	8,3,3,L0C+2	
3871	01	00DBC	00000000	A		DATA	0,100	
	01	00DBD	00000064	A				
3872	01	00DBE	2E000064	A		WAIT	100	
3873	01	00DBF	2E000064	A		WAIT	100	
3874	01	00DC0	FFFFFFF4	A		DATA	-1,-1	
	01	00DC1	FFFFFFF4	A				
3875	01	00DC2	0F000464			XPSD,0	RETURN	
3876	01	00DC3	0F000464			XPSD,0	RETURN	
3877								* BRPRE4 = (LI+LCFI).PREL1.NANLZ.NC0

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
3878	01	00DC4	FFFFFFF8	A	ANLZ24	DATA	=8	
3879	01	00DC5	44C00460			ANLZ,12	MEMORY	
3880	01	00DC6	07300136			K	0,7,3,SETPSW	
3881	01	00DC7	97300169			K	9,7,3,L8C+2	
3882	01	00DC8	00000001	A		DATA	1	
3883	01	00DC9	00000001	A		DATA	1	
3884	01	00DCA	023000FF	A		LCFI,3	X'FFF'	
3885	01	00DCB	023000FF	A		LCFI,3	X'FFF'	
3886						PAGE		
3887						** CONDITION CODE	SETTINGS FOR CI,CB,CH,CW	
3888						** CC2 CC3 CC4		
3889						** - 0 0	OPERANDS EQUAL	
3890						** - 0 1	REGISTER WORD < EFFECTIVE WORD	
3891						** - 1 0	REGISTER WORD > EFFECTIVE WORD	
3892						** 0 - -	LOGICAL PRODUCT OF THE TWO OPERANDS IS ZERO	
3893						** 1 - -	LOGICAL PRODUCT OF THE TWO OPERANDS IS NONZERO	
3894						** COMPARE C(R) > C(EW), LOGIC PROD ZERO		
3895						** CHECK THAT SO,NFACOMP DOES NOT INHIBIT SGTZ (S1CC3) ALSO		
3896						** CHECK THAT SO,NFACOMP DOES NOT S/CC4		
3897	01	00DC0	FFFFFFF8	A	CW01	DATA	=8	
3898	01	00DC0	31C00460			CW,12	MEMORY	
3899	01	00DC0E	F7300136			K	15,7,3,SETPSW	
3900	01	00DC0F	A7300169			K	10,7,3,L8C+2	
3901	01	00DC00	40000000	A		DATA	X'40000000'	
3902	01	00DC01	40000000	A		DATA	X'40000000'	
3903	01	00DC02	BFFFFFFF	A		DATA	X'BFFFFFFF'	
3904	01	00DC03	BFFFFFFF	A		DATA	X'BFFFFFFF'	
3905						** COMPARE C(R) < C(EW), LOGIC PROD NEZ		
3906						** CHECK THAT S00,FACOMP HOLD SGTZ FALSE INHIBITING SETTING CC3		
3907						** CHECK THAT S00,FACOMP CAUSES S/CC4		
3908	01	00DC4	FFFFFFF8	A	CW02	DATA	=8	
3909	01	00DC5	31C00460			CW,12	MEMORY	
3910	01	00DC6	07300136			K	0,7,3,SETPSW	
3911	01	00DC7	57300169			K	5,7,3,L8C+2	
3912	01	00DC8	FFFFFFFE	A		DATA	=2	
3913	01	00DC9	FFFFFFFE	A		DATA	=2	
3914	01	00DCA	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3915	01	00DCB	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3916						** COMPARE EQUALS, LOGIC PRODUCT ZERO (OPERANDS BOTH ZERO)		
3917	01	00DC0C	FFFFFFFC	A	CW03	DATA	=4	
3918	01	00DC0D	31C00460			CW,12	MEMORY	
3919	01	00DC0E	F7300136			K	15,7,3,SETPSW	
3920	01	00DC0F	87300169			K	8,7,3,L8C+2	
3921						PAGE		
3922						** R > EW, HALFWORD ZERO BEING COMPARED, LOGICAL PRODUCT NEZ		
3923	01	00DE0	FFFFFFF8	A	CH01	DATA	=8	CH
3924	01	00DE1	51C00460			CH,12	MEMORY	
3925	01	00DE2	F7300136			K	15,7,3,SETPSW	
3926	01	00DE3	C7300169			K	12,7,3,L8C+2	
3927	01	00DE4	FFFF8000	A		DATA	X'FFFF8000'	
3928	01	00DE5	FFFF8000	A		DATA	X'FFFF8000'	
3929	01	00DE6	8000F739	A		DATA	X'8000F739'	
3930	01	00DE7	8000F739	A		DATA	X'8000F739'	
3931						** R=EW HALFWORD ONE BEING COMPARED, LOGICAL PRODUCT NEZ		
3932	01	00DE8	FFFFFFF8	A	CH02	DATA	=8	CH X
3933	01	00DE9	51C00460			CH,12	MEMORY,7	
3934	01	00DEA	77300136			K	7,7,3,SETPSW	
3935	01	00DEB	47300169			K	4,7,3,L8C+2	
3936	01	00DEC	00007F32	A		DATA	X'7F32'	
3937	01	00DED	00007F32	A		DATA	X'7F32'	
3938	01	00DEE	123E7F32	A		DATA	X'123E7F32'	
3939	01	00DEF	123E7F32	A		DATA	X'123E7F32'	
3940						** EW > R, HW ZERO BEING COMPARED, LOGICAL PRODUCT EZ		
3941	01	00DF0	FFFFFFF8	A	CH03	DATA	=8	
3942	01	00DF1	51C00460			CH,12	MEMORY	
3943	01	00DF2	07300136			K	0,7,3,SETPSW	
3944	01	00DF3	27300169			K	2,7,3,L8C+2	
3945	01	00DF4	42008200	A		DATA	X'42008200'	
3946	01	00DF5	42008200	A		DATA	X'42008200'	
3947	01	00DF6	71140200	A		DATA	X'71140200'	
3948	01	00DF7	71140200	A		DATA	X'71140200'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
3949						PAGE		
3950	01	00DF8	FFFFFFF8	A	CB01	DATA	-8	CB BYTE 0
3951	01	00DF9	71C00460			CB,12	MEMORY	
3952	01	00DFA	77300136			K	7,7,3,SETPSW	
3953	01	00DFB	07300169			K	0,7,3,L0C+2	
3954	01	00DFC	FFFFFFF0	A		DATA	X'FFFFFFF0'	
3955	01	00DFD	FFFFFFF0	A		DATA	X'FFFFFFF0'	
3956	01	00DFE	00FFFFFF	A		DATA	X'FFFFFF'	
3957	01	00DFE	00FFFFFF	A		DATA	X'FFFFFF'	
3958	01	00E00	FFFFFFF8	A	CB02	DATA	-8	CB BYTE 1
3959	01	00E01	71C20440			CB,12	MEMORY=X'20',1	
3960	01	00E02	77300136			K	7,7,3,SETPSW	
3961	01	00E03	07300169			K	5,7,3,L0C+2	
3962	01	00E04	0000081	A		DATA	X'81'	
3963	01	00E05	0000081	A		DATA	X'81'	
3964	01	00E06	FFFFFFF8	A		DATA	X'FFFFFFF8'	
3965	01	00E07	FFFFFFF8	A		DATA	X'FFFFFFF8'	
3966	01	00E08	FFFFFFF8	A	CB03	DATA	-8	CB BYTE 0
3967	01	00E09	71C00460			CB,12	MEMORY	
3968	01	00E0A	37300136			K	3,7,3,SETPSW	
3969	01	00E0B	47300169			K	4,7,3,L0C+2	
3970	01	00E0C	000000FF	A		DATA	X'FF'	
3971	01	00E0D	000000FF	A		DATA	X'FF'	
3972	01	00E0E	FFEECCDD	A		DATA	X'FFEECCDD'	
3973	01	00E0F	FFEECCDD	A		DATA	X'FFEECCDD'	
3974	01	00E10	FFFFFFF8	A	CB04	DATA	-8	CB X BYTE 1
3975	01	00E11	71C2ECC2			CB,12	MEMORY=X'1159E',1	
3976	01	00E12	77300136			K	15,7,3,SETPSW	
3977	01	00E13	C7300169			K	12,7,3,L0C+2	
3978	01	00E14	12345679	A		DATA	X'12345679'	
3979	01	00E15	12345679	A		DATA	X'12345679'	
3980	01	00E16	26793355	A		DATA	X'26793355'	
3981	01	00E17	26793355	A		DATA	X'26793355'	
3982						PAGE		
3983	01	00E18	FFFFFFF8	A	CB05	DATA	-8	CB *X BYTE 2
3984	01	00E19	F1C2045A			CB,12	+1A,1	
3985	01	00E1A	07300136			K	0,7,3,SETPSW	
3986	01	00E1B	47300169			K	4,7,3,L0C+2	
3987	01	00E1C	00000002	A		DATA	2	
3988	01	00E1D	00000002	A		DATA	2	
3989	01	00E1E	FFFF02FF	A		DATA	X'FFFF02FF'	
3990	01	00E1F	FFFF02FF	A		DATA	X'FFFF02FF'	
3991	01	00E20	FFFFFFF8	A	CB06	DATA	-8	CB BYTE 3
3992	01	00E21	71C22B10			CB,12	MEMORY=X'1D950',1	
3993	01	00E22	07300136			K	0,7,3,SETPSW	
3994	01	00E23	47300169			K	4,7,3,L0C+2	
3995	01	00E24	ABC76543	A		DATA	X'ABC76543'	
3996	01	00E25	ABC76543	A		DATA	X'ABC76543'	
3997	01	00E26	54389A43	A		DATA	X'54389A43'	
3998	01	00E27	54389A43	A		DATA	X'54389A43'	
3999	01	00E28	FFFFFFF8	A	CB07	DATA	-8	CB BYTE 2
4000	01	00E29	71CE0460			CB,12	MEMORY,7	
4001	01	00E2A	77300136			K	7,7,3,SETPSW	
4002	01	00E2B	17300169			K	1,7,3,L0C+2	
4003	01	00E2C	00000059	A		DATA	X'59'	
4004	01	00E2D	00000059	A		DATA	X'59'	
4005	01	00E2E	58A65754	A		DATA	X'58A65754'	
4006	01	00E2F	58A65754	A		DATA	X'58A65754'	
4007	01	00E30	FFFFFFF8	A	CB08	DATA	-8	CB BYTE 0
4008	01	00E31	71C00460			CB,12	MEMORY	
4009	01	00E32	77300136			K	7,7,3,SETPSW	
4010	01	00E33	27300169			K	2,7,3,L0C+2	
4011	01	00E34	FFFFFFFBC	A		DATA	X'FFFFFFFBC'	
4012	01	00E35	FFFFFFFBC	A		DATA	X'FFFFFFFBC'	
4013	01	00E36	43210567	A		DATA	X'43210567'	
4014	01	00E37	43210567	A		DATA	X'43210567'	
4015						PAGE		
4016						** SIGN EXTEND	'0' C(R) > EW. LOGIC PRODUCT NEZ	
4017	01	00E38	FFFFFFFA	A	CIO1	DATA	-6	
4018	01	00E39	21C7FFFD	A		CI,12	X'7FFFD'	
4019	01	00E3A	07300136			K	0,7,3,SETPSW	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
4020	01	00E3B	67300169			K	6,7,3,L0C+2	
4021	01	00E3C	0007FFFE A			DATA	X'7FFFE'	
4022	01	00E3D	0007FFFE A			DATA	X'7FFFE'	
4023								** SIGN EXTEND '1' C(R) < EW. LP = ZERO
4024	01	00E3E	FFFFFFFA A		CI02	DATA	=6	
4025	01	00E3F	21C80000 A			CI,12	X'80000'	
4026	01	00E40	F7300136			K	15,7,3,SETPSW	
4027	01	00E41	A7300169			K	10,7,3,L0C+2	
4028	01	00E42	0007FFFF A			DATA	X'7FFFF'	
4029	01	00E43	0007FFFF A			DATA	X'7FFFF'	
4030						PAGE		
4031	01	00E44	FFFFFFF4 A		CD01	DATA	=12	CD
4032	01	00E45	11C00460			CD,12	MEMORY	
4033	01	00E46	F7300136			K	15,7,3,SETPSW	
4034	01	00E47	C7300169			K	12,7,3,L0C+2	
4035	01	00E48	12345678 A			DATA	X'12345678'	
4036	01	00E49	12345678 A			DATA	X'12345678'	
4037	01	00E4A	12345678 A			DATA	X'12345678'	
4038	01	00E4B	12345678 A			DATA	X'12345678'	
4039	01	00E4C	9ABCDEF0 A			DATA	X'9ABCDEF0'	
4040	01	00E4D	9ABCDEF0 A			DATA	X'9ABCDEF0'	
4041	01	00E4E	9ABCDEF0 A			DATA	X'9ABCDEF0'	
4042	01	00E4F	9ABCDEF0 A			DATA	X'9ABCDEF0'	
4043	01	00E50	FFFFFFF4 A		CD02	DATA	=12	CD X
4044	01	00E51	11C35770			CD,12	MEMORY=X'ACF0',1	
4045	01	00E52	07300136			K	0,7,3,SETPSW	
4046	01	00E53	27300169			K	2,7,3,L0C+2	
4047	01	00E54	12345678 A			DATA	X'12345678'	
4048	01	00E55	12345678 A			DATA	X'12345678'	
4049	01	00E56	12345678 A			DATA	X'12345678'	
4050	01	00E57	12345678 A			DATA	X'12345678'	
4051	01	00E58	9ABCDEF1 A			DATA	X'9ABCDEF1'	
4052	01	00E59	9ABCDEF1 A			DATA	X'9ABCDEF1'	
4053	01	00E5A	9ABCDEF0 A			DATA	X'9ABCDEF0'	
4054	01	00E5B	9ABCDEF0 A			DATA	X'9ABCDEF0'	
4055						PAGE		
4056	01	00E5C	FFFFFFF4 A		CD03	DATA	=12	CD *
4057	01	00E5D	91C0045A			CD,12	*1A	
4058	01	00E5E	77300136			K	7,7,3,SETPSW	
4059	01	00E5F	57300169			K	5,7,3,L0C+2	
4060	01	00E60	76543210 A			DATA	X'76543210'	
4061	01	00E61	76543210 A			DATA	X'76543210'	
4062	01	00E62	76543210 A			DATA	X'76543210'	
4063	01	00E63	76543210 A			DATA	X'76543210'	
4064	01	00E64	FDECBA98 A			DATA	X'FDECBA98'	
4065	01	00E65	FDECBA98 A			DATA	X'FDECBA98'	
4066	01	00E66	FDECBA99 A			DATA	X'FDECBA99'	
4067	01	00E67	FDECBA99 A			DATA	X'FDECBA99'	
4068	01	00E68	FFFFFFF4 A		CD04	DATA	=12	CD
4069	01	00E69	11D00460			CD,13	MEMORY	
4070	01	00E6A	F7300136			K	15,7,3,SETPSW	
4071	01	00E6B	D7300169			K	13,7,3,L0C+2	
4072	01	00E6C	ADDEBCAD A			DATA	X'ADDEBCAD'	
4073	01	00E6D	ADDEBCAD A			DATA	X'ADDEBCAD'	
4074	01	00E6E	76543210 A			DATA	X'76543210'	
4075	01	00E6F	76543210 A			DATA	X'76543210'	
4076	01	00E70	76543210 A			DATA	X'76543210'	
4077	01	00E71	76543210 A			DATA	X'76543210'	
4078	01	00E72	76543211 A			DATA	X'76543211'	
4079	01	00E73	76543211 A			DATA	X'76543211'	
4080						PAGE		
4081								** 0PERANDS EQUAL
4082	01	00E74	FFFFFFF6 A		CS01	DATA	=10	
4083	01	00E75	45C00460			CS,12	MEMORY	PH1: C(S) = EW*RU1 = A5A5A5A5
4084	01	00E76	F7300136			K	15,7,3,SETPSW	
4085	01	00E77	C7300169			K	12,7,3,L0C+2	PH3: C(S) = R*RU1 = A5A5A5A5
4086	01	00E78	A5A5A5A5 A			DATA	X'A5A5A5A5'	
4087	01	00E79	A5A5A5A5 A			DATA	X'A5A5A5A5'	PH4: C(S) = PH3=PH1 = 00000000
4088	01	00E7A	FFFFFFF7 A			DATA	=1	
4089	01	00E7B	FFFFFFF7 A			DATA	=1	
4090	01	00E7C	A5A5A5A5 A			DATA	X'A5A5A5A5'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
4091	01	00E7D	A5A5A5A5	A		DATA	X'A5A5A5A5'	
4092					** R < Ew			
4093	01	00E7E	FFFFFFF6	A	CS02	DATA	=10	
4094	01	00E7F	45C00460			CS,12	MEMORY	PH1; C(S) = Ew,RU1 = A5A5A5A5
4095	01	00E80	07300136			K	0,7,3,SETPSW	
4096	01	00E81	17300169			K	1,7,3,L0C+2	
4097	01	00E82	5A5A5A5A	A		DATA	X'5A5A5A5A'	
4098	01	00E83	5A5A5A5A	A		DATA	X'5A5A5A5A'	PH4; C(S) = PH3=PH1 = B4B4B4B5
4099	01	00E84	A5A5A5A5	A		DATA	X'A5A5A5A5'	
4100	01	00E85	A5A5A5A5	A		DATA	X'A5A5A5A5'	
4101	01	00E86	FFFFFFF6	A		DATA	=1	
4102	01	00E87	FFFFFFF6	A		DATA	=1	
4103					** R > Ew			
4104	01	00E88	FFFFFFF6	A	CS03	DATA	=10	
4105	01	00E89	45C00460			CS,12	MEMORY	PH1; C(S) = Ew,RU1 = 5A5A0000
4106	01	00E8A	07300136			K	0,7,3,SETPSW	
4107	01	00E8B	27300169			K	2,7,3,L0C+2	PH3; C(S) = R,RU1 = A5A50000
4108	01	00E8C	A5A5A5A5	A		DATA	X'A5A5A5A5'	
4109	01	00E8D	A5A5A5A5	A		DATA	X'A5A5A5A5'	PH4; C(S) = PH3=PH1 = 4B4B0000
4110	01	00E8E	5A5A5A5A	A		DATA	X'5A5A5A5A'	
4111	01	00E8F	5A5A5A5A	A		DATA	X'5A5A5A5A'	
4112	01	00E90	FFFF0000	A		DATA	X'FFFF0000'	
4113	01	00E91	FFFF0000	A		DATA	X'FFFF0000'	
4114						PAGE		
4115					** C(R) < Ew. C(RU1)=Ew			
4116	01	00E92	FFFFFFF6	A	CLR01	DATA	=10	
4117	01	00E93	39C00460			CLR,12	MEMORY	
4118	01	00E94	F7300136			K	15,7,3,SETPSW	
4119	01	00E95	47300169			K	4,7,3,L0C+2	
4120	01	00E96	00000000	A		DATA	0	
4121	01	00E97	00000000	A		DATA	0	
4122	01	00E98	00000000	A		DATA	0	
4123	01	00E99	00000000	A		DATA	0	
4124	01	00E9A	FFFFFFF6	A		DATA	=1	
4125	01	00E9B	FFFFFFF6	A		DATA	=1	
4126					** C(R)=Ew. C(RU1) < Ew			
4127	01	00E9C	FFFFFFF6	A	CLR02	DATA	=6	
4128	01	00E9D	39C00460			CLR,12	MEMORY	
4129	01	00E9E	F7300136			K	15,7,3,SETPSW	
4130	01	00E9F	17300169			K	1,7,3,L0C+2	
4131	01	00EA0	FFFFFFF6	A		DATA	=1	
4132	01	00EA1	FFFFFFF6	A		DATA	=1	
4133					** C(R) > Ew. C(RU1) < Ew.			
4134	01	00EA2	FFFFFFF6	A	CLR03	DATA	=10	
4135	01	00EA3	39C00460			CLR,12	MEMORY	
4136	01	00EA4	07300136			K	0,7,3,SETPSW	
4137	01	00EA5	67300169			K	6,7,3,L0C+2	
4138	01	00EA6	00000001	A		DATA	1	
4139	01	00EA7	00000001	A		DATA	1	
4140	01	00EA8	00000000	A		DATA	0	
4141	01	00EA9	00000000	A		DATA	0	
4142	01	00EAA	FFFFFFF6	A		DATA	=1	
4143	01	00EAB	FFFFFFF6	A		DATA	=1	
4144						PAGE		
4145					** C(R) < Ew. C(RU1) > Ew.			
4146	01	00EAC	FFFFFFF6	A	CLR04	DATA	=10	
4147	01	00EAD	39C00460			CLR,12	MEMORY	
4148	01	00EAE	07300136			K	0,7,3,SETPSW	
4149	01	00EAF	97300169			K	9,7,3,L0C+2	
4150	01	00EB0	FFFFFFF6	A		DATA	=1	
4151	01	00EB1	FFFFFFF6	A		DATA	=1	
4152	01	00EB2	00000000	A		DATA	0	
4153	01	00EB3	00000000	A		DATA	0	
4154	01	00EB4	00000001	A		DATA	1	
4155	01	00EB5	00000001	A		DATA	1	
4156					** USE 0DD R FIELD. C(R)=C(RU1)>Ew.			
4157	01	00EB6	FFFFFFF6	A	CLR05	DATA	=10	
4158	01	00EB7	39D00460			CLR,13	MEMORY	
4159	01	00EB8	07300136			K	0,7,3,SETPSW	
4160	01	00EB9	A7300169			K	10,7,3,L0C+2	
4161	01	00EBA	FFFFFFF6	A		DATA	=1	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
4162	01	00EBB	FFFFFFFF	A		DATA	=1	
4163	01	00EBC	00000000	A		DATA	0	
4164	01	00EBD	00000000	A		DATA	0	
4165	01	00EBE	00000001	A		DATA	1	
4166	01	00EBF	00000001	A		DATA	1	
4167						PAGE		
4168					** R > M+1. R < M			
4169	01	00EC0	FFFFFFFF	A	CLM01	DATA	=12	
4170	01	00EC1	19C00460			CLM,12	MEMORY	
4171	01	00EC2	07300136			K	0,7,3,SETPSW	
4172	01	00EC3	97300169			K	9,7,3,L8C+2	
4173	01	00EC4	00000000	A		DATA	0	
4174	01	00EC5	00000000	A		DATA	0	
4175	01	00EC6	00000001	A		DATA	1	
4176	01	00EC7	00000001	A		DATA	1	
4177	01	00EC8	FFFFFFFF	A		DATA	=1	
4178	01	00EC9	FFFFFFFF	A		DATA	=1	
4179	01	00ECA	FFFFFFFF	A		DATA	=1	
4180	01	00ECB	FFFFFFFF	A		DATA	=1	
4181					** USE BDD MEMORY L8C. SHOULD STILL FETCH EVEN L8C AND BDD L8C			
4182					** R < M+1. R > M			
4183	01	00ECC	FFFFFFFF	A	CLM02	DATA	=12	
4184	01	00ECD	19D00461			CLM,13	MEMORY+1	
4185	01	00ECE	97300136			K	9,7,3,SETPSW	
4186	01	00ECF	67300169			K	6,7,3,L8C+2	
4187	01	00ED0	FFFFFFFF	A		DATA	=1	
4188	01	00ED1	FFFFFFFF	A		DATA	=1	
4189	01	00ED2	FFFFFFFF	A		DATA	=1	
4190	01	00ED3	FFFFFFFF	A		DATA	=1	
4191	01	00ED4	00000000	A		DATA	0	
4192	01	00ED5	00000000	A		DATA	0	
4193	01	00ED6	00000001	A		DATA	1	
4194	01	00ED7	00000001	A		DATA	1	
4195					*			
4196					** R = M+1. R=M			
4197	01	00ED8	FFFFFFFF	A	CLM03	DATA	=12	*E
4198	01	00ED9	19C00460			CLM,12	MEMORY	*E
4199	01	00EDA	F7300136			K	F,7,3,SETPSW	*E
4200	01	00EDB	07300169			K	0,7,3,L8C+2	*E
4201	01	00EDC	25252525	A		DATA	X'25252525'	*E
4202	01	00EDD	25252525	A		DATA	X'25252525'	*E
4203	01	00EDE	25252525	A		DATA	X'25252525'	*E
4204	01	00EDF	25252525	A		DATA	X'25252525'	*E
4205	01	00EE0	FFFFFFFF	A		DATA	=1	*E
4206	01	00EE1	FFFFFFFF	A		DATA	=1	*E
4207	01	00EE2	25252525	A		DATA	X'25252525'	*E
4208	01	00EE3	25252525	A		DATA	X'25252525'	*E
4209					*			
4210					*			
4211					** R<M. R<M+1.			*E
4212	01	00EE4	FFFFFFFF	A	CLM04	DATA	=12	*E
4213	01	00EE5	19C00460			CLM,12	MEMORY	*E
4214	01	00EE6	07300136			K	0,7,3,SETPSW	*E
4215	01	00EE7	57300169			K	5,7,3,L8C+2	*E
4216	01	00EE8	80000000	A		DATA	X'80000000'	*E
4217	01	00EE9	80000000	A		DATA	X'80000000'	*E
4218	01	00EEA	80000001	A		DATA	X'80000001'	*E
4219	01	00EEB	80000001	A		DATA	X'80000001'	*E
4220	01	00EEC	00000000	A		DATA	0	*E
4221	01	00EED	00000000	A		DATA	0	*E
4222	01	00EEE	FFFFFFFF	A		DATA	=1	*E
4223	01	00EEF	FFFFFFFF	A		DATA	=1	*E
4224					*			*E
4225					** R>M. R>M+1			
4226	01	00EF0	FFFFFFFF	A	CLM05	DATA	=12	*E
4227	01	00EF1	19D2ACC6			CLM,13	MEMORY+2*X'ABCD',1	*E
4228	01	00EF2	07300136			K	0,7,3,SETPSW	*E
4229	01	00EF3	A7300169			K	10,7,3,L8C+2	*E
4230	01	00EF4	6789ABCD	A		DATA	X'6789ABCD'	*E
4231	01	00EF5	6789ABCD	A		DATA	X'6789ABCD'	*E
4232	01	00EF6	7FFFFFFE	A		DATA	X'7FFFFFFE'	*E

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
4233	01	00EF7	7FFFFFFE	A		DATA	X'7FFFFFFE'	•E
4234	01	00EF8	7FFFFFFF	A		DATA	X'7FFFFFFF'	•E
4235	01	00EF9	7FFFFFFF	A		DATA	X'7FFFFFFF'	•E
4236	01	00EFA	FFFFFFFF	A		DATA	=1	•E
4237	01	00EFB	FFFFFFFF	A		DATA	=1	•E
4238								
4239								
4240	01	00EFC	FFFFFFF4	A		DATA	=12	•E
4241	01	00EFD	19C00461	A	CLM06	CLM,12	MEMORY+1	•E
4242	01	00EFE	77300136	A		K	7,7,3,SETPSW	•E
4243	01	00EFF	87300169	A		K	8,7,3,L8C+2	•E
4244	01	00F00	02345678	A		DATA	X'2345678'	•E
4245	01	00F01	02345678	A		DATA	X'2345678'	•E
4246	01	00F02	02345678	A		DATA	X'2345678'	•E
4247	01	00F03	02345678	A		DATA	X'2345678'	•E
4248	01	00F04	00000000	A		DATA	0	•E
4249	01	00F05	00000000	A		DATA	0	•E
4250	01	00F06	02345677	A		DATA	X'2345677'	•E
4251	01	00F07	02345677	A		DATA	X'2345677'	•E
4252					** CHECK	OVERFLOW	N0 TRAP	
4253	01	00F08	FFFFFFFA	A	MTW01	DATA	=6	MTW
4254	01	00F09	33F0000C	A		MTW,15	12	
4255	01	00FOA	072001C8	A		K	0,7,2,FXP0SW	
4256	01	00FOB	E7200169	A		K	14,7,2,L8C+2	
4257	01	00FOC	80000000	A		DATA	X'80000000'	
4258	01	00F0D	7FFFFFFF	A		DATA	X'7FFFFFFF'	
4259	01	00FOE	FFFFFFFA	A	MTW02	DATA	=6	MTW
4260	01	00FOF	3300000C	A		MTW,0	12	
4261	01	00F10	07300136	A		K	0,7,3,SETPSW	
4262	01	00F11	17300169	A		K	1,7,3,L8C+2	
4263	01	00F12	80000000	A		DATA	X'80000000'	
4264	01	00F13	80000000	A		DATA	X'80000000'	
4265	01	00F14	FFFFFFF8	A	MTW03	DATA	=8	MTW X
4266	01	00F15	33D211EA	A		MTW,13	MEMORY=X'1F276',1	
4267	01	00F16	77300136	A		K	7,7,3,SETPSW	
4268	01	00F17	87300169	A		K	8,7,3,L8C+2	
4269	01	00F18	0001F276	A		DATA	X'1F276'	
4270	01	00F19	0001F276	A		DATA	X'1F276'	
4271	01	00F1A	00000003	A		DATA	3	
4272	01	00F1B	00000000	A		DATA	0	
4273						PAGE		
4274					** CHECK	OVERFLOW	TRAP	
4275	01	00F1C	FFFFFFF8	A	MTW04	DATA	=8	MTW *
4276	01	00F1D	B310045A	A		MTW,1	*1A	
4277	01	00F1E	073001C8	A		K	0,7,3,FXP0SW	
4278	01	00F1F	57300084	A		K	5,7,3,FP0RET+1	
4279	01	00F20	00000000	A		DATA	0	
4280	01	00F21	00000000	A		DATA	0	
4281	01	00F22	7FFFFFFF	A		DATA	X'7FFFFFFF'	
4282	01	00F23	80000000	A		DATA	X'80000000'	
4283	01	00F24	FFFFFFF8	A	MTW05	DATA	=8	MTW
4284	01	00F25	33700460	A		MTW,7	MEMORY	
4285	01	00F26	F7300136	A		K	15,7,3,SETPSW	
4286	01	00F27	17300169	A		K	1,7,3,L8C+2	
4287	01	00F28	FFFFFFFF	A		DATA	=1	
4288	01	00F29	FFFFFFFF	A		DATA	=1	
4289	01	00F2A	FFFFFFF8	A		DATA	X'FFFFFFF8'	
4290	01	00F2B	FFFFFFFF	A		DATA	=1	
4291						PAGE		
4292	01	00F2C	FFFFFFFA	A	MTH01	DATA	=6	MTH
4293	01	00F2D	5300000C	A		MTH,0	12	
4294	01	00F2E	07300136	A		K	0,7,3,SETPSW	
4295	01	00F2F	27300169	A		K	2,7,3,L8C+2	
4296	01	00F30	00010000	A		DATA	X'10000'	
4297	01	00F31	00010000	A		DATA	X'10000'	
4298	01	00F32	FFFFFFF8	A	MTH02	DATA	=8	MTH X
4299	01	00F33	5323C01C	A		MTH,2	MEMORY=X'4444',1	
4300	01	00F34	77300136	A		K	7,7,3,SETPSW	
4301	01	00F35	87300169	A		K	8,7,3,L8C+2	
4302	01	00F36	00008889	A		DATA	X'8889'	
4303	01	00F37	00008889	A		DATA	X'8889'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
4304	01	00F38	7FFFFFFE	A		DATA	X'7FFFFFFE'	
4305	01	00F39	7FFF0000	A		DATA	X'7FFF0000'	
4306					** CHECK	OVERFLOW	NO TRAP	
4307	01	00F3A	FFFFFFF8	A	MTH03	DATA	-8	MTH *
4308	01	00F3B	D3E2045A			MTH,14	*IA,1	
4309	01	00F3C	172001C8			K	1,7,2,FXPSW	
4310	01	00F3D	E7200169			K	14,7,2,L0C+2	
4311	01	00F3E	00000001	A		DATA	1	
4312	01	00F3F	00000001	A		DATA	1	
4313	01	00F40	FFFF8000	A		DATA	X'FFFF8000'	
4314	01	00F41	FFFF7FFE	A		DATA	X'FFFF7FFE'	
4315					** CHECK	OVERFLOW	TRAP	
4316	01	00F42	FFFFFFF8	A	MTH04	DATA	-8	MTH X
4317	01	00F43	53320460			MTH,3	MEMORY,1	
4318	01	00F44	273001C8			K	2,7,3,FXPSW	
4319	01	00F45	57300084			K	5,7,3,FP0RET+1	
4320	01	00F46	00000001	A		DATA	1	
4321	01	00F47	00000001	A		DATA	1	
4322	01	00F48	7FFF7FFF	A		DATA	X'7FFF7FFF'	
4323	01	00F49	7FFF8002	A		DATA	X'7FFF8002'	
4324						PAGE		
4325	01	00F4A	FFFFFFF8	A	MTH05	DATA	-8	MTH X(X=0)
4326	01	00F4B	53920460			MTH,9	MEMORY,1	
4327	01	00F4C	F7300136			K	15,7,3,SETPSW	
4328	01	00F4D	97300169			K	9,7,3,L0C+2	
4329	01	00F4E	00000000	A		DATA	0	
4330	01	00F4F	00000000	A		DATA	0	
4331	01	00F50	FFF979AB	A		DATA	X'FFF979AB'	
4332	01	00F51	FFF279AB	A		DATA	X'FFF279AB'	
4333						PAGE		
4334	01	00F52	FFFFFFF8	A	MTB01	DATA	-8	MTB BYTE 0
4335	01	00F53	73000460			MTB,0	MEMORY	
4336	01	00F54	F7300136			K	15,7,3,SETPSW	
4337	01	00F55	07300169			K	0,7,3,L0C+2	
4338	01	00F56	00000000	A		DATA	0	
4339	01	00F57	00000000	A		DATA	0	
4340	01	00F58	00FFFFFF	A		DATA	X'FFFFFF'	
4341	01	00F59	00FFFFFF	A		DATA	X'FFFFFF'	
4342	01	00F5A	FFFFFFF8	A	MTB02	DATA	-8	MTB X BYTE 1
4343	01	00F5B	73C20460			MTB,12	MEMORY,1	
4344	01	00F5C	F7300136			K	15,7,3,SETPSW	
4345	01	00F5D	A7300169			K	10,7,3,L0C+2	
4346	01	00F5E	00000001	A		DATA	1	
4347	01	00F5F	00000001	A		DATA	1	
4348	01	00F60	F0F5F300	A		DATA	X'F0F5F300'	
4349	01	00F61	F0F1F300	A		DATA	X'F0F1F300'	
4350	01	00F62	FFFFFFF8	A	MTB03	DATA	-8	MTB *X BYTE 2
4351	01	00F63	F342045A			MTB,4	*IA,1	
4352	01	00F64	07300136			K	0,7,3,SETPSW	
4353	01	00F65	A7300169			K	10,7,3,L0C+2	
4354	01	00F66	00000002	A		DATA	2	
4355	01	00F67	00000002	A		DATA	2	
4356	01	00F68	F0F9FF03	A		DATA	X'F0F9FF03'	
4357	01	00F69	F0F90303	A		DATA	X'F0F90303'	
4358	01	00F6A	FFFFFFF8	A	MTB04	DATA	-8	MTH X BYTE 3
4359	01	00F6B	73B20460			MTB,11	MEMORY,1	
4360	01	00F6C	77300136			K	7,7,3,SETPSW	
4361	01	00F6D	87300169			K	8,7,3,L0C+2	
4362	01	00F6E	00000003	A		DATA	3	
4363	01	00F6F	00000003	A		DATA	3	
4364	01	00F70	FFFFFFF05	A		DATA	X'FFFFFFF05'	
4365	01	00F71	FFFFFFF00	A		DATA	-256	
4366						PAGE		
4367	01	00F72	FFFFFFFA	A	MTB05	DATA	-6	MTB BYTE 1
4368	01	00F73	738E000C	A		MTB,8	12,7	
4369	01	00F74	77300136			K	7,7,3,SETPSW	
4370	01	00F75	87300169			K	8,7,3,L0C+2	
4371	01	00F76	FF08FFFF	A		DATA	X'FF08FFFF'	
4372	01	00F77	FF00FFFF	A		DATA	X'FF00FFFF'	
4373	01	00F78	FFFFFFFA	A	MTB06	DATA	-6	MTB BYTE 2
4374	01	00F79	7352014C	A		MTB,5	12-X'IFEC0',1	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
4375	01	00F7A	07300136			K	0,7,3,SETPSW	
4376	01	00F7B	87300169			K	8,7,3,L8C+2	
4377	01	00F7C	FFFFFFB02	A		DATA	X'FFFFFFB02'	
4378	01	00F7D	FFFF0002	A		DATA	X'FFFF0002'	
4379	01	00F7E	FFFFFFFA	A	MTB07	DATA	=6	MTB BYTE 0
4380	01	00F7F	73A0000C	A		MTB,10	12	
4381	01	00F80	37300136			K	3,7,3,SETPSW	
4382	01	00F81	87300169			K	8,7,3,L8C+2	
4383	01	00F82	06123457	A		DATA	X'6123457'	
4384	01	00F83	00123457	A		DATA	X'123457'	
4385	01	00F84	FFFFFFFA	A	MTB08	DATA	=6	
4386	01	00F85	7360000C	A		MTB,6	12	
4387	01	00F86	57300136			K	5,7,3,SETPSW	
4388	01	00F87	27300169			K	2,7,3,L8C+2	
4389	01	00F88	00000000	A		DATA	0	
4390	01	00F89	06000000	A		DATA	X'6000000'	
4391						PAGE		
4392	01	00F8A	FFFFFFF8	A	AH01	DATA	=8	AH
4393	01	00F8B	50C00460			AH,12	MEMORY	
4394	01	00F8C	673001C8			K	6,7,3,FXP8SW	
4395	01	00F8D	97300169			K	9,7,3,L8C+2	
4396	01	00F8E	FFFF7654	A		DATA	X'FFFF7654'	
4397	01	00F8F	FFFFFFF7	A		DATA	X'FFFFFFF7'	
4398	01	00F90	89AB0000	A		DATA	X'89AB0000'	
4399	01	00F91	89AB0000	A		DATA	X'89AB0000'	
4400	01	00F92	FFFFFFF8	A	AH02	DATA	=8	AH X
4401	01	00F93	50CE0460			AH,12	MEMORY,7	
4402	01	00F94	573001C8			K	5,7,3,FXP8SW	
4403	01	00F95	27300169			K	2,7,3,L8C+2	
4404	01	00F96	7FFFD0BB	A		DATA	X'7FFFD0BB'	
4405	01	00F97	7FFFFFFF	A		DATA	X'7FFFFFFF'	
4406	01	00F98	23452344	A		DATA	X'23452344'	
4407	01	00F99	23452344	A		DATA	X'23452344'	
4408	01	00F9A	FFFFFFF8	A	AH03	DATA	=8	AH *
4409	01	00F9B	00CE045A			AH,12	*IA,7	
4410	01	00F9C	072001C8			K	0,7,2,FXP8SW	
4411	01	00F9D	E7200169			K	14,7,2,L8C+2	
4412	01	00F9E	80000000	A		DATA	X'80000000'	
4413	01	00F9F	7FFFFFFF	A		DATA	X'7FFFFFFF'	
4414	01	00FA0	7FFFFFFF	A		DATA	X'7FFFFFFF'	
4415	01	00FA1	7FFFFFFF	A		DATA	X'7FFFFFFF'	
4416	01	00FA2	FFFFFFFA	A	AH04	DATA	=6	AH
4417	01	00FA3	50C0000C	A		AH,12	12	
4418	01	00FA4	273001C8			K	2,7,3,FXP8SW	
4419	01	00FA5	57300084			K	5,7,3,FP8RET+1	
4420	01	00FA6	7FFF8001	A		DATA	X'7FFF8001'	
4421	01	00FA7	80000000	A		DATA	X'80000000'	
4422						PAGE		
4423	01	00FA8	FFFFFFFA	A	AI01	DATA	=6	AI
4424	01	00FA9	20C70000	A		AI,12	X'70000'	
4425	01	00FAA	773001C8			K	7,7,3,FXP8SW	
4426	01	00FAB	17300169			K	1,7,3,L8C+2	
4427	01	00FAC	80000000	A		DATA	X'80000000'	
4428	01	00FAD	80070000	A		DATA	X'80070000'	
4429	01	00FAE	FFFFFFFA	A	AI02	DATA	=6	AI
4430	01	00FAF	20C80000	A		AI,12	X'80000'	
4431	01	00FB0	173001C8			K	1,7,3,FXP8SW	
4432	01	00FB1	E7300084			K	14,7,3,FP8RET+1	
4433	01	00FB2	80000000	A		DATA	X'80000000'	
4434	01	00FB3	7FF80000	A		DATA	X'7FF80000'	
4435	01	00FB4	FFFFFFFC	A	AI03	DATA	=4	AI *
4436	01	00FB5	A0C0045A			AI,12	*IA	
4437	01	00FB6	17300180			K	1,7,3,RI9NAB	
4438	01	00FB7	97300063			K	9,7,3,NABRET+1	
4439						PAGE		
4440	01	00FB8	FFFFFFF4	A	AD01	DATA	=12	AD
4441	01	00FB9	10C0046C			AD,12	MEMORY	
4442	01	00FBA	773001C8			K	7,7,3,FXP8SW	
4443	01	00FBB	87300169			K	8,7,3,L8C+2	
4444	01	00FBC	FFFFFFF7	A		DATA	=1	
4445	01	00FBD	00000000	A		DATA	0	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
4446	01	00FB E	00000000	A		DATA	0	
4447	01	00FB F	00000000	A		DATA	0	
4448	01	00FC 0	FFFFFFF F	A		DATA	=1	
4449	01	00FC 1	00000000	A		DATA	0	
4450	01	00FC 2	00000001	A		DATA	1	
4451	01	00FC 3	00000001	A		DATA	1	
4452	01	00FC 4	FFFFFFF 4	A	AD02	DATA	=12	AD X BF TRAP
4453	01	00FC 5	10C20462			AD,12	MEMORY+2,1	
4454	01	00FC 6	273001C8			K	2,7,3,FXP8SW	
4455	01	00FC 7	57300084			K	5,7,3,FP8RET+1	
4456	01	00FC 8	7FFFFFF F	A		DATA	X'7FFFFFFF'	
4457	01	00FC 9	80000000	A		DATA	X'80000000'	
4458	01	00FC A	00000000	A		DATA	0	
4459	01	00FC B	00000000	A		DATA	0	
4460	01	00FC C	FFFFFFF F	A		DATA	=1	
4461	01	00FC D	00000000	A		DATA	0	
4462	01	00FC E	00000001	A		DATA	1	
4463	01	00FC F	00000001	A		DATA	1	
4464						PAGE		
4465	01	00FD 0	FFFFFFF 4	A	AD03	DATA	=12	AD * BF NTRAP
4466	01	00FD 1	90C0045A			AD,12	*IA	
4467	01	00FD 2	172001C8			K	1,7,2,FXP8SW	
4468	01	00FD 3	E7200169			K	14,7,2,L8C+2	
4469	01	00FD 4	87654321	A		DATA	X'87654321'	
4470	01	00FD 5	7FFFFFF F	A		DATA	X'7FFFFFFF'	
4471	01	00FD 6	F89ABCDE	A		DATA	X'F89ABCDE'	
4472	01	00FD 7	F89ABCDE	A		DATA	X'F89ABCDE'	
4473	01	00FD 8	0FEDCBA9	A		DATA	X'0FEDCBA9'	
4474	01	00FD 9	FFFFFFF F	A		DATA	=1	
4475	01	00FD A	F0123456	A		DATA	X'F0123456'	
4476	01	00FD B	F0123456	A		DATA	X'F0123456'	
4477						PAGE		
4478	01	00FD C	FFFFFFF 4	A	AD04	DATA	=12	AD M8 TRAP
4479	01	00FD D	10C00461			AD,12	MEMORY+1	
4480	01	00FD E	F73001C8			K	15,7,3,FXP8SW	
4481	01	00FD F	17300169			K	1,7,3,L8C+2	
4482	01	00FE 0	83759624	A		DATA	X'83759624'	
4483	01	00FE 1	F5D02CDA	A		DATA	X'F5D02CDA'	
4484	01	00FE 2	725A9685	A		DATA	X'725A9685'	
4485	01	00FE 3	725A9685	A		DATA	X'725A9685'	
4486	01	00FE 4	F65219AC	A		DATA	X'F65219AC'	
4487	01	00FE 5	2FA47D20	A		DATA	X'2FA47D20'	
4488	01	00FE 6	39526374	A		DATA	X'39526374'	
4489	01	00FE 7	39526374	A		DATA	X'39526374'	
4490						** CHECK THAT OVERFLOW OF LSW D8ES NOT CAUSE AN OVERFLOW		
4491	01	00FE 8	FFFFFFF 4	A	AD05	DATA	=12	
4492	01	00FE 9	10C00460			AD,12	MEMORY	
4493	01	00FE A	07300136			K	0,7,3,SETPSW	
4494	01	00FE B	27300169			K	2,7,3,L8C+2	
4495	01	00FE C	00000000	A		DATA	0,0,0,0,X'40000000',X'80000000'	
	01	00FE D	00000000	A				
	01	00FE E	00000000	A				
	01	00FE F	00000000	A				
	01	00FF 0	40000000	A				
	01	00FF 1	80000000	A				
4496	01	00FF 2	40000000	A		DATA	X'40000000',X'40000000'	
4497	01	00FF 3	40000000	A				
4498						PAGE		
4499						** CHECK K15= PR16=31.K31, K19= PR20=31.K31, K23=PR24=31.K31		
						** K27 = PR2831.K31		
4500	01	00FF 4	FFFFFFF 4	A	AD06	DATA	=12	
4501	01	00FF 5	1CC00460			AD,12	MEMORY	
4502	01	00FF 6	07300136			K	0,7,3,SETPSW	
4503	01	00FF 7	27300169			K	2,7,3,L8C+2	
4504	01	00FF 8	0C000000	A		DATA	0,X'10000',X'FFFF',X'FFFF'	
	01	00FF 9	0C010000	A				
	01	00FF A	0C00FFFF	A				
	01	00FF B	0C00FFFF	A				
4505	01	00FF C	8C000000	A		DATA	X'80000000',0,X'80000000',X'80000000'	
	01	00FF D	0C000000	A				
	01	00FF E	8C000000	A				

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
4506	01	00FFF	80000000	A				
4507						PAGE		
4508						** CHECK THAT AWM GENERATES PROBE OVER TO CHECK FOR OVERFLOW AND CAUSE		
						** A TRAP		
4509	01	01000	FFFFFFF8	A	AWM01	DATA	=8	AWM OF TRAP
4510	01	01001	66C00460			AWM,12	MEMORY	
4511	01	01002	273001C8			K	2,7,3,FXP0SW	
4512	01	01003	57300084			K	5,7,3,FP0RET+1	
4513	01	01004	2375694B	A		DATA	X'2375694B'	
4514	01	01005	2375694B	A		DATA	X'2375694B'	
4515	01	01006	7235641C	A		DATA	X'7235641C'	
4516	01	01007	95AACD67	A		DATA	X'95AACD67'	
4517	01	01008	FFFFFFF8	A	AWM02	DATA	=8	AWM X
4518	01	01009	66C26DEB			AWM,12	MEMORY-X'19675',1	
4519	01	0100A	F73001C8			K	15,7,3,FXP0SW	
4520	01	0100B	A7300169			K	10,7,3,L0C+2	
4521	01	0100C	F3219675	A		DATA	X'F3219675'	
4522	01	0100D	F3219675	A		DATA	X'F3219675'	
4523	01	0100E	691ABCDE	A		DATA	X'691ABCDE'	
4524	01	0100F	5C3C5353	A		DATA	X'5C3C5353'	
4525	01	01010	FFFFFFF8	A	AWM03	DATA	=8	AWM *
4526	01	01011	E6C0045A			AWM,12	*IA	
4527	01	01012	773001C8			K	7,7,3,FXP0SW	
4528	01	01013	87300169			K	8,7,3,L0C+2	
4529	01	01014	0C000007	A		DATA	7	
4530	01	01015	0C000007	A		DATA	7	
4531	01	01016	FFFFFFF9	A		DATA	=7	
4532	01	01017	00000000	A		DATA	0	
4533						PAGE		
4534						** AWM WITH IX AND IA		
4535	01	01018	FFFFFFF4	A	AWM04	DATA	=12	
4536	01	01019	E6CE045A			AWM,12	*IA,7	
4537	01	0101A	F0000136			K	15,0,0,SETPSW	
4538	01	0101B	20000169			K	2,0,0,L0C+2	
4539	01	0101C	00000007	A		DATA	7,7,MEMORY,MEMORY,-1,-1,1,8	
	01	0101D	00000007	A				
	01	0101E	00000460					
	01	0101F	00000460					
	01	01020	FFFFFFF8	A				
	01	01021	FFFFFFF8	A				
	01	01022	00000001	A				
	01	01023	00000008	A				
4540						PAGE		
4541	01	01024	FFFFFFF8	A	SH01	DATA	=8	SH OF NTRAP
4542	01	01025	58C00460			SH,12	MEMORY	
4543	01	01026	072001C8			K	0,7,2,FXP0SW	
4544	01	01027	E7200169			K	14,7,2,L0C+2	
4545	01	01028	8C003946	A		DATA	X'80003946'	
4546	01	01029	7FFFFFFF	A		DATA	X'7FFFFFFF'	
4547	01	0102A	3947F261	A		DATA	X'3947F261'	
4548	01	0102B	3947F261	A		DATA	X'3947F261'	
4549	01	0102C	FFFFFFF8	A	SH02	DATA	=8	SH X OF TRAP
4550	01	0102D	58CE0460			SH,12	MEMORY,7	
4551	01	0102E	773001C8			K	7,7,3,FXP0SW	
4552	01	0102F	57300084			K	5,7,3,FP0RET+1	
4553	01	01030	7FFF8375	A		DATA	X'7FFF8375'	
4554	01	01031	80002B34	A		DATA	X'80002B34'	
4555	01	01032	7FFF8841	A		DATA	X'7FFF8841'	
4556	01	01033	7FFF8841	A		DATA	X'7FFF8841'	
4557	01	01034	FFFFFFF8	A	SH03	DATA	=8	SH *X
4558	01	01035	D8CE045A			SH,12	*IA,7	
4559	01	01036	07300136			K	0,7,3,SETPSW	
4560	01	01037	87300169			K	8,7,3,L0C+2	
4561	01	01038	00000000	A		DATA	0	
4562	01	01039	00000000	A		DATA	0	
4563	01	0103A	FFFF0000	A		DATA	X'FFFF0000'	
4564	01	0103B	FFFF0000	A		DATA	X'FFFF0000'	
4565						PAGE		
4566	01	0103C	FFFFFFF4	A	SD01	DATA	=12	SD
4567	01	0103D	18C00460			SD,12	MEMORY	
4568	01	0103E	07300136			K	0,7,3,SETPSW	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
4630	01	01080	FFFFFFF6	A	S003	DATA	=10	
4631	01	01081	25C00121	A		S,12	X'121'	
4632	01	01082	C0000136			K	12,0,0,SETPSW	
4633	01	01083	00000169			K	0,0,0,L8C+2	
4634	01	01084	00000000	A		DATA	0,2,-1,-1,1,0	
	01	01085	00000002	A				
	01	01086	FFFFFFF7	A				
	01	01087	FFFFFFF7	A				
	01	01088	00000001	A				
	01	01089	00000000	A				
4635						PAGE		
4636						** LOGICAL SHIFT LEFT DOUBLE. PARITY ODD. SHIFT OF 12 BITS		
4637	01	0108A	FFFFFFF6	A	S004	DATA	=10	
4638	01	0108B	25C0010C	A		S,12	X'10C'	
4639	01	0108C	07300136			K	0,7,3,SETPSW	
4640	01	0108D	C7300169			K	12,7,3,L8C+2	
4641	01	0108E	B5C35A3C	A		DATA	X'B5C35A3C',X'35A3C3CA',0,0,X'3CA5C35A',X'5C35A000'	
	01	0108F	35A3C3CA	A				
	01	01090	00000000	A				
	01	01091	00000000	A				
	01	01092	3CA5C35A	A				
	01	01093	5C35A000	A				
4642						** CYCLICAL SHIFT LEFT SINGLE. SHIFT 16 BITS		
4643	01	01094	FFFFFFF6	A	S005	DATA	=10	
4644	01	01095	25C00210	A		S,12	X'210'	
4645	01	01096	00000136			K	0,0,0,SETPSW	
4646	01	01097	40000169			K	4,0,0,L8C+2	
4647	01	01098	3CA5C35A	A		DATA	X'3CA5C35A',X'35A3C3CA',0,0,X'FFFF',X'FFFF'	
	01	01099	C35A3CA5	A				
	01	0109A	00000000	A				
	01	0109B	00000000	A				
	01	0109C	0000FFFF	A				
	01	0109D	0000FFFF	A				
4648						** CYCLICAL SHIFT LEFT SINGLE. ODD REGISTER. SHIFT 16 BITS		
4649	01	0109E	FFFFFFF6	A	S006	DATA	=10	
4650	01	0109F	25D00210	A		S,13	X'210'	
4651	01	010A0	00000136			K	0,0,0,SETPSW	
4652	01	010A1	40000169			K	4,0,0,L8C+2	
4653	01	010A2	A5A5C3C3	A		DATA	X'A5A5C3C3',X'A5A5C3C3',-1,-1,X'C53AA3C5',X'A3C5C53A'	
	01	010A3	A5A5C3C3	A				
	01	010A4	FFFFFFF7	A				
	01	010A5	FFFFFFF7	A				
	01	010A6	C53AA3C5	A				
	01	010A7	A3C5C53A	A				
4654						PAGE		
4655						** CYCLICAL LEFT SHIFT DOUBLE. SWAP R WITH RU1 (32 BIT SHIFT)		
4656	01	010A8	FFFFFFF6	A	S007	DATA	=10	
4657	01	010A9	25C00320	A		S,12	X'320'	
4658	01	010AA	F7300136			K	15,7,3,SETPSW	
4659	01	010AB	77300169			K	7,7,3,L8C+2	
4660	01	010AC	EDB77BDE	A		DATA	X'EDB77BDE',X'A53C5AC3',0,0,X'A53C5AC3',X'EDB77BDE'	
	01	010AD	A53C5AC3	A				
	01	010AE	00000000	A				
	01	010AF	00000000	A				
	01	010B0	A53C5AC3	A				
	01	010B1	EDB77BDE	A				
4661						** CYCLICAL LEFT SHIFT DOUBLE. SHIFT OF MAX COUNT (EQUIVALENT TO SHIFT		
4662						** RIGHT CYCLICAL BY 1 BIT)		
4663	01	010B2	FFFFFFF6	A	S008	DATA	=10	
4664	01	010B3	25C0033F	A		S,12	X'33F'	
4665	01	010B4	07300136			K	0,7,3,SETPSW	
4666	01	010B5	47300169			K	4,7,3,L8C+2	
4667	01	010B6	5A5A5A5A	A		DATA	X'5A5A5A5A',X'2D2D2D2D',0,0,X'5A5A5A5A',X'2D2D2D2D'	
	01	010B7	2D2D2D2D	A				
	01	010B8	00000000	A				
	01	010B9	00000000	A				
	01	010BA	5A5A5A5A	A				
	01	010BB	2D2D2D2D	A				
4668						PAGE		
4669						** LOGICAL SHIFT RIGHT. ODD REGISTER. TEST SET OF ODD BITS. SHIFT OF 31		
4670	01	010BC	FFFFFFF6	A	S009	DATA	=10	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
4671	01	0103D	25D00061	A		S,13	X'61'	
4672	01	0108E	F7300136			K	15,7,3,SETPSW	
4673	01	0103F	37300169			K	3,7,3,L8C+2	
4674	01	010C0	00000000	A		DATA	0,0,0,0,X'80000000',1	
	01	010C1	00000000	A				
	01	010C2	00000000	A				
	01	010C3	00000000	A				
	01	010C4	80000000	A				
	01	010C5	00000001	A				
4675								** LOGICAL SHIFT RIGHT, TEST SET OF EVEN BIT POSITIONS, SHIFT OF 30
4676	01	010C6	FFFFFFFA	A	S010	DATA	=6	
4677	01	010C7	25C00062	A		S,12	X'62'	
4678	01	010C8	00000136			K	0,0,0,SETPSW	
4679	01	010C9	00000169			K	0,0,0,L8C+2	
4680	01	010CA	80000000	A		DATA	X'80000000',2	
	01	010CB	00000002	A				
4681								** ARITH SHIFT RIGHT, FILL WITH ONES, SHIFT OF 12 BITS
4682	01	010CC	FFFFFFFA	A	S011	DATA	=6	
4683	01	010CD	25C00474	A		S,12	X'474'	
4684	01	010CE	00000136			DATA	SETPSW,L8C+2,X'A5A5A5A5',X'FFFA5A5A'	
	01	010CF	00000169					
	01	010D0	A5A5A5A5	A				
	01	010D1	FFFA5A5A	A				
4685								PAGE
4686								** ARITH SHIFT RIGHT, FILL WITH ZEROS, DOUBLE REG. SHIFT OF 34 BITS
4687								** CHECKS SET OF 8DD B REG BITS
4688	01	010D2	FFFFFFF6	A	S012	DATA	=10	
4689	01	010D3	25C0055E	A		S,12	X'55E'	
4690	01	010D4	00000136			DATA	SETPSW,L8C+2,5,0,7,7,0,1	
	01	010D5	00000169					
	01	010D6	00000005	A				
	01	010D7	00000000	A				
	01	010D8	00000007	A				
	01	010D9	00000007	A				
	01	010DA	00000000	A				
	01	010DB	00000001	A				
4691								** ARITH SHIFT RIGHT, FILL WITH ONES, DOUBLE REG. SHIFT OF 31 BITS
4692	01	010DC	FFFFFFF6	A	S013	DATA	=10	
4693	01	010DD	25C00561	A		S,12	X'561'	
4694	01	010DE	00000136			DATA	SETPSW,L8C+2,X'C3C3C3C3',*1,0,0,X'80005AC3'	
	01	010DF	00000169					
	01	010E0	C3C3C3C3	A				
	01	010E1	FFFFFFF7	A				
	01	010E2	00000000	A				
	01	010E3	00000000	A				
	01	010E4	80005AC3	A				
4695	01	010E5	87878787	A		DATA	X'87878787'	
4696								** CIRCULAR RIGHT SHIFT SINGLE REG. 13 BITS
4697	01	010E6	FFFFFFFA	A	S014	DATA	=6	
4698	01	010E7	25C00273	A		S,12	X'273'	
4699	01	010E8	00000136			DATA	SETPSW,L8C+2,X'A5A5A5A5',X'2D2D2D2D'	
	01	010E9	00000169					
	01	010EA	A5A5A5A5	A				
	01	010EB	2D2D2D2D	A				
4700								PAGE
4701								** CIRCULAR RIGHT SHIFT SINGLE REGISTER, 13 BITS
4702	01	010EC	FFFFFFFA	A	S015	DATA	=6	
4703	01	010ED	25C00273	A		S,12	X'273'	
4704	01	010EE	00000136			DATA	SETPSW,L8C+2,X'A5A5A5A5',X'D2D2D2D2'	
	01	010EF	00000169					
	01	010F0	5A5A5A5A	A				
	01	010F1	D2D2D2D2	A				
4705								** CIRCULAR RIGHT SHIFT DOUBLE REGISTER 13 BITS
4706	01	010F2	FFFFFFF6	A	S016	DATA	=10	
4707	01	010F3	25C00373	A		S,12	X'373'	
4708	01	010F4	00000136			DATA	SETPSW,L8C+2,X'CA35CA35',X'2D2E51AE',0,0	
	01	010F5	00000169					
	01	010F6	CA35CA35	A				
	01	010F7	2D2E51AE	A				
	01	010F8	00000000	A				
	01	010F9	00000000	A				

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
4709	01	010FA	A5A5A5A5	A		DATA	X'A5A5A5A5',X'51AD2D2D'	
	01	010FB	51AD2D2D	A				
4710							** CIRCULAR RIGHT SHIFT DOUBLE REGISTER. 13 BITS	
4711	01	010FC	FFFFFFF6	A	S017	DATA	=10	
4712	01	010FD	25C00373	A		S,12	X'373'	
4713	01	010FE	00000136	A		DATA	SETPSW,L0C+2,X'5C3A35AC',X'D2D2E1D1',0,0	
	01	010FF	00000169	A				
	01	01100	5C3A35AC	A				
	01	01101	D2D2E1D1	A				
	01	01102	00000C00	A				
	01	01103	00000000	A				
4714	01	01104	5A5A5A5A	A		DATA	X'5A5A5A5A',X'AD62D2D2'	
	01	01105	AD62D2D2	A				
4715							PAGE	
4716							** CIRCULAR RIGHT SHIFT. IA. 0DD REG. MAX SHIFT COUNT OF 64	
4717	01	01106	FFFFFFF6	A	S018	DATA	=10	
4718	01	01107	A5D00460	A		S,13	*MEMORY	
4719	01	01108	00000136	A		DATA	SETPSW,L0C+2,-1,-1,X'340',X'340',1,1	
	01	01109	00000169	A				
	01	0110A	FFFFFFF6	A				
	01	0110B	FFFFFFF6	A				
	01	0110C	00000340	A				
	01	0110D	00000340	A				
	01	0110E	000000C1	A				
	01	0110F	00000001	A				
4720							** ARITH RIGHT SHIFT. INDEXING. SHIFT OF 1	
4721	01	01110	FFFFFFF8	A	S019	DATA	=8	
4722	01	01111	25C2FFCF	A		S,12	X'FFCF',1	
4723	01	01112	00000136	A		DATA	SETPSW,L0C+2	
	01	01113	00000169	A				
4724	01	01114	00000430	A		DATA	X'430',X'218',X'FFF4F',X'FFF4F'	
	01	01115	00000218	A				
	01	01116	000FFF4F	A				
	01	01117	000FFF4F	A				
4725							** ARITH LEFT SHIFT. IA AND IX. SHIFT OF 0	
4726	01	01118	FFFFFFF8	A	S020	DATA	=8	
4727	01	01119	A5CE000C	A		S,12	*12,7	
4728	01	0111A	00000136	A		DATA	SETPSW,L0C+2,X'47F',X'47F',1,1	
	01	0111B	00000169	A				
	01	0111C	0000047F	A				
	01	0111D	0000047F	A				
	01	0111E	000000C1	A				
	01	0111F	00000001	A				
4729							PAGE	
4730							**** THE REMAINING SHIFT TESTS ARE REDUNDANT BUT MAY AID IN UNCOVERING	
4731							**** PATTERN SENSITIVE FAILURE MODES	
4732	01	01120	FFFFFFFA	A	S01	DATA	=6	ALS 1 OF SL1 ALT 1'S + 0'S
4733	01	01121	25C00401	A		S,12	X'401'	0 INTO A31
4734	01	01122	073001C8	A		K	0,7,3,FXP0SW	0VF 01
4735	01	01123	47300169	A		K	4,7,3,L0C+2	
4736	01	01124	55555555	A		DATA	X'55555555'	
4737	01	01125	AAAAAAAA	A		DATA	X'AAAAAAAA'	
4738	01	01126	FFFFFFFA	A	S02	DATA	=6	ALS 1
4739	01	01127	25C00401	A		S,12	X'401'	
4740	01	01128	373001C8	A		K	3,7,3,FXP0SW	
4741	01	01129	F7300169	A		K	15,7,3,L0C+2	
4742	01	0112A	AAAAAAAA	A		DATA	X'AAAAAAAA'	
4743	01	0112B	55555554	A		DATA	X'55555554'	
4744	01	0112C	FFFFFFFA	A	S03	DATA	=6	ALS 4 SL4 ALT 1'S + 0'S
4745	01	0112D	25C00404	A		S,12	X'404'	PARITY 1111
4746	01	0112E	373001C8	A		K	3,7,3,FXP0SW	0VF 10
4747	01	0112F	77300169	A		K	7,7,3,L0C+2	
4748	01	01130	F0F0F0F0	A		DATA	X'F0F0F0F0'	
4749	01	01131	0F0F0F00	A		DATA	X'0F0F0F00'	
4750	01	01132	FFFFFFFA	A	S04	DATA	=6	ALS 4
4751	01	01133	25C00404	A		S,12	X'404'	PARITY 0000
4752	01	01134	F73001C8	A		K	15,7,3,FXP0SW	
4753	01	01135	77300169	A		K	7,7,3,L0C+2	
4754	01	01136	0F0F0F0F	A		DATA	X'0F0F0F0F'	
4755	01	01137	F0F0F0F0	A		DATA	X'F0F0F0F0'	
4756	01	01138	FFFFFFFA	A	S05	DATA	=6	ALS 0 SUIFY 0

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
4757	01	01139	25C00400	A		S,12	X'400'	
4758	01	0113A	F7300136			K	15,7,3,SETPSW	
4759	01	0113B	37300169			K	3,7,3,L8C+2	
4760	01	0113C	40000000	A		DATA	X'40000000'	
4761	01	0113D	40000000	A		DATA	X'40000000'	
4762						PAGE		
4763	01	0113E	FFFFFFFA	A	S06	DATA	=6	ALS 2 2=SL1
4764	01	0113F	25C00402	A		S,12	X'402'	
4765	01	01140	07300136			K	0,7,3,SETPSW	
4766	01	01141	47300169			K	4,7,3,L8C+2	
4767	01	01142	D2345678	A		DATA	X'D2345678'	
4768	01	01143	48D159E0	A		DATA	X'48D159E0'	
4769						PAGE		
4770	01	01144	FFFFFFF8	A	S07	DATA	=8	ALS 3 * 3=SL1
4771	01	01145	A5C00460			S,12	*MEMBRY	
4772	01	01146	37300136			K	3,7,3,SETPSW	
4773	01	01147	B7300169			K	11,7,3,L8C+2	
4774	01	01148	F2345678	A		DATA	X'F2345678'	
4775	01	01149	91A2B3C0	A		DATA	X'91A2B3C0'	
4776	01	0114A	00000403	A		DATA	X'403'	
4777	01	0114B	00000403	A		DATA	X'403'	
4778	01	0114C	FFFFFFFA	A	S08	DATA	=6	ALS 29
4779	01	0114D	25C0041D	A		S,12	X'41D'	
4780	01	0114E	07300136			K	0,7,3,SETPSW	
4781	01	0114F	47300169			K	4,7,3,L8C+2	
4782	01	01150	12345674	A		DATA	X'12345674'	
4783	01	01151	80000000	A		DATA	X'80000000'	
4784	01	01152	FFFFFFFA	A	S09	DATA	=6	ALS 27 X
4785	01	01153	25C20425	A		S,12	X'42B',1	
4786	01	01154	07300136			K	0,7,3,SETPSW	
4787	01	01155	87300169			K	8,7,3,L8C+2	
4788	01	01156	FFFFFFFF0	A		DATA	=16	
4789	01	01157	80000000	A		DATA	X'80000000'	
4790	01	01158	FFFFFFFA	A	S10	DATA	=6	LLS 1
4791	01	01159	25C00001	A		S,12	1	0 INT0 A31
4792	01	0115A	77300136			K	7,7,3,SETPSW	6VF 00
4793	01	0115B	37300169			K	3,7,3,L8C+2	
4794	01	0115C	3C3C3C3C	A		DATA	X'3C3C3C3C'	
4795	01	0115D	78787878	A		DATA	X'78787878'	
4796	01	0115E	FFFFFFFA	A	S11	DATA	=6	LLS 1 X
4797	01	0115F	25C2003E	A		S,12	X'3E',1	
4798	01	01160	87300136			K	8,7,3,SETPSW	8VF 11
4799	01	01161	87300169			K	8,7,3,L8C+2	
4800	01	01162	C3C3C3C3	A		DATA	X'C3C3C3C3'	
4801	01	01163	87878786	A		DATA	X'87878786'	
4802						PAGE		
4803	01	01164	FFFFFFF8	A	S12	DATA	=8	LLS 4
4804	01	01165	A5C00460			S,12	*MEMBRY	
4805	01	01166	07300136			K	0,7,3,SETPSW	
4806	01	01167	C7300169			K	12,7,3,L8C+2	
4807	01	01168	23456789	A		DATA	X'23456789'	
4808	01	01169	34567890	A		DATA	X'34567890'	
4809	01	0116A	00000004	A		DATA	4	
4810	01	0116B	00000004	A		DATA	4	
4811	01	0116C	FFFFFFFA	A	S13	DATA	=6	LLS 4
4812	01	0116D	25C00004	A		S,12	4	PARITY 0001
4813	01	0116E	F7300136			K	15,7,3,SETPSW	
4814	01	0116F	F7300169			K	15,7,3,L8C+2	
4815	01	01170	12345678	A		DATA	X'12345678'	
4816	01	01171	23456780	A		DATA	X'23456780'	
4817	01	01172	FFFFFFFA	A	S14	DATA	=6	LLS 4
4818	01	01173	25C00004	A		S,12	4	PARITY 0011
4819	01	01174	07300136			K	0,7,3,SETPSW	
4820	01	01175	47300169			K	4,7,3,L8C+2	
4821	01	01176	3456789A	A		DATA	X'3456789A'	
4822	01	01177	456789A0	A		DATA	X'456789A0'	
4823	01	01178	FFFFFFFA	A	S15	DATA	=6	LLS 4
4824	01	01179	25C00004	A		S,12	4	PARITY 0100
4825	01	0117A	07300136			K	0,7,3,SETPSW	
4826	01	0117B	C7300169			K	12,7,3,L8C+2	
4827	01	0117C	456789AB	A		DATA	X'456789AB'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
4828	01	0117D	56789AB0	A		DATA	X'56789AB0'	
4829	01	0117E	FFFFFFFA	A	S16	DATA	=6	LLS 4
4830	01	0117F	25C00004	A		S,12	4	PARITY 0101
4831	01	01180	37300136	A		K	3,7,3,SETPSW	
4832	01	01181	77300169	A		K	7,7,3,L0C+2	
4833	01	01182	56789ABC	A		DATA	X'56789ABC'	
4834	01	01183	6789ABCO	A		DATA	X'6789ABCO'	
4835						PAGE		
4836	01	01184	FFFFFFFA	A	S17	DATA	=6	LLS 4
4837	01	01185	25C00004	A		S,12	4	PARITY 0110
4838	01	01186	07300136	A		K	0,7,3,SETPSW	
4839	01	01187	47300169	A		K	4,7,3,L0C+2	
4840	01	01188	6789ABCD	A		DATA	X'6789ABCD'	
4841	01	01189	789ABCD0	A		DATA	X'789ABCD0'	
4842	01	0118A	FFFFFFFA	A	S18	DATA	=6	LLS 4
4843	01	0118B	25C00004	A		S,12	4	PARITY 0111
4844	01	0118C	A7300136	A		K	10,7,3,SETPSW	
4845	01	0118D	E7300169	A		K	14,7,3,L0C+2	
4846	01	0118E	789ABCDE	A		DATA	X'789ABCDE'	
4847	01	0118F	89ABCDE0	A		DATA	X'89ABCDE0'	
4848	01	01190	FFFFFFFA	A	S19	DATA	=6	LLS 32
4849	01	01191	25C00020	A		S,12	X'20'	
4850	01	01192	07300136	A		K	0,7,3,SETPSW	
4851	01	01193	C7300169	A		K	12,7,3,L0C+2	
4852	01	01194	00000001	A		DATA	1	
4853	01	01195	00000000	A		DATA	0	
4854	01	01196	FFFFFFFA	A	S20	DATA	=6	LLS 30
4855	01	01197	25C0001E	A		S,12	X'1E'	
4856	01	01198	37300136	A		K	3,7,3,SETPSW	
4857	01	01199	F7300169	A		K	15,7,3,L0C+2	
4858	01	0119A	89ABCDE7	A		DATA	X'89ABCDE7'	
4859	01	0119B	C0000000	A		DATA	X'C0000000'	
4860	01	0119C	FFFFFFFA	A	S21	DATA	=6	CLS 1
4861	01	0119D	25C00201	A		S,12	X'201'	A0(1) INT0 A31
4862	01	0119E	07300136	A		K	0,7,3,SETPSW	
4863	01	0119F	C7300169	A		K	12,7,3,L0C+2	A0+A1(10)INT0 A30 A31
4864	01	011A0	89ABCDE0	A		DATA	X'89ABCDE0'	
4865	01	011A1	13579BC1	A		DATA	X'13579BC1'	
4866						PAGE		
4867	01	011A2	FFFFFFFA	A	S22	DATA	=6	CLS 2 X
4868	01	011A3	25C20222	A		S,12	X'222',1	
4869	01	011A4	F7300136	A		K	15,7,3,SETPSW	
4870	01	011A5	F7300169	A		K	15,7,3,L0C+2	
4871	01	011A6	91234560	A		DATA	X'91234560'	
4872	01	011A7	448D1582	A		DATA	X'448D1582'	
4873	01	011A8	FFFFFFFA	A	S23	DATA	=6	CLS 3 3=SL1
4874	01	011A9	25C00203	A		S,12	X'203'	
4875	01	011AA	37300136	A		K	3,7,3,SETPSW	
4876	01	011AB	77300169	A		K	7,7,3,L0C+2	
4877	01	011AC	76543210	A		DATA	X'76543210'	
4878	01	011AD	B2A19083	A		DATA	X'B2A19083'	
4879	01	011AE	FFFFFFFA	A	S24	DATA	=6	CLS 4
4880	01	011AF	25C00204	A		S,12	X'204'	PARITY 1000
4881	01	011B0	F7300136	A		K	15,7,3,SETPSW	
4882	01	011B1	F7300169	A		K	15,7,3,L0C+2	
4883	01	011B2	89ABCDEF	A		DATA	X'89ABCDEF'	
4884	01	011B3	9ABCDEF8	A		DATA	X'9ABCDEF8'	
4885	01	011B4	FFFFFFFA	A	S25	DATA	=6	CLS 4
4886	01	011B5	25C00204	A		S,12	X'204'	PARITY 1001
4887	01	011B6	07300136	A		K	0,7,3,SETPSW	
4888	01	011B7	47300169	A		K	4,7,3,L0C+2	
4889	01	011B8	9ABCDEF0	A		DATA	X'9ABCDEF0'	
4890	01	011B9	ABCDEF09	A		DATA	X'ABCDEF09'	
4891	01	011BA	FFFFFFFA	A	S26	DATA	=6	CLS 4
4892	01	011BB	25C00204	A		S,12	X'204'	PARITY 1010
4893	01	011BC	07300136	A		K	0,7,3,SETPSW	
4894	01	011BD	47300169	A		K	4,7,3,L0C+2	
4895	01	011BE	ABCDEF01	A		DATA	X'ABCDEF01'	
4896	01	011BF	BCDEF01A	A		DATA	X'BCDEF01A'	
4897						PAGE		
4898	01	011C0	FFFFFFFA	A	S27	DATA	=6	CLS 4

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
4899	01	011C1	25C00204	A		S,12	X'204'	PARITY 1011
4900	01	011C2	07300136			K	0,7,3,SETPSW	
4901	01	011C3	C7300169			K	12,7,3,L0C+2	
4902	01	011C4	BCDEF012	A		DATA	X'BCDEF012'	
4903	01	011C5	CDEF012B	A		DATA	X'CDEF012B'	
4904	01	011C6	FFFFFFFA	A	S28	DATA	=6	CLS 4
4905	01	011C7	25C00204	A		S,12	X'204'	PARITY 1100
4906	01	011C8	07300136			K	0,7,3,SETPSW	
4907	01	011C9	47300169			K	4,7,3,L0C+2	
4908	01	011CA	CDEF0123	A		DATA	X'CDEF0123'	
4909	01	011CB	DEF0123C	A		DATA	X'DEF0123C'	
4910						PAGE		
4911	01	011CC	FFFFFFFA	A	S29	DATA	=6	CLS 4
4912	01	011CD	25C00204	A		S,12	X'204'	PARITY 1101
4913	01	011CE	07300136			K	0,7,3,SETPSW	
4914	01	011CF	C7300169			K	12,7,3,L0C+2	
4915	01	011D0	DEF01234	A		DATA	X'DEF01234'	
4916	01	011D1	EF01234D	A		DATA	X'EF01234D'	
4917	01	011D2	FFFFFFFA	A	S30	DATA	=6	CLS 4
4918	01	011D3	25C00204	A		S,12	X'204'	PARITY 1110
4919	01	011D4	37300136			K	3,7,3,SETPSW	
4920	01	011D5	F7300169			K	15,7,3,L0C+2	
4921	01	011D6	EF012345	A		DATA	X'EF012345'	
4922	01	011D7	FF012345E	A		DATA	X'F012345E'	
4923	01	011D8	FFFFFFFA	A	S31	DATA	=6	CLS 63
4924	01	011D9	25C0023F	A		S,12	X'23F'	
4925	01	011DA	07300136			K	0,7,3,SETPSW	
4926	01	011DB	C7300169			K	12,7,3,L0C+2	
4927	01	011DC	76543211	A		DATA	X'76543211'	
4928	01	011DD	BB2A1908	A		DATA	X'BB2A1908'	
4929	01	011DE	FFFFFFFA	A	S32	DATA	=6	CLS 31
4930	01	011DF	25C0023F	A		S,12	X'23F'	
4931	01	011E0	07300136			K	0,7,3,SETPSW	
4932	01	011E1	C7300169			K	12,7,3,L0C+2	
4933	01	011E2	76543211	A		DATA	X'76543211'	
4934	01	011E3	BB2A1908	A		DATA	X'BB2A1908'	
4935	01	011E4	FFFFFFF6	A	S33	DATA	=10	ALD 1 B0(0) INT0 A31
4936	01	011E5	25C00501	A		S,12	X'501'	(0) INT0 B31
4937	01	011E6	07300136			K	0,7,3,SETPSW	
4938	01	011E7	07300169			K	0,7,3,L0C+2	
4939	01	011E8	12345679	A		DATA	X'12345679'	
4940	01	011E9	2468ACF2	A		DATA	X'2468ACF2'	
4941	01	011EA	00000000	A		DATA	0	
4942	01	011EB	00000000	A		DATA	0	
4943	01	011EC	55555555	A		DATA	X'55555555'	
4944	01	011ED	AAAAAAAA	A		DATA	X'AAAAAAAA'	
4945						PAGE		
4946	01	011EE	FFFFFFF6	A	S34	DATA	=10	ALD 1 B0(1) INT0 A31
4947	01	011EF	25C00501	A		S,12	X'501'	
4948	01	011F0	07300136			K	0,7,3,SETPSW	
4949	01	011F1	07300169			K	0,7,3,L0C+2	
4950	01	011F2	12345678	A		DATA	X'12345678'	
4951	01	011F3	2468ACF1	A		DATA	X'2468ACF1'	
4952	01	011F4	00000000	A		DATA	0	
4953	01	011F5	00000000	A		DATA	0	
4954	01	011F6	AAAAAAAAAB	A		DATA	X'AAAAAAAAAB'	
4955	01	011F7	55555556	A		DATA	X'55555556'	
4956	01	011F8	FFFFFFF6	A	S35	DATA	=10	ALD 35 *
4957	01	011F9	A5C00460			S,12	*MEMORY	
4958	01	011FA	07300136			K	0,7,3,SETPSW	
4959	01	011FB	47300169			K	4,7,3,L0C+2	
4960	01	011FC	CABBEDED	A		DATA	X'CABBEDED'	
4961	01	011FD	91A2B3C0	A		DATA	X'91A2B3C0'	
4962	01	011FE	00000523	A		DATA	X'523'	
4963	01	011FF	00000523	A		DATA	X'523'	
4964	01	01200	12345678	A		DATA	X'12345678'	
4965	01	01201	00000000	A		DATA	0	
4966	01	01202	FFFFFFF6	A	S36	DATA	=10	ALD 17 X R0
4967	01	01203	25D20547	A		S,13	X'547',1	
4968	01	01204	07300136			K	0,7,3,SETPSW	
4969	01	01205	47300169			K	4,7,3,L0C+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL O R I G	LABEL	OPERATION	OPERAND	COMMENTS
4970	01	01206	1728394A	A		DATA	X'1728394A'	
4971	01	01207	1728394A	A		DATA	X'1728394A'	
4972	01	01208	00000C00	A		DATA	0	
4973	01	01209	00000000	A		DATA	0	
4974	01	0120A	92345678	A		DATA	X'92345678'	
4975	01	0120B	ACF12468	A		DATA	X'ACF12468'	
4976						PAGE		
4977	01	0120C	FFFFFFF6	A	S37	DATA	-10	LLD 63
4978	01	0120D	25C0013F	A		S,12	X'13F'	
4979	01	0120E	07300136	A		K	0,7,3,SETPSW	
4980	01	0120F	87300169	A		K	8,7,3,L0C+2	
4981	01	01210	FFFFFFF6	A		DATA	-1	
4982	01	01211	80000000	A		DATA	X'80000000'	
4983	01	01212	00000000	A		DATA	0	
4984	01	01213	00000000	A		DATA	0	
4985	01	01214	FFFFFFF6	A		DATA	-1	
4986	01	01215	00000000	A		DATA	0	
4987	01	01216	FFFFFFF6	A	S38	DATA	-10	LLD 47 X R0
4988	01	01217	25D20107	A		S,13	X'107',1	
4989	01	01218	07300136	A		K	0,7,3,SETPSW	
4990	01	01219	C7300169	A		K	12,7,3,L0C+2	
4991	01	0121A	5B4A3928	A		DATA	X'5B4A3928'	
4992	01	0121B	5B4A3928	A		DATA	X'5B4A3928'	
4993	01	0121C	00000000	A		DATA	0	
4994	01	0121D	00000000	A		DATA	0	
4995	01	0121E	23456789	A		DATA	X'23456789'	
4996	01	0121F	B3C48000	A		DATA	X'B3C48000'	
4997	01	01220	FFFFFFF6	A	S39	DATA	-10	CLD 19
4998	01	01221	25C00313	A		S,12	X'313'	
4999	01	01222	07300136	A		K	0,7,3,SETPSW	
5000	01	01223	47300169	A		K	4,7,3,L0C+2	
5001	01	01224	12345678	A		DATA	X'12345678'	
5002	01	01225	B3C4D5E6	A		DATA	X'B3C4D5E6'	
5003	01	01226	00000000	A		DATA	0	
5004	01	01227	0C000000	A		DATA	0	
5005	01	01228	9ABCDEF0	A		DATA	X'9ABCDEF0'	
5006	01	01229	F78091A2	A		DATA	X'F78091A2'	
5007						PAGE		
5008	01	0122A	FFFFFFFA	A	S40	DATA	-6	ARS 2
5009	01	0122B	25C0047E	A		S,12	X'47E'	
5010	01	0122C	F73001C8	A		K	15,7,3,FXPSW	
5011	01	0122D	37300169	A		K	3,7,3,L0C+2	
5012	01	0122E	CCCCCCCC	A		DATA	X'CCCCCCCC'	
5013	01	0122F	F3333333	A		DATA	X'F3333333'	
5014	01	01230	FFFFFFFA	A	S41	DATA	-6	ARS 2
5015	01	01231	25C0047E	A		S,12	X'47E'	
5016	01	01232	0C000136	A		DATA	SETPSW	
5017	01	01233	00000169	A		DATA	L0C+2	
5018	01	01234	33333333	A		DATA	X'33333333'	
5019	01	01235	0CCCCCCC	A		DATA	X'0CCCCCCC'	
5020	01	01236	FFFFFFFA	A	S42	DATA	-6	ARS 1
5021	01	01237	25C0047F	A		S,12	X'47F'	
5022	01	01238	00000136	A		DATA	SETPSW	
5023	01	01239	00000169	A		DATA	L0C+2	
5024	01	0123A	AAAAAAAA	A		DATA	X'AAAAAAAA'	
5025	01	0123B	D5555555	A		DATA	X'D5555555'	
5026	01	0123C	FFFFFFFA	A	S43	DATA	-6	ARS 1
5027	01	0123D	25C0047F	A		S,12	X'47F'	
5028	01	0123E	00000136	A		DATA	SETPSW	
5029	01	0123F	00000169	A		DATA	L0C+2	
5030	01	01240	55555555	A		DATA	X'55555555'	
5031	01	01241	2AAAAAAAA	A		DATA	X'2AAAAAAAA'	
5032	01	01242	FFFFFFFA	A	S44	DATA	-6	ARS 28 X
5033	01	01243	25C20471	A		S,12	X'471',1	
5034	01	01244	00000136	A		DATA	SETPSW	
5035	01	01245	00000169	A		DATA	L0C+2	
5036	01	01246	800000F3	A		DATA	X'800000F3'	
5037	01	01247	FFFFFFF8	A		DATA	-8	
5038						PAGE		
5039	01	01248	FFFFFFFA	A	S45	DATA	-6	LRS 13
5040	01	01249	25C00073	A		S,12	X'73'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
5041	01	0124A	F73001C8			K	15,7,3,FXP8SW	
5042	01	0124B	37300169			K	3,7,3,L8C+2	
5043	01	0124C	87654321 A			DATA	X'87654321'	
5044	01	0124D	00043B2A A			DATA	X'43B2A'	
5045	01	0124E	FFFFFFFA A		S46	DATA	-6	CRS 11
5046	01	0124F	25C00275 A			S,12	X'275'	
5047	01	01250	F73001C8			K	15,7,3,FXP8SW	
5048	01	01251	37300169			K	3,7,3,L8C+2	
5049	01	01252	ABCDEF89 A			DATA	X'ABCDEF89'	
5050	01	01253	F13579BD A			DATA	X'F13579BD'	
5051	01	01254	FFFFFFFA A		S47	DATA	-6	CRS 64
5052	01	01255	25C00240 A			S,12	X'240'	
5053	01	01256	00000136			DATA	SETPSW	
5054	01	01257	00000169			DATA	L8C+2	
5055	01	01258	99999999 A			DATA	X'99999999'	
5056	01	01259	99999999 A			DATA	X'99999999'	
5057						PAGE		
5058	01	0125A	FFFFFFF6 A		S48	DATA	-10	ARD 33
5059	01	0125B	25C0055F A			S,12	X'55F'	
5060	01	0125C	F73001C8			K	15,7,3,FXP8SW	
5061	01	0125D	37300169			K	3,7,3,L8C+2	
5062	01	0125E	87654321 A			DATA	X'87654321'	
5063	01	0125F	FFFFFFF A			DATA	-1	
5064	01	01260	00000000 A			DATA	0	
5065	01	01261	00000000 A			DATA	0	
5066	01	01262	0FEDCBA9 A			DATA	X'0FEDCBA9'	
5067	01	01263	C3B2A19C A			DATA	X'C3B2A19C'	
5068	01	01264	FFFFFFF6 A		S49	DATA	-10	ARD 15 *
5069	01	01265	A5D00460			S,13	*MEMORY	
5070	01	01266	00000136			DATA	SETPSW	
5071	01	01267	00000169			DATA	L8C+2	
5072	01	01268	789ABCDE A			DATA	X'789ABCDE'	
5073	01	01269	789ABCDE A			DATA	X'789ABCDE'	
5074	01	0126A	00000571 A			DATA	X'571'	
5075	01	0126B	00000571 A			DATA	X'571'	
5076	01	0126C	F0123456 A			DATA	X'F0123456'	
5077	01	0126D	FFFFFFE24 A			DATA	X'FFFFFFE24'	
5078	01	0126E	FFFFFFF6 A		S50	DATA	-10	LRD 54
5079	01	0126F	25C0014A A			S,12	X'14A'	
5080	01	01270	F73001C8			K	15,7,3,FXP8SW	
5081	01	01271	37300169			K	3,7,3,L8C+2	
5082	01	01272	87654321 A			DATA	X'87654321'	
5083	01	01273	00000000 A			DATA	0	
5084	01	01274	00000000 A			DATA	0	
5085	01	01275	00000000 A			DATA	0	
5086	01	01276	ABCDEF01 A			DATA	X'ABCDEF01'	
5087	01	01277	0000021D A			DATA	X'21D'	
5088						PAGE		
5089	01	01278	FFFFFFF6 A		S51	DATA	-10	LRD 36 R8
5090	01	01279	25D0015C A			S,13	X'15C'	
5091	01	0127A	00000136			DATA	SETPSW	
5092	01	0127B	00000169			DATA	L8C+2	
5093	01	0127C	12345678 A			DATA	X'12345678'	
5094	01	0127D	12345678 A			DATA	X'12345678'	
5095	01	0127E	00000000 A			DATA	0	
5096	01	0127F	00000000 A			DATA	0	
5097	01	01280	9ABCDEF0 A			DATA	X'9ABCDEF0'	
5098	01	01281	00000000 A			DATA	0	
5099	01	01282	FFFFFFF6 A		S52	DATA	-10	CRD 62 *
5100	01	01283	A5C00460			S,12	*MEMORY	
5101	01	01284	00000136			DATA	SETPSW	
5102	01	01285	00000169			DATA	L8C+2	
5103	01	01286	99999999 A			DATA	X'99999999'	
5104	01	01287	66666666 A			DATA	X'66666666'	
5105	01	01288	00000342 A			DATA	X'342'	
5106	01	01289	00000342 A			DATA	X'342'	
5107	01	0128A	99999999 A			DATA	X'99999999'	
5108	01	0128B	66666666 A			DATA	X'66666666'	
5109	01	0128C	FFFFFFF6 A		S53	DATA	-10	CRD 31 *X R8
5110	01	0128D	A5D20460			S,13	*MEMORY,1	
5111	01	0128E	F73001C8			K	15,7,3,FXP8SW	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
5112	01	0128F	37300169			K	3,7,3,L8C+2	
5113	01	01290	22222222	A		DATA	X'22222222'	
5114	01	01291	22222222	A		DATA	X'22222222'	
5115	01	01292	000003BF	A		DATA	X'3BF'	
5116	01	01293	000003BF	A		DATA	X'3BF'	
5117	01	01294	7BDE7BDE	A		DATA	X'7BDE7BDE'	
5118	01	01295	F7BCF7BC	A		DATA	X'F7BCF7BC'	
5119						PAGE		
5120						** NUMBER ALREADY NORMALIZED		
5121	01	01296	FFFFFFFA	A	SF001	DATA	=6	
5122	01	01297	24C000CF	A		SF,12	15	
5123	01	01298	F7300136	A		K	15,7,3,SETPSW	
5124	01	01299	A7300169	A		K	10,7,3,L8C+2	
5125	01	0129A	0F100000	A		DATA	X'F100000',X'F100000'	
5126						** NORMALIZED WHEN COUNT EQUALS ZERO		
5127	01	0129C	FFFFFFF6	A	SF002	DATA	=10	
5128	01	0129D	24C00104	A		SF,12	X'104'	
5129	01	0129E	07300136	A		K	0,7,3,SETPSW	
5130	01	0129F	A7300169	A		K	10,7,3,L8C+2	
5131	01	012A0	0F00002F	A		DATA	X'F00002F',X'B2FFFF',0,0,-1,X'FFFF0000'	
	01	012A1	0B2FFFFF	A				
	01	012A2	00000000	A				
	01	012A3	00000000	A				
	01	012A4	FFFFFFF7	A				
	01	012A5	FFFF0000	A				
5132						** NORMALIZED BEFORE COUNT EQUALS ZERO		
5133	01	012A6	FFFFFFFA	A	SF003	DATA	=6	
5134	01	012A7	24C00104	A		SF,12	X'104'	
5135	01	012A8	70000136	A		K	7,0,0,SETPSW	
5136	01	012A9	A0000169	A		K	10,0,0,L8C+2	
5137	01	012AA	0F004FFF	A		DATA	X'CF004FFF',X'D4FFF00'	
5138						PAGE		
5139						** UNDERFLOW. NOT NORMALIZED COUNT NOT EQUAL ZERO S/CC2 IN PH6		
5140	01	012AC	FFFFFFF6	A	SF004	DATA	=10	
5141	01	012AD	24C0013F	A		SF,12	X'13F'	
5142	01	012AE	97300136	A		K	9,7,3,SETPSW	
5143	01	012AF	67300169	A		K	6,7,3,L8C+2	
5144	01	012B0	04000000	A		DATA	X'40000001',X'7F0F0000',0,0,X'F0000000',0	
	01	012B1	7F0F0000	A				
	01	012B2	00000000	A				
	01	012B3	00000000	A				
	01	012B4	F0000000	A				
	01	012B5	00000000	A				
5145						** UNDERFLOW. NORMALIZED. COUNT EQUAL ZERO. S/CC2 IN PH7		
5146	01	012B6	FFFFFFFA	A	SF005	DATA	=6	
5147	01	012B7	24C00005	A		SF,12	5	
5148	01	012B8	17300136	A		K	1,7,3,SETPSW	
5149	01	012B9	E7300169	A		K	14,7,3,L8C+2	
5150	01	012BA	04000008	A		DATA	X'04000008',X'7F800000'	
	01	012BB	7F800000	A				
5151						** COUNT EQUALS ZERO. NOT NORMALIZED		
5152	01	012BC	FFFFFFFA	A	SF006	DATA	=6	
5153	01	012BD	24C00004	A		SF,12	4	
5154	01	012BE	D7300136	A		K	13,7,3,SETPSW	
5155	01	012BF	27300169	A		K	2,7,3,L8C+2	
5156	01	012C0	0F000001	A		DATA	X'F000001',X'0B010000'	
	01	012C1	0B010000	A				
5157						PAGE		
5158						** TRUE ZERO S/FL3 IN PH6		
5159	01	012C2	FFFFFFF6	A	SF007	DATA	=10	
5160	01	012C3	24C00004	A		SF,12	4	
5161	01	012C4	70300136	A		K	7,0,3,SETPSW	
5162	01	012C5	80300169	A		K	8,0,3,L8C+2	
5163	01	012C6	03000000	A		DATA	X'30000001',0,0,0,-1,-1	
	01	012C7	00000000	A				
	01	012C8	00000000	A				
	01	012C9	00000000	A				
	01	012CA	FFFFFFF7	A				
	01	012CB	FFFFFFF7	A				

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
5164						** NEGATIVE CHARACTERISTIC		
5165	01	012CC	FFFFFFF6	A	SF008	DATA	-10	
5166	01	012CD	24C00004	A		SF,12	4	
5167	01	012CE	E7000136			K	14,7,0,SETPSW	
5168	01	012CF	17000169			K	1,7,0,L8C+2	
5169	01	012D0	F0FFFFFF1	A		DATA	X'F0FFFFFF1',X'F4F10000',0,0,-1,-1	
	01	012D1	F4F10000	A				
	01	012D2	00000000	A				
	01	012D3	00000000	A				
	01	012D4	FFFFFFF7	A				
	01	012D5	FFFFFFF7	A				
5170						** NEG CHAR. UNDERFLOW 8DD REG NORMALIZED		
5171	01	012D6	FFFFFFFA	A	SF009	DATA	-6	
5172	01	012D7	24C00004	A		SF,12	4	
5173	01	012D8	27300136			K	2,7,3,SETPSW	
5174	01	012D9	D7300169			K	13,7,3,L8C+2	
5175	01	012DA	FEFFFFFF	A		DATA	X'FEFFFFFF',X'80EFFFF0'	
	01	012DB	80EFFFF0	A				
5176						PAGE		
5177						** NEG CHAR TO CHECK NK00 IN PH4 AND PH9		
5178	01	012DC	FFFFFFF6	A	SF010	DATA	-10	
5179	01	012DD	24C00102	A		SF,12	X'102'	
5180	01	012DE	00000136			K	0,0,0,SETPSW	
5181	01	012DF	90000169			K	9,0,0,L8C+2	
5182	01	012E0	F0FF4321	A		DATA	X'F0FF4321',X'F24321FF',0,0,-1,X'FFFFFFF0'	
	01	012E1	F24321FF	A				
	01	012E2	00000000	A				
	01	012E3	00000000	A				
	01	012E4	FFFFFFF7	A				
	01	012E5	FFFFFFF0	A				
5183						** NEG CHAR TO CHECK K00 IN PH4 AND PH9		
5184	01	012E6	FFFFFFFA	A	SF011	DATA	-6	
5185	01	012E7	24C00102	A		SF,12	X'102'	
5186	01	012E8	63100136			K	6,3,1,SETPSW	
5187	01	012E9	93100169			K	9,3,1,L8C+2	
5188	01	012EA	F0FF4320	A		DATA	X'F0FF4320',X'F2432000'	
	01	012EB	F2432000	A				
5189						** TEST THAT MAX COUNT W/O NORMALIZING IS 8K		
5190	01	012EC	FFFFFFF6	A	SF012	DATA	-10	
5191	01	012ED	24C0010C	A		SF,12	X'10C'	
5192	01	012EE	55100136			K	5,5,1,SETPSW	
5193	01	012EF	25100169			K	2,5,1,L8C+2	
5194	01	012F0	7F000000	A		DATA	X'7F000000',X'73010000',0,0,1,0	
	01	012F1	73010000	A				
	01	012F2	00000000	A				
	01	012F3	00000000	A				
	01	012F4	00000001	A				
	01	012F5	00000000	A				
5195						PAGE		
5196						** RIGHT SHIFT. TRUE ZERO BEFORE COUNT DONE. S/FL3 IN PH6		
5197	01	012F6	FFFFFFF6	A	SF013	DATA	-10	
5198	01	012F7	24D0007B	A		SF,13	X'17B'	
5199	01	012F8	F7300136			K	15,7,3,SETPSW	
5200	01	012F9	07300169			K	0,7,3,L8C+2	
5201	01	012FA	04800000	A		DATA	X'04800000',X'04800000',0,0,X'20000100',0	
	01	012FB	04800000	A				
	01	012FC	00000000	A				
	01	012FD	00000000	A				
	01	012FE	20000100	A				
	01	012FF	00000000	A				
5202						** RIGHT SHIFT OVERFLOW AT COUNT DONE. S/CC2 IN PH7		
5203	01	01300	FFFFFFF6	A	SF014	DATA	-10	
5204	01	01301	24C0017F	A		SF,12	X'17F'	
5205	01	01302	07300136			K	0,7,3,SETPSW	
5206	01	01303	67300169			K	6,7,3,L8C+2	
5207	01	01304	7F453210	A		DATA	X'7F453210',X'00045321',0,0,-1,X'FFFFFFF'	
	01	01305	00045321	A				
	01	01306	00000000	A				
	01	01307	00000000	A				
	01	01308	FFFFFFF7	A				
	01	01309	0FFFFFFF	A				

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
5208								** RIGHT SHIFT. OVERFLOW BEFORE COUNT DONE. S/CC2 IN PH6
5209	01	0130A	FFFFFFF6	A	SF015	DATA	*10	
5210	01	0130B	24C00170	A		SF,12	X'170'	
5211	01	0130C	F0000136			K	15,0,0,SETPSW	
5212	01	0130D	50000169			K	5,0,0,L8C+2	
5213	01	0130E	81FFFFFF	A		DATA	X'81FFFFFF',-1,0,0,X'FFFFFF222',X'FFFFFFF3'	
	01	0130F	FFFFFFF7	A				
	01	01310	00000000	A				
	01	01311	00000000	A				
	01	01312	FFFFFF222	A				
	01	01313	FFFFFFF3	A				
5214								PAGE
5215								** RIGHT SHIFT. OVERFLOW AND TRUE ZERO. AT COUNT DONE. S/FL3 IN PH7
5216	01	01314	FFFFFFF6	A	SF016	DATA	*10	
5217	01	01315	24C0017F	A		SF,12	X'17F'	
5218	01	01316	00000136			DATA	SETPSW,L8C+2,X'7F000000',0,0,0,1,0	
	01	01317	00000169					
	01	01318	7F000000	A				
	01	01319	00000000	A				
	01	0131A	00000000	A				
	01	0131B	00000000	A				
	01	0131C	00000001	A				
	01	0131D	00000000	A				
5219								** RIGHT SHIFT COUNT DONE. MAX COUNT W/O OVERFLOW OR TRUE ZERO
5220	01	0131E	FFFFFFF6	A	SF017	DATA	*10	
5221	01	0131F	24C00173	A		SF,12	X'173'	
5222	01	01320	00000136			DATA	SETPSW	
5223	01	01321	20000169			K	2,0,0,L8C+2	
5224	01	01322	0125AC31	A		DATA	X'0125AC31',X'0E000000',0,0,0,X'95A3C195',2	
	01	01323	0E000000	A				
	01	01324	00000000	A				
	01	01325	00000000	A				
	01	01326	95A3C195	A				
	01	01327	00000002	A				
5225								PAGE
5226								** THE NEXT 16 TESTS ARE LEFT SHIFTS WITH THE COUNT GOING TO ZERO
5227								** EACH TEST LEAVES A SINGLE BIT IN REG B TO VERIFY EACH BIT POSITION
5228								** WILL CAUSE B0031Z TO BE FALSE. CHARACTERISTICS ARE CHOSEN TO VERIFY
5229								** THAT THE A DOWN COUNT LOGIC IS FUNCTIONING
5230	01	01328	FFFFFFF6	A	SF018	DATA	*10 B00	
5231	01	01329	A4C00460			SF,12	*MEMORY	
5232	01	0132A	00000136			DATA	SETPSW	
5233	01	0132B	20000169			K	2,0,0,L8C+2	
5234	01	0132C	73000000	A		DATA	X'73000000',X'71000000',X'102',X'102',X'800000'	
	01	0132D	71000000	A				
	01	0132E	00000102	A				
	01	0132F	00000102	A				
	01	01330	00800000	A				
5235	01	01331	80000000	A		DATA	X'80000000'	
5236	01	01332	FFFFFFF6	A	SF019	DATA	*10 B01	
5237	01	01333	24CE0100	A		SF,12	X'100',7 IX ADD 1 TO COUNT	
5238	01	01334	00000136			DATA	SETPSW	
5239	01	01335	20000169			K	2,0,0,L8C+2	
5240	01	01336	70000000	A		DATA	X'70000000',X'6F000000',0,0,0,X'4000000',X'40000000'	
	01	01337	6F000000	A				
	01	01338	00000000	A				
	01	01339	00000000	A				
	01	0133A	04000000	A				
	01	0133B	40000000	A				
5241	01	0133C	FFFFFFF6	A	SF020	DATA	*10 B02	
5242	01	0133D	A4CE0460			SF,12	*MEMORY,7	
5243	01	0133E	00000136			DATA	SETPSW	
5244	01	0133F	20000169			K	2,0,0,L8C+2	
5245	01	01340	60000000	A		DATA	X'60000000',X'5F000000',X'100',X'100',X'2000000'	
	01	01341	5F000000	A				
	01	01342	00000100	A				
	01	01343	00000100	A				
	01	01344	02000000	A				
5246	01	01345	20000000	A		DATA	X'20000000'	
5247								PAGE
5248	01	01346	FFFFFFF6	A	SF021	DATA	*10 B03	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
5249	01	01347	24C00101	A		SF,12	X'101'	
5250	01	01348	00000136			DATA	SETPSW	
5251	01	01349	20000169			K	2,0,0,L8C+2	
5252	01	0134A	50000000	A		DATA	X'50000000',X'4F000000',0,0,X'1000000',X'10000000'	
	01	0134B	4F000000	A				
	01	0134C	00000000	A				
	01	0134D	00000000	A				
	01	0134E	01000000	A				
	01	0134F	10000000	A				
5253	01	01350	FFFFFFF6	A	SF022	DATA	-10	B04
5254	01	01351	24C00101	A		SF,12	X'101'	
5255	01	01352	00000136			DATA	SETPSW	
5256	01	01353	20000169			K	2,0,0,L8C+2	
5257	01	01354	40000000	A		DATA	X'40000000',X'3F000000',0,0,X'800000',X'8000000'	
	01	01355	3F000000	A				
	01	01356	00000000	A				
	01	01357	00000000	A				
	01	01358	00800000	A				
	01	01359	08000000	A				
5258	01	0135A	FFFFFFF6	A	SF023	DATA	-10	B05
5259	01	0135B	24C00101	A		SF,12	X'101'	
5260	01	0135C	00000136			DATA	SETPSW	
5261	01	0135D	20000169			K	2,0,0,L8C+2	
5262	01	0135E	30000000	A		DATA	X'30000000',X'2F000000',0,0,X'400000',X'4000000'	
	01	0135F	2F000000	A				
	01	01360	00000000	A				
	01	01361	00000000	A				
	01	01362	00400000	A				
	01	01363	04000000	A				
5263						PAGE		
5264	01	01364	FFFFFFF6	A	SF024	DATA	-10	B06
5265	01	01365	24C00101	A		SF,12	X'101'	
5266	01	01366	00000136			DATA	SETPSW	
5267	01	01367	20000169			K	2,0,0,L8C+2	
5268	01	01368	20000000	A		DATA	X'20000000',X'1F000000',0,0,X'200000',X'2000000'	
	01	01369	1F000000	A				
	01	0136A	00000000	A				
	01	0136B	00000000	A				
	01	0136C	00200000	A				
	01	0136D	02000000	A				
5269	01	0136E	FFFFFFF6	A	SF025	DATA	-10	B07
5270	01	0136F	24C00101	A		SF,12	X'101'	
5271	01	01370	00000136			DATA	SETPSW	
5272	01	01371	20000169			K	2,0,0,L8C+2	
5273	01	01372	10000000	A		DATA	X'10000000',X'0F000000',0,0,X'100000',X'1000000'	
	01	01373	0F000000	A				
	01	01374	00000000	A				
	01	01375	00000000	A				
	01	01376	00100000	A				
	01	01377	01000000	A				
5274	01	01378	FFFFFFF6	A	SF026	DATA	-10	B08
5275	01	01379	24C00101	A		SF,12	X'101'	
5276	01	0137A	00000136			DATA	SETPSW	
5277	01	0137B	20000169			K	2,0,0,L8C+2	
5278	01	0137C	71000000	A		DATA	X'71000000',X'70000000',0,0,X'800000',X'8000000'	
	01	0137D	70000000	A				
	01	0137E	00000000	A				
	01	0137F	00000000	A				
	01	01380	00080000	A				
	01	01381	00800000	A				
5279						PAGE		
5280	01	01382	FFFFFFF6	A	SF027	DATA	-10	B09
5281	01	01383	24C00101	A		SF,12	X'101'	
5282	01	01384	00000136			DATA	SETPSW	
5283	01	01385	20000169			K	2,0,0,L8C+2	
5284	01	01386	61000000	A		DATA	X'61000000',X'60000000',0,0,X'400000',X'4000000'	
	01	01387	60000000	A				
	01	01388	00000000	A				
	01	01389	00000000	A				
	01	0138A	00040000	A				
	01	0138B	00400000	A				

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
5285	01	0138C	FFFFFFF6	A	SF028	DATA	*10	B10
5286	01	0138D	24C00101	A		SF,12	X'101'	
5287	01	0138E	00000136	A		DATA	SETPSW	
5288	01	0138F	20000169	A		K	2,0,0,L8C+2	
5289	01	01390	51000000	A		DATA	X'51000000',X'50000000',0,0,X'20000',X'200000'	
	01	01391	50000000	A				
	01	01392	00000000	A				
	01	01393	00000000	A				
	01	01394	00020000	A				
	01	01395	00200000	A				
5290	01	01396	FFFFFFF6	A	SF029	DATA	*10	B11
5291	01	01397	24C00101	A		SF,12	X'101'	
5292	01	01398	00000136	A		DATA	SETPSW	
5293	01	01399	20000169	A		K	2,0,0,L8C+2	
5294	01	0139A	41000000	A		DATA	X'41000000',X'40000000',0,0,X'10000',X'100000'	
	01	0139B	40000000	A				
	01	0139C	00000000	A				
	01	0139D	00000000	A				
	01	0139E	00010000	A				
	01	0139F	00100000	A				
5295						PAGE		
5296	01	013A0	FFFFFFF6	A	SF030	DATA	*10	B12
5297	01	013A1	24C00101	A		SF,12	X'101'	
5298	01	013A2	00000136	A		DATA	SETPSW	
5299	01	013A3	20000169	A		K	2,0,0,L8C+2	
5300	01	013A4	31000000	A		DATA	X'31000000',X'30000000',0,0,X'8000',X'80000'	
	01	013A5	30000000	A				
	01	013A6	00000000	A				
	01	013A7	00000000	A				
	01	013A8	00008000	A				
	01	013A9	00080000	A				
5301	01	013AA	FFFFFFF6	A	SF031	DATA	*10	B13
5302	01	013AB	24C00101	A		SF,12	X'101'	
5303	01	013AC	00000136	A		DATA	SETPSW	
5304	01	013AD	20000169	A		K	2,0,0,L8C+2	
5305	01	013AE	21000000	A		DATA	X'21000000',X'20000000',0,0,X'4000',X'40000'	
	01	013AF	20000000	A				
	01	013B0	00000000	A				
	01	013B1	00000000	A				
	01	013B2	00004000	A				
	01	013B3	00040000	A				
5306						PAGE		
5307	01	013B4	FFFFFFF6	A	SF032	DATA	*10	B14
5308	01	013B5	24C00101	A		SF,12	X'101'	
5309	01	013B6	00000136	A		DATA	SETPSW	
5310	01	013B7	20000169	A		K	2,0,0,L8C+2	
5311	01	013B8	11000000	A		DATA	X'11000000',X'10000000',0,0,X'2000',X'20000'	
	01	013B9	10000000	A				
	01	013BA	00000000	A				
	01	013BB	00000000	A				
	01	013BC	00002000	A				
	01	013BD	00020000	A				
5312	01	013BE	FFFFFFF6	A	SF033	DATA	*10	B15
5313	01	013BF	24C00101	A		SF,12	X'101'	
5314	01	013C0	00000136	A		DATA	SETPSW	
5315	01	013C1	20000169	A		K	2,0,0,L8C+2	
5316	01	013C2	01000000	A		DATA	X'01000000',0,0,0,X'1000',X'10000'	
	01	013C3	00000000	A				
	01	013C4	00000000	A				
	01	013C5	00000000	A				
	01	013C6	00001000	A				
	01	013C7	00010000	A				
5317						PAGE		
5318						** THE NEXT 16 TESTS COMPLETE THE TEST OF B0031Z AND CHECK THE A UP		
5319						** CBUNT LBGIC.		
5320	01	013C8	FFFFFFF6	A	SF034	DATA	*10	B31
5321	01	013C9	24C0017F	A		SF,12	X'17F'	
5322	01	013CA	00000136	A		DATA	SETPSW	
5323	01	013CB	20000169	A		K	2,0,0,L8C+2	
5324	01	013CC	0F000000	A		DATA	X'0F000000',X'10000000',0,0,16,1	
	01	013CD	10000000	A				

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
	01	013CE	00000000	A				
	01	013CF	00000000	A				
	01	013D0	00000010	A				
	01	013D1	00000001	A				
5325	01	013D2	FFFFFFF6	A	SF035	DATA	=10	B30
5326	01	013D3	24C0017F	A		SF,12	X'17F'	
5327	01	013D4	00000136	A		DATA	SETPSW	
5328	01	013D5	20000169	A		K	2,0,0,L8C+2	
5329	01	013D6	1F000000	A		DATA	X'1F000000',X'20000000',0,0,32,2	
	01	013D7	20000000	A				
	01	013D8	00000000	A				
	01	013D9	00000000	A				
	01	013DA	00000020	A				
	01	013DB	00000002	A				
5330	01	013DC	FFFFFFF6	A	SF036	DATA	=10	B29
5331	01	013DD	24C0017F	A		SF,12	X'17F'	
5332	01	013DE	00000136	A		DATA	SETPSW	
5333	01	013DF	20000169	A		K	2,0,0,L8C+2	
5334	01	013E0	2F000000	A		DATA	X'2F000000',X'30000000',0,0,64,4	
	01	013E1	30000000	A				
	01	013E2	00000000	A				
	01	013E3	00000000	A				
	01	013E4	00000040	A				
	01	013E5	00000004	A				
5335						PAGE		
5336	01	013E6	FFFFFFF6	A	SF037	DATA	=10	B28
5337	01	013E7	24C0017F	A		SF,12	X'17F'	
5338	01	013E8	00000136	A		DATA	SETPSW	
5339	01	013E9	20000169	A		K	2,0,0,L8C+2	
5340	01	013EA	3F000000	A		DATA	X'3F000000',X'40000000',0,0,128,8	
	01	013EB	40000000	A				
	01	013EC	00000000	A				
	01	013ED	00000000	A				
	01	013EE	00000080	A				
	01	013EF	00000008	A				
5341	01	013F0	FFFFFFF6	A	SF038	DATA	=10	B27
5342	01	013F1	24C0017F	A		SF,12	X'17F'	
5343	01	013F2	00000136	A		DATA	SETPSW	
5344	01	013F3	20000169	A		K	2,0,0,L8C+2	
5345	01	013F4	4F000000	A		DATA	X'4F000000',X'50000000',0,0,256,16	
	01	013F5	50000000	A				
	01	013F6	00000000	A				
	01	013F7	00000000	A				
	01	013F8	00000100	A				
	01	013F9	00000010	A				
5346	01	013FA	FFFFFFF6	A	SF039	DATA	=10	B26
5347	01	013FB	24C0017F	A		SF,12	X'17F'	
5348	01	013FC	00000136	A		DATA	SETPSW	
5349	01	013FD	20000169	A		K	2,0,0,L8C+2	
5350	01	013FE	5F000000	A		DATA	X'5F000000',X'60000000',0,0,512,32	
	01	013FF	60000000	A				
	01	01400	00000000	A				
	01	01401	00000000	A				
	01	01402	00000200	A				
	01	01403	00000020	A				
5351						PAGE		
5352	01	01404	FFFFFFF6	A	SF040	DATA	=10	B25
5353	01	01405	24C0017F	A		SF,12	X'17F'	
5354	01	01406	00000136	A		DATA	SETPSW	
5355	01	01407	20000169	A		K	2,0,0,L8C+2	
5356	01	01408	6F000000	A		DATA	X'6F000000',X'70000000',0,0,1024,64	
	01	01409	70000000	A				
	01	0140A	00000000	A				
	01	0140B	00000000	A				
	01	0140C	00000400	A				
	01	0140D	00000040	A				
5357	01	0140E	FFFFFFF6	A	SF041	DATA	=10	B24
5358	01	0140F	24C0017F	A		SF,12	X'17F'	
5359	01	01410	00000136	A		DATA	SETPSW	
5360	01	01411	20000169	A		K	2,0,0,L8C+2	
5361	01	01412	06000000	A		DATA	X'60000000',X'70000000',0,0,2048,128	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL O R I G	LABEL	OPERATION	OPERAND	COMMENTS
		01 01413	07000000	A				
		01 01414	00000000	A				
		01 01415	00000000	A				
		01 01416	00000800	A				
		01 01417	00000800	A				
5362		01 01418	FFFFFFF6	A	SF042	DATA	=10	B23
5363		01 01419	24C0017F	A		SF,12	X'17F'	
5364		01 0141A	00000136	A		DATA	SETPSW	
5365		01 0141B	20000169	A		K	2,0,0,L8C+2	
5366		01 0141C	70000000	A		DATA	X'70000000',X'71000000',0,0,4096,256	
		01 0141D	71000000	A				
		01 0141E	00000000	A				
		01 0141F	00000000	A				
		01 01420	00001000	A				
		01 01421	00000100	A				
5367						PAGE		
5368		01 01422	FFFFFFF6	A	SF043	DATA	=10	B22
5369		01 01423	24C0017F	A		SF,12	X'17F'	
5370		01 01424	00000136	A		DATA	SETPSW	
5371		01 01425	20000169	A		K	2,0,0,L8C+2	
5372		01 01426	60000000	A		DATA	X'60000000',X'61000000',0,0,8192,512	
		01 01427	61000000	A				
		01 01428	00000000	A				
		01 01429	00000000	A				
		01 0142A	00002000	A				
		01 0142B	00000200	A				
5373		01 0142C	FFFFFFF6	A	SF044	DATA	=10	B21
5374		01 0142D	24C0017F	A		SF,12	X'17F'	
5375		01 0142E	00000136	A		DATA	SETPSW	
5376		01 0142F	20000169	A		K	2,0,0,L8C+2	
5377		01 01430	50000000	A		DATA	X'50000000',X'51000000',0,0,16384,1024	
		01 01431	51000000	A				
		01 01432	00000000	A				
		01 01433	00000000	A				
		01 01434	00004000	A				
		01 01435	00000400	A				
5378		01 01436	FFFFFFF6	A	SF045	DATA	=10	B20
5379		01 01437	24C0017F	A		SF,12	X'17F'	
5380		01 01438	00000136	A		DATA	SETPSW	
5381		01 01439	20000169	A		K	2,0,0,L8C+2	
5382		01 0143A	40000000	A		DATA	X'40000000',X'41000000',0,0,32768,2048	
		01 0143B	41000000	A				
		01 0143C	00000000	A				
		01 0143D	00000000	A				
		01 0143E	00008000	A				
		01 0143F	00000800	A				
5383						PAGE		
5384		01 01440	FFFFFFF6	A	SF046	DATA	=10	B19
5385		01 01441	24C0017F	A		SF,12	X'17F'	
5386		01 01442	00000136	A		DATA	SETPSW	
5387		01 01443	20000169	A		K	2,0,0,L8C+2	
5388		01 01444	30000000	A		DATA	X'30000000',X'31000000',0,0,65536,4096	
		01 01445	31000000	A				
		01 01446	00000000	A				
		01 01447	00000000	A				
		01 01448	00010000	A				
		01 01449	00001000	A				
5389		01 0144A	FFFFFFF6	A	SF047	DATA	=10	B18
5390		01 0144B	24C0017F	A		SF,12	X'17F'	
5391		01 0144C	00000136	A		DATA	SETPSW	
5392		01 0144D	20000169	A		K	2,0,0,L8C+2	
5393		01 0144E	20000000	A		DATA	X'20000000',X'21000000',0,0,131072,8192	
		01 0144F	21000000	A				
		01 01450	00000000	A				
		01 01451	00000000	A				
		01 01452	00020000	A				
		01 01453	00002000	A				
5394		01 01454	FFFFFFF6	A	SF048	DATA	=10	B17
5395		01 01455	24C0017F	A		SF,12	X'17F'	
5396		01 01456	00000136	A		DATA	SETPSW	
5397		01 01457	20000169	A		K	2,0,0,L8C+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
5398	01	01458	10000000	A		DATA	X'10000000',X'11000000',0,0,262144,16384	
	01	01459	11000000	A				
	01	0145A	00000000	A				
	01	0145B	00000000	A				
	01	0145C	00040000	A				
	01	0145D	00004000	A				
5399						PAGE		
5400	01	0145E	FFFFFFF6	A	SF049	DATA	-10	B16
5401	01	0145F	24C0017F	A		SF,12	X'17F'	
5402	01	01460	00000136	A		DATA	SETPSW	
5403	01	01461	20000169	A		K	2,0,0,L8C+2	
5404	01	01462	00000000	A		DATA	0,X'1000000',0,0,524288,32768	
	01	01463	01000000	A				
	01	01464	00000000	A				
	01	01465	00000000	A				
	01	01466	00080000	A				
	01	01467	00008000	A				
5405								** CHECK THAT UNUSED BITS IN ADDRESS FIELD HAVE NO EFFECT
5406								** ALSO THAT INDEXING WILL CHANGE A - COUNT TO A + COUNT
5407	01	01468	FFFFFFF4	A	SF050	DATA	-12	
5408	01	01469	A4C20460	A		SF,12	*MEMORY,1	
5409	01	0146A	00000136	A		K	0,0,0,SETPSW	
5410	01	0146B	20000169	A		K	2,0,0,L8C+2	
5411	01	0146C	04000011	A		DATA	X'04000011',X'03000110',X'FFFFFFF0',X'FFFFFFF0',-9,-9	
	01	0146D	03000110	A				
	01	0146E	FFFFFFF0	A				
	01	0146F	FFFFFFF0	A				
	01	01470	FFFFFFF7	A				
	01	01471	FFFFFFF7	A				
5412	01	01472	00000008	A		DATA	8,8	
	01	01473	00000008	A				
5413						PAGE		
5414	01	01474	FFFFFFF4	A	SF01	DATA	-12	SF
5415	01	01475	24C00101	A		SF,12	X'101'	
5416	01	01476	073001CF	A		K	0,7,3,FLPFSW	
5417	01	01477	A7300169	A		K	10,7,3,L8C+2	
5418	01	01478	010F0F0F	A		DATA	X'010F0F0F'	
5419	01	01479	00F0F0F0	A		DATA	X'00F0F0F0'	
5420	01	0147A	00000000	A		DATA	X'0'	
5421	01	0147B	00000000	A		DATA	X'0'	
5422	01	0147C	0F0F0F0F	A		DATA	X'0F0F0F0F'	
5423	01	0147D	F0F0F0F0	A		DATA	X'F0F0F0F0'	
5424	01	0147E	00000000	A		DATA	X'0'	
5425	01	0147F	00000000	A		DATA	X'0'	
5426	01	01480	FFFFFFF4	A	SF02	DATA	-12	SF
5427	01	01481	24C00101	A		SF,12	X'101'	
5428	01	01482	073001CF	A		K	0,7,3,FLPFSW	
5429	01	01483	27300169	A		K	2,7,3,L8C+2	
5430	01	01484	0300F0F0	A		DATA	X'0300F0F0'	
5431	01	01485	020F0F0F	A		DATA	X'020F0F0F'	
5432	01	01486	00000000	A		DATA	X'0'	
5433	01	01487	00000000	A		DATA	X'0'	
5434	01	01488	F0F0F0F0	A		DATA	X'F0F0F0F0'	
5435	01	01489	0F0F0F00	A		DATA	X'0F0F0F00'	
5436	01	0148A	00000000	A		DATA	X'0'	
5437	01	0148B	00000000	A		DATA	X'0'	
5438						PAGE		
5439	01	0148C	FFFFFFF4	A	SF03	DATA	-12	SF
5440	01	0148D	24C0017F	A		SF,12	X'17F'	
5441	01	0148E	073001CF	A		K	0,7,3,FLPFSW	
5442	01	0148F	27300169	A		K	2,7,3,L8C+2	
5443	01	01490	010F0F0F	A		DATA	X'010F0F0F'	
5444	01	01491	020F0F0F	A		DATA	X'020F0F0F'	
5445	01	01492	00000000	A		DATA	X'0'	
5446	01	01493	00000000	A		DATA	X'0'	
5447	01	01494	0F0F0F0F	A		DATA	X'0F0F0F0F'	
5448	01	01495	F0F0F0F0	A		DATA	X'F0F0F0F0'	
5449	01	01496	00000000	A		DATA	X'0'	
5450	01	01497	00000000	A		DATA	X'0'	
5451						PAGE		
5452	01	01498	FFFFFFF4	A	SF04	DATA	-12	SF

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
5453	01	01499	24C0017F	A		SF,12	X'17F'	
5454	01	0149A	073001CF			K	0,7,3,FLPFSW	
5455	01	0149B	27300169			K	2,7,3,L8C+2	
5456	01	0149C	03F0F0F0	A		DATA	X'03F0F0F0'	
5457	01	0149D	040F0F0F	A		DATA	X'040F0F0F'	
5458	01	0149E	00000000	A		DATA	X'0'	
5459	01	0149F	00000000	A		DATA	X'0'	
5460	01	014A0	F0F0F0F0	A		DATA	X'F0F0F0F0'	
5461	01	014A1	0F0F0F0F	A		DATA	X'0F0F0F0F'	
5462	01	014A2	00000000	A		DATA	X'0'	
5463	01	014A3	00000000	A		DATA	X'0'	
5464	01	014A4	FFFFFFF4	A	SF05	DATA	-12	SF
5465	01	014A5	24C00101	A		SF,12	X'101'	
5466	01	014A6	073001CF			K	0,7,3,FLPFSW	
5467	01	014A7	87300169			K	8,7,3,L8C+2	
5468	01	014A8	7F000000	A		DATA	X'7F000000'	
5469	01	014A9	00000000	A		DATA	X'0'	
5470	01	014AA	00000000	A		DATA	X'0'	
5471	01	014AB	00000000	A		DATA	X'0'	
5472	01	014AC	00000000	A		DATA	X'0'	
5473	01	014AD	00000000	A		DATA	X'0'	
5474	01	014AE	00000000	A		DATA	X'0'	
5475	01	014AF	00000000	A		DATA	X'0'	
5476						PAGE		
5477	01	014B0	FFFFFFF4	A	SF06	DATA	-12	SF
5478	01	014B1	24C00041	A		SF,12	X'041'	
5479	01	014B2	073001CF			K	0,7,3,FLPFSW	
5480	01	014B3	07300169			K	0,7,3,L8C+2	
5481	01	014B4	7F000000	A		DATA	X'7F000000'	
5482	01	014B5	00000000	A		DATA	X'0'	
5483	01	014B6	00000000	A		DATA	X'0'	
5484	01	014B7	00000000	A		DATA	X'0'	
5485	01	014B8	00000000	A		DATA	X'0'	
5486	01	014B9	00000000	A		DATA	X'0'	
5487	01	014BA	00000000	A		DATA	X'0'	
5488	01	014BB	00000000	A		DATA	X'0'	
5489	01	014BC	FFFFFFF4	A	SF07	DATA	-12	SF
5490	01	014BD	24C00101	A		SF,12	X'101'	
5491	01	014BE	073001CF			K	0,7,3,FLPFSW	
5492	01	014BF	57300169			K	5,7,3,L8C+2	
5493	01	014C0	FFFFFFF4	A		DATA	X'FFFFFFF4'	
5494	01	014C1	80FFFFFF0	A		DATA	X'80FFFFFF0'	
5495	01	014C2	00000000	A		DATA	X'0'	
5496	01	014C3	00000000	A		DATA	X'0'	
5497	01	014C4	00000000	A		DATA	X'0'	
5498	01	014C5	00000000	A		DATA	X'0'	
5499	01	014C6	00000000	A		DATA	X'0'	
5500	01	014C7	00000000	A		DATA	X'0'	
5501						PAGE		
5502	01	014C8	FFFFFFF4	A	SF08	DATA	-12	SF
5503	01	014C9	24C00141	A		SF,12	X'141'	
5504	01	014CA	073001CF			K	0,7,3,FLPFSW	
5505	01	014CB	07300169			K	0,7,3,L8C+2	
5506	01	014CC	00FFFFFF	A		DATA	X'00FFFFFF'	
5507	01	014CD	00000000	A		DATA	X'0'	
5508	01	014CE	00000000	A		DATA	X'0'	
5509	01	014CF	00000000	A		DATA	X'0'	
5510	01	014D0	FFFFFFF4	A		DATA	X'FFFFFFF4'	
5511	01	014D1	00000000	A		DATA	X'0'	
5512	01	014D2	00000000	A		DATA	X'0'	
5513	01	014D3	00000000	A		DATA	X'0'	
5514	01	014D4	FFFFFFF4	A	SF09	DATA	-12	SF
5515	01	014D5	24C00173	A		SF,12	X'173'	
5516	01	014D6	073001CF			K	0,7,3,FLPFSW	
5517	01	014D7	27300169			K	2,7,3,L8C+2	
5518	01	014D8	72F00000	A		DATA	X'72F00000'	
5519	01	014D9	7F000000	A		DATA	X'7F000000'	
5520	01	014DA	00000000	A		DATA	X'0'	
5521	01	014DB	00000000	A		DATA	X'0'	
5522	01	014DC	00000000	A		DATA	X'0'	
5523	01	014DD	0000000F	A		DATA	X'0000000F'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
5524	01	014DE	00000000	A		DATA	X'0'	
5525	01	014DF	00000000	A		DATA	X'0'	
5526						PAGE		
5527	01	014E0	FFFFFFF4	A	SF10	DATA	-12	SF
5528	01	014E1	24C0013F	A		SF,12	X'13F'	
5529	01	014E2	073001CF			K	0,7,3,FLPFSW	
5530	01	014E3	A7300169			K	10,7,3,L8C+2	
5531	01	014E4	07080000	A		DATA	X'07080000'	
5532	01	014E5	06800000	A		DATA	X'06800000'	
5533	01	014E6	00000000	A		DATA	X'0'	
5534	01	014E7	00000000	A		DATA	X'0'	
5535	01	014E8	00000000	A		DATA	X'0'	
5536	01	014E9	00000000	A		DATA	X'0'	
5537	01	014EA	00000000	A		DATA	X'0'	
5538	01	014EB	00000000	A		DATA	X'0'	
5539	01	014EC	FFFFFFF4	A	SF11	DATA	-12	SF
5540	01	014ED	24C00172	A		SF,12	X'172'	
5541	01	014EE	073001CF			K	0,7,3,FLPFSW	
5542	01	014EF	07300169			K	0,7,3,L8C+2	
5543	01	014F0	72FFFFFF	A		DATA	X'72FFFFFF'	
5544	01	014F1	00000000	A		DATA	X'0'	
5545	01	014F2	00000000	A		DATA	X'0'	
5546	01	014F3	00000000	A		DATA	X'0'	
5547	01	014F4	FFFFFFF4	A		DATA	X'FFFFFFF4'	
5548	01	014F5	00000000	A		DATA	X'0'	
5549	01	014F6	00000000	A		DATA	X'0'	
5550	01	014F7	00000000	A		DATA	X'0'	
5551						PAGE		
5552	01	014F8	FFFFFFF4	A	SF12	DATA	-12	SF
5553	01	014F9	24C0010D	A		SF,12	X'10D'	
5554	01	014FA	073001CF			K	0,7,3,FLPFSW	
5555	01	014FB	A7300169			K	10,7,3,L8C+2	
5556	01	014FC	73000000	A		DATA	X'73000000'	
5557	01	014FD	66100000	A		DATA	X'66100000'	
5558	01	014FE	00000000	A		DATA	X'0'	
5559	01	014FF	00000000	A		DATA	X'0'	
5560	01	01500	00000001	A		DATA	X'00000001'	
5561	01	01501	00000000	A		DATA	X'0'	
5562	01	01502	00000000	A		DATA	X'0'	
5563	01	01503	00000000	A		DATA	X'0'	
5564	01	01504	FFFFFFF4	A	SF13	DATA	-12	SF
5565	01	01505	24C0017E	A		SF,12	X'17E'	
5566	01	01506	073001CF			K	0,7,3,FLPFSW	
5567	01	01507	67300169			K	6,7,3,L8C+2	
5568	01	01508	7FF00000	A		DATA	X'7FF00000'	
5569	01	01509	000F0000	A		DATA	X'000F0000'	
5570	01	0150A	00000000	A		DATA	X'0'	
5571	01	0150B	00000000	A		DATA	X'0'	
5572	01	0150C	0000000F	A		DATA	X'0000000F'	
5573	01	0150D	00000000	A		DATA	X'0'	
5574	01	0150E	00000000	A		DATA	X'0'	
5575	01	0150F	00000000	A		DATA	X'0'	
5576						PAGE		
5577	01	01510	FFFFFFF4	A	SF14	DATA	-12	SF
5578	01	01511	24C00000	A		SF,12	X'000'	
5579	01	01512	073001CF			K	0,7,3,FLPFSW	
5580	01	01513	A7300169			K	10,7,3,L8C+2	
5581	01	01514	7F555555	A		DATA	X'7F555555'	
5582	01	01515	7F555555	A		DATA	X'7F555555'	
5583	01	01516	00000000	A		DATA	X'0'	
5584	01	01517	00000000	A		DATA	X'0'	
5585	01	01518	00000000	A		DATA	X'0'	
5586	01	01519	00000000	A		DATA	X'0'	
5587	01	0151A	00000000	A		DATA	X'0'	
5588	01	0151B	00000000	A		DATA	X'0'	
5589						PAGE		
5590	01	0151C	FFFFFFF4	A	SF15	DATA	-12	SF
5591	01	0151D	24C00101	A		SF,12	X'101'	
5592	01	0151E	073001CF			K	0,7,3,FLPFSW	
5593	01	0151F	97300169			K	9,7,3,L8C+2	
5594	01	01520	FE000000	A		DATA	X'FE000000'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
5595	01	01521	FE000000	A		DATA	X'FE000000'	
5596	01	01522	00000000	A		DATA	X'0'	
5597	01	01523	00000000	A		DATA	X'0'	
5598	01	01524	FFFFFFFF	A		DATA	X'FFFFFFFF'	
5599	01	01525	FFFFFFFF	A		DATA	X'FFFFFFFF'	
5600	01	01526	00000000	A		DATA	X'0'	
5601	01	01527	00000000	A		DATA	X'0'	
5602	01	01528	FFFFFFFF4	A	SF16	DATA	=12	SF
5603	01	01529	24D0017E	A		SF,13	X'17E'	
5604	01	0152A	073001CF			K	0,7,3,FLPFSW	
5605	01	0152B	27300169			K	2,7,3,L0C+2	
5606	01	0152C	7FAAAAAA	A		DATA	X'7FAAAAAA'	
5607	01	0152D	7FAAAAAA	A		DATA	X'7FAAAAAA'	
5608	01	0152E	00000000	A		DATA	X'0'	
5609	01	0152F	00000000	A		DATA	X'0'	
5610	01	01530	40555555	A		DATA	X'40555555'	
5611	01	01531	42005555	A		DATA	X'42005555'	
5612	01	01532	00000000	A		DATA	X'0'	
5613	01	01533	00000000	A		DATA	X'0'	
5614						PAGE		
5615	01	01534	FFFFFFFF4	A	SF17	DATA	=12	SF
5616	01	01535	24D00104	A		SF,13	X'104'	
5617	01	01536	073001CF			K	0,7,3,FLPFSW	
5618	01	01537	A7300169			K	10,7,3,L0C+2	
5619	01	01538	00000001	A		DATA	X'00000001'	
5620	01	01539	00000001	A		DATA	X'1'	
5621	01	0153A	00000000	A		DATA	X'0'	
5622	01	0153B	00000000	A		DATA	X'0'	
5623	01	0153C	40000FFF	A		DATA	X'40000FFF'	
5624	01	0153D	30FFF400	A		DATA	X'30FFF400'	
5625	01	0153E	00000000	A		DATA	X'0'	
5626	01	0153F	00000000	A		DATA	X'0'	
5627	01	01540	FFFFFFFF4	A	SF18	DATA	=12	SF
5628	01	01541	24C0007D	A		SF,12	X'07D'	
5629	01	01542	073001CF			K	0,7,3,FLPFSW	
5630	01	01543	07300169			K	0,7,3,L0C+2	
5631	01	01544	FF000000	A		DATA	X'FF000000'	
5632	01	01545	00000000	A		DATA	X'0'	
5633	01	01546	00000000	A		DATA	X'0'	
5634	01	01547	00000000	A		DATA	X'0'	
5635	01	01548	00000000	A		DATA	X'0'	
5636	01	01549	00000000	A		DATA	X'0'	
5637	01	0154A	00000000	A		DATA	X'0'	
5638	01	0154B	00000000	A		DATA	X'0'	
5639						PAGE		
5640	01	0154C	FFFFFFFF4	A	SF19	DATA	=12	SF
5641	01	0154D	24D00001	A		SF,13	X'001'	
5642	01	0154E	073001CF			K	0,7,3,FLPFSW	
5643	01	0154F	A7300169			K	10,7,3,L0C+2	
5644	01	01550	00000000	A		DATA	X'0'	
5645	01	01551	00000000	A		DATA	X'0'	
5646	01	01552	00000000	A		DATA	X'0'	
5647	01	01553	00000000	A		DATA	X'0'	
5648	01	01554	080F0F0F	A		DATA	X'080F0F0F'	
5649	01	01555	07F0F0F0	A		DATA	X'07F0F0F0'	
5650	01	01556	00000000	A		DATA	X'0'	
5651	01	01557	00000000	A		DATA	X'0'	
5652	01	01558	FFFFFFFF4	A	SF20	DATA	=12	SF
5653	01	01559	24D0007F	A		SF,13	X'07F'	
5654	01	0155A	073001CF			K	0,7,3,FLPFSW	
5655	01	0155B	27300169			K	2,7,3,L0C+2	
5656	01	0155C	00000000	A		DATA	X'0'	
5657	01	0155D	00000000	A		DATA	X'0'	
5658	01	0155E	00000000	A		DATA	X'0'	
5659	01	0155F	00000000	A		DATA	X'0'	
5660	01	01560	07F0F0F0	A		DATA	X'07F0F0F0'	
5661	01	01561	080F0F0F	A		DATA	X'080F0F0F'	
5662	01	01562	00000000	A		DATA	X'0'	
5663	01	01563	00000000	A		DATA	X'0'	
5664						PAGE		
5665	01	01564	FFFFFFFF4	A	SF21	DATA	=12	SF

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
5666	01	01565	A4C00460			SF,12	*MEMORY	
5667	01	01566	073001CF			K	0,7,3,FLPFSW	
5668	01	01567	A7300169			K	10,7,3,L8C+2	
5669	01	01568	010F0F0F	A		DATA	X'010F0F0F'	
5670	01	01569	00F0F0F0	A		DATA	X'00F0F0F0'	
5671	01	0156A	00000101	A		DATA	X'101'	
5672	01	0156B	00000101	A		DATA	X'101'	
5673	01	0156C	0F0F0F0F	A		DATA	X'0F0F0F0F'	
5674	01	0156D	F0F0F0F0	A		DATA	X'F0F0F0F0'	
5675	01	0156E	00000000	A		DATA	X'0'	
5676	01	0156F	00000000	A		DATA	X'0'	
5677						PAGE		
5678	01	01570	FFFFFFF4	A	SF22	DATA	=12	SF
5679	01	01571	24CE0101	A		SF,12	X'101',7	
5680	01	01572	073001CF			K	0,7,3,FLPFSW	
5681	01	01573	A7300169			K	10,7,3,L8C+2	
5682	01	01574	010F0F0F	A		DATA	X'010F0F0F'	
5683	01	01575	00F0F0F0	A		DATA	X'00F0F0F0'	
5684	01	01576	00000000	A		DATA	X'0'	
5685	01	01577	00000000	A		DATA	X'0'	
5686	01	01578	0F0F0F0F	A		DATA	X'0F0F0F0F'	
5687	01	01579	F0F0F0F0	A		DATA	X'F0F0F0F0'	
5688	01	0157A	00000000	A		DATA	X'0'	
5689	01	0157B	00000000	A		DATA	X'0'	
5690	01	0157C	FFFFFFF4	A	SF23	DATA	=12	SF
5691	01	0157D	A4CE0460			SF,12	*MEMORY,7	
5692	01	0157E	073001CF			K	0,7,3,FLPFSW	
5693	01	0157F	A7300169			K	10,7,3,L8C+2	
5694	01	01580	010F0F0F	A		DATA	X'010F0F0F'	
5695	01	01581	00F0F0F0	A		DATA	X'00F0F0F0'	
5696	01	01582	00000100	A		DATA	X'100'	
5697	01	01583	00000100	A		DATA	X'100'	
5698	01	01584	0F0F0F0F	A		DATA	X'0F0F0F0F'	
5699	01	01585	F0F0F0F0	A		DATA	X'F0F0F0F0'	
5700	01	01586	00000000	A		DATA	X'0'	
5701	01	01587	00000000	A		DATA	X'0'	
5702						PAGE		
5703					** CHECK	CBND CBDE	SETTINGS AND TRAP LOCATIONS. IS SET FOR FIRST SIX	
5704	01	01588	FFFFFFFC	A	CAL01	DATA	=4	
5705	01	01589	04301589			CAL1,3	\$	
5706	01	0158A	079001D5			K	0,7,9,S19CL1	SLAVE MODE
5707	01	0158B	3710009E			K	3,7,1,C1RET+4	
5708	01	0158C	FFFFFFFC	A	CAL02	DATA	=4	
5709	01	0158D	05C0158D			CAL2,12	\$	
5710	01	0158E	073001DB			K	0,7,3,S19CL2	MASTER MODE
5711	01	0158F	C730009B			K	12,7,3,C2RET+13	
5712	01	01590	FFFFFFFC	A	CAL03	DATA	=4	
5713	01	01591	06AC1591			CAL3,10	\$	
5714	01	01592	008001E1			K	0,0,8,S19CL3	SLAVE
5715	01	01593	A00000CD			K	10,0,0,C3RET+11	
5716	01	01594	FFFFFFFC	A	CAL04	DATA	=4	
5717	01	01595	07501595			CAL4,5	\$	
5718	01	01596	000001E7			K	0,0,0,S19CL4	MASTER
5719	01	01597	500000DC			K	5,0,0,C4RET+6	
5720						PAGE		
5721					** CHECK	THAT IA AND IX	HAS NO EFFECT	
5722	01	01598	FFFFFFF8	A	CAL05	DATA	=8	
5723	01	01599	870E0460			CAL4,0	*MEMORY,7	
5724	01	0159A	F08001E7			K	15,0,8,S19CL4	SLAVE
5725	01	0159B	F00000D7			K	15,0,0,C4RET+1	
5726	01	0159C	00000000	A		DATA	0	
5727	01	0159D	00000000	A		DATA	0	
5728	01	0159E	00000460			DATA	MEMORY	
5729	01	0159F	00000460			DATA	MEMORY	
5730	01	015A0	FFFFFFFC	A	CAL06	DATA	=4	
5731	01	015A1	07FC15A1			CAL4,F	\$	
5732	01	015A2	000001F7			K	0,0,0,S19CL4	MASTER
5733	01	015A3	F00000E6			K	15,0,0,C4RET+16	
5734					** 19	RESET		
5735	01	015A4	FFFFFFFC	A	CAL07	DATA	=4	
5736	01	015A5	07F015A5			CAL4,F	\$	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIGIN	LABEL	OPERATION	OPERAND	COMMENTS
5737	01	015A6	000001E8			K	0,0,0,R19CL4	MASTER
5738	01	015A7	F00000D7			K	15,0,0,C4RET+1	
5739							PAGE	
5740						***		
5741						*** CAUTION		
5742						***		
5743						*** PSW1 BUT IS DEPENDENT UPON THE SENSE SWITCH SETTING WHEN EXECUTING		
5744						*** FARWD INSTRUCTIONS, A FALSE ERROR COULD OCCUR IF SWITCHES ARE		
5745						*** OPERATED.		
5746						*** TO RECOVER USE THE CP INTERRUPT SET THE SENSE SWITCHES, ENTER		
5747						*** THE MODULE LOCATION IN R1, DISPLAY THE IA AND RUN.		
5748	01	015A8	FFFFFFF2	A	FARWD01	DATA	-14	
5749	01	015A9	6DC00037	A		WD,12	X'37'	SET ALL INTERRUPT INHIBITS IN PSW2
5750	01	015AA	000001ED			DATA	FARWD	
5751	01	015AB	00000169			DATA	L0C+2	
5752	01	015AC	00000000	A		DATA	0,0,0,0,0,0,0,0,X'7000000'	
	01	015AD	00000000	A				
	01	015AE	00000000	A				
	01	015AF	00000000	A				
	01	015B0	00000000	A				
	01	015B1	00000000	A				
	01	015B2	00000000	A				
	01	015B3	00000000	A				
	01	015B4	00000000	A				
	01	015B5	07000000	A				
5753	01	015B6	FFFFFFF2	A	FARWD02	DATA	-14	INTERRUPT INHIBIT TEST *B
5754	01	015B7	6DC00030	A		WD,12	X'30'	TRY TO SET W/O SPECIFYING ANY BITS *B
5755	01	015B8	000001ED			DATA	FARWD	
5756	01	015B9	00000169			DATA	L0C+2	
5757	01	015BA	FFFFFFF7	A		DATA	-1,-1,-1,-1,-1,-1,-1,-1,0,0	PSW2 IN=0 PSW2 OUT=0 *B
	01	015BB	FFFFFFF7	A				
	01	015BC	FFFFFFF7	A				
	01	015BD	FFFFFFF7	A				
	01	015BE	FFFFFFF7	A				
	01	015BF	FFFFFFF7	A				
	01	015C0	FFFFFFF7	A				
	01	015C1	FFFFFFF7	A				
	01	015C2	00000000	A				
	01	015C3	00000000	A				
5758						PAGE		
5759	01	015C4	FFFFFFF2	A	FARWD03	DATA	-14	INTERRUPT INHIBIT TEST *B
5760	01	015C5	6DC00027	A		WD,12	X'27'	RESET ALL BITS *B
5761	01	015C6	000001ED			DATA	FARWD	*B
5762	01	015C7	00000169			DATA	L0C+2	*B
5763	01	015C8	00000000	A		DATA	0,0,0,0,0,0,0,0	*B
	01	015C9	00000000	A				
	01	015CA	00000000	A				
	01	015CB	00000000	A				
	01	015CC	00000000	A				
	01	015CD	00000000	A				
	01	015CE	00000000	A				
	01	015CF	00000000	A				
5764	01	015D0	07000000	A		GEN,8,24	7,0	PSW2 IN
5765	01	015D1	00000000	A		DATA	0	PSW2 OUT
5766	01	015D2	FFFFFFF2	A	FARWD04	DATA	-14	INTERRUPT INHIBIT TEST *B
5767	01	015D3	6DC00020	A		WD,12	X'20'	TRY TO RESET W/O SPECIFYING BITS *B
5768	01	015D4	000001ED			DATA	FARWD	
5769	01	015D5	00000169			DATA	L0C+2	
5770	01	015D6	00000000	A		DATA	0,0,0,0,0,0,0,0	
	01	015D7	00000000	A				
	01	015D8	00000000	A				
	01	015D9	00000000	A				
	01	015DA	00000000	A				
	01	015DB	00000000	A				
	01	015DC	00000000	A				
	01	015DD	00000000	A				
5771	01	015DE	07000000	A		GEN,8,24,8,24	7,0,7,0	PSW2 IN AND OUT
			07000000					
5772						PAGE		
5773	01	015E0	FFFFFFF2	A	FARWD05	DATA	-14	INTERRUPT INHIBIT TEST *B
5774	01	015E1	6CC00037	A		RD,12	X'37'	ONLY WD SHOULD SET BITS *B

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
5775	01	015E2	000001E0			DATA	FARWD,LBC+2	*B
	01	015E3	00000169					
5776	01	015E4	FFFFFFFF A			DATA	-1,0,0,0,0,0,0,0,0	*B
	01	015E5	00000000 A					
	01	015E6	00000000 A					
	01	015E7	00000000 A					
	01	015E8	00000000 A					
	01	015E9	00000000 A					
	01	015EA	00000000 A					
	01	015EB	00000000 A					
	01	015EC	00000000 A					
	01	015ED	00000000 A					
5777						PAGE		
5778						** CHECK THAT INDX=C4 C14		
5779						** INDEXING ALIGNMENT IS CHECKED BY THE BYTE, HALF AND DOUBLEWORD MODULE		
5780	01	015EE	FFFFFFFF A		IX01	DATA	=8	
5781	01	015EF	48C3EE72 A			EOR,12	MEMORY=IX01,1	
5782	01	015F0	00000136			DATA	SETPSW,LBC+2	
	01	015F1	00000169					
5783	01	015F2	000015EE			DATA	IX01,0,IX01,IX01	
	01	015F3	00000000 A					
	01	015F4	000015EE					
	01	015F5	000015EE					
5784						** CHECK THAT INDX=C3,C12		
5785	01	015F6	FFFFFFFF A		IX02	DATA	=8	
5786	01	015F7	30C80004 A			AW,12	4,4	EFF ADDR IS 8. CONTENTS OF MEM IN 8
5787	01	015F8	00000136			DATA	SETPSW	
5788	01	015F9	20000169			K	2,0,0,LBC+2	
5789	01	015FA	00000064 A			DATA	100,300,200,200	
	01	015FB	0000012C A					
	01	015FC	000000C8 A					
	01	015FD	000000C8 A					
5790						** CHECK THAT INDX=C5,C13		
5791	01	015FE	FFFFFFFF A		IX03	DATA	=10	
5792	01	015FF	24C40002 A			SF,12	2,2	IX2 CONTAINS A 1. CAUSING LS OF 3.
5793	01	01600	00000136			K	0,0,0,SETPSW	
5794	01	01601	A0000169			K	10,0,0,LBC+2	
5795	01	01602	14000100 A			DATA	X'14000100'	
5796	01	01603	11100000 A			DATA	X'11100000'	
5797	01	01604	00000000 A			DATA	0	
5798	01	01605	00000000 A			DATA	0	
5799	01	01606	FFFFFFFF A			DATA	=1	
5800	01	01607	FFFFFFFF A			DATA	=1	
5801						PAGE		
5802						** TEST THAT A PRIVILEGED INSTRUCTION TRAPS IN SLAVE MODE		
5803	01	01608	FFFFFFFF A		FAPRIVO1	DATA	=4	
5804	01	01609	0F000464			XPSD,0	RETURN	
5805	01	0160A	F7B001BC			K	15,7,11,SIGNAB	I9=1 CAUSING TRACC2 ADDITION TO ADDR
5806	01	0160B	F7300065			K	F,7,3,MVRET+1	
5807						** TEST THAT FAPRIV IS FALSE WHEN 05 IS FALSE		
5808	01	0160C	FFFFFFFF A		FAPRIVO2	DATA	=4	
5809	01	0160D	48C00460			EOR,12	MEMORY	
5810	01	0160E	F7B00136			K	15,7,11,SETPSW	
5811	01	0160F	C7B00168			K	12,7,11,LBC+1	
5812						** TEST THAT FAPRIV IS FALSE WHEN 04 IS FALSE		
5813	01	01610	FFFFFFFF A		FAPRIVO3	DATA	=4	
5814	01	01611	66C00460			AWM,12	MEMORY	
5815	01	01612	F7B00136			K	15,7,11,SETPSW	
5816	01	01613	07B00168			K	0,7,11,LBC+1	
5817						** TEST THAT FAPRIV IS FALSE WHEN 03 IS TRUE, NON-EXISTENT TRAP SHOULD		
5818						** OCCUR. A RETURN FROM NEIRET+2 INDICATES FAPRIV BECAME TRUE.		
5819	01	01614	FFFFFFFF A		FAPRIVO4	DATA	=4	
5820	01	01615	7E000460			DL,0	MEMORY	
5821	01	01616	F7B001BC			K	15,7,11,SIGNAB	
5822	01	01617	F730006B			K	15,7,3,NEIRET+1	
5823						PAGE		
5824						** THE FOLLOWING ROUTINES CHECK THAT ALL TERMS FOR FAIL (FAM ILLEGAL)		
5825						** ARE OPERATING PROPERLY. ALL CASES SHOULD TRAP TO 40.		
5826						** CHECK INPUT IA,FAIM		
5827	01	01618	FFFFFFFF A		FAILLO1	DATA	=8	
5828	01	01619	A2C0045A N			GEN,16,16 X'A2C0',IA	LI,C *IA	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
5829	01	0161A	000001BC			DATA	SIGNAB	
5830	01	0161B	8000006B			K	8,0,0,NEIRET+1	
5831	01	0161C	00000000	A		DATA	0	R IN
5832	01	0161D	00000000	A		DATA	0	R OUT
5833	01	0161E	00000100	A		DATA	X'100'	M IN
5834	01	0161F	00000100	A		DATA	X'100'	M OUT
5835					** CHECK	INPUT	0U1.N04.005.006-1	
5836	01	01620	FFFFFFFC	A	FAILLO2	DATA	=4	
5837	01	01621	16000000	A		DATA	X'16000000'	ILLEGAL INST
5838	01	01622	000001BC			DATA	SIGNAB	
5839	01	01623	8000006B			K	8,0,0,NEIRET+1	
5840					** CHECK	INPUT	FUMMC.N(ND12,ND13,D14) WITH D12 TRUE	
5841	01	01624	FFFFFFFC	A	FAILLO3	DATA	=4	
5842	01	01625	6FCA0000	A		DATA	X'6FCA0000'	MMC,12 5
5843	01	01626	000001BC			DATA	SIGNAB	
5844	01	01627	8000006B			K	8,0,0,NEIRET+1	
5845					** CHECK	INPUT	FUMMC.N(ND12,ND13,D14) WITH D13 TRUE	
5846	01	01628	FFFFFFFC	A	FAILLO4	DATA	=4	
5847	01	01629	6FC60000	A		DATA	X'6FC60000'	MMC,12 3
5848	01	0162A	000001BC			DATA	SIGNAB	
5849	01	0162B	8000006B			K	8,0,0,NEIRET+1	
5850					** CHECK	INPUT	FUMMC.N(ND12,ND13,D14) WITH ND14 TRUE	
5851	01	0162C	FFFFFFFC	A	FAILLO5	DATA	=4	
5852	01	0162D	6FC00000	A		DATA	X'6FC00000'	MMC,12 0
5853	01	0162E	000001BC			DATA	SIGNAB	
5854	01	0162F	8000006B			K	8,0,0,NEIRET+1	
5855						PAGE		
5856					** CHECK	INPUT	0U2.04.N05.N06	
5857	01	01630	FFFFFFFC	A	FAILLO6	DATA	=4	
5858	01	01631	28C00460			CVS,12	MEMBRY	
5859	01	01632	000001BC			DATA	SIGNAB	
5860	01	01633	8000006B			K	8,0,0,NEIRET+1	
5861					** CHECK	INPUT	0U7.M04.005.006	
5862	01	01634	FFFFFFFC	A	FAILLO7	DATA	=4	
5863	01	01635	76C00460			PACK,12	MEMBRY	
5864	01	01636	000001BC			DATA	SIGNAB	
5865	01	01637	8000006B			K	8,0,0,NEIRET+1	
5866					** CHECK	INPUT	0U7.04	
5867	01	01638	FFFFFFFC	A	FAILLO8	DATA	=4	
5868	01	01639	7FC00460			DST,12	MEMBRY	
5869	01	0163A	000001BC			DATA	SIGNAB	
5870	01	0163B	8000006B			K	8,0,0,NEIRET+1	
5871					** CHECK	INPUT	01.N03.N04.N05	
5872	01	0163C	FFFFFFFC	A	FAILLO9	DATA	=4	
5873	01	0163D	41C00460			TBS,12	MEMBRY	
5874	01	0163E	000001BC			DATA	SIGNAB	
5875	01	0163F	8000006B			K	8,0,0,NEIRET+1	
5876					** CHECK	INPUT	0U5.0L9	
5877	01	01640	FFFFFFFC	A	FAILLO10	DATA	=4	
5878	01	01641	59000000	A		DATA	X'59000000'	
5879	01	01642	000001BC			DATA	SIGNAB	
5880	01	01643	8000006B			K	8,0,0,NEIRET+1	
5881					** CHECK	INPUT	0L4.03.NFABYTE	
5882	01	01644	FFFFFFFC	A	FAILLO11	DATA	=4	
5883	01	01645	34000000	A		DATA	X'34000000'	
5884	01	01646	000001BC			DATA	SIGNAB	
5885	01	01647	8000006B			K	8,0,0,NEIRET+1	
5886						PAGE		
5887					** CHECK	INPUT	04.05.01.03	
5888	01	01648	FFFFFFFC	A	FAILLO12	DATA	=4	
5889	01	01649	7C000460			DSA	MEMBRY	
5890	01	0164A	000001BC			DATA	SIGNAB	
5891	01	0164B	8000006B			K	8,0,0,NEIRET+1	
5892					** CHECK	INPUT	04.05.N01.N03.N06	
5893	01	0164C	FFFFFFFC	A	FAILLO13	DATA	=4	
5894	01	0164D	0C000000	A		DATA	X'C0000000'	
5895	01	0164E	000001BC			DATA	SIGNAB	
5896	01	0164F	8000006B			K	8,0,0,NEIRET+1	
5897					** THIS TEST IS BYPASSED IF FLOATING POINT IS INSTALLED. IF NOT			
5898					** INSTALLED, THIS TESTS NFAIMP = FAFL.NFP0PTION			
5899	01	01650	FFFFFFFC	A	NFAIMP01	DATA	=4	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
5900	01	01651	680001AE			B	END	BECOMES FAS,12MEMORY IF NFPPTION
5901	01	01652	000001C2			K	0,0,0,UIISW	
5902	01	01653	00000077			K	0,0,0,UIIRET+1	
5903						PAGE		
5904	01	01654	FFFFFFF6 A		MW01	DATA	-10	MW
5905	01	01655	37C00460			MW,12	MEMBRY	
5906	01	01656	073001C8			K	00,7,3,FXP0SW	
5907	01	01657	57300169			K	5,7,3,L0C+2	
5908	01	01658	55555555 A			DATA	X'55555555'	
5909	01	01659	D58E3546 A			DATA	X'D58E3546'	
5910	01	0165A	55555555 A			DATA	X'55555555'	
5911	01	0165B	55555555 A			DATA	X'55555555'	
5912	01	0165C	80AA9FD4 A			DATA	X'80AA9FD4'	
5913	01	0165D	D51C7564 A			DATA	X'D51C7564'	
5914	01	0165E	FFFFFFF6 A		MW02	DATA	-10	MW
5915	01	0165F	37C00460			MW,12	MEMBRY	
5916	01	01660	073001C8			K	00,7,3,FXP0SW	
5917	01	01661	57300169			K	5,7,3,L0C+2	
5918	01	01662	00000000 A			DATA	X'00000000'	
5919	01	01663	FE40C85E A			DATA	X'FE40C85E'	
5920	01	01664	FC7CF1CC A			DATA	X'FC7CF1CC'	
5921	01	01665	FC7CF1CC A			DATA	X'FC7CF1CC'	
5922	01	01666	7F56BA80 A			DATA	X'7F56BA80'	
5923	01	01667	74AF1E00 A			DATA	X'74AF1E00'	
5924	01	01668	FFFFFFF6 A		MW03	DATA	-10	MW
5925	01	01669	37C00460			MW,12	MEMBRY	
5926	01	0166A	073001C8			K	00,7,3,FXP0SW	
5927	01	0166B	67300169			K	6,7,3,L0C+2	
5928	01	0166C	00000000 A			DATA	X'00000000'	
5929	01	0166D	15BB908B A			DATA	X'15BB908B'	
5930	01	0166E	59C61C18 A			DATA	X'59C61C18'	
5931	01	0166F	59C61C18 A			DATA	X'59C61C18'	
5932	01	01670	3DF91CF8 A			DATA	X'3DF91CF8'	
5933	01	01671	AE55D740 A			DATA	X'AE55D740'	
5934						PAGE		
5935	01	01672	FFFFFFF6 A		MW04	DATA	-10	MW
5936	01	01673	37C00460			MW,12	MEMBRY	
5937	01	01674	073001C8			K	00,7,3,FXP0SW	
5938	01	01675	57300169			K	5,7,3,L0C+2	
5939	01	01676	00000000 A			DATA	X'00000000'	
5940	01	01677	FAE49435 A			DATA	X'FAE49435'	
5941	01	01678	F1C3C731 A			DATA	X'F1C3C731'	
5942	01	01679	F1C3C731 A			DATA	X'F1C3C731'	
5943	01	0167A	5BD80E1D A			DATA	X'5BD80E1D'	
5944	01	0167B	946A3E8D A			DATA	X'946A3E8D'	
5945	01	0167C	FFFFFFF6 A		MW05	DATA	-10	MW
5946	01	0167D	37C00460			MW,12	MEMBRY	
5947	01	0167E	073001C8			K	00,7,3,FXP0SW	
5948	01	0167F	67300169			K	6,7,3,L0C+2	
5949	01	01680	00000000 A			DATA	X'00000000'	
5950	01	01681	1EC17468 A			DATA	X'1EC17468'	
5951	01	01682	3F01FC03 A			DATA	X'3F01FC03'	
5952	01	01683	3F01FC03 A			DATA	X'3F01FC03'	
5953	01	01684	7CF5C8E1 A			DATA	X'7CF5C8E1'	
5954	01	01685	907FD6A3 A			DATA	X'907FD6A3'	
5955	01	01686	FFFFFFF6 A		MW06	DATA	-10	MW
5956	01	01687	37C00460			MW,12	MEMBRY	
5957	01	01688	073001C8			K	00,7,3,FXP0SW	
5958	01	01689	57300169			K	5,7,3,L0C+2	
5959	01	0168A	00000000 A			DATA	X'00000000'	
5960	01	0168B	CD4A4EA5 A			DATA	X'CD4A4EA5'	
5961	01	0168C	70000000 A			DATA	X'70000000'	
5962	01	0168D	70000000 A			DATA	X'70000000'	
5963	01	0168E	8C178F32 A			DATA	X'8C178F32'	
5964	01	0168F	E0000000 A			DATA	X'E0000000'	
5965						PAGE		
5966	01	01690	FFFFFFF6 A		MW07	DATA	-10	MW
5967	01	01691	37C00460			MW,12	MEMBRY	
5968	01	01692	073001C8			K	00,7,3,FXP0SW	
5969	01	01693	57300169			K	5,7,3,L0C+2	
5970	01	01694	00000000 A			DATA	X'00000000'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
5971	01	01695	EC7E668F	A		DATA	X'EC7E668F'	
5972	01	01696	CDB53C70	A		DATA	X'CDB53C70'	
5973	01	01697	CDB53C70	A		DATA	X'CDB53C70'	
5974	01	01698	634AC271	A		DATA	X'634AC271'	
5975	01	01699	ED2C8D70	A		DATA	X'ED2C8D70'	
5976	01	0169A	FFFFFFF6	A	MW08	DATA	-10	MW
5977	01	0169B	37C00460			MW,12	MEMORY	
5978	01	0169C	073001C8			K	00,7,3,FXP0SW	
5979	01	0169D	57300169			K	5,7,3,L0C+2	
5980	01	0169E	00000000	A		DATA	X'00000000'	
5981	01	0169F	FAA8C9D1	A		DATA	X'FAA8C9D1'	
5982	01	016A0	31C3C1F0	A		DATA	X'31C3C1F0'	
5983	01	016A1	31C3C1F0	A		DATA	X'31C3C1F0'	
5984	01	016A2	E486C662	A		DATA	X'E486C662'	
5985	01	016A3	B88FDDE0	A		DATA	X'B88FDDE0'	
5986	01	016A4	FFFFFFF6	A	MW09	DATA	-10	MW
5987	01	016A5	37C00460			MW,12	MEMORY	
5988	01	016A6	073001C8			K	00,7,3,FXP0SW	
5989	01	016A7	57300169			K	5,7,3,L0C+2	
5990	01	016A8	00000000	A		DATA	X'00000000'	
5991	01	016A9	F47642A4	A		DATA	X'F47642A4'	
5992	01	016AA	DF4F3C70	A		DATA	X'DF4F3C70'	
5993	01	016AB	DF4F3C70	A		DATA	X'DF4F3C70'	
5994	01	016AC	5A5ACF3B	A		DATA	X'5A5ACF3B'	
5995	01	016AD	28817DD0	A		DATA	X'28817DD0'	
5996						PAGE		
5997	01	016AE	FFFFFFF6	A	MW10	DATA	-10	MW
5998	01	016AF	37C00460			MW,12	MEMORY	
5999	01	016B0	073001C8			K	00,7,3,FXP0SW	
6000	01	016B1	17300169			K	1,7,3,L0C+2	
6001	01	016B2	00000000	A		DATA	X'00000000'	
6002	01	016B3	FFFFFFF6	A		DATA	X'FFFFFFF6'	
6003	01	016B4	FFFFFFF6	A		DATA	X'FFFFFFF6'	
6004	01	016B5	FFFFFFF6	A		DATA	X'FFFFFFF6'	
6005	01	016B6	55555551	A		DATA	X'55555551'	
6006	01	016B7	AAAAAAAAAF	A		DATA	X'AAAAAAAAAF'	
6007	01	016B8	FFFFFFF6	A	MW11	DATA	-10	MW
6008	01	016B9	37C00460			MW,12	MEMORY	
6009	01	016BA	073001C8			K	00,7,3,FXP0SW	
6010	01	016BB	17300169			K	1,7,3,L0C+2	
6011	01	016BC	00000000	A		DATA	X'00000000'	
6012	01	016BD	FFFFFFF6	A		DATA	X'FFFFFFF6'	
6013	01	016BE	FFFFFFF6	A		DATA	X'FFFFFFF6'	
6014	01	016BF	FFFFFFF6	A		DATA	X'FFFFFFF6'	
6015	01	016C0	00000005	A		DATA	X'00000005'	
6016	01	016C1	FFFFFFF6	A		DATA	X'FFFFFFF6'	
6017	01	016C2	FFFFFFF6	A	MW12	DATA	-10	MW
6018	01	016C3	37C00460			MW,12	MEMORY	
6019	01	016C4	073001C8			K	00,7,3,FXP0SW	
6020	01	016C5	67300169			K	6,7,3,L0C+2	
6021	01	016C6	00000000	A		DATA	X'00000000'	
6022	01	016C7	06D3A075	A		DATA	X'06D3A075'	
6023	01	016C8	EEEEEEEE	A		DATA	X'EEEEEEEE'	
6024	01	016C9	EEEEEEEE	A		DATA	X'EEEEEEEE'	
6025	01	016CA	99999922	A		DATA	X'99999922'	
6026	01	016CB	92C5F99C	A		DATA	X'92C5F99C'	
6027						PAGE		
6028	01	016CC	FFFFFFF6	A	MW13	DATA	-10	MW
6029	01	016CD	37C00460			MW,12	MEMORY	
6030	01	016CE	073001C8			K	00,7,3,FXP0SW	
6031	01	016CF	07300169			K	0,7,3,L0C+2	
6032	01	016D0	00000000	A		DATA	X'00000000'	
6033	01	016D1	00000000	A		DATA	X'00000000'	
6034	01	016D2	00000000	A		DATA	X'00000000'	
6035	01	016D3	00000000	A		DATA	X'00000000'	
6036	01	016D4	B3333334	A		DATA	X'B3333334'	
6037	01	016D5	00000000	A		DATA	X'00000000'	
6038	01	016D6	FFFFFFF6	A	MW14	DATA	-10	MW
6039	01	016D7	37C00460			MW,12	MEMORY	
6040	01	016D8	073001C8			K	00,7,3,FXP0SW	
6041	01	016D9	67300169			K	6,7,3,L0C+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
6042	01	016DA	00000000	A		DATA	X'00000000'	
6043	01	016DB	0E8851EA	A		DATA	X'0E8851EA'	
6044	01	016DC	CCCCCCCC	A		DATA	X'CCCCCCCC'	
6045	01	016DD	CCCCCCCC	A		DATA	X'CCCCCCCC'	
6046	01	016DE	B666666E	A		DATA	X'B666666E'	
6047	01	016DF	3AE147A8	A		DATA	X'3AE147A8'	
6048	01	016E0	FFFFFFFF	A	MW15	DATA	=10	MW
6049	01	016E1	37C00460			MW,12	MEMORY	
6050	01	016E2	073001C8			K	00,7,3,FXP8SW	
6051	01	016E3	57300169			K	5,7,3,L8C+2	
6052	01	016E4	00000000	A		DATA	X'00000000'	
6053	01	016E5	F58F28C2	A		DATA	X'F58F28C2'	
6054	01	016E6	33333333	A		DATA	X'33333333'	
6055	01	016E7	33333333	A		DATA	X'33333333'	
6056	01	016E8	CBCBCBCB	A		DATA	X'CBCBCBCB'	
6057	01	016E9	3DA40A71	A		DATA	X'3DA40A71'	
6058						PAGE		
6059	01	016EA	FFFFFFFF	A	MW16	DATA	=10	MW
6060	01	016EB	37C00460			MW,12	MEMORY	
6061	01	016EC	073001C8			K	00,7,3,FXP8SW	
6062	01	016ED	67300169			K	6,7,3,L8C+2	
6063	01	016EE	00000000	A		DATA	X'00000000'	
6064	01	016EF	36A45B36	A		DATA	X'36A45B36'	
6065	01	016F0	6DB6DB6D	A		DATA	X'6DB6DB6D'	
6066	01	016F1	6DB6DB6D	A		DATA	X'6DB6DB6D'	
6067	01	016F2	7F7F7F7F	A		DATA	X'7F7F7F7F'	
6068	01	016F3	12A4EE13	A		DATA	X'12A4EE13'	
6069	01	016F4	FFFFFFFF	A	MW17	DATA	=10	MW
6070	01	016F5	37C00460			MW,12	MEMORY	
6071	01	016F6	073001C8			K	00,7,3,FXP8SW	
6072	01	016F7	57300169			K	5,7,3,L8C+2	
6073	01	016F8	00000000	A		DATA	X'00000000'	
6074	01	016F9	FEFF1010	A		DATA	X'FEFF1010'	
6075	01	016FA	DDDDDDDD	A		DATA	X'DDDDDDDD'	
6076	01	016FB	DDDDDDDD	A		DATA	X'DDDDDDDD'	
6077	01	016FC	07870787	A		DATA	X'07870787'	
6078	01	016FD	1B9C0A8B	A		DATA	X'1B9C0A8B'	
6079	01	016FE	FFFFFFFF	A	MW18	DATA	=10	MW
6080	01	016FF	37C00460			MW,12	MEMORY	
6081	01	01700	073001C8			K	00,7,3,FXP8SW	
6082	01	01701	17300169			K	1,7,3,L8C+2	
6083	01	01702	00000000	A		DATA	X'00000000'	
6084	01	01703	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6085	01	01704	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6086	01	01705	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6087	01	01706	6B6D36D9	A		DATA	X'6B6D36D9'	
6088	01	01707	9492C927	A		DATA	X'9492C927'	
6089						PAGE		
6090	01	01708	FFFFFFFF	A	MW19	DATA	=10	MW
6091	01	01709	37C00460			MW,12	MEMORY	
6092	01	0170A	073001C8			K	00,7,3,FXP8SW	
6093	01	0170B	57300169			K	5,7,3,L8C+2	
6094	01	0170C	00000000	A		DATA	X'00000000'	
6095	01	0170D	FB0DB4B6	A		DATA	X'FB0DB4B6'	
6096	01	0170E	EEEEEEEE	A		DATA	X'EEEEEEEE'	
6097	01	0170F	EEEEEEEE	A		DATA	X'EEEEEEEE'	
6098	01	01710	4A32694C	A		DATA	X'4A32694C'	
6099	01	01711	656A8CAB	A		DATA	X'656A8CAB'	
6100	01	01712	FFFFFFFF	A	MW20	DATA	=10	MW
6101	01	01713	37C00460			MW,12	MEMORY	
6102	01	01714	073001C8			K	00,7,3,FXP8SW	
6103	01	01715	67300169			K	6,7,3,L8C+2	
6104	01	01716	00000000	A		DATA	X'00000000'	
6105	01	01717	15555552	A		DATA	X'15555552'	
6106	01	01718	7FFFFFFFF	A		DATA	X'7FFFFFFFF'	
6107	01	01719	7FFFFFFFF	A		DATA	X'7FFFFFFFF'	
6108	01	0171A	2AAAAAA6	A		DATA	X'2AAAAAA6'	
6109	01	0171B	D555555A	A		DATA	X'D555555A'	
6110	01	0171C	FFFFFFFF	A	MW21	DATA	=10	MW
6111	01	0171D	37C00460			MW,12	MEMORY	
6112	01	0171E	073001C8			K	00,7,3,FXP8SW	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
6113	01	0171F	67300169			K	6,7,3,L8C+2	
6114	01	01720	00000000	A		DATA	X'00000000'	
6115	01	01721	00000000	A		DATA	X'00000000'	
6116	01	01722	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6117	01	01723	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6118	01	01724	80000000	A		DATA	X'80000000'	
6119	01	01725	80000000	A		DATA	X'80000000'	
6120						PAGE		
6121	01	01726	FFFFFFF6	A	MW22	DATA	=10	MW
6122	01	01727	37C00460			MW,12	MEMORY	
6123	01	01728	073001C8			K	00,7,3,FXP8SW	
6124	01	01729	67300169			K	6,7,3,L8C+2	
6125	01	0172A	00000000	A		DATA	X'00000000'	
6126	01	0172B	3FFFFFFFF	A		DATA	X'3FFFFFFFF'	
6127	01	0172C	7FFFFFFFF	A		DATA	X'7FFFFFFFF'	
6128	01	0172D	7FFFFFFFF	A		DATA	X'7FFFFFFFF'	
6129	01	0172E	7FFFFFFFF	A		DATA	X'7FFFFFFFF'	
6130	01	0172F	00000001	A		DATA	X'00000001'	
6131	01	01730	FFFFFFF6	A	MW23	DATA	=10	MW
6132	01	01731	37C00460			MW,12	MEMORY	
6133	01	01732	073001C8			K	00,7,3,FXP8SW	
6134	01	01733	67300169			K	6,7,3,L8C+2	
6135	01	01734	00000000	A		DATA	X'00000000'	
6136	01	01735	40000000	A		DATA	X'40000000'	
6137	01	01736	80000000	A		DATA	X'80000000'	
6138	01	01737	80000000	A		DATA	X'80000000'	
6139	01	01738	80000000	A		DATA	X'80000000'	
6140	01	01739	00000000	A		DATA	X'00000000'	
6141	01	0173A	FFFFFFF6	A	MW24	DATA	=10	MW
6142	01	0173B	37C00460			MW,12	MEMORY	
6143	01	0173C	073001C8			K	00,7,3,FXP8SW	
6144	01	0173D	17300169			K	1,7,3,L8C+2	
6145	01	0173E	00000000	A		DATA	X'00000000'	
6146	01	0173F	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6147	01	01740	00000001	A		DATA	X'00000001'	
6148	01	01741	00000001	A		DATA	X'00000001'	
6149	01	01742	80000000	A		DATA	X'80000000'	
6150	01	01743	80000000	A		DATA	X'80000000'	
6151						PAGE		
6152	01	01744	FFFFFFF6	A	MW25	DATA	=10	MW
6153	01	01745	37C00460			MW,12	MEMORY	
6154	01	01746	073001C8			K	00,7,3,FXP8SW	
6155	01	01747	17300169			K	1,7,3,L8C+2	
6156	01	01748	00000000	A		DATA	X'00000000'	
6157	01	01749	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6158	01	0174A	80000000	A		DATA	X'80000000'	
6159	01	0174B	80000000	A		DATA	X'80000000'	
6160	01	0174C	00000001	A		DATA	X'00000001'	
6161	01	0174D	80000000	A		DATA	X'80000000'	
6162	01	0174E	FFFFFFF6	A	MW26	DATA	=10	MW
6163	01	0174F	37C00460			MW,12	MEMORY	
6164	01	01750	073001C8			K	00,7,3,FXP8SW	
6165	01	01751	27300169			K	2,7,3,L8C+2	
6166	01	01752	00000000	A		DATA	X'00000000'	
6167	01	01753	00000000	A		DATA	X'00000000'	
6168	01	01754	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6169	01	01755	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6170	01	01756	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6171	01	01757	00000001	A		DATA	X'00000001'	
6172	01	01758	FFFFFFF6	A	MW27	DATA	=10	MW
6173	01	01759	37C00460			MW,12	MEMORY	
6174	01	0175A	073001C8			K	00,7,3,FXP8SW	
6175	01	0175B	07300169			K	0,7,3,L8C+2	
6176	01	0175C	7FFFFFFFF	A		DATA	X'7FFFFFFFF'	
6177	01	0175D	00000000	A		DATA	X'00000000'	
6178	01	0175E	7FFFFFFFF	A		DATA	X'7FFFFFFFF'	
6179	01	0175F	7FFFFFFFF	A		DATA	X'7FFFFFFFF'	
6180	01	01760	00000000	A		DATA	X'00000000'	
6181	01	01761	00000000	A		DATA	X'00000000'	
6182						PAGE		
6183	01	01762	FFFFFFF6	A	MW28	DATA	=10	MW

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
6184	01	01763	37C00460			MW,12	MEMORY	
6185	01	01764	073001C8			K	00,7,3,FXP8SW	
6186	01	01765	07300169			K	0,7,3,L8C+2	
6187	01	01766	00000000	A		DATA	X'00000000'	
6188	01	01767	00000000	A		DATA	X'00000000'	
6189	01	01768	00000000	A		DATA	X'00000000'	
6190	01	01769	00000000	A		DATA	X'00000000'	
6191	01	0176A	00000000	A		DATA	0	
6192	01	0176B	00000000	A		DATA	X'00000000'	
6193	01	0176C	FFFFFFF6	A	MW29	DATA	-10	MW
6194	01	0176D	37C00460			MW,12	MEMORY	
6195	01	0176E	073001C8			K	00,7,3,FXP8SW	
6196	01	0176F	67300169			K	6,7,3,L8C+2	
6197	01	01770	00000000	A		DATA	X'00000000'	
6198	01	01771	17A36285	A		DATA	X'17A36285'	
6199	01	01772	79999999	A		DATA	X'79999999'	
6200	01	01773	79999999	A		DATA	X'79999999'	
6201	01	01774	31C3C1F0	A		DATA	X'31C3C1F0'	
6202	01	01775	15575870	A		DATA	X'15575870'	
6203	01	01776	FFFFFFF6	A	MW30	DATA	-10	MW
6204	01	01777	37C00460			MW,12	MEMORY	
6205	01	01778	073001C8			K	00,7,3,FXP8SW	
6206	01	01779	57300169			K	5,7,3,L8C+2	
6207	01	0177A	00000000	A		DATA	X'00000000'	
6208	01	0177B	D3DC7674	A		DATA	X'D3DC7674'	
6209	01	0177C	59C61C18	A		DATA	X'59C61C18'	
6210	01	0177D	59C61C18	A		DATA	X'59C61C18'	
6211	01	0177E	82222222	A		DATA	X'82222222'	
6212	01	0177F	273AEB30	A		DATA	X'273AEB30'	
6213						PAGE		
6214	01	01780	FFFFFFF6	A	MW31	DATA	-10	MW
6215	01	01781	37C00460			MW,12	MEMORY	
6216	01	01782	073001C8			K	00,7,3,FXP8SW	
6217	01	01783	57300169			K	5,7,3,L8C+2	
6218	01	01784	00000000	A		DATA	X'00000000'	
6219	01	01785	FF036C81	A		DATA	X'FF036C81'	
6220	01	01786	87777777	A		DATA	X'87777777'	
6221	01	01787	87777777	A		DATA	X'87777777'	
6222	01	01788	021871E7	A		DATA	X'021871E7'	
6223	01	01789	19B05361	A		DATA	X'19B05361'	
6224	01	0178A	FFFFFFF6	A	MW32	DATA	-10	MW
6225	01	0178B	37C00460			MW,12	MEMORY	
6226	01	0178C	073001C8			K	00,7,3,FXP8SW	
6227	01	0178D	67300169			K	6,7,3,L8C+2	
6228	01	0178E	00000000	A		DATA	X'00000000'	
6229	01	0178F	012BAF66	A		DATA	X'012BAF66'	
6230	01	01790	FC7CF1CC	A		DATA	X'FC7CF1CC'	
6231	01	01791	FC7CF1CC	A		DATA	X'FC7CF1CC'	
6232	01	01792	AAAAAAAA	A		DATA	X'AAAAAAAA'	
6233	01	01793	AD020978	A		DATA	X'AD020978'	
6234	01	01794	FFFFFFF6	A	MW33	DATA	-10	MW
6235	01	01795	37C00460			MW,12	MEMORY	
6236	01	01796	073001C8			K	00,7,3,FXP8SW	
6237	01	01797	57300169			K	5,7,3,L8C+2	
6238	01	01798	00000000	A		DATA	X'00000000'	
6239	01	01799	FBC79A5E	A		DATA	X'FBC79A5E'	
6240	01	0179A	15555555	A		DATA	X'15555555'	
6241	01	0179B	15555555	A		DATA	X'15555555'	
6242	01	0179C	CD5B3C70	A		DATA	X'CD5B3C70'	
6243	01	0179D	8B8C4130	A		DATA	X'8B8C4130'	
6244						PAGE		
6245	01	0179E	FFFFFFF6	A	MW34	DATA	-10	MW
6246	01	0179F	37C00460			MW,12	MEMORY	
6247	01	017A0	073001C8			K	00,7,3,FXP8SW	
6248	01	017A1	67300169			K	6,7,3,L8C+2	
6249	01	017A2	00000000	A		DATA	X'00000000'	
6250	01	017A3	00345678	A		DATA	X'00345678'	
6251	01	017A4	03111111	A		DATA	X'03111111'	
6252	01	017A5	03111111	A		DATA	X'03111111'	
6253	01	017A6	11111111	A		DATA	X'11111111'	
6254	01	017A7	99654321	A		DATA	X'99654321'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
6255	01	017A8	FFFFFFF6	A	MW35	DATA	*10	MW
6256	01	017A9	37C00460			MW,12	MEMBRY	
6257	01	017AA	073001C8			K	00,7,3,FXP8SW	
6258	01	017AB	57300169			K	5,7,3,L8C+2	
6259	01	017AC	00000000	A		DATA	X'00000000'	
6260	01	017AD	D5D5D5D8	A		DATA	X'D5D5D5D8'	
6261	01	017AE	66666666	A		DATA	X'66666666'	
6262	01	017AF	66666666	A		DATA	X'66666666'	
6263	01	017B0	9696969D	A		DATA	X'9696969D'	
6264	01	017B1	9090908E	A		DATA	X'9090908E'	
6265	01	017B2	FFFFFFF6	A	MW36	DATA	*10	MW
6266	01	017B3	37C00460			MW,12	MEMBRY	
6267	01	017B4	073001C8			K	00,7,3,FXP8SW	
6268	01	017B5	57300169			K	5,7,3,L8C+2	
6269	01	017B6	00000000	A		DATA	X'00000000'	
6270	01	017B7	E06D3A06	A		DATA	X'E06D3A06'	
6271	01	017B8	44444444	A		DATA	X'44444444'	
6272	01	017B9	44444444	A		DATA	X'44444444'	
6273	01	017BA	89999999	A		DATA	X'89999999'	
6274	01	017BB	CA3D70A4	A		DATA	X'CA3D70A4'	
6275						PAGE		
6276	01	017BC	FFFFFFF6	A	MW37	DATA	*10	MW
6277	01	017BD	37C00460			MW,12	MEMBRY	
6278	01	017BE	073001C8			K	00,7,3,FXP8SW	
6279	01	017BF	67300169			K	6,7,3,L8C+2	
6280	01	017C0	00000000	A		DATA	X'00000000'	
6281	01	017C1	080FCAE0	A		DATA	X'080FCAE0'	
6282	01	017C2	E1C4C737	A		DATA	X'E1C4C737'	
6283	01	017C3	E1C4C737	A		DATA	X'E1C4C737'	
6284	01	017C4	BBBBBBBB	A		DATA	X'BBBBBBBB'	
6285	01	017C5	5A6FB22D	A		DATA	X'5A6FB22D'	
6286	01	017C6	FFFFFFF6	A	MW38	DATA	*10	MW
6287	01	017C7	37C00460			MW,12	MEMBRY	
6288	01	017C8	073001C8			K	00,7,3,FXP8SW	
6289	01	017C9	67300169			K	6,7,3,L8C+2	
6290	01	017CA	00000000	A		DATA	X'00000000'	
6291	01	017CB	00000000	A		DATA	X'00000000'	
6292	01	017CC	80000000	A		DATA	X'80000000'	
6293	01	017CD	80000000	A		DATA	X'80000000'	
6294	01	017CE	FFFFFFF6	A		DATA	X'FFFFFFF6'	
6295	01	017CF	80000000	A		DATA	X'80000000'	
6296	01	017D0	FFFFFFF6	A	MW39	DATA	*10	MW
6297	01	017D1	37C00460			MW,12	MEMBRY	
6298	01	017D2	073001C8			K	00,7,3,FXP8SW	
6299	01	017D3	67300169			K	6,7,3,L8C+2	
6300	01	017D4	00000000	A		DATA	X'00000000'	
6301	01	017D5	004B6827	A		DATA	X'004B6827'	
6302	01	017D6	42468ACE	A		DATA	X'42468ACE'	
6303	01	017D7	42468ACE	A		DATA	X'42468ACE'	
6304	01	017D8	01234567	A		DATA	X'01234567'	
6305	01	017D9	75F55EE2	A		DATA	X'75F55EE2'	
6306						PAGE		
6307	01	017DA	FFFFFFF6	A	MW40	DATA	*10	MW
6308	01	017DB	37C00460			MW,12	MEMBRY	
6309	01	017DC	073001C8			K	00,7,3,FXP8SW	
6310	01	017DD	57300169			K	5,7,3,L8C+2	
6311	01	017DE	00000000	A		DATA	X'00000000'	
6312	01	017DF	EEA535DC	A		DATA	X'EEA535DC'	
6313	01	017E0	258BCDEF	A		DATA	X'258BCDEF'	
6314	01	017E1	258BCDEF	A		DATA	X'258BCDEF'	
6315	01	017E2	89ABCDEF	A		DATA	X'89ABCDEF'	
6316	01	017E3	7712A521	A		DATA	X'7712A521'	
6317	01	017E4	FFFFFFF6	A	MW41	DATA	*10	MW
6318	01	017E5	37C00460			MW,12	MEMBRY	
6319	01	017E6	073001C8			K	00,7,3,FXP8SW	
6320	01	017E7	67300169			K	6,7,3,L8C+2	
6321	01	017E8	00000000	A		DATA	X'00000000'	
6322	01	017E9	0CB68AEE	A		DATA	X'0CB68AEE'	
6323	01	017EA	56AE37BF	A		DATA	X'56AE37BF'	
6324	01	017EB	56AE37BF	A		DATA	X'56AE37BF'	
6325	01	017EC	258BE147	A		DATA	X'258BE147'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
6326	01	017ED	090554F9	A		DATA	X'090554F9'	
6327	01	017EE	FFFFFFFF	A	MW42	DATA	-10	MW
6328	01	017EF	37C00460			MW,12	MEMORY	
6329	01	017F0	073001C8			K	00,7,3,FXP8SW	
6330	01	017F1	67300169			K	6,7,3,L8C+2	
6331	01	017F2	00000000	A		DATA	X'00000000'	
6332	01	017F3	0AAC4A2C	A		DATA	X'0AAC4A2C'	
6333	01	017F4	DF1357BD	A		DATA	X'DF1357BD'	
6334	01	017F5	DF1357BD	A		DATA	X'DF1357BD'	
6335	01	017F6	AD0369CF	A		DATA	X'AD0369CF'	
6336	01	017F7	0FD776D3	A		DATA	X'0FD776D3'	
6337						PAGE		
6338	01	017F8	FFFFFFFF	A	MW43	DATA	-10	MW
6339	01	017F9	37C00460			MW,12	MEMORY	
6340	01	017FA	073001C8			K	00,7,3,FXP8SW	
6341	01	017FB	67300169			K	6,7,3,L8C+2	
6342	01	017FC	00000000	A		DATA	X'00000000'	
6343	01	017FD	00CAFFFF	A		DATA	X'00CAFFFF'	
6344	01	017FE	F2468ACE	A		DATA	X'F2468ACE'	
6345	01	017FF	F2468ACE	A		DATA	X'F2468ACE'	
6346	01	01800	F13579BD	A		DATA	X'F13579BD'	
6347	01	01801	E055D816	A		DATA	X'E055D816'	
6348	01	01802	FFFFFFFF	A	MW44	DATA	-10	MW
6349	01	01803	37C00460			MW,12	MEMORY	
6350	01	01804	073001C8			K	00,7,3,FXP8SW	
6351	01	01805	67300169			K	6,7,3,L8C+2	
6352	01	01806	00000000	A		DATA	X'00000000'	
6353	01	01807	01B37451	A		DATA	X'01B37451'	
6354	01	01808	F147AD03	A		DATA	X'F147AD03'	
6355	01	01809	F147AD03	A		DATA	X'F147AD03'	
6356	01	0180A	E26AE38D	A		DATA	X'E26AE38D'	
6357	01	0180B	BC21F3A7	A		DATA	X'BC21F3A7'	
6358	01	0180C	FFFFFFFF	A	MW45	DATA	-10	MW
6359	01	0180D	37C00460			MW,12	MEMORY	
6360	01	0180E	073001C8			K	00,7,3,FXP8SW	
6361	01	0180F	67300169			K	6,7,3,L8C+2	
6362	01	01810	00000000	A		DATA	X'00000000'	
6363	01	01811	0330D831	A		DATA	X'0330D831'	
6364	01	01812	148BF37B	A		DATA	X'148BF37B'	
6365	01	01813	148BF37B	A		DATA	X'148BF37B'	
6366	01	01814	27C16805	A		DATA	X'27C16805'	
6367	01	01815	323B2A67	A		DATA	X'323B2A67'	
6368						PAGE		
6369	01	01816	FFFFFFFF	A	MW46	DATA	-10	MW
6370	01	01817	37C00460			MW,12	MEMORY	
6371	01	01818	073001C8			K	00,7,3,FXP8SW	
6372	01	01819	67300169			K	6,7,3,L8C+2	
6373	01	0181A	00000000	A		DATA	X'00000000'	
6374	01	0181B	01723EB3	A		DATA	X'01723EB3'	
6375	01	0181C	F37BF49E	A		DATA	X'F37BF49E'	
6376	01	0181D	F37BF49E	A		DATA	X'F37BF49E'	
6377	01	0181E	E26AF49F	A		DATA	X'E26AF49F'	
6378	01	0181F	248F8622	A		DATA	X'248F8622'	
6379	01	01820	FFFFFFFF	A	MW47	DATA	-10	MW
6380	01	01821	37C00460			MW,12	MEMORY	
6381	01	01822	073001C8			K	00,7,3,FXP8SW	
6382	01	01823	57300169			K	5,7,3,L8C+2	
6383	01	01824	00000000	A		DATA	X'00000000'	
6384	01	01825	FBB2877E	A		DATA	X'FBB2877E'	
6385	01	01826	457AE39F	A		DATA	X'457AE39F'	
6386	01	01827	457AE39F	A		DATA	X'457AE39F'	
6387	01	01828	F0259E49	A		DATA	X'F0259E49'	
6388	01	01829	9E820A57	A		DATA	X'9E820A57'	
6389	01	0182A	FFFFFFFF	A	MW48	DATA	-10	MW
6390	01	0182B	37C00460			MW,12	MEMORY	
6391	01	0182C	073001C8			K	00,7,3,FXP8SW	
6392	01	0182D	57300169			K	5,7,3,L8C+2	
6393	01	0182E	00000000	A		DATA	X'00000000'	
6394	01	0182F	DDF466A3	A		DATA	X'DDF466A3'	
6395	01	01830	679C05B2	A		DATA	X'679C05B2'	
6396	01	01831	679C05B2	A		DATA	X'679C05B2'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
6397	01	01832	ABE159F0	A		DATA	X'ABE159F0'	
6398	01	01833	47B238E0	A		DATA	X'47B238E0'	
6399						PAGE		
6400	01	01834	FFFFFFF6	A	MW49	DATA	=10	MW
6401	01	01835	37C00460			MW,12	MEMORY	
6402	01	01836	073001C8			K	00,7,3,FXP8SW	
6403	01	01837	67300169			K	6,7,3,L8C+2	
6404	01	01838	00000000	A		DATA	X'00000000'	
6405	01	01839	0D5BB3FB	A		DATA	X'0D5BB3FB'	
6406	01	0183A	59D73C28	A		DATA	X'59D73C28'	
6407	01	0183B	59D73C28	A		DATA	X'59D73C28'	
6408	01	0183C	26106573	A		DATA	X'26106573'	
6409	01	0183D	F8EBCDF8	A		DATA	X'F8EBCDF8'	
6410	01	0183E	FFFFFFF6	A	MW50	DATA	=10	MW
6411	01	0183F	37C00460			MW,12	MEMORY	
6412	01	01840	073001C8			K	00,7,3,FXP8SW	
6413	01	01841	67300169			K	6,7,3,L8C+2	
6414	01	01842	00000000	A		DATA	X'00000000'	
6415	01	01843	02DA0095	A		DATA	X'02DA0095'	
6416	01	01844	CD2A3C71	A		DATA	X'CD2A3C71'	
6417	01	01845	CD2A3C71	A		DATA	X'CD2A3C71'	
6418	01	01846	F1A3C842	A		DATA	X'F1A3C842'	
6419	01	01847	C10EDD22	A		DATA	X'C10EDD22'	
6420	01	01848	FFFFFFF6	A	MW51	DATA	=10	MW
6421	01	01849	37C00460			MW,12	MEMORY	
6422	01	0184A	073001C8			K	00,7,3,FXP8SW	
6423	01	0184B	57300169			K	5,7,3,L8C+2	
6424	01	0184C	00000000	A		DATA	X'00000000'	
6425	01	0184D	FF1737FC	A		DATA	X'FF1737FC'	
6426	01	0184E	FC7CF1CC	A		DATA	X'FC7CF1CC'	
6427	01	0184F	FC7CF1CC	A		DATA	X'FC7CF1CC'	
6428	01	01850	42486CEA	A		DATA	X'42486CEA'	
6429	01	01851	19971478	A		DATA	X'19971478'	
6430						PAGE		
6431	01	01852	FFFFFFF6	A	MW52	DATA	=10	MW
6432	01	01853	37C00460			MW,12	MEMORY	
6433	01	01854	073001C8			K	00,7,3,FXP8SW	
6434	01	01855	67300169			K	6,7,3,L8C+2	
6435	01	01856	00000000	A		DATA	X'00000000'	
6436	01	01857	0C654900	A		DATA	X'0C654900'	
6437	01	01858	475E3AF9	A		DATA	X'475E3AF9'	
6438	01	01859	475E3AF9	A		DATA	X'475E3AF9'	
6439	01	0185A	2C76B150	A		DATA	X'2C76B150'	
6440	01	0185B	6EFE96D0	A		DATA	X'6EFE96D0'	
6441	01	0185C	FFFFFFF6	A	MW53	DATA	=10	MW
6442	01	0185D	37C00460			MW,12	MEMORY	
6443	01	0185E	073001C8			K	00,7,3,FXP8SW	
6444	01	0185F	57300169			K	5,7,3,L8C+2	
6445	01	01860	00000000	A		DATA	X'00000000'	
6446	01	01861	F5C7652C	A		DATA	X'F5C7652C'	
6447	01	01862	38D27C16	A		DATA	X'38D27C16'	
6448	01	01863	38D27C16	A		DATA	X'38D27C16'	
6449	01	01864	D1F375DB	A		DATA	X'D1F375DB'	
6450	01	01865	8DA834D2	A		DATA	X'8DA834D2'	
6451	01	01866	FFFFFFF6	A	MW54	DATA	=10	MW
6452	01	01867	37C00460			MW,12	MEMORY	
6453	01	01868	073001C8			K	00,7,3,FXP8SW	
6454	01	01869	67300169			K	6,7,3,L8C+2	
6455	01	0186A	00000000	A		DATA	X'00000000'	
6456	01	0186B	36F57A5C	A		DATA	X'36F57A5C'	
6457	01	0186C	8067CB91	A		DATA	X'8067CB91'	
6458	01	0186D	8067CB91	A		DATA	X'8067CB91'	
6459	01	0186E	91BBA0F5	A		DATA	X'91BBA0F5'	
6460	01	0186F	8FFEB8B5	A		DATA	X'8FFEB8B5'	
6461						PAGE		
6462	01	01870	FFFFFFF6	A	MW55	DATA	=10	MW
6463	01	01871	37C00460			MW,12	MEMORY	
6464	01	01872	073001C8			K	00,7,3,FXP8SW	
6465	01	01873	67300169			K	6,7,3,L8C+2	
6466	01	01874	00000000	A		DATA	X'00000000'	
6467	01	01875	1F5F1EB5	A		DATA	X'1F5F1EB5'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
6468	01	01876	66E91F2E	A		DATA	X'66E91F2E'	
6469	01	01877	66E91F2E	A		DATA	X'66E91F2E'	
6470	01	01878	4E0A2D09	A		DATA	X'4E0A2D09'	
6471	01	01879	D4792E9E	A		DATA	X'D4792E9E'	
6472	01	0187A	FFFFFFF6	A	MW56	DATA	=10	MW
6473	01	0187B	37C00460			MW,12	MEMORY	
6474	01	0187C	073001C8			K	00,7,3,FXP8SW	
6475	01	0187D	67300169			K	6,7,3,L8C+2	
6476	01	0187E	00000000	A		DATA	X'00000000'	
6477	01	0187F	2C6421FF	A		DATA	X'2C6421FF'	
6478	01	01880	9D289043	A		DATA	X'9D289043'	
6479	01	01881	9D289043	A		DATA	X'9D289043'	
6480	01	01882	8D06D9F2	A		DATA	X'8D06D9F2'	
6481	01	01883	3B332A56	A		DATA	X'3B332A56'	
6482	01	01884	FFFFFFF6	A	MW57	DATA	=10	MW
6483	01	01885	37C00460			MW,12	MEMORY	
6484	01	01886	073001C8			K	00,7,3,FXP8SW	
6485	01	01887	67300169			K	6,7,3,L8C+2	
6486	01	01888	00000000	A		DATA	X'00000000'	
6487	01	01889	1176E78B	A		DATA	X'1176E78B'	
6488	01	0188A	266C684E	A		DATA	X'266C684E'	
6489	01	0188B	266C684E	A		DATA	X'266C684E'	
6490	01	0188C	745BD382	A		DATA	X'745BD382'	
6491	01	0188D	48BF419C	A		DATA	X'48BF419C'	
6492						PAGE		
6493	01	0188E	FFFFFFF6	A	MW58	DATA	=10	MW
6494	01	0188F	37C00460			MW,12	MEMORY	
6495	01	01890	073001C8			K	00,7,3,FXP8SW	
6496	01	01891	67300169			K	6,7,3,L8C+2	
6497	01	01892	00000000	A		DATA	X'00000000'	
6498	01	01893	0F673E9E	A		DATA	X'0F673E9E'	
6499	01	01894	CC1FC7CF	A		DATA	X'CC1FC7CF'	
6500	01	01895	CC1FC7CF	A		DATA	X'CC1FC7CF'	
6501	01	01896	B3FCA5A5	A		DATA	X'B3FCA5A5'	
6502	01	01897	7908336B	A		DATA	X'7908336B'	
6503	01	01898	FFFFFFF6	A	MW59	DATA	=10	MW
6504	01	01899	37C00460			MW,12	MEMORY	
6505	01	0189A	073001C8			K	00,7,3,FXP8SW	
6506	01	0189B	27300169			K	2,7,3,L8C+2	
6507	01	0189C	00000000	A		DATA	X'00000000'	
6508	01	0189D	00000000	A		DATA	X'00000000'	
6509	01	0189E	00000001	A		DATA	X'00000001'	
6510	01	0189F	00000001	A		DATA	X'00000001'	
6511	01	018A0	7FFFFFFF	A		DATA	X'7FFFFFFF'	
6512	01	018A1	7FFFFFFF	A		DATA	X'7FFFFFFF'	
6513	01	018A2	FFFFFFF6	A	MW60	DATA	=10	MW
6514	01	018A3	37C00460			MW,12	MEMORY	
6515	01	018A4	073001C8			K	00,7,3,FXP8SW	
6516	01	018A5	27300169			K	2,7,3,L8C+2	
6517	01	018A6	00000000	A		DATA	X'00000000'	
6518	01	018A7	00000000	A		DATA	X'00000000'	
6519	01	018A8	7FFFFFFF	A		DATA	X'7FFFFFFF'	
6520	01	018A9	7FFFFFFF	A		DATA	X'7FFFFFFF'	
6521	01	018AA	00000001	A		DATA	X'00000001'	
6522	01	018AB	7FFFFFFF	A		DATA	X'7FFFFFFF'	
6523						PAGE		
6524	01	018AC	FFFFFFF6	A	MW61	DATA	=10	MW
6525	01	018AD	37C00460			MW,12	MEMORY	
6526	01	018AE	073001C8			K	00,7,3,FXP8SW	
6527	01	018AF	67300169			K	6,7,3,L8C+2	
6528	01	018B0	00000000	A		DATA	X'00000000'	
6529	01	018B1	0ADAA050	A		DATA	X'0ADAA050'	
6530	01	018B2	B5631AF2	A		DATA	X'B5631AF2'	
6531	01	018B3	B5631AF2	A		DATA	X'B5631AF2'	
6532	01	018B4	DAC269A5	A		DATA	X'DAC269A5'	
6533	01	018B5	0E519FFA	A		DATA	X'0E519FFA'	
6534	01	018B6	FFFFFFF6	A	MW62	DATA	=10	MW
6535	01	018B7	37C00460			MW,12	MEMORY	
6536	01	018B8	073001C8			K	00,7,3,FXP8SW	
6537	01	018B9	57300169			K	5,7,3,L8C+2	
6538	01	018BA	00000000	A		DATA	X'00000000'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
6539	01	018BB	E8549FA9	A		DATA	X'E8549FA9'	
6540	01	018BC	C7B51894	A		DATA	X'C7B51894'	
6541	01	018BD	C7B51894	A		DATA	X'C7B51894'	
6542	01	018BE	6BA40763	A		DATA	X'6BA40763'	
6543	01	018BF	C9848D3C	A		DATA	X'C9848D3C'	
6544	01	018C0	FFFFFFFF	A	MW63	DATA	-10	MW
6545	01	018C1	37C00460			MW,12	MEMORY	
6546	01	018C2	073001C8			K	00,7,3,FXP8SW	
6547	01	018C3	57300169			K	5,7,3,L8C+2	
6548	01	018C4	00000000	A		DATA	0	
6549	01	018C5	FE179952	A		DATA	X'FE179952'	
6550	01	018C6	E9D73A96	A		DATA	X'E9D73A96'	
6551	01	018C7	E9D73A96	A		DATA	X'E9D73A96'	
6552	01	018C8	160A5DC9	A		DATA	X'160A5DC9'	
6553	01	018C9	F8217DC6	A		DATA	X'F8217DC6'	
6554						PAGE		
6555	01	018CA	FFFFFFFF	A	MW64	DATA	-10	MW
6556	01	018CB	37C00460			MW,12	MEMORY	
6557	01	018CC	073001C8			K	00,7,3,FXP8SW	
6558	01	018CD	67300169			K	6,7,3,L8C+2	
6559	01	018CE	00000000	A		DATA	X'00000000'	
6560	01	018CF	275BDC20	A		DATA	X'275BDC20'	
6561	01	018D0	84F82DDE	A		DATA	X'84F82DDE'	
6562	01	018D1	84F82DDE	A		DATA	X'84F82DDE'	
6563	01	018D2	AE1A4FE0	A		DATA	X'AE1A4FE0'	
6564	01	018D3	7BDBA440	A		DATA	X'7BDBA440'	
6565	01	018D4	FFFFFFFF	A	MW65	DATA	-10	MW
6566	01	018D5	37C00460			MW,12	MEMORY	
6567	01	018D6	073001C8			K	00,7,3,FXP8SW	
6568	01	018D7	67300169			K	6,7,3,L8C+2	
6569	01	018D8	00000000	A		DATA	X'00000000'	
6570	01	018D9	02F12C68	A		DATA	X'02F12C68'	
6571	01	018DA	136AF5B2	A		DATA	X'136AF5B2'	
6572	01	018DB	136AF5B2	A		DATA	X'136AF5B2'	
6573	01	018DC	26C9AAD5	A		DATA	X'26C9AAD5'	
6574	01	018DD	83E8A11A	A		DATA	X'83E8A11A'	
6575	01	018DE	FFFFFFFF	A	MW66	DATA	-10	MW
6576	01	018DF	37C00460			MW,12	MEMORY	
6577	01	018E0	073001C8			K	00,7,3,FXP8SW	
6578	01	018E1	67300169			K	6,7,3,L8C+2	
6579	01	018E2	00000000	A		DATA	X'00000000'	
6580	01	018E3	00651680	A		DATA	X'00651680'	
6581	01	018E4	15B897C4	A		DATA	X'15B897C4'	
6582	01	018E5	15B897C4	A		DATA	X'15B897C4'	
6583	01	018E6	04A766B3	A		DATA	X'04A766B3'	
6584	01	018E7	CD66360C	A		DATA	X'CD66360C'	
6585						PAGE		
6586	01	018E8	FFFFFFFF	A	MW67	DATA	-10	MW
6587	01	018E9	37C00460			MW,12	MEMORY	
6588	01	018EA	073001C8			K	00,7,3,FXP8SW	
6589	01	018EB	67300169			K	6,7,3,L8C+2	
6590	01	018EC	00000000	A		DATA	X'00000000'	
6591	01	018ED	13A5DB6D	A		DATA	X'13A5DB6D'	
6592	01	018EE	37DA99E6	A		DATA	X'37DA99E6'	
6593	01	018EF	37DA99E6	A		DATA	X'37DA99E6'	
6594	01	018F0	5A0DC619	A		DATA	X'5A0DC619'	
6595	01	018F1	340EEB76	A		DATA	X'340EEB76'	
6596	01	018F2	FFFFFFFF	A	MW68	DATA	-10	MW
6597	01	018F3	37C00460			MW,12	MEMORY	
6598	01	018F4	073001C8			K	00,7,3,FXP8SW	
6599	01	018F5	67300169			K	6,7,3,L8C+2	
6600	01	018F6	00000000	A		DATA	X'00000000'	
6601	01	018F7	0BDE7CCB	A		DATA	X'0BDE7CCB'	
6602	01	018F8	28FDD84E	A		DATA	X'28FDD84E'	
6603	01	018F9	28FDD84E	A		DATA	X'28FDD84E'	
6604	01	018FA	4A1FEA60	A		DATA	X'4A1FEA60'	
6605	01	018FB	245A6940	A		DATA	X'245A6940'	
6606	01	018FC	FFFFFFFF	A	MW69	DATA	-10	MW
6607	01	018FD	37C00460			MW,12	MEMORY	
6608	01	018FE	073001C8			K	00,7,3,FXP8SW	
6609	01	018FF	57300169			K	5,7,3,L8C+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
6610	01	01900	00000000	A		DATA	X'00000000'	
6611	01	01901	DFCF32C1	A		DATA	X'DFCF32C1'	
6612	01	01902	8508753F	A		DATA	X'8508753F'	
6613	01	01903	8508753F	A		DATA	X'8508753F'	
6614	01	01904	43043218	A		DATA	X'43043218'	
6615	01	01905	71AD4BE8	A		DATA	X'71AD4BE8'	
6616						PAGE		
6617	01	01906	FFFFFFF6	A	MW70	DATA	=10	MW
6618	01	01907	37C00460			MW,12	MEMORY	
6619	01	01908	073001C8			K	00,7,3,FXP8SW	
6620	01	01909	67300169			K	6,7,3,L8C+2	
6621	01	0190A	00000000	A		DATA	X'00000000'	
6622	01	0190B	0FDED2C2	A		DATA	X'0FDED2C2'	
6623	01	0190C	2B5FA631	A		DATA	X'2B5FA631'	
6624	01	0190D	2B5FA631	A		DATA	X'2B5FA631'	
6625	01	0190E	5DAB9C62	A		DATA	X'5DAB9C62'	
6626	01	0190F	B39E7AC2	A		DATA	X'B39E7AC2'	
6627	01	01910	FFFFFFF6	A	MW71	DATA	=10	MW
6628	01	01911	37C00460			MW,12	MEMORY	
6629	01	01912	073001C8			K	00,7,3,FXP8SW	
6630	01	01913	67300169			K	6,7,3,L8C+2	
6631	01	01914	00000000	A		DATA	X'00000000'	
6632	01	01915	11BEA00E	A		DATA	X'11BEA00E'	
6633	01	01916	4C798B51	A		DATA	X'4C798B51'	
6634	01	01917	4C798B51	A		DATA	X'4C798B51'	
6635	01	01918	3B667A40	A		DATA	X'3B667A40'	
6636	01	01919	380D6E40	A		DATA	X'380D6E40'	
6637	01	0191A	FFFFFFF6	A	MW72	DATA	=10	MW
6638	01	0191B	37C00460			MW,12	MEMORY	
6639	01	0191C	073001C8			K	00,7,3,FXP8SW	
6640	01	0191D	57300169			K	5,7,3,L8C+2	
6641	01	0191E	00000000	A		DATA	X'00000000'	
6642	01	0191F	003A60C4	A		DATA	X'003A60C4'	
6643	01	01920	6E99AD73	A		DATA	X'6E99AD73'	
6644	01	01921	6E99AD73	A		DATA	X'6E99AD73'	
6645	01	01922	916C00A5	A		DATA	X'916C00A5'	
6646	01	01923	757E3B1F	A		DATA	X'757E3B1F'	
6647						PAGE		
6648	01	01924	FFFFFFF6	A	MW73	DATA	=10	MW
6649	01	01925	37C00460			MW,12	MEMORY	
6650	01	01926	073001C8			K	00,7,3,FXP8SW	
6651	01	01927	57300169			K	5,7,3,L8C+2	
6652	01	01928	00000000	A		DATA	X'00000000'	
6653	01	01929	FF4891C2	A		DATA	X'FF4891C2'	
6654	01	0192A	E48DDF82	A		DATA	X'E48DDF82'	
6655	01	0192B	E48DDF82	A		DATA	X'E48DDF82'	
6656	01	0192C	06AEF144	A		DATA	X'06AEF144'	
6657	01	0192D	F0A89148	A		DATA	X'F0A89148'	
6658	01	0192E	FFFFFFF6	A	MW74	DATA	=10	MW
6659	01	0192F	37C00460			MW,12	MEMORY	
6660	01	01930	073001C8			K	00,7,3,FXP8SW	
6661	01	01931	67300169			K	6,7,3,L8C+2	
6662	01	01932	00000000	A		DATA	X'00000000'	
6663	01	01933	0645D91E	A		DATA	X'0645D91E'	
6664	01	01934	F3578058	A		DATA	X'F3578058'	
6665	01	01935	F3578058	A		DATA	X'F3578058'	
6666	01	01936	81234034	A		DATA	X'81234034'	
6667	01	01937	31E411E0	A		DATA	X'31E411E0'	
6668	01	01938	FFFFFFF6	A	MW75	DATA	=10	MW
6669	01	01939	37C00460			MW,12	MEMORY	
6670	01	0193A	073001C8			K	00,7,3,FXP8SW	
6671	01	0193B	67300169			K	6,7,3,L8C+2	
6672	01	0193C	00000000	A		DATA	X'00000000'	
6673	01	0193D	0925E650	A		DATA	X'0925E650'	
6674	01	0193E	BF6125A3	A		DATA	X'BF6125A3'	
6675	01	0193F	BF6125A3	A		DATA	X'BF6125A3'	
6676	01	01940	0BC25A96	A		DATA	X'0BC25A96'	
6677	01	01941	40AD5B82	A		DATA	X'40AD5B82'	
6678						PAGE		
6679	01	01942	FFFFFFF6	A	MW76	DATA	=10	MW
6680	01	01943	37C00460			MW,12	MEMORY	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
6681	01	01944	073001C8			K	00,7,3,FXP8SW	
6682	01	01945	67300169			K	6,7,3,L8C+2	
6683	01	01946	00000000	A		DATA	X'00000000'	
6684	01	01947	0F90C493	A		DATA	X'0F90C493'	
6685	01	01948	C9B14785	A		DATA	X'C9B14785'	
6686	01	01949	C9B14785	A		DATA	X'C9B14785'	
6687	01	0194A	B6A03674	A		DATA	X'B6A03674'	
6688	01	0194B	0A8A7644	A		DATA	X'0A8A7644'	
6689	01	0194C	FFFFFFFF6	A	MW77	DATA	=10	MW
6690	01	0194D	37C00460			MW,12	MEMORY	
6691	01	0194E	073001C8			K	00,7,3,FXP8SW	
6692	01	0194F	57300169			K	5,7,3,L8C+2	
6693	01	01950	00000000	A		DATA	X'00000000'	
6694	01	01951	FD92A39E	A		DATA	X'FD92A39E'	
6695	01	01952	E9D369A7	A		DATA	X'E9D369A7'	
6696	01	01953	E9D369A7	A		DATA	X'E9D369A7'	
6697	01	01954	1C0596DA	A		DATA	X'1C0596DA'	
6698	01	01955	5232D236	A		DATA	X'5232D236'	
6699	01	01956	FFFFFFFF6	A	MW78	DATA	=10	MW
6700	01	01957	37C00460			MW,12	MEMORY	
6701	01	01958	073001C8			K	00,7,3,FXP8SW	
6702	01	01959	67300169			K	6,7,3,L8C+2	
6703	01	0195A	00000000	A		DATA	X'00000000'	
6704	01	0195B	21847A5E	A		DATA	X'21847A5E'	
6705	01	0195C	4DF2E8D8	A		DATA	X'4DF2E8D8'	
6706	01	0195D	4DF2E8D8	A		DATA	X'4DF2E8D8'	
6707	01	0195E	6E140AFA	A		DATA	X'6E140AFA'	
6708	01	0195F	9D2FD2F0	A		DATA	X'9D2FD2F0'	
6709						PAGE		
6710	01	01960	FFFFFFFF6	A	MW79	DATA	=10	MW *
6711	01	01961	B7C0045A			MW,12	*IA	
6712	01	01962	073001C8			K	00,7,3,FXP8SW	
6713	01	01963	67300169			K	6,7,3,L8C+2	
6714	01	01964	00000000	A		DATA	X'00000000'	
6715	01	01965	0416A25D	A		DATA	X'0416A25D'	
6716	01	01966	3708F585	A		DATA	X'3708F585'	
6717	01	01967	3708F585	A		DATA	X'3708F585'	
6718	01	01968	13048243	A		DATA	X'13048243'	
6719	01	01969	A919C8CF	A		DATA	X'A919C8CF'	
6720	01	0196A	FFFFFFFF6	A	MW80	DATA	=10	MW X
6721	01	0196B	37C3E067			MW,12	MEMORY=X'23F9,1	
6722	01	0196C	073001C8			K	00,7,3,FXP8SW	
6723	01	0196D	67300169			K	6,7,3,L8C+2	
6724	01	0196E	000023F9	A		DATA	X'23F9'	
6725	01	0196F	23CDBD6A	A		DATA	X'23CDBD6A'	
6726	01	01970	A56F321B	A		DATA	X'A56F321B'	
6727	01	01971	A56F321B	A		DATA	X'A56F321B'	
6728	01	01972	9ACB652D	A		DATA	X'9ACB652D'	
6729	01	01973	ECC975BF	A		DATA	X'ECC975BF'	
6730	01	01974	FFFFFFFF6	A	MW81	DATA	=10	MW0
6731	01	01975	37D00460			MW,13	MEMORY	
6732	01	01976	073001C8			K	00,7,3,FXP8SW	
6733	01	01977	67300169			K	6,7,3,L8C+2	
6734	01	01978	00000000	A		DATA	X'00000000'	
6735	01	01979	00000000	A		DATA	0	
6736	01	0197A	DFA08A94	A		DATA	X'DFA08A94'	
6737	01	0197B	DFA08A94	A		DATA	X'DFA08A94'	
6738	01	0197C	C1C7FCFC	A		DATA	X'C1C7FCFC'	
6739	01	0197D	777E19B0	A		DATA	X'777E19B0'	
6740						PAGE		
6741	01	0197E	FFFFFFFF6	A	MW82	DATA	=10	MW
6742	01	0197F	37D00460			MW,13	MEMORY	
6743	01	01980	073001C8			K	00,7,3,FXP8SW	
6744	01	01981	57300169			K	5,7,3,L8C+2	
6745	01	01982	00000000	A		DATA	X'00000000'	
6746	01	01983	00000000	A		DATA	X'00000000'	
6747	01	01984	8A5F76B0	A		DATA	X'8A5F76B0'	
6748	01	01985	8A5F76B0	A		DATA	X'8A5F76B0'	
6749	01	01986	1CC95618	A		DATA	X'1CC95618'	
6750	01	01987	7B024080	A		DATA	X'7B024080'	
6751	01	01988	FFFFFFFF6	A	MW83	DATA	=10	MW

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
6752	01	01989	37D00460			MW,13	MEMORY	
6753	01	0198A	073001C8			K	00,7,3,FXP8SW	
6754	01	0198B	57300169			K	5,7,3,L8C+2	
6755	01	0198C	00000000	A		DATA	X'00000000'	
6756	01	0198D	00000000	A		DATA	X'00000000'	
6757	01	0198E	FCFD3918	A		DATA	X'FCFD3918'	
6758	01	0198F	FCFD3918	A		DATA	X'FCFD3918'	
6759	01	01990	37C1F3C1	A		DATA	X'37C1F3C1'	
6760	01	01991	4831D318	A		DATA	X'4831D318'	
6761	01	01992	FFFFFFF6	A	MW84	DATA	-10	MW
6762	01	01993	37D00460			MW,13	MEMORY	
6763	01	01994	073001C8			K	00,7,3,FXP8SW	
6764	01	01995	67300169			K	6,7,3,L8C+2	
6765	01	01996	00000000	A		DATA	X'00000000'	
6766	01	01997	00000000	A		DATA	X'00000000'	
6767	01	01998	1EDB580D	A		DATA	X'1EDB580D'	
6768	01	01999	1EDB580D	A		DATA	X'1EDB580D'	
6769	01	0199A	0C1031F3	A		DATA	X'0C1031F3'	
6770	01	0199B	62DF1157	A		DATA	X'62DF1157'	
6771						PAGE		
6772	01	0199C	FFFFFFF6	A	MW85	DATA	-10	MW
6773	01	0199D	37D00460			MW,13	MEMORY	
6774	01	0199E	073001C8			K	00,7,3,FXP8SW	
6775	01	0199F	57300169			K	5,7,3,L8C+2	
6776	01	019A0	00000000	A		DATA	X'00000000'	
6777	01	019A1	00000000	A		DATA	X'00000000'	
6778	01	019A2	E8FC75C1	A		DATA	X'E8FC75C1'	
6779	01	019A3	E8FC75C1	A		DATA	X'E8FC75C1'	
6780	01	019A4	3F1C8782	A		DATA	X'3F1C8782'	
6781	01	019A5	D2689302	A		DATA	X'D2689302'	
6782	01	019A6	FFFFFFF6	A	MW86	DATA	-10	MW
6783	01	019A7	37D00460			MW,13	MEMORY	
6784	01	019A8	073001C8			K	00,7,3,FXP8SW	
6785	01	019A9	67300169			K	6,7,3,L8C+2	
6786	01	019AA	00000000	A		DATA	X'00000000'	
6787	01	019AB	00000000	A		DATA	X'00000000'	
6788	01	019AC	7CBDC530	A		DATA	X'7CBDC530'	
6789	01	019AD	7CBDC530	A		DATA	X'7CBDC530'	
6790	01	019AE	72436AC1	A		DATA	X'72436AC1'	
6791	01	019AF	9A478930	A		DATA	X'9A478930'	
6792	01	019A0	FFFFFFF6	A	MW87	DATA	-10	MW
6793	01	019B1	37D00460			MW,13	MEMORY	
6794	01	019B2	073001C8			K	00,7,3,FXP8SW	
6795	01	019B3	57300169			K	5,7,3,L8C+2	
6796	01	019B4	00000000	A		DATA	X'00000000'	
6797	01	019B5	00000000	A		DATA	X'00000000'	
6798	01	019B6	F1C133C0	A		DATA	X'F1C133C0'	
6799	01	019B7	F1C133C0	A		DATA	X'F1C133C0'	
6800	01	019B8	6684E6C2	A		DATA	X'6684E6C2'	
6801	01	019B9	F7E7B780	A		DATA	X'F7E7B780'	
6802						PAGE		
6803	01	019BA	FFFFFFF6	A	MW88	DATA	-10	MW
6804	01	019BB	37D00460			MW,13	MEMORY	
6805	01	019BC	073001C8			K	00,7,3,FXP8SW	
6806	01	019BD	67300169			K	6,7,3,L8C+2	
6807	01	019BE	00000000	A		DATA	X'00000000'	
6808	01	019BF	00000000	A		DATA	X'00000000'	
6809	01	019C0	7CF4DF30	A		DATA	X'7CF4DF30'	
6810	01	019C1	7CF4DF30	A		DATA	X'7CF4DF30'	
6811	01	019C2	3F5A5ACB	A		DATA	X'3F5A5ACB'	
6812	01	019C3	7383DB10	A		DATA	X'7383DB10'	
6813	01	019C4	FFFFFFF6	A	MW89	DATA	-10	MW
6814	01	019C5	37D00460			MW,13	MEMORY	
6815	01	019C6	073001C8			K	00,7,3,FXP8SW	
6816	01	019C7	67300169			K	6,7,3,L8C+2	
6817	01	019C8	00000000	A		DATA	X'00000000'	
6818	01	019C9	00000000	A		DATA	X'00000000'	
6819	01	019CA	366B6D39	A		DATA	X'366B6D39'	
6820	01	019CB	366B6D39	A		DATA	X'366B6D39'	
6821	01	019CC	493A426C	A		DATA	X'493A426C'	
6822	01	019CD	A764C60C	A		DATA	X'A764C60C'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
6823	01	019CE	FFFFFFF6	A	MW90	DATA	=10	MW
6824	01	019CF	37D00460			MW,13	MEMORY	
6825	01	019D0	073001C8			K	00,7,3,FXP0SW	
6826	01	019D1	57300169			K	5,7,3,L8C+2	
6827	01	019D2	00000000	A		DATA	X'00000000'	
6828	01	019D3	00000000	A		DATA	0	
6829	01	019D4	F1C133C0	A		DATA	X'F1C133C0'	
6830	01	019D5	F1C133C0	A		DATA	X'F1C133C0'	
6831	01	019D6	1CC95618	A		DATA	X'1CC95618'	
6832	01	019D7	333F5A00	A		DATA	X'333F5A00'	
6833						PAGE		
6834	01	019D8	FFFFFFF6	A	MH01	DATA	=10	MH
6835	01	019D9	57C00460			MH,12	MEMORY	
6836	01	019DA	073001C8			K	00,7,3,FXP0SW	
6837	01	019DB	17300169			K	1,7,3,L8C+2	
6838	01	019DC	0000FC7C	A		DATA	X'0000FC7C'	
6839	01	019DD	0000FC7C	A		DATA	X'0000FC7C'	
6840	01	019DE	37BF0000	A		DATA	X'37BF0000'	
6841	01	019DF	37BF0000	A		DATA	X'37BF0000'	
6842	01	019E0	00000000	A		DATA	X'00000000'	
6843	01	019E1	FF3C0484	A		DATA	X'FF3C0484'	
6844	01	019E2	FFFFFFF6	A	MH02	DATA	=10	MH
6845	01	019E3	57C00460			MH,12	MEMORY	
6846	01	019E4	073001C8			K	00,7,3,FXP0SW	
6847	01	019E5	17300169			K	1,7,3,L8C+2	
6848	01	019E6	0C000383	A		DATA	X'00000383'	
6849	01	019E7	00000383	A		DATA	X'00000383'	
6850	01	019E8	C8400000	A		DATA	X'C8400000'	
6851	01	019E9	C8400000	A		DATA	X'C8400000'	
6852	01	019EA	00000000	A		DATA	X'00000000'	
6853	01	019EB	FF3C38C0	A		DATA	X'FF3C38C0'	
6854	01	019EC	FFFFFFF6	A	MH03	DATA	=10	MH X
6855	01	019ED	57CE0460			MH,12	MEMORY,7	
6856	01	019EE	073001C8			K	00,7,3,FXP0SW	
6857	01	019EF	17300169			K	1,7,3,L8C+2	
6858	01	019F0	0000E159	A		DATA	X'0000E159'	
6859	01	019F1	0000E159	A		DATA	X'0000E159'	
6860	01	019F2	0C0027C1	A		DATA	X'000027C1'	
6861	01	019F3	0C0027C1	A		DATA	X'000027C1'	
6862	01	019F4	00000000	A		DATA	X'00000000'	
6863	01	019F5	FB3D7319	A		DATA	X'FB3D7319'	
6864						PAGE		
6865	01	019F6	FFFFFFF6	A	MH04	DATA	=10	MH X
6866	01	019F7	57CE0460			MH,12	MEMORY,7	
6867	01	019F8	073001C8			K	00,7,3,FXP0SW	
6868	01	019F9	17300169			K	1,7,3,L8C+2	
6869	01	019FA	00001EA6	A		DATA	X'00001EA6'	
6870	01	019FB	00001EA6	A		DATA	X'00001EA6'	
6871	01	019FC	0000D83E	A		DATA	X'0000D83E'	
6872	01	019FD	0C00D83E	A		DATA	X'0000D83E'	
6873	01	019FE	00000000	A		DATA	X'00000000'	
6874	01	019FF	FB3D7C34	A		DATA	X'FB3D7C34'	
6875	01	01A00	FFFFFFF6	A	MH05	DATA	=10	MH0
6876	01	01A01	57D00460			MH,13	MEMORY	
6877	01	01A02	073001C8			K	00,7,3,FXP0SW	
6878	01	01A03	27300169			K	2,7,3,L8C+2	
6879	01	01A04	00000000	A		DATA	X'00000000'	
6880	01	01A05	00000000	A		DATA	X'00000000'	
6881	01	01A06	30C90000	A		DATA	X'30C90000'	
6882	01	01A07	30C90000	A		DATA	X'30C90000'	
6883	01	01A08	000048C1	A		DATA	X'000048C1'	
6884	01	01A09	0DDD4F89	A		DATA	X'0DDD4F89'	
6885	01	01ACA	FFFFFFF6	A	MH06	DATA	=10	MH
6886	01	01ACB	57D00460			MH,13	MEMORY	
6887	01	01ACC	073001C8			K	00,7,3,FXP0SW	
6888	01	01ACD	27300169			K	2,7,3,L8C+2	
6889	01	01ACE	00000000	A		DATA	X'00000000'	
6890	01	01ACF	00000000	A		DATA	X'00000000'	
6891	01	01A10	C7360000	A		DATA	X'C7360000'	
6892	01	01A11	C7360000	A		DATA	X'C7360000'	
6893	01	01A12	0000B73E	A		DATA	X'0000B73E'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
6894	01	01A13	1023D914	A		DATA	X'1023D914'	
6895						PAGE		
6896	01	01A14	FFFFFFF6	A	MH07	DATA	=10	MH X
6897	01	01A15	57DE0460			MH,13	MEMORY,7	
6898	01	01A16	073001C8			K	00,7,3,FXP8SW	
6899	01	01A17	27300169			K	2,7,3,L8C+2	
6900	01	01A18	0C000000	A		DATA	X'00000000'	
6901	01	01A19	0C000000	A		DATA	X'00000000'	
6902	01	01A1A	0C005AF4	A		DATA	X'00005AF4'	
6903	01	01A1B	0C005AF4	A		DATA	X'00005AF4'	
6904	01	01A1C	FFFF62EA	A		DATA	X'FFFF62EA'	
6905	01	01A1D	23248B08	A		DATA	X'23248B08'	
6906	01	01A1E	FFFFFFF6	A	MH08	DATA	=10	MH *X
6907	01	01A1F	D7D2045A			MH,13	*IA,1	
6908	01	01A20	073001C8			K	00,7,3,FXP8SW	
6909	01	01A21	27300169			K	2,7,3,L8C+2	
6910	01	01A22	00000001	A		DATA	1	
6911	01	01A23	0C000001	A		DATA	1	
6912	01	01A24	0000A50B	A		DATA	X'0000A50B'	
6913	01	01A25	0000A50B	A		DATA	X'0000A50B'	
6914	01	01A26	00009D15	A		DATA	X'00009D15'	
6915	01	01A27	232548E7	A		DATA	X'232548E7'	
6916						PAGE		
6917	01	01A28	FFFFFFF6	A	MI01	DATA	=10	MI
6918	01	01A29	23C42EFD	A		MI,12	X'42EFD'	
6919	01	01A2A	073001C8			K	00,7,3,FXP8SW	
6920	01	01A2B	57300169			K	5,7,3,L8C+2	
6921	01	01A2C	00000000	A		DATA	X'00000000'	
6922	01	01A2D	FFFFFFE994	A		DATA	X'FFFFFFE994'	
6923	01	01A2E	00000000	A		DATA	X'00000000'	
6924	01	01A2F	00000000	A		DATA	X'00000000'	
6925	01	01A30	FAA401EB	A		DATA	X'FAA401EB'	
6926	01	01A31	341A1F3F	A		DATA	X'341A1F3F'	
6927	01	01A32	FFFFFFF6	A	MI02	DATA	=10	MI
6928	01	01A33	23C6590D	A		MI,12	X'6590D'	
6929	01	01A34	073001C8			K	00,7,3,FXP8SW	
6930	01	01A35	67300169			K	6,7,3,L8C+2	
6931	01	01A36	00000000	A		DATA	X'00000000'	
6932	01	01A37	00015C36	A		DATA	X'00015C36'	
6933	01	01A38	00000000	A		DATA	X'00000000'	
6934	01	01A39	00000000	A		DATA	X'00000000'	
6935	01	01A3A	36DAE799	A		DATA	X'36DAE799'	
6936	01	01A3B	5137F3C5	A		DATA	X'5137F3C5'	
6937	01	01A3C	FFFFFFF6	A	MI03	DATA	=10	MI
6938	01	01A3D	23DA7646	A		MI,13	X'A7646'	
6939	01	01A3E	F73001C8			K	15,7,3,FXP8SW	
6940	01	01A3F	E7300169			K	14,7,3,L8C+2	
6941	01	01A40	00000000	A		DATA	X'00000000'	
6942	01	01A41	00000000	A		DATA	0	
6943	01	01A42	00000000	A		DATA	X'00000000'	
6944	01	01A43	00000000	A		DATA	X'00000000'	
6945	01	01A44	C5971488	A		DATA	X'C5971488'	
6946	01	01A45	2E8C7A50	A		DATA	X'2E8C7A50'	
6947						PAGE		
6948	01	01A46	FFFFFFF6	A	MI04	DATA	=10	MI
6949	01	01A47	23D5C9D2	A		MI,13	X'5C9D2'	
6950	01	01A48	F73001C8			K	15,7,3,FXP8SW	
6951	01	01A49	E7300169			K	14,7,3,L8C+2	
6952	01	01A4A	00000000	A		DATA	X'00000000'	
6953	01	01A4B	00000000	A		DATA	0	
6954	01	01A4C	00000000	A		DATA	X'00000000'	
6955	01	01A4D	00000000	A		DATA	X'00000000'	
6956	01	01A4E	26AB3F51	A		DATA	X'26AB3F51'	
6957	01	01A4F	69C58972	A		DATA	X'69C58972'	
6958	01	01A50	FFFFFFF6	A	MI05	DATA	=10	MI0
6959	01	01A51	23C44133	A		MI,12	X'44133'	
6960	01	01A52	F73001C8			K	15,7,3,FXP8SW	
6961	01	01A53	D7300169			K	13,7,3,L8C+2	
6962	01	01A54	00000000	A		DATA	X'00000000'	
6963	01	01A55	FFFE0253	A		DATA	X'FFFE0253'	
6964	01	01A56	00000000	A		DATA	X'00000000'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
6965	01	01A57	00000000	A		DATA	X'00000000'	
6966	01	01A58	88357F05	A		DATA	X'88357F05'	
6967	01	01A59	B3FC92FF	A		DATA	X'B3FC92FF'	
6968	01	01A5A	FFFFFFF6	A	M106	DATA	=10	MI
6969	01	01A5B	23CAE01A	A		MI,12	X'AE01A'	
6970	01	01A5C	F73001C8	A		K	15,7,3,FXP8SW	
6971	01	01A5D	E7300169	A		K	14,7,3,L8C+2	
6972	01	01A5E	00000000	A		DATA	X'00000000'	
6973	01	01A5F	00024888	A		DATA	X'00024888'	
6974	01	01A60	00000000	A		DATA	X'00000000'	
6975	01	01A61	00000000	A		DATA	X'00000000'	
6976	01	01A62	8DEF82D4	A		DATA	X'8DEF82D4'	
6977	01	01A63	EBD4C988	A		DATA	X'EBD4C988'	
6978						PAGE		
6979	01	01A64	FFFFFFF6	A	M107	DATA	=10	MI
6980	01	01A65	23D065D1	A		MI,13	X'065D1'	
6981	01	01A66	F73001C8	A		K	15,7,3,FXP8SW	
6982	01	01A67	D7300169	A		K	13,7,3,L8C+2	
6983	01	01A68	00000000	A		DATA	X'00000000'	
6984	01	01A69	00000000	A		DATA	0	
6985	01	01A6A	00000000	A		DATA	X'00000000'	
6986	01	01A6B	00000000	A		DATA	X'00000000'	
6987	01	01A6C	D93AE796	A		DATA	X'D93AE796'	
6988	01	01A6D	96753F76	A		DATA	X'96753F76'	
6989	01	01A6E	FFFFFFF6	A	M108	DATA	=10	MI
6990	01	01A6F	23D7B463	A		MI,13	X'7B463'	
6991	01	01A70	F73001C8	A		K	15,7,3,FXP8SW	
6992	01	01A71	D7300169	A		K	13,7,3,L8C+2	
6993	01	01A72	00000000	A		DATA	X'00000000'	
6994	01	01A73	00000000	A		DATA	0	
6995	01	01A74	00000000	A		DATA	X'00000000'	
6996	01	01A75	00000000	A		DATA	X'00000000'	
6997	01	01A76	8C594B71	A		DATA	X'8C594B71'	
6998	01	01A77	1FAAA0B3	A		DATA	X'1FAAA0B3'	
6999	01	01A78	FFFFFFFA	A	M109	DATA	=6	MI *
7000	01	01A79	A3C0045A	A		MI,12	*1A	
7001	01	01A7A	173001BC	A		K	1,7,3,S19NA8	
7002	01	01A7B	9730006B	A		K	9,7,3,NEIRET+1	
7003	01	01A7C	12345678	A		DATA	X'12345678'	
7004	01	01A7D	12345678	A		DATA	X'12345678'	
7005						PAGE		
7006	01	01A7E	FFFFFFF6	A	DW01	DATA	=10	NDO.RN * OVERFLOW
7007	01	01A7F	36C00460	A		DW,12	MEMORY	
7008	01	01A80	072001C8	A		K	0,7,2,FXP8SW	
7009	01	01A81	47200169	A		K	4,7,2,L8C+2	
7010	01	01A82	CF999999	A		DATA	X'CF999999'	
7011	01	01A83	CF999999	A		DATA	X'CF999999'	
7012	01	01A84	60000000	A		DATA	X'60000000'	
7013	01	01A85	60000000	A		DATA	X'60000000'	
7014	01	01A86	00000000	A		DATA	X'00000000'	
7015	01	01A87	00000000	A		DATA	X'00000000'	
7016	01	01A88	FFFFFFF6	A	DW02	DATA	=10	DO.NRN.NAZ.BWZ * OVERFLOW
7017	01	01A89	36C00460	A		DW,12	MEMORY	
7018	01	01A8A	F73001C8	A		K	15,7,3,FXP8SW	
7019	01	01A8B	F7300084	A		K	15,7,3,FP0RET+1	
7020	01	01A8C	60000000	A		DATA	X'60000000'	
7021	01	01A8D	60000000	A		DATA	X'60000000'	
7022	01	01A8E	BFFFFFFE	A		DATA	X'BFFFFFFE'	
7023	01	01A8F	BFFFFFFE	A		DATA	X'BFFFFFFE'	
7024	01	01A90	80000000	A		DATA	X'80000000'	
7025	01	01A91	80000000	A		DATA	X'80000000'	
7026	01	01A92	FFFFFFF6	A	DW03	DATA	=10	DO.NRN.NAZ.NBWZ * OVERFLOW
7027	01	01A93	36C00460	A		DW,12	MEMORY	
7028	01	01A94	F73001C8	A		K	15,7,3,FXP8SW	
7029	01	01A95	F7300084	A		K	15,7,3,FP0RET+1	
7030	01	01A96	3FFFFFFF	A		DATA	X'3FFFFFFF'	
7031	01	01A97	3FFFFFFF	A		DATA	X'3FFFFFFF'	
7032	01	01A98	7FFFFFFD	A		DATA	X'7FFFFFFD'	
7033	01	01A99	7FFFFFFD	A		DATA	X'7FFFFFFD'	
7034	01	01A9A	00000001	A		DATA	X'00000001'	
7035	01	01A9B	00000001	A		DATA	X'00000001'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
7036						PAGE		
7037	01	01A9C	FFFFFFF6	A	DW04	DATA	-10	DO-AZ,BWZ,MWN,RN = OVERFLOW
7038	01	01A9D	36C00460			DW,12	MEMORY	
7039	01	01A9E	F73001C8			K	15,7,3,FXP0SW	
7040	01	01A9F	F7300084			K	15,7,3,FP0RET+1	
7041	01	01AA0	C0000000	A		DATA	X'C0000000'	
7042	01	01AA1	C0000000	A		DATA	X'C0000000'	
7043	01	01AA2	80000000	A		DATA	X'80000000'	
7044	01	01AA3	80000000	A		DATA	X'80000000'	
7045	01	01AA4	00000000	A		DATA	X'00000000'	
7046	01	01AA5	00000000	A		DATA	X'00000000'	
7047	01	01AA6	FFFFFFF6	A	DW05	DATA	-10	DO-AZ,BWZ,NMWN,NRN = OVERFLOW
7048	01	01AA7	36C00460			DW,12	MEMORY	
7049	01	01AA8	F73001C8			K	15,7,3,FXP0SW	
7050	01	01AA9	F7300084			K	15,7,3,FP0RET+1	
7051	01	01AAA	40000000	A		DATA	X'40000000'	
7052	01	01AAB	40000000	A		DATA	X'40000000'	
7053	01	01AAC	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7054	01	01AAD	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7055	01	01AAE	80000000	A		DATA	X'80000000'	
7056	01	01AAF	80000000	A		DATA	X'80000000'	
7057	01	01AB0	FFFFFFF6	A	DW06	DATA	-10	DW
7058	01	01AB1	36C00460			DW,12	MEMORY	
7059	01	01AB2	F73001C8			K	15,7,3,FXP0SW	
7060	01	01AB3	A7300169			K	10,7,3,L0C+2	
7061	01	01AB4	3FFFFFFF	A		DATA	X'3FFFFFFF'	
7062	01	01AB5	00000000	A		DATA	X'00000000'	
7063	01	01AB6	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7064	01	01AB7	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7065	01	01AB8	00000001	A		DATA	X'00000001'	
7066	01	01AB9	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7067						PAGE		
7068	01	01ABA	FFFFFFF6	A	DW07	DATA	-10	DW
7069	01	01ABB	36C00460			DW,12	MEMORY	
7070	01	01ABC	F73001C8			K	15,7,3,FXP0SW	
7071	01	01ABD	97300169			K	9,7,3,L0C+2	
7072	01	01ABE	3FFFFFFF	A		DATA	X'3FFFFFFF'	
7073	01	01ABF	00000000	A		DATA	X'00000000'	
7074	01	01AC0	80000001	A		DATA	X'80000001'	
7075	01	01AC1	80000001	A		DATA	X'80000001'	
7076	01	01AC2	00000001	A		DATA	X'00000001'	
7077	01	01AC3	80000001	A		DATA	X'80000001'	
7078	01	01AC4	FFFFFFF6	A	DW08	DATA	-10	DW
7079	01	01AC5	36C00460			DW,12	MEMORY	
7080	01	01AC6	F73001C8			K	15,7,3,FXP0SW	
7081	01	01AC7	97300169			K	9,7,3,L0C+2	
7082	01	01AC8	E0000000	A		DATA	X'E0000000'	
7083	01	01AC9	C0000001	A		DATA	X'C0000001'	
7084	01	01ACA	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7085	01	01ACB	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7086	01	01ACC	FFFFFFF6	A		DATA	X'FFFFFFF6'	
7087	01	01ACD	C0000002	A		DATA	X'C0000002'	
7088	01	01ACE	FFFFFFF6	A	DW09	DATA	-10	DW
7089	01	01ACF	36C00460			DW,12	MEMORY	
7090	01	01AD0	F73001C8			K	15,7,3,FXP0SW	
7091	01	01AD1	A7300169			K	10,7,3,L0C+2	
7092	01	01AD2	C0000000	A		DATA	X'C0000000'	
7093	01	01AD3	00000000	A		DATA	X'00000000'	
7094	01	01AD4	80000001	A		DATA	X'80000001'	
7095	01	01AD5	80000001	A		DATA	X'80000001'	
7096	01	01AD6	FFFFFFF6	A		DATA	X'FFFFFFF6'	
7097	01	01AD7	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7098						PAGE		
7099	01	01AD8	FFFFFFF6	A	DW10	DATA	-10	DW
7100	01	01AD9	36C00460			DW,12	MEMORY	
7101	01	01ADA	F73001C8			K	15,7,3,FXP0SW	
7102	01	01ADB	A7300169			K	10,7,3,L0C+2	
7103	01	01ADC	FFFFFFF6	A		DATA	X'FFFFFFF6'	
7104	01	01ADD	FFFFFFFD	A		DATA	X'FFFFFFFD'	
7105	01	01ADE	FFFFFFFC	A		DATA	X'FFFFFFFC'	
7106	01	01ADF	FFFFFFFC	A		DATA	X'FFFFFFFC'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
7107	01	01AE0	FFFFFFE1	A		DATA	X'FFFFFFE1'	
7108	01	01AE1	00000007	A		DATA	X'00000007'	
7109	01	01AE2	FFFFFFF6	A	Dw11	DATA	-10	DW
7110	01	01AE3	36C00460			DW,12	MEMORY	
7111	01	01AE4	F73001C8			K	15,7,3,FXP8SW	
7112	01	01AE5	A7300169			K	10,7,3,L8C+2	
7113	01	01AE6	00000000	A		DATA	X'00000000'	
7114	01	01AE7	00000000	A		DATA	X'00000000'	
7115	01	01AE8	00000004	A		DATA	X'00000004'	
7116	01	01AE9	00000004	A		DATA	X'00000004'	
7117	01	01AEA	00000020	A		DATA	X'00000020'	
7118	01	01AEB	00000008	A		DATA	X'00000008'	
7119	01	01AEC	FFFFFFF6	A	Dw12	DATA	-10	DW
7120	01	01AED	36C00460			DW,12	MEMORY	
7121	01	01AEE	F73001C8			K	15,7,3,FXP8SW	
7122	01	01AEF	97300169			K	9,7,3,L8C+2	
7123	01	01AF0	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7124	01	01AF1	00000000	A		DATA	X'00000000'	
7125	01	01AF2	00000004	A		DATA	X'00000004'	
7126	01	01AF3	00000004	A		DATA	X'00000004'	
7127	01	01AF4	FFFFFFE0	A		DATA	X'FFFFFFE0'	
7128	01	01AF5	FFFFFFF8	A		DATA	X'FFFFFFF8'	
7129						PAGE		
7130	01	01AF6	FFFFFFF6	A	Dw13	DATA	-10	DW
7131	01	01AF7	36C00460			DW,12	MEMORY	
7132	01	01AF8	F73001C8			K	15,7,3,FXP8SW	
7133	01	01AF9	A7300169			K	10,7,3,L8C+2	
7134	01	01AFA	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7135	01	01AFB	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7136	01	01AFC	FFFFFFFB	A		DATA	X'FFFFFFFB'	
7137	01	01AFD	FFFFFFFB	A		DATA	X'FFFFFFFB'	
7138	01	01AFE	FFFFFFE1	A		DATA	X'FFFFFFE1'	
7139	01	01AFF	00000006	A		DATA	X'00000006'	
7140	01	01B00	FFFFFFF6	A	Dw14	DATA	-10	DW
7141	01	01B01	36C00460			DW,12	MEMORY	
7142	01	01B02	F73001C8			K	15,7,3,FXP8SW	
7143	01	01B03	97300169			K	9,7,3,L8C+2	
7144	01	01B04	00000000	A		DATA	X'00000000'	
7145	01	01B05	00000000	A		DATA	X'00000000'	
7146	01	01B06	FFFFFFFC	A		DATA	X'FFFFFFFC'	
7147	01	01B07	FFFFFFFC	A		DATA	X'FFFFFFFC'	
7148	01	01B08	00000020	A		DATA	X'00000020'	
7149	01	01B09	FFFFFFF8	A		DATA	X'FFFFFFF8'	
7150	01	01B0A	FFFFFFF6	A	Dw15	DATA	-10	DW
7151	01	01B0B	36C00460			DW,12	MEMORY	
7152	01	01B0C	F73001C8			K	15,7,3,FXP8SW	
7153	01	01B0D	97300169			K	9,7,3,L8C+2	
7154	01	01B0E	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7155	01	01B0F	FFFFFFFD	A		DATA	X'FFFFFFFD'	
7156	01	01B10	00000004	A		DATA	X'00000004'	
7157	01	01B11	00000004	A		DATA	X'00000004'	
7158	01	01B12	FFFFFFE1	A		DATA	X'FFFFFFE1'	
7159	01	01B13	FFFFFFF9	A		DATA	X'FFFFFFF9'	
7160						PAGE		
7161	01	01B14	FFFFFFF6	A	Dw16	DATA	-10	DW
7162	01	01B15	36C00460			DW,12	MEMORY	
7163	01	01B16	F73001C8			K	15,7,3,FXP8SW	
7164	01	01B17	A7300169			K	10,7,3,L8C+2	
7165	01	01B18	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7166	01	01B19	00000000	A		DATA	X'00000000'	
7167	01	01B1A	FFFFFFFC	A		DATA	X'FFFFFFFC'	
7168	01	01B1B	FFFFFFFC	A		DATA	X'FFFFFFFC'	
7169	01	01B1C	FFFFFFE0	A		DATA	X'FFFFFFE0'	
7170	01	01B1D	00000008	A		DATA	X'00000008'	
7171	01	01B1E	FFFFFFF6	A	Dw17	DATA	-10	DW
7172	01	01B1F	36C00460			DW,12	MEMORY	
7173	01	01B20	F73001C8			K	15,7,3,FXP8SW	
7174	01	01B21	A7300169			K	10,7,3,L8C+2	
7175	01	01B22	00000000	A		DATA	X'00000000'	
7176	01	01B23	00000003	A		DATA	X'00000003'	
7177	01	01B24	00000004	A		DATA	X'00000004'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
7178	01	01B25	00000004	A		DATA	X'00000004'	
7179	01	01B26	0000001F	A		DATA	X'0000001F'	
7180	01	01B27	00000007	A		DATA	X'00000007'	
7181	01	01B28	FFFFFFF6	A	DW18	DATA	-10	DW
7182	01	01B29	36C00460	A		DW,12	MEMORY	
7183	01	01B2A	F73001C8	A		K	15,7,3,FXP8SW	
7184	01	01B2B	A7300169	A		K	10,7,3,L8C+2	
7185	01	01B2C	15555555	A		DATA	X'15555555'	
7186	01	01B2D	00000000	A		DATA	X'00000000'	
7187	01	01B2E	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7188	01	01B2F	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7189	01	01B30	55555555	A		DATA	X'55555555'	
7190	01	01B31	2AAAAAAB	A		DATA	X'2AAAAAAB'	
7191						PAGE		
7192	01	01B32	FFFFFFF6	A	DW19	DATA	-10	DW
7193	01	01B33	36C00460	A		DW,12	MEMORY	
7194	01	01B34	F73001C8	A		K	15,7,3,FXP8SW	
7195	01	01B35	A7300169	A		K	10,7,3,L8C+2	
7196	01	01B36	31C3C1F0	A		DATA	X'31C3C1F0'	
7197	01	01B37	3CBA3128	A		DATA	X'3CBA3128'	
7198	01	01B38	79999999	A		DATA	X'79999999'	
7199	01	01B39	79999999	A		DATA	X'79999999'	
7200	01	01B3A	11111111	A		DATA	X'11111111'	
7201	01	01B3B	68C48AD1	A		DATA	X'68C48AD1'	
7202	01	01B3C	FFFFFFF6	A	DW20	DATA	-10	DW
7203	01	01B3D	36C00460	A		DW,12	MEMORY	
7204	01	01B3E	F73001C8	A		K	15,7,3,FXP8SW	
7205	01	01B3F	97300169	A		K	9,7,3,L8C+2	
7206	01	01B40	FC7CF1CC	A		DATA	X'FC7CF1CC'	
7207	01	01B41	FAAAAAAA	A		DATA	X'FAAAAAAA'	
7208	01	01B42	70000000	A		DATA	X'70000000'	
7209	01	01B43	70000000	A		DATA	X'70000000'	
7210	01	01B44	AAAAAAAAAA	A		DATA	X'AAAAAAAAAA'	
7211	01	01B45	F7F9041D	A		DATA	X'F7F9041D'	
7212	01	01B46	FFFFFFF6	A	DW21	DATA	-10	DW
7213	01	01B47	36C00460	A		DW,12	MEMORY	
7214	01	01B48	F73001C8	A		K	15,7,3,FXP8SW	
7215	01	01B49	97300169	A		K	9,7,3,L8C+2	
7216	01	01B4A	31111111	A		DATA	X'31111111'	
7217	01	01B4B	584D7750	A		DATA	X'584D7750'	
7218	01	01B4C	84444444	A		DATA	X'84444444'	
7219	01	01B4D	84444444	A		DATA	X'84444444'	
7220	01	01B4E	59C61C18	A		DATA	X'59C61C18'	
7221	01	01B4F	9A7B9612	A		DATA	X'9A7B9612'	
7222						PAGE		
7223	01	01B50	FFFFFFF6	A	DW22	DATA	-10	DW
7224	01	01B51	36C00460	A		DW,12	MEMORY	
7225	01	01B52	F73001C8	A		K	15,7,3,FXP8SW	
7226	01	01B53	97300169	A		K	9,7,3,L8C+2	
7227	01	01B54	D6666666	A		DATA	X'D6666666'	
7228	01	01B55	BE7E7E7E	A		DATA	X'BE7E7E7E'	
7229	01	01B56	7EEEEEEE	A		DATA	X'7EEEEEEE'	
7230	01	01B57	7EEEEEEE	A		DATA	X'7EEEEEEE'	
7231	01	01B58	66666666	A		DATA	X'66666666'	
7232	01	01B59	AC19D0AC	A		DATA	X'AC19D0AC'	
7233	01	01B5A	FFFFFFF6	A	DW23	DATA	-10	DW
7234	01	01B5B	36C00460	A		DW,12	MEMORY	
7235	01	01B5C	F73001C8	A		K	15,7,3,FXP8SW	
7236	01	01B5D	A7300169	A		K	10,7,3,L8C+2	
7237	01	01B5E	F1C3C731	A		DATA	X'F1C3C731'	
7238	01	01B5F	ED42FD57	A		DATA	X'ED42FD57'	
7239	01	01B60	84444444	A		DATA	X'84444444'	
7240	01	01B61	84444444	A		DATA	X'84444444'	
7241	01	01B62	3F01FC03	A		DATA	X'3F01FC03'	
7242	01	01B63	1073C4FB	A		DATA	X'1073C4FB'	
7243	01	01B64	FFFFFFF6	A	DW24	DATA	-10	DW
7244	01	01B65	36C00460	A		DW,12	MEMORY	
7245	01	01B66	F73001C8	A		K	15,7,3,FXP8SW	
7246	01	01B67	A7300169	A		K	10,7,3,L8C+2	
7247	01	01B68	36666666	A		DATA	X'36666666'	
7248	01	01B69	75555555	A		DATA	X'75555555'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL I G	LABEL	OPERATION	OPERAND	COMMENTS
7249	01	01B6A	7EEEEEEE	A		DATA	X'7EEEEEEE'	
7250	01	01B6B	7EEEEEEE	A		DATA	X'7EEEEEEE'	
7251	01	01B6C	99999999	A		DATA	X'99999999'	
7252	01	01B6D	6DB6DB6E	A		DATA	X'6DB6DB6E'	
7253						PAGE		
7254	01	01B6E	FFFFFFF6	A	DW25	DATA	=10	DW
7255	01	01B6F	36C00460			DW,12	MEMORY	
7256	01	01B70	F73001C8			K	15,7,3,FXP0SW	
7257	01	01B71	A7300169			K	10,7,3,L0C+2	
7258	01	01B72	27777777	A		DATA	X'27777777'	
7259	01	01B73	6DB53C70	A		DATA	X'6DB53C70'	
7260	01	01B74	70000000	A		DATA	X'70000000'	
7261	01	01B75	70000000	A		DATA	X'70000000'	
7262	01	01B76	CDB53C70	A		DATA	X'CDB53C70'	
7263	01	01B77	5A35A35A	A		DATA	X'5A35A35A'	
7264	01	01B78	FFFFFFF6	A	DW26	DATA	=10	DW
7265	01	01B79	36C00460			DW,12	MEMORY	
7266	01	01B7A	F73001C8			K	15,7,3,FXP0SW	
7267	01	01B7B	97300169			K	9,7,3,L0C+2	
7268	01	01B7C	31C3C1F0	A		DATA	X'31C3C1F0'	
7269	01	01B7D	44D906D0	A		DATA	X'44D906D0'	
7270	01	01B7E	85555555	A		DATA	X'85555555'	
7271	01	01B7F	85555555	A		DATA	X'85555555'	
7272	01	01B80	77777777	A		DATA	X'77777777'	
7273	01	01B81	9824AE0B	A		DATA	X'9824AE0B'	
7274	01	01B82	FFFFFFF6	A	DW27	DATA	=10	DW
7275	01	01B83	36C00460			DW,12	MEMORY	
7276	01	01B84	F73001C8			K	15,7,3,FXP0SW	
7277	01	01B85	97300169			K	9,7,3,L0C+2	
7278	01	01B86	D6666666	A		DATA	X'D6666666'	
7279	01	01B87	C45C85B4	A		DATA	X'C45C85B4'	
7280	01	01B88	79999999	A		DATA	X'79999999'	
7281	01	01B89	79999999	A		DATA	X'79999999'	
7282	01	01B8A	DF4F3C70	A		DATA	X'DF4F3C70'	
7283	01	01B8B	A86BCA1C	A		DATA	X'A86BCA1C'	
7284						PAGE		
7285	01	01B8C	FFFFFFF6	A	DW28	DATA	=10	DW
7286	01	01B8D	36C00460			DW,12	MEMORY	
7287	01	01B8E	F73001C8			K	15,7,3,FXP0SW	
7288	01	01B8F	97300169			K	9,7,3,L0C+2	
7289	01	01B90	15555555	A		DATA	X'15555555'	
7290	01	01B91	4FB8CDB4	A		DATA	X'4FB8CDB4'	
7291	01	01B92	82222222	A		DATA	X'82222222'	
7292	01	01B93	82222222	A		DATA	X'82222222'	
7293	01	01B94	59C61C18	A		DATA	X'59C61C18'	
7294	01	01B95	D49C3412	A		DATA	X'D49C3412'	
7295	01	01B96	FFFFFFF6	A	DW29	DATA	=10	DW
7296	01	01B97	36C00460			DW,12	MEMORY	
7297	01	01B98	F73001C8			K	15,7,3,FXP0SW	
7298	01	01B99	97300169			K	9,7,3,L0C+2	
7299	01	01B9A	021871E7	A		DATA	X'021871E7'	
7300	01	01B9B	09CE9631	A		DATA	X'09CE9631'	
7301	01	01B9C	83333333	A		DATA	X'83333333'	
7302	01	01B9D	83333333	A		DATA	X'83333333'	
7303	01	01B9E	77777777	A		DATA	X'77777777'	
7304	01	01B9F	FBB399A2	A		DATA	X'FBB399A2'	
7305	01	01BA0	FFFFFFF6	A	DW30	DATA	=10	DW
7306	01	01BA1	36C00460			DW,12	MEMORY	
7307	01	01BA2	F73001C8			K	15,7,3,FXP0SW	
7308	01	01BA3	A7300169			K	10,7,3,L0C+2	
7309	01	01BA4	E1111111	A		DATA	X'E1111111'	
7310	01	01BA5	BA64966C	A		DATA	X'BA64966C'	
7311	01	01BA6	87777777	A		DATA	X'87777777'	
7312	01	01BA7	87777777	A		DATA	X'87777777'	
7313	01	01BA8	AAAAAAAA	A		DATA	X'AAAAAAAA'	
7314	01	01BA9	41B2F932	A		DATA	X'41B2F932'	
7315						PAGE		
7316	01	01BAA	FFFFFFF6	A	DW31	DATA	=10	DW
7317	01	01BAB	36C00460			DW,12	MEMORY	
7318	01	01BAC	F73001C8			K	15,7,3,FXP0SW	
7319	01	01BAD	97300169			K	9,7,3,L0C+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
7320	01	01BAE	FC7CF1CC	A		DATA	X'FC7CF1CC'	
7321	01	01BAF	88E1079C	A		DATA	X'88E1079C'	
7322	01	01BB0	7EEEEEEE	A		DATA	X'7EEEEEEE'	
7323	01	01BB1	7EEEEEEE	A		DATA	X'7EEEEEEE'	
7324	01	01BB2	CD5B3C70	A		DATA	X'CD5B3C70'	
7325	01	01BB3	F8EAC766	A		DATA	X'F8EAC766'	
7326	01	01BB4	FFFFFFF6	A	DW32	DATA	-10	DW *
7327	01	01BB5	B6C0045A	A		DW,12	*1A	
7328	01	01BB6	F73001C8	A		K	15,7,3,FXP8SW	
7329	01	01BB7	A7300169	A		K	10,7,3,L8C+2	
7330	01	01BB8	15555555	A		DATA	X'15555555'	
7331	01	01BB9	11111111	A		DATA	X'11111111'	
7332	01	01BBA	70000000	A		DATA	X'70000000'	
7333	01	01BBB	70000000	A		DATA	X'70000000'	
7334	01	01BBC	11111111	A		DATA	X'11111111'	
7335	01	01BBD	30C30C30	A		DATA	X'30C30C30'	
7336	01	01BBE	FFFFFFF6	A	DW33	DATA	-10	DW X
7337	01	01BBF	36C2F34F	A		DW,12	MEMORY=X'111111',1	
7338	01	01BC0	F73001C8	A		K	15,7,3,FXP8SW	
7339	01	01BC1	97300169	A		K	9,7,3,L8C+2	
7340	01	01BC2	31111111	A		DATA	X'31111111'	
7341	01	01BC3	1E4D06CC	A		DATA	X'1E4D06CC'	
7342	01	01BC4	87777777	A		DATA	X'87777777'	
7343	01	01BC5	87777777	A		DATA	X'87777777'	
7344	01	01BC6	22222222	A		DATA	X'22222222'	
7345	01	01BC7	97C9A0DA	A		DATA	X'97C9A0DA'	
7346						PAGE		
7347	01	01BC8	FFFFFFF6	A	DW34	DATA	-10	DW
7348	01	01BC9	36C00460	A		DW,12	MEMORY	
7349	01	01BCA	F73001C8	A		K	15,7,3,FXP8SW	
7350	01	01BCB	97300169	A		K	9,7,3,L8C+2	
7351	01	01BCC	D6666666	A		DATA	X'D6666666'	
7352	01	01BCD	93521CFB	A		DATA	X'93521CFB'	
7353	01	01BCE	71111111	A		DATA	X'71111111'	
7354	01	01BCF	71111111	A		DATA	X'71111111'	
7355	01	01BD0	33333333	A		DATA	X'33333333'	
7356	01	01BD1	A1CFB2B8	A		DATA	X'A1CFB2B8'	
7357	01	01BD2	FFFFFFF6	A	DW35	DATA	-10	DW
7358	01	01BD3	36C00460	A		DW,12	MEMORY	
7359	01	01BD4	F73001C8	A		K	15,7,3,FXP8SW	
7360	01	01BD5	97300169	A		K	9,7,3,L8C+2	
7361	01	01BD6	36666666	A		DATA	X'36666666'	
7362	01	01BD7	274B2F83	A		DATA	X'274B2F83'	
7363	01	01BD8	89999999	A		DATA	X'89999999'	
7364	01	01BD9	89999999	A		DATA	X'89999999'	
7365	01	01BDA	44444444	A		DATA	X'44444444'	
7366	01	01BDB	8A60DD69	A		DATA	X'8A60DD69'	
7367	01	01BDC	FFFFFFF6	A	DW36	DATA	-10	DW
7368	01	01BDD	36C00460	A		DW,12	MEMORY	
7369	01	01BDE	F73001C8	A		K	15,7,3,FXP8SW	
7370	01	01BD0F	A7300169	A		K	10,7,3,L8C+2	
7371	01	01BEO	021871E7	A		DATA	X'021871E7'	
7372	01	01BE1	48888888	A		DATA	X'48888888'	
7373	01	01BE2	70000000	A		DATA	X'70000000'	
7374	01	01BE3	70000000	A		DATA	X'70000000'	
7375	01	01BE4	8E888888	A		DATA	X'8E888888'	
7376	01	01BE5	04CA28EC	A		DATA	X'04CA28EC'	
7377						PAGE		
7378	01	01BE6	FFFFFFF6	A	DW37	DATA	-10	DW
7379	01	01BE7	36C00460	A		DW,12	MEMORY	
7380	01	01BE8	F73001C8	A		K	15,7,3,FXP8SW	
7381	01	01BE9	A7300169	A		K	10,7,3,L8C+2	
7382	01	01BEA	E1111111	A		DATA	X'E1111111'	
7383	01	01BEB	CB75A77D	A		DATA	X'CB75A77D'	
7384	01	01BEC	87777777	A		DATA	X'87777777'	
7385	01	01BED	87777777	A		DATA	X'87777777'	
7386	01	01BEE	BBBBBBBB	A		DATA	X'BBBBBBBB'	
7387	01	01BEF	41B2F932	A		DATA	X'41B2F932'	
7388	01	01BF0	FFFFFFF6	A	DW38	DATA	-10	DW
7389	01	01BF1	36C00460	A		DW,12	MEMORY	
7390	01	01BF2	F73001C8	A		K	15,7,3,FXP8SW	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
7391	01	01BF3	97300169			K	9,7,3,L8C+2	
7392	01	01BF4	F1C3C731	A		DATA	X'F1C3C731'	
7393	01	01BF5	E79E5F51	A		DATA	X'E79E5F51'	
7394	01	01BF6	79999999	A		DATA	X'79999999'	
7395	01	01BF7	79999999	A		DATA	X'79999999'	
7396	01	01BF8	CCCCCCCC	A		DATA	X'CCCCCCCC'	
7397	01	01BF9	E207F433	A		DATA	X'E207F433'	
7398	01	01BFA	FFFFFFFF	A	DW39	DATA	=10	DW
7399	01	01BFB	36C00460			DW,12	MEMORY	
7400	01	01BFC	F73001C8			K	15,7,3,FXP8SW	
7401	01	01BFD	A7300169			K	10,7,3,L8C+2	
7402	01	01BFE	00000000	A		DATA	X'00000000'	
7403	01	01BFF	00000000	A		DATA	X'00000000'	
7404	01	01C00	00000001	A		DATA	X'00000001'	
7405	01	01C01	00000001	A		DATA	X'00000001'	
7406	01	01C02	00000002	A		DATA	X'00000002'	
7407	01	01C03	00000002	A		DATA	X'00000002'	
7408						PAGE		
7409	01	01C04	FFFFFFFF	A	DW40	DATA	=10	DW
7410	01	01C05	36C00460			DW,12	MEMORY	
7411	01	01C06	F73001C8			K	15,7,3,FXP8SW	
7412	01	01C07	A7300169			K	10,7,3,L8C+2	
7413	01	01C08	00000000	A		DATA	X'00000000'	
7414	01	01C09	00000000	A		DATA	X'00000000'	
7415	01	01C0A	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7416	01	01C0B	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7417	01	01C0C	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7418	01	01C0D	00000001	A		DATA	X'00000001'	
7419	01	01C0E	FFFFFFFF	A	DW41	DATA	=10	DW
7420	01	01C0F	36C00460			DW,12	MEMORY	
7421	01	01C10	F73001C8			K	15,7,3,FXP8SW	
7422	01	01C11	A7300169			K	10,7,3,L8C+2	
7423	01	01C12	00000000	A		DATA	X'00000000'	
7424	01	01C13	00000000	A		DATA	X'00000000'	
7425	01	01C14	00000001	A		DATA	X'00000001'	
7426	01	01C15	00000001	A		DATA	X'00000001'	
7427	01	01C16	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7428	01	01C17	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7429	01	01C18	FFFFFFFF	A	DW42	DATA	=10	DW
7430	01	01C19	36C00460			DW,12	MEMORY	
7431	01	01C1A	F73001C8			K	15,7,3,FXP8SW	
7432	01	01C1B	A7300169			K	10,7,3,L8C+2	
7433	01	01C1C	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7434	01	01C1D	00000000	A		DATA	X'00000000'	
7435	01	01C1E	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7436	01	01C1F	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7437	01	01C20	FFFFFFFFE	A		DATA	X'FFFFFFFFE'	
7438	01	01C21	00000002	A		DATA	X'00000002'	
7439						PAGE		
7440	01	01C22	FFFFFFFF	A	DW43	DATA	=10	DW
7441	01	01C23	36C00460			DW,12	MEMORY	
7442	01	01C24	F73001C8			K	15,7,3,FXP8SW	
7443	01	01C25	F7300169			K	10,7,3,L8C+2	
7444	01	01C26	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7445	01	01C27	00000000	A		DATA	X'00000000'	
7446	01	01C28	80000001	A		DATA	X'80000001'	
7447	01	01C29	80000001	A		DATA	X'80000001'	
7448	01	01C2A	80000001	A		DATA	X'80000001'	
7449	01	01C2B	00000001	A		DATA	X'00000001'	
7450	01	01C2C	FFFFFFFF	A	DW44	DATA	=10	DW
7451	01	01C2D	36C00460			DW,12	MEMORY	
7452	01	01C2E	F73001C8			K	15,7,3,FXP8SW	
7453	01	01C2F	A7300169			K	10,7,3,L8C+2	
7454	01	01C30	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7455	01	01C31	00000000	A		DATA	X'00000000'	
7456	01	01C32	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7457	01	01C33	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7458	01	01C34	80000001	A		DATA	X'80000001'	
7459	01	01C35	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7460	01	01C36	FFFFFFFF	A	DW45	DATA	=10	DW
7461	01	01C37	36C00460			DW,12	MEMORY	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
7462	01	01C38	F73001C8			K	15,7,3,FXP8SW	
7463	01	01C39	97300169			K	9,7,3,L8C+2	
7464	01	01C3A	00000000	A		DATA	X'00000000'	
7465	01	01C3B	00000000	A		DATA	X'00000000'	
7466	01	01C3C	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7467	01	01C3D	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7468	01	01C3E	00000002	A		DATA	X'00000002'	
7469	01	01C3F	FFFFFFFFE	A		DATA	X'FFFFFFFFE'	
7470						PAGE		
7471	01	01C40	FFFFFFFF6	A	DW46	DATA	=10	DW
7472	01	01C41	36C00460			DW,12	MEMORY	
7473	01	01C42	F73001C8			K	15,7,3,FXP8SW	
7474	01	01C43	97300169			K	9,7,3,L8C+2	
7475	01	01C44	00000000	A		DATA	X'00000000'	
7476	01	01C45	00000000	A		DATA	X'00000000'	
7477	01	01C46	80000001	A		DATA	X'80000001'	
7478	01	01C47	80000001	A		DATA	X'80000001'	
7479	01	01C48	7FFFFFFFF	A		DATA	X'7FFFFFFFF'	
7480	01	01C49	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7481	01	01C4A	FFFFFFFF6	A	DW47	DATA	=10	DW
7482	01	01C4B	36C00460			DW,12	MEMORY	
7483	01	01C4C	F73001C8			K	15,7,3,FXP8SW	
7484	01	01C4D	97300169			K	9,7,3,L8C+2	
7485	01	01C4E	00000000	A		DATA	X'00000000'	
7486	01	01C4F	00000000	A		DATA	X'00000000'	
7487	01	01C50	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7488	01	01C51	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7489	01	01C52	7FFFFFFFF	A		DATA	X'7FFFFFFFF'	
7490	01	01C53	80000001	A		DATA	X'80000001'	
7491	01	01C54	FFFFFFFF6	A	DW48	DATA	=10	DW
7492	01	01C55	36C00460			DW,12	MEMORY	
7493	01	01C56	F73001C8			K	15,7,3,FXP8SW	
7494	01	01C57	97300169			K	9,7,3,L8C+2	
7495	01	01C58	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7496	01	01C59	00000000	A		DATA	X'00000000'	
7497	01	01C5A	00000001	A		DATA	X'00000001'	
7498	01	01C5B	00000001	A		DATA	X'00000001'	
7499	01	01C5C	FFFFFFFFE	A		DATA	X'FFFFFFFFE'	
7500	01	01C5D	FFFFFFFFE	A		DATA	X'FFFFFFFFE'	
7501						PAGE		
7502	01	01C5E	FFFFFFFF6	A	DW49	DATA	=10	DW
7503	01	01C5F	36C00460			DW,12	MEMORY	
7504	01	01C60	F73001C8			K	15,7,3,FXP8SW	
7505	01	01C61	97300169			K	9,7,3,L8C+2	
7506	01	01C62	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7507	01	01C63	00000000	A		DATA	X'00000000'	
7508	01	01C64	7FFFFFFFF	A		DATA	X'7FFFFFFFF'	
7509	01	01C65	7FFFFFFFF	A		DATA	X'7FFFFFFFF'	
7510	01	01C66	80000001	A		DATA	X'80000001'	
7511	01	01C67	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7512	01	01C68	FFFFFFFF6	A	DW50	DATA	=10	DW
7513	01	01C69	36C00460			DW,12	MEMORY	
7514	01	01C6A	F73001C8			K	15,7,3,FXP8SW	
7515	01	01C6B	97300169			K	9,7,3,L8C+2	
7516	01	01C6C	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7517	01	01C6D	00000000	A		DATA	X'00000000'	
7518	01	01C6E	00000001	A		DATA	X'00000001'	
7519	01	01C6F	00000001	A		DATA	X'00000001'	
7520	01	01C70	80000001	A		DATA	X'80000001'	
7521	01	01C71	80000001	A		DATA	X'80000001'	
7522	01	01C72	FFFFFFFF6	A	DW51	DATA	=10	DW
7523	01	01C73	36C00460			DW,12	MEMORY	
7524	01	01C74	F73001C8			K	15,7,3,FXP8SW	
7525	01	01C75	A7300169			K	10,7,3,L8C+2	
7526	01	01C76	01234567	A		DATA	X'01234567'	
7527	01	01C77	0DD441AF	A		DATA	X'0DD441AF'	
7528	01	01C78	42468ACE	A		DATA	X'42468ACE'	
7529	01	01C79	42468ACE	A		DATA	X'42468ACE'	
7530	01	01C7A	89ABCDEF	A		DATA	X'89ABCDEF'	
7531	01	01C7B	046514E0	A		DATA	X'046514E0'	
7532						PAGE		

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
7533	01	01C7C	FFFFFFF6	A	DW52	DATA	-10	DW
7534	01	01C7D	36C00460			DW,12	MEMORY	
7535	01	01C7E	F73001C8			K	15,7,3,FXP0SW	
7536	01	01C7F	A7300169			K	10,7,3,L0C+2	
7537	01	01C80	258BE147	A		DATA	X'258BE147'	
7538	01	01C81	55A20A6F	A		DATA	X'55A20A6F'	
7539	01	01C82	56AE37BF	A		DATA	X'56AE37BF'	
7540	01	01C83	56AE37BF	A		DATA	X'56AE37BF'	
7541	01	01C84	AD0369CF	A		DATA	X'AD0369CF'	
7542	01	01C85	6EE378A0	A		DATA	X'6EE378A0'	
7543	01	01C86	FFFFFFF6	A	DW53	DATA	-10	DW
7544	01	01C87	36C00460			DW,12	MEMORY	
7545	01	01C88	F73001C8			K	15,7,3,FXP0SW	
7546	01	01C89	F7300084			K	15,7,3,FP0RET+1	
7547	01	01C8A	DF1357BD	A		DATA	X'DF1357BD'	
7548	01	01C8B	DF1357BD	A		DATA	X'DF1357BD'	
7549	01	01C8C	E13579BD	A		DATA	X'E13579BD'	
7550	01	01C8D	E13579BD	A		DATA	X'E13579BD'	
7551	01	01C8E	F2468ACE	A		DATA	X'F2468ACE'	
7552	01	01C8F	F2468ACE	A		DATA	X'F2468ACE'	
7553	01	01C90	FFFFFFF6	A	DW54	DATA	-10	DW
7554	01	01C91	36C00460			DW,12	MEMORY	
7555	01	01C92	F73001C8			K	15,7,3,FXP0SW	
7556	01	01C93	A7300169			K	10,7,3,L0C+2	
7557	01	01C94	E26AE38D	A		DATA	X'E26AE38D'	
7558	01	01C95	92D13AE2	A		DATA	X'92D13AE2'	
7559	01	01C96	8147AD03	A		DATA	X'8147AD03'	
7560	01	01C97	8147AD03	A		DATA	X'8147AD03'	
7561	01	01C98	27C16B05	A		DATA	X'27C16B05'	
7562	01	01C99	3BC33661	A		DATA	X'3BC33661'	
7563						PAGE		
7564	01	01C9A	FFFFFFF6	A	DW55	DATA	-10	DW
7565	01	01C9B	36C00460			DW,12	MEMORY	
7566	01	01C9C	F73001C8			K	15,7,3,FXP0SW	
7567	01	01C9D	F7300084			K	15,7,3,FP0RET+1	
7568	01	01C9E	148BF37B	A		DATA	X'148BF37B'	
7569	01	01C9F	148BF37B	A		DATA	X'148BF37B'	
7570	01	01CA0	E26AF49F	A		DATA	X'E26AF49F'	
7571	01	01CA1	E26AF49F	A		DATA	X'E26AF49F'	
7572	01	01CA2	F37BF49E	A		DATA	X'F37BF49E'	
7573	01	01CA3	F37BF49E	A		DATA	X'F37BF49E'	
7574	01	01CA4	FFFFFFF6	A	DW56	DATA	-10	DW
7575	01	01CA5	36C00460			DW,12	MEMORY	
7576	01	01CA6	F73001C8			K	15,7,3,FXP0SW	
7577	01	01CA7	97300169			K	9,7,3,L0C+2	
7578	01	01CA8	F0259E49	A		DATA	X'F0259E49'	
7579	01	01CA9	DBE59C60	A		DATA	X'DBE59C60'	
7580	01	01CAA	457AE39F	A		DATA	X'457AE39F'	
7581	01	01CAB	457AE39F	A		DATA	X'457AE39F'	
7582	01	01CAC	ABE159F0	A		DATA	X'ABE159F0'	
7583	01	01CAD	C596D870	A		DATA	X'C596D870'	
7584	01	01CAE	FFFFFFF6	A	DW57	DATA	-10	DW
7585	01	01CAF	36C00460			DW,12	MEMORY	
7586	01	01CB0	F73001C8			K	15,7,3,FXP0SW	
7587	01	01CB1	97300169			K	9,7,3,L0C+2	
7588	01	01CB2	00000000	A		DATA	X'00000000'	
7589	01	01CB3	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7590	01	01CB4	80000000	A		DATA	X'80000000'	
7591	01	01CB5	80000000	A		DATA	X'80000000'	
7592	01	01CB6	FFFFFFF6	A		DATA	X'FFFFFFF6'	
7593	01	01CB7	FFFFFFF6	A		DATA	X'FFFFFFF6'	
7594						PAGE		
7595	01	01CB8	FFFFFFF6	A	DW58	DATA	-10	DW
7596	01	01CB9	36C00460			DW,12	MEMORY	
7597	01	01CBA	F73001C8			K	15,7,3,FXP0SW	
7598	01	01CBB	A7300169			K	10,7,3,L0C+2	
7599	01	01CBC	C0000000	A		DATA	X'C0000000'	
7600	01	01CBD	80000001	A		DATA	X'80000001'	
7601	01	01CBE	80000000	A		DATA	X'80000000'	
7602	01	01CBF	80000000	A		DATA	X'80000000'	
7603	01	01CC0	00000001	A		DATA	X'00000001'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
7604	01	01CC1	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7605	01	01CC2	FFFFFFF6	A	DW59	DATA	-10	DW
7606	01	01CC3	36C00460			DW,12	MEMORY	
7607	01	01CC4	F73001C8			K	15,7,3,FXP8SW	
7608	01	01CC5	A7300169			K	10,7,3,L8C+2	
7609	01	01CC6	F0000000	A		DATA	X'F0000000'	
7610	01	01CC7	00000000	A		DATA	X'00000000'	
7611	01	01CC8	80000000	A		DATA	X'80000000'	
7612	01	01CC9	80000000	A		DATA	X'80000000'	
7613	01	01CCA	00000000	A		DATA	X'00000000'	
7614	01	01CCB	20000000	A		DATA	X'20000000'	
7615	01	01CCC	FFFFFFF6	A	DW60	DATA	-10	DW
7616	01	01CCD	36C00460			DW,12	MEMORY	
7617	01	01CCE	B73001C8			K	11,7,3,FXP8SW	
7618	01	01CCF	F7300084			K	15,7,3,FP8RET+1	
7619	01	01CD0	30000000	A		DATA	X'30000000'	
7620	01	01CD1	30000000	A		DATA	X'30000000'	
7621	01	01CD2	A0000000	A		DATA	X'A0000000'	
7622	01	01CD3	A0000000	A		DATA	X'A0000000'	
7623	01	01CD4	00000001	A		DATA	X'00000001'	
7624	01	01CD5	00000001	A		DATA	X'00000001'	
7625						PAGE		
7626	01	01CD6	FFFFFFF6	A	DW61	DATA	-10	DW
7627	01	01CD7	36C00460			DW,12	MEMORY	
7628	01	01CD8	F73001C8			K	15,7,3,FXP8SW	
7629	01	01CD9	97300169			K	9,7,3,L8C+2	
7630	01	01CDA	28CE5BDF	A		DATA	X'28CE5BDF'	
7631	01	01CDB	006C9928	A		DATA	X'006C9928'	
7632	01	01CDC	8ACE9FBD	A		DATA	X'8ACE9FBD'	
7633	01	01CDD	8ACE9FBD	A		DATA	X'8ACE9FBD'	
7634	01	01CDE	5A3E6E7F	A		DATA	X'5A3E6E7F'	
7635	01	01CDF	A6DCA0A3	A		DATA	X'A6DCA0A3'	
7636	01	01CE0	FFFFFFF6	A	DW62	DATA	-10	DW
7637	01	01CE1	36C00460			DW,12	MEMORY	
7638	01	01CE2	F73001C8			K	15,7,3,FXP8SW	
7639	01	01CE3	97300169			K	9,7,3,L8C+2	
7640	01	01CE4	28E45B17	A		DATA	X'28E45B17'	
7641	01	01CE5	4F57573B	A		DATA	X'4F57573B'	
7642	01	01CE6	A13BF37D	A		DATA	X'A13BF37D'	
7643	01	01CE7	A13BF37D	A		DATA	X'A13BF37D'	
7644	01	01CE8	A09CD39F	A		DATA	X'A09CD39F'	
7645	01	01CE9	9188D334	A		DATA	X'9188D334'	
7646	01	01CEA	FFFFFFF6	A	DW63	DATA	-10	DW
7647	01	01CEB	36C00460			DW,12	MEMORY	
7648	01	01CEC	F73001C8			K	15,7,3,FXP8SW	
7649	01	01CED	A7300169			K	10,7,3,L8C+2	
7650	01	01CEE	FE8C26AE	A		DATA	X'FE8C26AE'	
7651	01	01CEF	F86A5FFC	A		DATA	X'F86A5FFC'	
7652	01	01CF0	F67B159D	A		DATA	X'F67B159D'	
7653	01	01CF1	F67B159D	A		DATA	X'F67B159D'	
7654	01	01CF2	F4A017D3	A		DATA	X'F4A017D3'	
7655	01	01CF3	27102303	A		DATA	X'27102303'	
7656						PAGE		
7657	01	01CF4	FFFFFFF6	A	DW64	DATA	-10	DW
7658	01	01CF5	36C00460			DW,12	MEMORY	
7659	01	01CF6	F73001C8			K	15,7,3,FXP8SW	
7660	01	01CF7	97300169			K	9,7,3,L8C+2	
7661	01	01CF8	E6E82A3D	A		DATA	X'E6E82A3D'	
7662	01	01CF9	C0DD5EE4	A		DATA	X'C0DD5EE4'	
7663	01	01CFA	78F74B3B	A		DATA	X'78F74B3B'	
7664	01	01CFB	78F74B3B	A		DATA	X'78F74B3B'	
7665	01	01CFC	2C607185	A		DATA	X'2C607185'	
7666	01	01CFD	CAE54163	A		DATA	X'CAE54163'	
7667	01	01CFE	FFFFFFF6	A	DW65	DATA	-10	DW
7668	01	01CFF	36C00460			DW,12	MEMORY	
7669	01	01D00	F73001C8			K	15,7,3,FXP8SW	
7670	01	01D01	A7300169			K	10,7,3,L8C+2	
7671	01	01D02	F7F93B4E	A		DATA	X'F7F93B4E'	
7672	01	01D03	F2D2BD30	A		DATA	X'F2D2BD30'	
7673	01	01D04	E6F22A4F	A		DATA	X'E6F22A4F'	
7674	01	01D05	E6F22A4F	A		DATA	X'E6F22A4F'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
7675	01	01D06	47E95A3F	A		DATA	X'47E95A3F'	
7676	01	01D07	52037141	A		DATA	X'52037141'	
7677	01	01D08	FFFFFFF6	A	DW66	DATA	-10	DW
7678	01	01D09	36C00460			DW,12	MEMORY	
7679	01	01D0A	F73001C8			K	15,7,3,FXP0SW	
7680	01	01D0B	97300169			K	9,7,3,L0C+2	
7681	01	01D0C	F29405E9	A		DATA	X'F29405E9'	
7682	01	01D0D	EDA31B94	A		DATA	X'EDA31B94'	
7683	01	01D0E	690B7C52	A		DATA	X'690B7C52'	
7684	01	01D0F	690B7C52	A		DATA	X'690B7C52'	
7685	01	01D10	AE58B190	A		DATA	X'AE58B190'	
7686	01	01D11	DF4A56CE	A		DATA	X'DF4A56CE'	
7687						PAGE		
7688	01	01D12	FFFFFFF6	A	DW67	DATA	-10	DW
7689	01	01D13	36C00460			DW,12	MEMORY	
7690	01	01D14	F73001C8			K	15,7,3,FXP0SW	
7691	01	01D15	A7300169			K	10,7,3,L0C+2	
7692	01	01D16	2D3297C8	A		DATA	X'2D3297C8'	
7693	01	01D17	1F22516F	A		DATA	X'1F22516F'	
7694	01	01D18	77532167	A		DATA	X'77532167'	
7695	01	01D19	77532167	A		DATA	X'77532167'	
7696	01	01D1A	C237DAC1	A		DATA	X'C237DAC1'	
7697	01	01D1B	60F79EDE	A		DATA	X'60F79EDE'	
7698	01	01D1C	FFFFFFF6	A	DW68	DATA	-10	DW
7699	01	01D1D	36C00460			DW,12	MEMORY	
7700	01	01D1E	F73001C8			K	15,7,3,FXP0SW	
7701	01	01D1F	A7300169			K	10,7,3,L0C+2	
7702	01	01D20	FAC41382	A		DATA	X'FAC41382'	
7703	01	01D21	EAC346BA	A		DATA	X'EAC346BA'	
7704	01	01D22	E0FC7F1C	A		DATA	X'E0FC7F1C'	
7705	01	01D23	E0FC7F1C	A		DATA	X'E0FC7F1C'	
7706	01	01D24	446E28CA	A		DATA	X'446E28CA'	
7707	01	01D25	2B344B5C	A		DATA	X'2B344B5C'	
7708	01	01D26	FFFFFFF6	A	DW69	DATA	-10	DW
7709	01	01D27	36C00460			DW,12	MEMORY	
7710	01	01D28	F73001C8			K	15,7,3,FXP0SW	
7711	01	01D29	A7300169			K	10,7,3,L0C+2	
7712	01	01D2A	253F7EA9	A		DATA	X'253F7EA9'	
7713	01	01D2B	57824166	A		DATA	X'57824166'	
7714	01	01D2C	67B5C610	A		DATA	X'67B5C610'	
7715	01	01D2D	67B5C610	A		DATA	X'67B5C610'	
7716	01	01D2E	3D7182C6	A		DATA	X'3D7182C6'	
7717	01	01D2F	5BF19BD6	A		DATA	X'5BF19BD6'	
7718						PAGE		
7719	01	01D30	FFFFFFF6	A	DW70	DATA	-10	DW
7720	01	01D31	36C00460			DW,12	MEMORY	
7721	01	01D32	F73001C8			K	15,7,3,FXP0SW	
7722	01	01D33	A7300169			K	10,7,3,L0C+2	
7723	01	01D34	135BDF7D	A		DATA	X'135BDF7D'	
7724	01	01D35	19C47069	A		DATA	X'19C47069'	
7725	01	01D36	67B980C1	A		DATA	X'67B980C1'	
7726	01	01D37	67B980C1	A		DATA	X'67B980C1'	
7727	01	01D38	9BAE1B05	A		DATA	X'9BAE1B05'	
7728	01	01D39	2FC7759C	A		DATA	X'2FC7759C'	
7729	01	01D3A	FFFFFFF6	A	DW71	DATA	-10	DW0
7730	01	01D3B	36D00460			DW,13	MEMORY	
7731	01	01D3C	F73001C8			K	15,7,3,FXP0SW	
7732	01	01D3D	A7300169			K	10,7,3,L0C+2	
7733	01	01D3E	FFFFFFF6	A		DATA	X'FFFFFFF6'	
7734	01	01D3F	FFFFFFF6	A		DATA	-1	
7735	01	01D40	26106573	A		DATA	X'26106573'	
7736	01	01D41	26106573	A		DATA	X'26106573'	
7737	01	01D42	59D73C28	A		DATA	X'59D73C28'	
7738	01	01D43	00000002	A		DATA	X'00000002'	
7739	01	01D44	FFFFFFF6	A	DW72	DATA	-10	DW
7740	01	01D45	36D00460			DW,13	MEMORY	
7741	01	01D46	F73001C8			K	15,7,3,FXP0SW	
7742	01	01D47	A7300169			K	10,7,3,L0C+2	
7743	01	01D48	00000000	A		DATA	X'00000000'	
7744	01	01D49	00000000	A		DATA	X'00000000'	
7745	01	01D4A	F1A3C842	A		DATA	X'F1A3C842'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
7746	01	01D4B	F1A3C842	A		DATA	X'F1A3C842'	
7747	01	01D4C	CD2A3C71	A		DATA	X'CD2A3C71'	
7748	01	01D4D	00000003	A		DATA	X'00000003'	
7749						PAGE		
7750	01	01D4E	FFFFFFF6	A	DW73	DATA	=10	DW
7751	01	01D4F	36D00460			DW,13	MEMORY	
7752	01	01D50	F73001C8			K	15,7,3,FXP8SW	
7753	01	01D51	A7300169			K	10,7,3,L8C+2	
7754	01	01D52	FFFFFFF7	A		DATA	X'FFFFFFF7'	
7755	01	01D53	FFFFFFF7	A		DATA	X'FFFFFFF7'	
7756	01	01D54	00000002	A		DATA	X'00000002'	
7757	01	01D55	00000002	A		DATA	X'00000002'	
7758	01	01D56	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7759	01	01D57	3FFFFFFF	A		DATA	X'3FFFFFFF'	
7760	01	01D58	FFFFFFF6	A	DW74	DATA	=10	DW
7761	01	01D59	36D00460			DW,13	MEMORY	
7762	01	01D5A	F73001C8			K	15,7,3,FXP8SW	
7763	01	01D5B	87300169			K	8,7,3,L8C+2	
7764	01	01D5C	00000000	A		DATA	X'00000000'	
7765	01	01D5D	00000000	A		DATA	X'00000000'	
7766	01	01D5E	42486CEA	A		DATA	X'42486CEA'	
7767	01	01D5F	42486CEA	A		DATA	X'42486CEA'	
7768	01	01D60	FC7CF1CC	A		DATA	X'FC7CF1CC'	
7769	01	01D61	00000000	A		DATA	X'00000000'	
7770	01	01D62	FFFFFFF6	A	DW75	DATA	=10	DW
7771	01	01D63	36D00460			DW,13	MEMORY	
7772	01	01D64	F73001C8			K	15,7,3,FXP8SW	
7773	01	01D65	A7300169			K	10,7,3,L8C+2	
7774	01	01D66	FFFFFFF7	A		DATA	X'FFFFFFF7'	
7775	01	01D67	FFFFFFF7	A		DATA	X'FFFFFFF7'	
7776	01	01D68	2C76B150	A		DATA	X'2C76B150'	
7777	01	01D69	2C76B150	A		DATA	X'2C76B150'	
7778	01	01D6A	475E3AF9	A		DATA	X'475E3AF9'	
7779	01	01D6B	00000001	A		DATA	X'00000001'	
7780						PAGE		
7781	01	01D6C	FFFFFFF6	A	DW76	DATA	=10	DW
7782	01	01D6D	36D00460			DW,13	MEMORY	
7783	01	01D6E	F73001C8			K	15,7,3,FXP8SW	
7784	01	01D6F	97300169			K	9,7,3,L8C+2	
7785	01	01D70	00000000	A		DATA	X'00000000'	
7786	01	01D71	00000000	A		DATA	X'00000000'	
7787	01	01D72	00004444	A		DATA	X'00004444'	
7788	01	01D73	00004444	A		DATA	X'00004444'	
7789	01	01D74	D1F375DB	A		DATA	X'D1F375DB'	
7790	01	01D75	FFFFF5351	A		DATA	X'FFFFF5351'	
7791	01	01D76	FFFFFFF6	A	DW77	DATA	=10	DW
7792	01	01D77	36D00460			DW,13	MEMORY	
7793	01	01D78	F73001C8			K	15,7,3,FXP8SW	
7794	01	01D79	A7300169			K	10,7,3,L8C+2	
7795	01	01D7A	FFFFFFF7	A		DATA	X'FFFFFFF7'	
7796	01	01D7B	FFFFFFF7	A		DATA	X'FFFFFFF7'	
7797	01	01D7C	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7798	01	01D7D	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7799	01	01D7E	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7800	01	01D7F	00000001	A		DATA	X'00000001'	
7801	01	01D80	FFFFFFF6	A	DW78	DATA	=10	DW
7802	01	01D81	36D00460			DW,13	MEMORY	
7803	01	01D82	F73001C8			K	15,7,3,FXP8SW	
7804	01	01D83	97300169			K	9,7,3,L8C+2	
7805	01	01D84	00000000	A		DATA	X'00000000'	
7806	01	01D85	00000000	A		DATA	X'00000000'	
7807	01	01D86	00000004	A		DATA	X'00000004'	
7808	01	01D87	00000004	A		DATA	X'00000004'	
7809	01	01D88	FFFFFFF1	A		DATA	X'FFFFFFF1'	
7810	01	01D89	FFFFFFF9	A		DATA	X'FFFFFFF9'	
7811						PAGE		
7812	01	01D8A	FFFFFFF6	A	DW79	DATA	=10	DW
7813	01	01D8B	36D00460			DW,13	MEMORY	
7814	01	01D8C	F73001C8			K	15,7,3,FXP8SW	
7815	01	01D8D	87300169			K	8,7,3,L8C+2	
7816	01	01D8E	FFFFFFF7	A		DATA	X'FFFFFFF7'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
7817	01	01D8F	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7818	01	01D90	55555555	A		DATA	X'55555555'	
7819	01	01D91	55555555	A		DATA	X'55555555'	
7820	01	01D92	0D0396FC	A		DATA	X'0D0396FC'	
7821	01	01D93	00000000	A		DATA	X'00000000'	
7822	01	01D94	FFFFFFFF	A	DW80	DATA	=10	DW
7823	01	01D95	36D00460			DW,13	MEMORY	
7824	01	01D96	F73001C8			K	15,7,3,FXP8SW	
7825	01	01D97	A7300169			K	10,7,3,L8C+2	
7826	01	01D98	00000000	A		DATA	X'00000000'	
7827	01	01D99	00000000	A		DATA	X'00000000'	
7828	01	01D9A	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7829	01	01D9B	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7830	01	01D9C	80000001	A		DATA	X'80000001'	
7831	01	01D9D	15555555	A		DATA	X'15555555'	
7832						PAGE		
7833	01	01D9E	FFFFFFFF	A	DH01	DATA	=10	DH
7834	01	01D9F	56C00460			DH,12	MEMORY	
7835	01	01DA0	F73001C8			K	15,7,3,FXP8SW	
7836	01	01DA1	A7300169			K	10,7,3,L8C+2	
7837	01	01DA2	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7838	01	01DA3	3FFFFFFF	A		DATA	X'3FFFFFFF'	
7839	01	01DA4	00010000	A		DATA	X'00010000'	
7840	01	01DA5	00010000	A		DATA	X'00010000'	
7841	01	01DA6	00000000	A		DATA	X'00000000'	
7842	01	01DA7	00000000	A		DATA	X'00000000'	
7843	01	01DA8	FFFFFFFF	A	DH02	DATA	=10	DH
7844	01	01DA9	56C00460			DH,12	MEMORY	
7845	01	01DAA	F73001C8			K	15,7,3,FXP8SW	
7846	01	01DAB	A7300169			K	10,7,3,L8C+2	
7847	01	01DAC	C0000000	A		DATA	X'C0000000'	
7848	01	01DAD	20000000	A		DATA	X'20000000'	
7849	01	01DAE	FFFFE000	A		DATA	X'FFFFE000'	
7850	01	01DAF	FFFFE000	A		DATA	X'FFFFE000'	
7851	01	01DB0	00000000	A		DATA	X'00000000'	
7852	01	01DB1	00000000	A		DATA	X'00000000'	
7853	01	01DB2	FFFFFFFF	A	DH03	DATA	=10	DH X
7854	01	01DB3	56CE0460			DH,12	MEMORY,7	
7855	01	01DB4	F73001C8			K	15,7,3,FXP8SW	
7856	01	01DB5	97300169			K	9,7,3,L8C+2	
7857	01	01DB6	AAAAAAAA	A		DATA	X'AAAAAAAA'	
7858	01	01DB7	AAAAAAAA	A		DATA	X'AAAAAAAA'	
7859	01	01DB8	00000001	A		DATA	X'00000001'	
7860	01	01DB9	00000001	A		DATA	X'00000001'	
7861	01	01DBA	00000000	A		DATA	X'00000000'	
7862	01	01DBB	00000000	A		DATA	X'00000000'	
7863						PAGE		
7864	01	01DBC	FFFFFFFF	A	DH04	DATA	=10	DH X
7865	01	01DBD	56CE0460			DH,12	MEMORY,7	
7866	01	01DBE	F73001C8			K	15,7,3,FXP8SW	
7867	01	01DBF	97300169			K	9,7,3,L8C+2	
7868	01	01DC0	25555555	A		DATA	X'25555555'	
7869	01	01DC1	ED555556	A		DATA	X'ED555556'	
7870	01	01DC2	0000FFFE	A		DATA	X'0000FFFE'	
7871	01	01DC3	0000FFFE	A		DATA	X'0000FFFE'	
7872	01	01DC4	00000000	A		DATA	X'00000000'	
7873	01	01DC5	00000000	A		DATA	X'00000000'	
7874	01	01DC6	FFFFFFFF	A	DH05	DATA	=10	DH0
7875	01	01DC7	56D00460			DH,13	MEMORY	
7876	01	01DC8	F73001C8			K	15,7,3,FXP8SW	
7877	01	01DC9	A7300169			K	10,7,3,L8C+2	
7878	01	01DCA	00000000	A		DATA	X'00000000'	
7879	01	01DCB	00000000	A		DATA	X'00000000'	
7880	01	01DCC	40000000	A		DATA	X'40000000'	
7881	01	01DCD	40000000	A		DATA	X'40000000'	
7882	01	01DCE	3FFFFFFF	A		DATA	X'3FFFFFFF'	
7883	01	01DCF	0000FFFF	A		DATA	X'0000FFFF'	
7884	01	01DD0	FFFFFFFF	A	DH06	DATA	=10	DH
7885	01	01DD1	56D00460			DH,13	MEMORY	
7886	01	01DD2	F73001C8			K	15,7,3,FXP8SW	
7887	01	01DD3	A7300169			K	10,7,3,L8C+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR I G	LABEL	OPERATION	OPERAND	COMMENTS
	01	01E0C	C540D5D6	A				
	01	01E0D	E340C9D5	A				
	01	01E0E	E2E3C1D3	A				
	01	01E0F	D3C5C440	A				
	01	01E10	C1D5C440	A				
	01	01E11	E6C9D3D3	A				
	01	01E12	40D5D6E3	A				
	01	01E13	40C2C540	A				
	01	01E14	C3C8C5C3	A				
	01	01E15	D2C5C440	A				
	01	01E16	C6E4D9E3	A				
	01	01E17	C8C5D940	A				
7944					TEXT		'INDISREGARD THE NEXT ERROR LINE, IT WILL BE',	*E
7945							'FOR INSTRUCTION LMS'	*E
	01	01E18	15C4C9E2	A				
	01	01E19	D9C5C7C1	A				
	01	01E1A	D9C440E3	A				
	01	01E1B	C8C540D5	A				
	01	01E1C	C5E7E340	A				
	01	01E1D	C5D9D9D6	A				
	01	01E1E	D940D3C9	A				
	01	01E1F	D5C56B40	A				
	01	01E20	C9E340E6	A				
	01	01E21	C9D3D340	A				
	01	01E22	C2C5C6D6	A				
	01	01E23	D940C9D5	A				
	01	01E24	E2E3D9E4	A				
	01	01E25	C3E3C9D6	A				
	01	01E26	D540D3D4	A				
	01	01E27	EP404040	A				
7946		01 01E28			E0MSG2	EQU	\$	*E
7947						BOUND	8	*E
7948	01	01E28	050077F0 N 080000B0		E0MSG3	GEN,8,24,8,24	5,BA(E0MSG1),8,4*(E0MSG2-E0MSG3)	*E
7949					**			*E
7950					**			*E
7951					**			*E
7952					**	THIS ROUTINE DETERMINS IF LAS AND LMS ARE INSTALLED		*E
7953					**			*E
7954					**			*E
7955					**			*E
7956	01	01E2A	02200000 A		LASLMS	LCI	0	*E
7957	01	01E2B	2B001E47			STM,0	REGTEMP	*E
7958	01	01E2C	32400445			LW,4	TABLE+1	*E
7959	01	01E2D	31401DEF			CW,4	LAS1+1	*E
7960	01	01E2E	68301E32			BE	LASLMS5	*E
7961	01	01E2F	31401DF7			CW,4	LMS1+1	*E
7962	01	01E30	68301E35			BE	LASLMS7	*E
7963	01	01E31	68001E44			B	LASLMS3	*E
7964	01	01E32	33101E5A		LASLMS5	MTW,1	LAS	*E
7965	01	01E33	69101E44			BLZ	LASLMS3	*E
7966	01	01E34	68001E37			B	LASLMS6	*E
7967	01	01E35	33101E59		LASLMS7	MTW,1	LMS	*E
7968	01	01E36	68001E37			B	LASLMS6	*E
7969	01	01E37	32401E59		LASLMS6	LW,4	LMS	*E
7970	01	01E38	31401E5A			CW,4	LAS	*E
7971	01	01E39	68301E38			BE	LASLMS8	*E
7972	01	01E3A	68001E44			B	LASLMS3	*E
7973	01	01E3B	32601E58		LASLMS8	LW,6	RESTORE	*E
7974	01	01E3C	3560016A			STW,6	ERREXIT	*E
7975	01	01E3D	32401E59			LW,4	LASLMS2	*E
7976	01	01E3E	68201E44			BLEZ	LASLMS3	*E
7977	01	01E3F	32001F57			LW,0	PE0MSG1	*E
7978	01	01E40	0F00027C			XPSD,0	PRINT	*E
7979	01	01E41	22400000 A			LI,4	0	*E
7980	01	01E42	35401DEE			STW,4	LAS1	*E
7981	01	01E43	68001E44			B	LASLMS3	*E
7982	01	01E44	02200000 A		LASLMS3	LCI	0	*E
7983	01	01E45	2A001E47			LM,0	REGTEMP	*E
7984	01	01E46	E800000F A			B	*15	*E
7985	01	01E47			REGTEMP	RES	16	*E
7986	01	01E57	00000F14		PE0MSG1	DATA	DA(E0MSG3)	*E

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL O R I G	LABEL	OPERATION	OPERAND	COMMENTS
7987	01	01E58	6800016B		RESTORE	B	ERREXIT+1	*E
7988	01	01E59	FFFFFFFF	A	LMS	DATA	-1	*E
7989	01	01E5A	FFFFFFFF	A	LAS	DATA	-1	*E
7990	01	01E5B	FFFFFFFFE	A	LASLMS2	DATA	-2	*E
7991	01	01E5C	00000000	A		DATA	0	
7992		01 00293			END		SETRPLY	
CONTROL SECTION SUMMARY: 01 01E5D PT C								

XDS 901523

SECTION V
CONCORDANCE LISTING

SIGMA 5 AUTO DIAG. 704287-51E00

ABSVAL	82/D0 3593/DATA	82/D0 3593/DATA	112/SET	112/SET	113/D0	113/D0	114/ORG
AD01	4440=DATA						
AD02	4452=DATA						
AD03	4465=DATA						
AD04	4478=DATA						
AD05	4491=DATA						
AD06	4500=DATA						
AF	70/GEN 112/SET	76/GEN 112/SET	76/GEN 112/SET	82/D0 113/D0	96/GEN 113/D0	96/GEN 113/D0	105/GEN
AFA	96/GEN	105/GEN					
AH01	4392=DATA						
AH02	4400=DATA						
AH03	4408=DATA						
AH04	4416=DATA						
AI	89/OPEN						
AI	89/OPEN	99=CNAME					
AI0	949/EXU	950/EXU	951/EXU	954/DATA	955=AI0		
AI01	4423=DATA						
AI02	4429=DATA						
AI03	4435=DATA						
ANDF	771/STW	793=AND					
ANDM	773/STW	782=AND					
AND01	1765=DATA						
AND02	1769=DATA						
AND03	1777=DATA						
AND04	1786=DATA						
AND05	1794=DATA						
AND06	1802=DATA						
ANFRE	758/LW	1019=AND					
ANFR2	764/LW	1020=AND					
ANLZ01	3585=DATA						
ANLZ02	3596=DATA						
ANLZ03	3604=DATA						
ANLZ04	3612=DATA						
ANLZ05	3621=DATA						
ANLZ06							

	3630=DATA						
ANLZ07	3638=DATA						
ANLZ08	433/STW	434/STW	436/STW	995/STW	996/STW	998/STW	3649=DATA
ANLZ09	997/LW	3659=DATA					
ANLZ10	3669=DATA						
ANLZ11	3680=DATA						
ANLZ12	3696=DATA						
ANLZ13	3711=DATA						
ANLZ14	3727=DATA						
ANLZ15	3743=DATA						
ANLZ16	3758=DATA						
ANLZ17	3775=DATA						
ANLZ18	3790=DATA						
ANLZ19	3806=DATA						
ANLZ20	3821=DATA						
ANLZ21	3837=DATA						
ANLZ22	3852=DATA						
ANLZ23	3867=DATA						
ANLZ24	3878=DATA						
ANMK	765/LW	1021=AND					
AUT8	429=LW	888/BCR	893/B				
AWM01	4509=DATA						
AWM02	4517=DATA						
AWM03	4525=DATA						
AWM04	4535=DATA						
AW01	2000=DATA						
AW02	2004=DATA						
AW03	2012=DATA						
AW04	2023=DATA						
AW05	2037=DATA						
AW06	2056=DATA						
AW07	2064=DATA						
AW08	2073=DATA						
AW09	2081=DATA						
AW10	2089=DATA						
AW11	2097=DATA						

AW12	2106=DATA
AW13	2114=DATA
AW14	2122=DATA
AW15	2130=DATA
AW16	2139=DATA
AW17	2147=DATA
AW18	2155=DATA
AW19	2163=DATA
AW20	2172=DATA
AW21	2180=DATA
AW22	2188=DATA
AW23	2196=DATA
AW24	2205=DATA
AW25	2213=DATA
AW26	2226=DATA
AW27	2236=DATA
AW28	2245=DATA
AW29	2257=DATA
AW30	2267=DATA
AW31	2276=DATA
AW32	2285=DATA
AW33	2296=DATA
AW34	2306=DATA
AW35	2316=DATA
AW36	2324=DATA
AW37	2334=DATA
AW38	2344=DATA
AW39	2353=DATA
AW40	2364=DATA
AW41	2372=DATA
AW42	2380=DATA
AW43	2390=DATA
AW44	2401=DATA
AW45	2410=DATA
AW46	2416=DATA
AW47	

BA	2422=DATA							
	76/GEN	969/GEN	978/GEN	982/GEN	1187/GEN	2946/DATA	2947/DATA	
	3609/DATA	7948/GEN						
BAL01	990/LW	2505=DATA						
BAL02	2511=DATA							
BAL03	2521=DATA							
BAL04	2529=DATA							
BAL05	437/STW	992/STW	2539=DATA					
BCR01	1931=DATA							
BCR02	1940=DATA							
BCR03	1947=DATA							
BCR04	1953=DATA							
BCR05	1958=DATA							
BCR06	1963=DATA							
BCS01	1970=DATA							
BCS02	1976=DATA							
BCS03	1981=DATA							
BDR01	2491=DATA							
BDR02	2498=DATA							
BEND	435/LW	1011=B						
BIND	110=CNAME							
BIR01	2474=DATA							
BIR02	2483=DATA							
BIT	780/LW	785/LW	1043/LW	1091=DATA				
BITS	778=STW	788/BIR						
BLANK	1232=DATA							
BRANCH	219=XPSD	669/EOR	1281/EQU	1327/EXU	1342/DATA	1343/DATA	1350/PZE	
	1351/PZE	1948/BCR	1954/BCR	1959/BCR	1964/BCR	1971/BCS	1977/BCS	
	2484/BIR	2492/BDR	2494/K	2499/BDR	2506/BAL	2508/K	2532/K	
	2533/DATA	2713/LD	2716/DATA	2729/DATA	2937/LCF	2946/DATA	2947/DATA	
	2948/DATA	2949/DATA	3234/LCH	3237/DATA	3732/DATA	3733/MW	3734/MW	
	3763/DATA	3764/BAL	3765/BAL	3780/DATA	3781/BIR	3782/BIR	3795/DATA	
	3796/BIR	3797/BIR	3857/DATA	3858/LM	3859/LM			
BUMP	784/LPSD	1263=PZE						
BUMPER	787=BIR	1263/PZE						
BUSY	867=SIG	869/BCR	874/BEZ					
BYTE	621/LW	792/LW	902/LW	903/FAS	1044/LW	1128=DATA	1278/EQU	
BYTES	771=STW	797/BIR						
C	460/LW	469/LW	1282=EQU					
CAL01								

CAL02	5704=DATA				
CAL03	5708=DATA				
CAL04	5712=DATA				
CAL05	5716=DATA				
CAL06	5722=DATA				
CAL07	5730=DATA				
CAL07	5735=DATA				
CAL1		307=PZE	678/STW	1025/PZE	1037/XPSD
CAL1AD	220/XPSD				
CAL1TR	677/EOR	1025=PZE			
CAL1XD	220=XPSD	676/STW			
CAL2					
CAL2AD	221/XPSD	330=PZE	685/STW	1026/PZE	1038/XPSD
CAL2TR	684/EOR	1026=PZE			
CAL2XD	221=XPSD	683/STW			
CAL3					
CAL3AD	682/EOR	1038=XPSD			
CAL3TR	222/XPSD	353=PZE	692/STW	1027/PZE	1039/XPSD
CAL3XD	691/EOR	1027=PZE			
CAL4					
CAL4AD	222=XPSD	690/STW			
CAL4TR	689/EOR	1039=XPSD			
CAL4XD	223/XPSD	376=PZE	699/STW	1028/PZE	1040/XPSD
CB01	698/EOR	1028=PZE			
CB02	223=XPSD	697/STW			
CB03	696/EOR	1040=XPSD			
CB04	3950=DATA				
CB05	3958=DATA				
CB06	3966=DATA				
CB07	3974=DATA				
CB08	3983=DATA				
CD01	3991=DATA				
CD02	3999=DATA				
CD03	4007=DATA				
CD04	4031=DATA				
CEE	4043=DATA				
	4056=DATA				
	4068=DATA				
	595/EOR	1061=DATA			

CF	96/GEN	105/GEN					
CH01	3923=DATA						
CH02	3932=DATA						
CH03	3941=DATA						
CI	89/8PEN						
CI	89/8PEN	100-CNAME					
CI01	4017=DATA						
CI02	4024=DATA						
CLEAR	455=STW 2958=DATA	458/BIR 2959=DATA	2608=DATA	2609=DATA	2610=DATA	2611=DATA	2955/LCF
CLM01	4169=DATA						
CLM02	4183=DATA						
CLM03	4197=DATA						
CLM04	4212=DATA						
CLM05	4226=DATA						
CLM06	4240=DATA						
CLR01	4116=DATA						
CLR02	4127=DATA						
CLR03	4134=DATA						
CLR04	4146=DATA						
CLR05	4157=DATA						
CNT1CP	226/MTW	1269=PZE					
CNT2CP	227/MTW	1270=PZE					
CNT3CP	228/MTW	1271=PZE					
CNT3Z	1288=EQU						
CNT4CP	229/MTW	1272=PZE					
CNT4Z	1289=EQU						
COMP	969/GEN	971=TEXTC					
COMPAT	1003/BNE	1013=ER					
COND	485/AND	490/AND	1056=DATA				
COUNT	754/STW	806/LW	1273=PZE				
CPINT	404/LW 1299/LW	414/LW 1313/STW	422/STW	439/STW	516/LW	933/STW	1080=DATA
CPINTM	424/STW	892/STW	928/LW	1081=DATA	1315/STW		
CS01	4082=DATA						
CS02	4093=DATA						
CS03							

CW01	4104=DATA						
CW02	3897=DATA						
CW03	3908=DATA						
CYCLE	3917=DATA						
	446=LW	628/BCS	919/BE	925/BNE	927/BNE	929/BEZ	934/B
	952/B	954/DATA	999/B	1005/BNE	1008/B	1265/PZE	2596/DATA
	2597/DATA	2598/DATA	2599/DATA	3593/DATA			
C1RET	311=XPSD	1359/PZE	1360/PZE	5707/K			
C2RET	334=XPSD	5711/K					
C3RET	357=XPSD	5715/K					
C4RET	380=XPSD	5719/K	5725/K	5733/K	5738/K		
DA	70/GEN	1032/PZE	3617/DATA	3643/GEN	7986/DATA		
DF	217/XPSD	291=PZE	295/LCF	1029/PZE			
DFAD	1029=PZE						
DFRET	296=XPSD						
DFTR	217=XPSD						
DH01	7833=DATA						
DH02	7843=DATA						
DH03	7853=DATA						
DH04	7864=DATA						
DH05	7874=DATA						
DH06	7884=DATA						
DH07	7895=DATA						
DH08	7905=DATA						
DONE	464/B	898=CI					
DONEMSG	868/BCR	876=TI0	878/BCR	883/BEZ			
DW01	7006=DATA						
DW02	7016=DATA						
DW03	7026=DATA						
DW04	7037=DATA						
DW05	7047=DATA						
DW06	7057=DATA						
DW07	7068=DATA						
DW08	7078=DATA						
DW09	7088=DATA						
DW10	7099=DATA						
DW11	7109=DATA						

DW12	7119=DATA
DW13	7130=DATA
DW14	7140=DATA
DW15	7150=DATA
DW16	7161=DATA
DW17	7171=DATA
DW18	7181=DATA
DW19	7192=DATA
DW20	7202=DATA
DW21	7212=DATA
DW22	7223=DATA
DW23	7233=DATA
DW24	7243=DATA
DW25	7254=DATA
DW26	7264=DATA
DW27	7274=DATA
DW28	7285=DATA
DW29	7295=DATA
DW30	7305=DATA
DW31	7316=DATA
DW32	7326=DATA
DW33	7336=DATA
DW34	7347=DATA
DW35	7357=DATA
DW36	7367=DATA
DW37	7378=DATA
DW38	7388=DATA
DW39	7398=DATA
DW40	7409=DATA
DW41	7419=DATA
DW42	7429=DATA
DW43	7440=DATA
DW44	7450=DATA
DW45	7460=DATA
DW46	7471=DATA
DW47	

DW48	7481=DATA						
DW49	7491=DATA						
DW50	7502=DATA						
DW51	7512=DATA						
DW52	7522=DATA						
DW53	7533=DATA						
DW54	7543=DATA						
DW55	7553=DATA						
DW56	7564=DATA						
DW57	7574=DATA						
DW58	7584=DATA						
DW59	7595=DATA						
DW60	7605=DATA						
DW61	7615=DATA						
DW62	7626=DATA						
DW63	7636=DATA						
DW64	7646=DATA						
DW65	7657=DATA						
DW66	7667=DATA						
DW67	7677=DATA						
DW68	7688=DATA						
DW69	7698=DATA						
DW70	7708=DATA						
DW71	7719=DATA						
DW72	7729=DATA						
DW73	7739=DATA						
DW74	7750=DATA						
DW75	7760=DATA						
DW76	7770=DATA						
DW77	7781=DATA						
DW78	7791=DATA						
DW79	7801=DATA						
DW80	7812=DATA						
EDIT	7822=DATA						
END	730/BCR	745=LW					
	623=WD	1011/B	1051/PZE	3568/DATA	3592/DATA	3593/DATA	5900/B

E0MSG1	7941-TEXT	7948/GEN	7948/GEN				
E0MSG2	7946-EQU	7948/GEN					
E0MSG3	7948-GEN	7986/DATA					
E0R01	1814-DATA						
E0R02	1822-DATA						
E0R03	1831-DATA						
E0R04	1839-DATA						
ERREXIT	534/BNE	540/B	549-BAL	7974/STW	7987/B		
ERRIND	617/LW	622/STW	631-DATA	726/STW			
ERR0R	567/XPSD 602/XPSD	571/XPSD 606/XPSD	575/XPSD 610/XPSD	580/XPSD 615/XPSD	584/XPSD 711-PZE	588/XPSD 718/LPSD	592/XPSD 742/LPSD
ERR0RS	417/LW	451/STW	554/LW	624/LW	720/STW	1274-PZE	1302/LW
EVEN	761-LW						
EXITI0	871/B	875/b	877/BCR	880/B	884-LPSD		
EXU01	1320-DATA						
EXU02	1326-DATA						
EXU03	1330-DATA						
EXU04	1338-DATA						
EXU05	1344-DATA						
EXU06	1353-DATA						
EXU07	1363-DATA						
EXU08	1371-DATA						
F	48-EQU	1753/K	1754/K	4199/K	5731/CAL4	5736/CAL4	5806/K
FAILL01	5827-DATA						
FAILL02	5836-DATA						
FAILL03	5841-DATA						
FAILL04	5846-DATA						
FAILL05	5851-DATA						
FAILL06	5857-DATA						
FAILL07	5862-DATA						
FAILL08	5867-DATA						
FAILL09	5872-DATA						
FAILL10	5877-DATA						
FAILL11	5882-DATA						
FAILL12	5888-DATA						
FAILL13	5893-DATA						

FAPRIV01	5803=DATA							
FAPRIV04	5819=DATA							
FAPRIV03	5813=DATA							
FAPRIV02	5808=DATA							
FAPSD01	1849=DATA							
FAPSD02	1869=DATA							
FAPSD03	1884=DATA							
FARWD	704=RD	5750/DATA	5755/DATA	5761/DATA	5768/DATA	5775/DATA		
FARWD01	5748=DATA							
FARWD02	5753=DATA							
FARWD03	5759=DATA							
FARWD04	5766=DATA							
FARWD05	5773=DATA							
FASTCHK	530=LW	546/BDR						
FASTCHKA	532/BE	536-LD						
FILL	80=CNAME							
FILTER	793/AND	1019/AND	1020/AND	1115=DATA				
FIRST	444/STW	813/LW	831/STW	1064=DATA				
FLM	978/GEN	980-TEXTC						
FLNIN	897/DATA	906=LW						
FLOAT	903=FAS	906/LW						
FLOATP	974/F	978=GEN						
FLPF	216/XPSD	283=PZE	287/LCF	665/STW	1030/PZE			
FLPFAD	664/EOR	1030=PZE						
FLPFSW	664=EOR	5416/K	5428/K	5441/K	5454/K	5466/K	5479/K	
	5491/K	5504/K	5516/K	5529/K	5541/K	5554/K	5566/K	
	5579/K	5592/K	5604/K	5617/K	5629/K	5642/K	5654/K	
	5667/K	5680/K	5692/K					
FLPFTR	216-XPSD							
FLPRINT	905/B	909=XPSD						
FLTRAP	897=DATA	973/XPSD						
FPFRET	288=XPSD							
FP0RET	280=XPSD	2375/K	2443/K	3029/K	3126/K	3186/K	3304/K	
	4278/K	4319/K	4419/K	4432/K	4455/K	4512/K	4552/K	
	4581/K	4606/K	7019/K	7029/K	7040/K	7050/K	7546/K	
	7567/K	7618/K						
FRAME	770/LW	1048/LW	1049/LW	1102=DATA				
FROM	467/STW	469=LW	474/STW	629/LW				
FXP0								

	215/XPSD	275*PZE	279/LCF	657/STW	662/DATA	1031/PZE	
FXPBA	659/EOR	662=DATA					
FXPAD	656/EOR	1031*PZE					
FXPBSDK	669=EOR	2382/K					
FXPSW	656=EOR	2039/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	2190/K	2198/K	2207/K
	2215/K	2228/K	2238/K	2247/K	2259/K	2269/K	2278/K
	2287/K	2298/K	2308/K	2318/K	2326/K	2336/K	2346/K
	2355/K	2366/K	2374/K	2438/K	2442/K	2451/K	2466/K
	3028/K	3125/K	3185/K	3303/K	4255/K	4277/K	4309/K
	4318/K	4394/K	4402/K	4410/K	4418/K	4425/K	4431/K
	4442/K	4454/K	4467/K	4480/K	4511/K	4519/K	4527/K
	4543/K	4551/K	4580/K	4593/K	4605/K	4734/K	4740/K
	4746/K	4752/K	5010/K	5041/K	5047/K	5060/K	5080/K
	5111/K	5906/K	5916/K	5926/K	5937/K	5947/K	5957/K
	5968/K	5978/K	5988/K	5999/K	6009/K	6019/K	6030/K
	6040/K	6050/K	6061/K	6071/K	6081/K	6092/K	6102/K
	6112/K	6123/K	6133/K	6143/K	6154/K	6164/K	6174/K
	6185/K	6195/K	6205/K	6216/K	6226/K	6236/K	6247/K
	6257/K	6267/K	6278/K	6288/K	6298/K	6309/K	6319/K
	6329/K	6340/K	6350/K	6360/K	6371/K	6381/K	6391/K
	6402/K	6412/K	6422/K	6433/K	6443/K	6453/K	6464/K
	6474/K	6484/K	6495/K	6505/K	6515/K	6526/K	6536/K
	6546/K	6557/K	6567/K	6577/K	6588/K	6598/K	6608/K
	6619/K	6629/K	6639/K	6650/K	6660/K	6670/K	6681/K
	6691/K	6701/K	6712/K	6722/K	6732/K	6743/K	6753/K
	6763/K	6774/K	6784/K	6794/K	6805/K	6815/K	6825/K
	6836/K	6846/K	6856/K	6867/K	6877/K	6887/K	6898/K
	6908/K	6919/K	6929/K	6939/K	6950/K	6960/K	6970/K
	6981/K	6991/K	7008/K	7018/K	7028/K	7039/K	7049/K
	7059/K	7070/K	7080/K	7090/K	7101/K	7111/K	7121/K
	7132/K	7142/K	7152/K	7163/K	7173/K	7183/K	7194/K
	7204/K	7214/K	7225/K	7235/K	7245/K	7256/K	7266/K
	7276/K	7287/K	7297/K	7307/K	7318/K	7328/K	7338/K
	7349/K	7359/K	7369/K	7380/K	7390/K	7400/K	7411/K
	7421/K	7431/K	7442/K	7452/K	7462/K	7473/K	7483/K
	7493/K	7504/K	7514/K	7524/K	7535/K	7545/K	7555/K
	7566/K	7576/K	7586/K	7597/K	7607/K	7617/K	7628/K
	7638/K	7648/K	7659/K	7669/K	7679/K	7690/K	7700/K
	7710/K	7721/K	7731/K	7741/K	7752/K	7762/K	7772/K
	7783/K	7793/K	7803/K	7814/K	7824/K	7835/K	7845/K
	7855/K	7866/K	7876/K	7886/K	7897/K	7907/K	
FXPTR	215=XPSD	660/STW	670/STW				
GETOUT	833/LPSD	836=PZE					
GETOP	848/BIP	854=LW					
G1	94=EQU	96/GEN					
G2	103=EQU	105/GEN					
HA	2608/DATA	2609/DATA	3060/DATA	3592/DATA	3593/DATA	3593/DATA	
HOG	1161/J	1184/J	1209=DATA				
HEAD	1148/P	1161=J					
HLTEST	733/B	737=RD	836/PZE				
I	53=FORM	456/STW	470/STW	1283=EQU			
IA	500/STW	573/LW	1286=EQU	1395/LCF*	1422/LW*	2005/AW*	2307/AW*
	2437/SW*	2522/BAL*	2563/LH*	2642/LB*	2651/LB*	2701/LD*	2726/LD*
	2763/LD*	2851/LW*	3018/LAW*	3065/LAH*	3111/LAD*	3193/LCW*	3226/LCH*

	3277/LCD*	3341/STH*	3406/STB*	3440/STD*	3503/STCF*	3602/STW*	3603/STW*
	3605/ANLZ*	3610/CB*	3611/CB*	3627/LI*	3628/LI*	3984/CB*	4057/CD*
	4276/MTW*	4308/MTH*	4351/MTB*	4409/AH*	4436/AI*	4466/AD*	4526/AWM*
	4536/AWM*	4558/SH*	4579/SD*	5828/GEN	6711/MW*	6907/MH*	7000/MI*
	7327/DW*	7906/DH*					
IAID	572/LW	1073-I					
IMAGE	798/STW	1053/STW	1163/J	1165/J	1172/J	1176/J	1230=DATA
IMP	910/LW	972-XPSD					
INDA	498/LW	574/LW	1022-PZE				
INITIATE	899/BNE	1002-CW					
INST	497/STW	544/EXU	1285-EQU				
INSTID	564/LW	1071-I					
INT01	3554=DATA						
INT02	3564=DATA						
INT03	3574=DATA						
I0	827/BCS	829-XPSD	841/B	853/B			
I0COMP	965/P	969-GEN					
I0CBUNT	1000=DATA	1014/CW					
I0INT	1090=DATA						
I0INTR	233/XPSD	954=DATA	963/LPSD				
I0M	722/LW	740/LW	947/STW	964=DATA			
ITERATE	440/STW	513/LW	550/LW	1007/STW	1010=DATA		
IXID	577/LW	1074-I					
IX01	5780=DATA	5781/E0R	5783=DATA	5783=DATA	5783=DATA		
IX02	5785=DATA						
IX03	5791=DATA						
I9	638/LW	674/LW	681/LW	688/LW	695/LW	1060=DATA	
J	74=CNAME						
K	55=F0RM						
LAD01	3073=DATA						
LAD02	3085=DATA						
LAD03	3098=DATA						
LAD04	3110=DATA						
LAD05	3123=DATA						
LAD06	3135=DATA						
LAD07	3148=DATA						
LAH01	3048=DATA						
LAH02	3056=DATA						

LAW03	3064=DATA					
LAS	7964/MTW	7970/CW	7989=DATA			
LASLMS	549/BAL	7956=LCI				
LASLMS2	866/MTW	7975/LW	7990=DATA			
LASLMS3	7963/B	7965/BLZ	7972/B	7976/BLEZ	7981/B	7982=LCI
LASLMS5	7960/BE	7964=MTW				
LASLMS6	7966/B	7968/B	7969=LW			
LASLMS7	7962/BE	7967=MTW				
LASLMS8	7971/BE	7973=LW				
LAS1	7919=DATA	7959/CW	7980/STW			
LAW01	3001=DATA					
LAW02	3009=DATA					
LAW03	3017=DATA					
LAW04	3026=DATA					
LAW05	3038=DATA					
LB01	2617=DATA					
LB02	2625=DATA					
LB03	2633=DATA					
LB04	2641=DATA					
LB05	2650=DATA					
LB06	2658=DATA					
LB07	2668=DATA					
LB08	2674=DATA					
LB09	2683=DATA					
LCD01	3251=DATA					
LCD02	3263=DATA					
LCD03	3275=DATA					
LCD04	3289=DATA					
LCD05	3301=DATA					
LCD06	3313=DATA					
LCF	85/BPEN					
LCF	85/BPEN	92=CNAME				
LCF1	89/BPEN					
LCF1	89/BPEN	98=CNAME				
LCF101	2968=DATA					
LCF102						

	2972=DATA			
LCF103	2976=DATA			
LCF104	2980=DATA			
LCF105	2984=DATA			
LCF106	2992=DATA			
LCF107	2996=DATA			
LCF01	1378=DATA			
LCF02	1382=DATA			
LCF03	1386=DATA			
LCF04	1390=DATA			
LCF05	1394=DATA			
LCF06	2936=DATA			
LCF07	2942=DATA			
LCF08	2954=DATA			
LCF09	2962=DATA			
LCH01	3209=DATA			
LCH02	3217=DATA			
LCH03	3225=DATA			
LCH04	3233=DATA			
LCH05	3242=DATA			
LCW01	3161=DATA			
LCW02	3169=DATA			
LCW03	3177=DATA			
LCW04	3183=DATA			
LCW05	3192=DATA			
LCW06	3200=DATA			
LDREG	751/STW	752=LW	807/LW	809/BIR
LD01	2690=DATA			
LD02	2700=DATA			
LD03	2712=DATA			
LD04	2725=DATA			
LD05	2737=DATA			
LD06	2750=DATA			
LD07	2762=DATA			
LD08	2775=DATA			
LD09	2787=DATA			

LD10	2800=DATA						
LD11	2812=DATA						
LD12	2825=DATA						
LD13	2837=DATA						
LF	70=GEN	76=GEN	96=GEN	105=GEN			
LH01	2546=DATA						
LH02	2554=DATA						
LH03	2562=DATA						
LH04	2571=DATA						
LH05	2577=DATA						
LH06	2584=DATA						
LH07	2592=DATA						
LH08	2604=DATA						
LI	89/BPEN						
LI	89/BPEN	101-CNAME					
LINE	442/STW	812/LW	830/STW	1070=DATA			
LINKAD	482/AND	1055=DATA					
LINOUT	817/BIR	825-LW					
LIST	460/LW	469/LW	1050/LW	1319=RES			
LI01	2856=DATA						
LI02	2862=DATA						
LI03	2868=DATA						
LI04	2874=DATA						
LI05	2880=DATA						
LMS	7967/MTW	7969/LW	7988=DATA				
LMS1	531/CW	600/CW	7931=DATA	7961/CW			
LOAD	445/LW	1050=LW					
LOADR	750/LW	1045=LW					
LBC	479/STW	544-EXU	569/LW	1023/PZE	1024/PZE	1072/I	1261/PZE
	1321/EXU	1323/K	1329/DATA	1333/K	1341/K	1347/K	1356/K
	1381/K	1385/K	1389/K	1393/K	1397/K	1407/K	1414/K
	1424/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	1636/K	1644/K	1652/K
	1660/K	1667/K	1673/K	1679/K	1686/K	1700/K	1704/K
	1712/K	1721/K	1729/K	1737/K	1746/K	1754/K	1768/K
	1772/K	1780/K	1789/K	1797/K	1805/K	1817/K	1825/K
	1834/K	1842/K	1852/K	1865/K	1872/K	1875/K	1876/K
	1887/K	1890/K	1891/K	1903/K	1918/K	1950/K	1956/K
	1961/K	1966/K	1973/K	1979/K	2003/K	2007/K	2015/K
	2026/K	2040/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	2191/K	2199/K	2208/K
2216/K	2229/K	2239/K	2248/K	2260/K	2270/K	2279/K
2288/K	2299/K	2309/K	2319/K	2327/K	2337/K	2347/K
2356/K	2367/K	2383/K	2393/K	2404/K	2413/K	2419/K
2425/K	2431/K	2439/K	2452/K	2458/K	2467/K	2486/K
2501/K	2510/DATA	2520/DATA	2526/DATA	2534/DATA	2544/DATA	2549/K
2557/K	2565/K	2574/K	2580/K	2587/K	2595/K	2607/K
2620/K	2628/K	2636/K	2644/K	2653/K	2661/K	2671/K
2677/K	2686/K	2693/K	2703/K	2715/K	2728/K	2740/K
2753/K	2765/K	2778/K	2790/K	2803/K	2815/K	2828/K
2840/K	2847/K	2853/K	2859/K	2865/K	2871/K	2877/K
2890/K	2900/K	2910/K	2921/K	2932/K	2939/K	2945/K
2957/K	2965/K	2971/DATA	2979/K	2979/K	2983/K	2987/K
2999/K	3004/K	3012/K	3020/K	3041/K	3051/K	3059/K
3067/K	3076/K	3088/K	3101/K	3113/K	3138/K	3151/K
3164/K	3172/K	3180/K	3195/K	3203/K	3212/K	3220/K
3228/K	3236/K	3245/K	3254/K	3266/K	3279/K	3292/K
3316/K	3327/K	3335/K	3343/K	3351/K	3360/K	3368/K
3377/K	3385/K	3393/K	3399/K	3408/K	3417/K	3429/K
3442/K	3454/K	3467/K	3478/K	3489/K	3497/K	3505/K
3513/K	3522/K	3530/K	3538/K	3546/K	3557/K	3567/K
3577/K	3591/K	3599/K	3607/K	3615/K	3624/K	3633/K
3641/K	3652/K	3662/K	3672/K	3683/K	3699/K	3714/K
3730/K	3746/K	3761/K	3778/K	3793/K	3809/K	3824/K
3825/DATA	3840/K	3855/K	3870/K	3881/K	3900/K	3911/K
3920/K	3926/K	3935/K	3944/K	3953/K	3961/K	3969/K
3977/K	3986/K	3994/K	4002/K	4010/K	4020/K	4027/K
4034/K	4046/K	4059/K	4071/K	4085/K	4096/K	4107/K
4119/K	4130/K	4137/K	4149/K	4160/K	4172/K	4186/K
4200/K	4215/K	4229/K	4243/K	4256/K	4262/K	4268/K
4286/K	4295/K	4301/K	4310/K	4328/K	4337/K	4345/K
4353/K	4361/K	4370/K	4376/K	4382/K	4388/K	4395/K
4403/K	4411/K	4426/K	4443/K	4468/K	4481/K	4494/K
4503/K	4520/K	4528/K	4538/K	4544/K	4560/K	4569/K
4594/K	4621/K	4627/K	4633/K	4640/K	4646/K	4652/K
4659/K	4666/K	4673/K	4679/K	4684/DATA	4690/DATA	4694/DATA
4699/DATA	4704/DATA	4708/DATA	4713/DATA	4719/DATA	4723/DATA	4728/DATA
4735/K	4741/K	4747/K	4753/K	4759/K	4766/K	4773/K
4781/K	4787/K	4793/K	4799/K	4806/K	4814/K	4820/K
4826/K	4832/K	4839/K	4845/K	4851/K	4857/K	4863/K
4870/K	4876/K	4882/K	4888/K	4894/K	4901/K	4907/K
4914/K	4920/K	4926/K	4932/K	4938/K	4949/K	4959/K
4969/K	4980/K	4990/K	5000/K	5011/K	5017/DATA	5023/DATA
5029/DATA	5035/DATA	5042/K	5048/K	5054/DATA	5061/K	5071/DATA
5081/K	5092/DATA	5102/DATA	5112/K	5124/K	5130/K	5136/K
5143/K	5149/K	5155/K	5162/K	5168/K	5174/K	5181/K
5187/K	5193/K	5200/K	5206/K	5212/K	5218/DATA	5223/K
5233/K	5239/K	5244/K	5251/K	5256/K	5261/K	5267/K
5272/K	5277/K	5283/K	5288/K	5293/K	5299/K	5304/K
5310/K	5315/K	5323/K	5328/K	5333/K	5339/K	5344/K
5349/K	5355/K	5360/K	5365/K	5371/K	5376/K	5381/K
5387/K	5392/K	5397/K	5403/K	5410/K	5417/K	5429/K
5442/K	5455/K	5467/K	5480/K	5492/K	5505/K	5517/K
5530/K	5542/K	5555/K	5567/K	5580/K	5593/K	5605/K
5618/K	5630/K	5643/K	5655/K	5668/K	5681/K	5693/K
5751/DATA	5756/DATA	5762/DATA	5769/DATA	5775/DATA	5782/DATA	5788/K
5794/K	5811/K	5816/K	5907/K	5917/K	5927/K	5938/K
5948/K	5958/K	5969/K	5979/K	5989/K	6000/K	6010/K
6020/K	6031/K	6041/K	6051/K	6062/K	6072/K	6082/K
6093/K	6103/K	6113/K	6124/K	6134/K	6144/K	6155/K
6165/K	6175/K	6186/K	6196/K	6206/K	6217/K	6227/K
6237/K	6248/K	6258/K	6268/K	6279/K	6289/K	6299/K
6310/K	6320/K	6330/K	6341/K	6351/K	6361/K	6372/K
6382/K	6392/K	6403/K	6413/K	6423/K	6434/K	6444/K
6454/K	6465/K	6475/K	6485/K	6496/K	6506/K	6516/K
6527/K	6537/K	6547/K	6558/K	6568/K	6578/K	6589/K
6599/K	6609/K	6620/K	6630/K	6640/K	6651/K	6661/K
6671/K	6682/K	6692/K	6702/K	6713/K	6723/K	6733/K
6744/K	6754/K	6764/K	6775/K	6785/K	6795/K	6806/K
6816/K	6826/K	6837/K	6847/K	6857/K	6868/K	6878/K

	6888/K	6899/K	6909/K	6920/K	6930/K	6940/K	6951/K
	6961/K	6971/K	6982/K	6992/K	7009/K	7060/K	7071/K
	7081/K	7091/K	7102/K	7112/K	7122/K	7133/K	7143/K
	7153/K	7164/K	7174/K	7184/K	7195/K	7205/K	7215/K
	7226/K	7236/K	7246/K	7257/K	7267/K	7277/K	7288/K
	7298/K	7308/K	7319/K	7329/K	7339/K	7350/K	7360/K
	7370/K	7381/K	7391/K	7401/K	7412/K	7422/K	7432/K
	7443/K	7453/K	7463/K	7474/K	7484/K	7494/K	7505/K
	7515/K	7525/K	7536/K	7556/K	7577/K	7587/K	7598/K
	7608/K	7629/K	7639/K	7649/K	7660/K	7670/K	7680/K
	7691/K	7701/K	7711/K	7722/K	7732/K	7742/K	7753/K
	7763/K	7773/K	7784/K	7794/K	7804/K	7815/K	7825/K
	7836/K	7846/K	7856/K	7867/K	7877/K	7887/K	7898/K
	7908/K	7922/DATA	7934/DATA				
L0CADD	491/E0R	1024-PZE					
L0C2AD	526/LW	1023-PZE					
L0NGL	1150/P	1165-J					
LPERR	849/LW	1153-P					
LPFORMAT	856/LW	1152-P					
LPG0T0P	854/LW	1151-P					
LPM5G	849-LW	858/B					
LP0	815/BLZ	838-TDV	844/BNEZ				
LPREP0RT	852/LW	1154-P					
LPT0P	847/BNEZ	856-LW					
LRP01	1900-DATA						
LRP02	1915-DATA						
LS01	2887-DATA						
LS02	2897-DATA						
LS03	2907-DATA						
LS04	2918-DATA						
LS05	2929-DATA						
LWB	778/STW	780-LW					
LWBIT	774/LW	1043-LW					
LWBT	779/STW	783/BCS	785-LW				
LWBY	791/STW	792-LW					
LWBYTE	790/E0R	1044-LW					
LWFRM	757/LW	1048-LW					
LWFRM2	763/LW	1049-LW					
LWIX	2844-DATA						
LWIXIA	2850-DATA						
LWN	756/LW	1046-LW					
LWN2	762/LW	1047-LW					
LW01							

LW02	1404=DATA						
LW03	1411=DATA						
LW04	432/LW	993/LW	1421=DATA				
LW05	1435=DATA						
LW06	1443=DATA						
LW07	1451=DATA						
LW08	1459=DATA						
LW09	1468=DATA						
LW10	1476=DATA						
LW11	1484=DATA						
LW12	1492=DATA						
LW13	1501=DATA						
LW14	1509=DATA						
LW15	1517=DATA						
LW16	1525=DATA						
LW17	1534=DATA						
LW18	1542=DATA						
LW19	1550=DATA						
LW20	1558=DATA						
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LW22	1575=DATA						
LW23	1583=DATA						
LW24	1591=DATA						
LW25	1600=DATA						
LW26	1608=DATA						
LW27	1616=DATA						
LW28	1624=DATA						
LW29	1633=DATA						
LW30	1641=DATA						
LW31	1649=DATA						
LW32	1657=DATA						
LW33	1664=DATA						
LW34	1670=DATA						
LW35	1676=DATA						
MASK	1683=DATA						
	421/AND	658/EOR	782/AND	789/AND	932/LW	1021/AND	1107=DATA

MAXCNT	1312/AND					
MEMAD	924/CW	1086-DATA				
MEMID	1032-PZE					
MEMORY	607/LW	612/LW	1077-I			
	522/STW	523/STW	537/CD	541/STD	608/LW	613/LW
	1032/PZE	1077/I	1287-EQU	1331/EXU	1335/LW	1336/LW
	1339/EXU	1342/DATA	1343/DATA	1345/EXU*	1354/EXU*	1364/EXU
	1376/K	1379/LCF	1383/LCF	1387/LCF	1391/LCF	1405/LW
	1436/LW	1444/LW	1452/LW	1460/LW	1469/LW	1477/LW
	1493/LW	1502/LW	1510/LW	1518/LW	1526/LW	1535/LW
	1551/LW	1559/LW	1568/LW	1576/LW	1584/LW	1592/LW
	1609/LW	1617/LW	1625/LW	1634/LW	1642/LW	1650/LW
	1665/LW	1671/LW	1677/LW	1684/LW	1698/BR	1702/BR
	1719/BR	1727/BR	1735/BR	1744/STW	1752/STW	1766/AND
	1778/AND	1787/AND	1795/AND	1815/EOR	1823/EOR	1832/EOR
	1870/LPSD	1885/LPSD	1901/LRP	1932/BCR	1934/K	1982/BCS
	2001/AW	2013/AW	2024/AW	2038/AW	2057/AW	2065/AW
	2082/AW	2090/AW	2098/AW	2107/AW	2115/AW	2123/AW
	2140/AW	2148/AW	2156/AW	2164/AW	2173/AW	2181/AW
	2197/AW	2206/AW	2214/AW	2227/AW	2237/AW	2246/AW
	2268/AW	2277/AW	2286/AW	2297/AW	2317/AW	2325/AW
	2345/AW	2354/AW	2365/AW	2373/AW	2381/AW	2391/AW
	2411/AW	2417/AW	2423/AW	2429/SW	2441/SW	2456/SW
	2475/BIR	2477/K	2512/BAL	2514/K	2524/DATA	2530/BAL*
	2555/LH	2585/LH	2593/LH*	2596/DATA	2597/DATA	2605/LH*
	2611/DATA	2618/LB	2626/LB	2634/LB	2662/DATA	2663/DATA
	2684/LB*	2687/DATA	2687/DATA	2691/LD	2716/DATA	2729/DATA
	2751/LD	2776/LD	2838/LD*	2841/DATA	2841/DATA	2841/DATA
	2848/DATA	2881/LI*	2888/LS	2898/LS	2908/LS	2919/LS
	2948/DATA	2949/DATA	2958/DATA	2959/DATA	2963/LCF	2993/LCFI*
	3010/LAW	3027/DATA*	3036/DATA	3037/DATA	3039/LAW	3049/LAH
	3074/LAD	3086/LAD	3102/DATA	3124/LAD	3136/LAD	3149/LAD
	3170/LCW	3187/DATA	3201/LCW	3210/LCH	3221/DATA	3237/DATA
	3252/LCD	3267/DATA	3290/LCD	3302/LCD	3325/STH	3333/STH
	3358/STH	3366/STH	3375/STB	3383/STB	3397/STB	3415/STD
	3452/STD	3465/STS	3487/STCF	3498/DATA	3499/DATA	3511/STCF
	3528/XW	3531/DATA	3534/DATA	3536/XW	3555/INT	3565/INT
	3575/INT	3586/ANLZ	3600/DATA	3601/DATA	3609/DATA	3613/ANLZ
	3618/LAD	3619/LAD	3622/ANLZ	3631/ANLZ	3639/ANLZ	3650/ANLZ
	3670/ANLZ	3681/ANLZ	3697/ANLZ	3701/DATA	3702/EXU	3703/EXU
	3728/ANLZ	3744/ANLZ	3748/DATA	3749/XW	3750/XW	3759/ANLZ
	3791/ANLZ	3807/ANLZ	3822/ANLZ	3838/ANLZ	3853/ANLZ	3868/ANLZ
	3898/CW	3909/CW	3918/CW	3924/CH	3933/CH	3942/CH
	3959/CB	3967/CB	3975/CB	3992/CB	4000/CB	4000/CB
	4044/CD	4069/CD	4083/CS	4094/CS	4105/CS	4117/CLR
	4135/CLR	4147/CLR	4158/CLR	4170/CLM	4184/CLM	4198/CLM
	4227/CLM	4241/CLM	4266/MTW	4284/MTW	4299/MTH	4317/MTH
	4335/MTB	4343/MTB	4359/MTB	4393/AH	4401/AH	4411/AD
	4479/AD	4492/AD	4501/AD	4510/AWM	4518/AWM	4539/DATA
	4542/SH	4550/SH	4567/SD	4592/SD	4604/SD	4718/S*
	4804/S*	4957/S*	5069/S*	5100/S*	5110/S*	5231/SF*
	5408/SF*	5666/SF*	5691/SF*	5723/CAL4*	5728/DATA	5729/DATA
	5809/EOR	5814/AWM	5820/DL	5858/CVS	5863/PACK	5868/DST
	5889/DSA	5905/MW	5915/MW	5925/MW	5936/MW	5946/MW
	5967/MW	5977/MW	5987/MW	5998/MW	6008/MW	6018/MW
	6039/MW	6049/MW	6060/MW	6070/MW	6080/MW	6091/MW
	6111/MW	6122/MW	6132/MW	6142/MW	6153/MW	6163/MW
	6184/MW	6194/MW	6204/MW	6215/MW	6225/MW	6235/MW
	6256/MW	6266/MW	6277/MW	6287/MW	6297/MW	6308/MW
	6328/MW	6339/MW	6349/MW	6359/MW	6370/MW	6380/MW
	6401/MW	6411/MW	6421/MW	6432/MW	6442/MW	6452/MW
	6473/MW	6483/MW	6494/MW	6504/MW	6514/MW	6525/MW
	6545/MW	6556/MW	6566/MW	6576/MW	6587/MW	6597/MW
	6618/MW	6628/MW	6638/MW	6649/MW	6659/MW	6669/MW
	6690/MW	6700/MW	6721/MW	6731/MW	6742/MW	6752/MW
	6773/MW	6783/MW	6793/MW	6804/MW	6814/MW	6824/MW
	6845/MH	6855/MH	6866/MH	6876/MH	6886/MH	6897/MH
						1022/PZE
						1337/LW
						1375/K
						1412/LW
						1485/LW
						1543/LW
						1601/LW
						1658/LW
						1710/BR
						1770/AND
						1840/EOR
						1984/K
						2074/AW
						2131/AW
						2189/AW
						2258/AW
						2335/AW
						2402/AW
						2465/SW
						2547/LH
						2610/DATA
						2675/LB
						2738/LD
						2848/DATA
						2943/LCF*
						3002/LAW
						3057/LAH
						3162/LCW
						3246/DATA
						3349/STH
						3427/STD
						3520/XW
						3568/DATA
						3617/DATA
						3660/ANLZ
						3712/ANLZ
						3776/ANLZ
						3879/ANLZ
						3951/CB
						4032/CD
						4128/CLR
						4213/CLM
						4326/MTH
						4453/AD
						4539/DATA
						4771/S*
						5242/SF*
						5781/EOR
						5873/TBS
						5956/MW
						6029/MW
						6101/MW
						6173/MW
						6246/MW
						6318/MW
						6390/MW
						6463/MW
						6535/MW
						6607/MW
						6680/MW
						6762/MW
						6835/MH
						7007/DW

	7017/DW	7027/DW	7038/DW	7048/DW	7058/DW	7069/DW	7079/DW
	7089/DW	7100/DW	7110/DW	7120/DW	7131/DW	7141/DW	7151/DW
	7162/DW	7172/DW	7182/DW	7193/DW	7203/DW	7213/DW	7224/DW
	7234/DW	7244/DW	7255/DW	7265/DW	7275/DW	7286/DW	7296/DW
	7306/DW	7317/DW	7337/DW	7348/DW	7358/DW	7368/DW	7379/DW
	7389/DW	7399/DW	7410/DW	7420/DW	7430/DW	7441/DW	7451/DW
	7461/DW	7472/DW	7482/DW	7492/DW	7503/DW	7513/DW	7523/DW
	7534/DW	7544/DW	7554/DW	7565/DW	7575/DW	7585/DW	7596/DW
	7606/DW	7616/DW	7627/DW	7637/DW	7647/DW	7658/DW	7668/DW
	7678/DW	7689/DW	7699/DW	7709/DW	7720/DW	7730/DW	7740/DW
	7751/DW	7761/DW	7771/DW	7782/DW	7792/DW	7802/DW	7813/DW
	7823/DW	7834/DH	7844/DH	7854/DH	7865/DH	7875/DH	7885/DH
	7896/DH	7920/K	7932/K				
MEMBUT	503/STW	504/STW	536/LD	634=DATA			
MH01	6834=DATA						
MH02	6844=DATA						
MH03	6854=DATA						
MH04	6865=DATA						
MH05	6875=DATA						
MH06	6885=DATA						
MH07	6896=DATA						
MH08	6906=DATA						
MI	89/8PEN						
MI	89/8PEN	102=CNAME					
MINCR	917/AW	1012=DATA					
MISSLMS	601/BE	612=LW					
MI01	6917=DATA						
MI02	6927=DATA						
MI03	6937=DATA						
MI04	6948=DATA						
MI05	6958=DATA						
MI06	6968=DATA						
MI07	6979=DATA						
MI08	6989=DATA						
MI09	6999=DATA						
MODULE	630/LPSD	1290=EQU					
MOTION	843/AND	1083=DATA					
MOVE	467=STW	473=BJR					
MPVRET	242=XPSD						
MSG	1187/GEN	1189=TEXTC					
MTB01	4334=DATA						
MTB02	4342=DATA						

MTB03	4350-DATA		
MTB04	4358-DATA		
MTB05	4367-DATA		
MTB06	4373-DATA		
MTB07	4379-DATA		
MTB08	4385-DATA		
MTH01	4292-DATA		
MTH02	4298-DATA		
MTH03	4307-DATA		
MTH04	4316-DATA		
MTH05	4325-DATA		
MTW01	4253-DATA		
MTW02	4259-DATA		
MTW03	4265-DATA		
MTW04	4275-DATA		
MTW05	4283-DATA		
MVRET	243-XPSC	1366/K	5806/K
MW01	5904-DATA		
MW02	5914-DATA		
MW03	5924-DATA		
MW04	5935-DATA		
MW05	5945-DATA		
MW06	5955-DATA		
MW07	5966-DATA		
MW08	5976-DATA		
MW09	5986-DATA		
MW10	5997-DATA		
MW11	6007-DATA		
MW12	6017-DATA		
MW13	6028-DATA		
MW14	6038-DATA		
MW15	6048-DATA		
MW16	6059-DATA		
MW17	6069-DATA		
MW18	6079-DATA		
MW19			

	6090=DATA
MW20	6100=DATA
MW21	6110=DATA
MW22	6121=DATA
MW23	6131=DATA
MW24	6141=DATA
MW25	6152=DATA
MW26	6162=DATA
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MW41	6317=DATA
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MW47	6379=DATA
MW48	6389=DATA
MW49	6400=DATA
MW50	6410=DATA
MW51	6420=DATA
MW52	6431=DATA
MW53	6441=DATA
MW54	6451=DATA

MW55	6462=DATA
MW56	6472=DATA
MW57	6482=DATA
MW58	6493=DATA
MW59	6503=DATA
MW60	6513=DATA
MW61	6524=DATA
MW62	6534=DATA
MW63	6544=DATA
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MW69	6606=DATA
MW70	6617=DATA
MW71	6627=DATA
MW72	6637=DATA
MW73	6648=DATA
MW74	6658=DATA
MW75	6668=DATA
MW76	6679=DATA
MW77	6689=DATA
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MW79	6710=DATA
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MW81	6730=DATA
MW82	6741=DATA
MW83	6751=DATA
MW84	6761=DATA
MW85	6772=DATA
MW86	6782=DATA
MW87	6792=DATA
MW88	6803=DATA
MW89	6813=DATA
MW90	

M1015	6823=DATA							
NAME	462/AND	1057=DATA						
NAB	96/GEN	105/GEN						
NABAD	212/XPSD	237=PZE	642/STW	1033/PZE	1041/XPSD			
NABRET	641/EOR	1033=PZE						
NABTR	241=XPSD	4438/K						
NABXD	212=XPSD	480/STW	640/STW					
NEARET	639/EOR	1041=XPSD						
NEG12	245=XPSD	2542/K						
NEG2	1067=DATA							
NEG20	443/LW	755/LW	1280=EQU					
NEG3	454/LW	1068=DATA						
NEG4	761/LW	1065=DATA						
NEG51	749/LW	775/LW	1279=EQU					
NEG8	441/LW	824/LW	1069=DATA					
NEIRET	746/LW	1066=DATA						
	249=XPSD	1374/K	2883/K	2995/K	3495/STCF	3498=DATA	3499=DATA	
	5822/K	5830/K	5839/K	5844/K	5849/K	5854/K	5860/K	
	5865/K	5870/K	5875/K	5880/K	5885/K	5891/K	5896/K	
	7002/K							
NFAIMPO1	438/STW	907/STW	5899=DATA					
NFLM	982/GEN	984=TEXTC						
NFLBATP	975/P	982=GEN						
NIMP	900/LW	973=XPSD						
NOHALT	738/BCS	740=LW						
NOTEND	461/BCS	465=LW						
NUMBER	769/LW	1046/LW	1047/LW	1097=DATA	1279/EQU	1280/EQU		
BDD	760/BCS	765=LW						
BDDBALL	558/LW	988/LW	1095=DATA					
BNE	499/LW	583/LW	759/AND	1063=DATA				
BRO1	1697=DATA							
BRO2	1701=DATA							
BRO3	1709=DATA							
BRO4	1718=DATA							
BRO5	1726=DATA							
BRO6	1734=DATA							
P	68=CNAME							
PAGE								

PAGE	59/EPEN							
PARITY	59/EPEN	60-CNAME						
PASS	230/XPSD	399-PZE						
PASSES	1291-EQU	2659/LB	2662/DATA	2663/DATA				
PCPINT	416/LW	452/STW	1275-PZE	1301/LW				
PEBMSG1	449/LW	1089-DATA						
PERR	7977/L*	7986-DATA						
PFLBAPT	1153/P	1170-J						
PFORMAT	904/LW	974-P						
PGB	1152/P	1178-J						
PGSTEP	1087-DATA	1168/J						
PHEAD	1151/P	1168-J						
PIBCOMP	822/LW	1148-P						
PLBNGL	957/LW	965-P						
PNFLBAPT	825/LW	1150-P						
PRELBC	908/LW	975-P						
PREPRT	528-LPSD							
PRINT	1154/F	1174-J						
PRTCMSG	819/XPSD	821/XPSD	823/XPSD	829/XPSD	855/XPSD	857/XPSD	862-PZE	
PSD*ID	884/LPSD	909/XPSD	931/XPSD	7978/XPSD				
PSHRTL	930/LW	1155-P						
PSIXCR	585/LW	1075-I						
PSW1	828/LW	1149-P						
PSW2	818/LW	1146-P						
PTITLE	483/STW	486/LPSD	492/STW	528/LPSD	543/LPSD	1267-PZE		
REGID	448/STW	494/STW	1268-PZE					
REGTEMP	820/LW	1147-P						
REPEAT	594/LW	1076-I						
REPLAY	7957/STM	7983/LM	7985-RES					
REPORT	407/LPSD	425/LPSD	1265-PZE	1290/EQU	1291/EQU	1316/LPSD	3030/DATA	
RESET	3031/DATA	3036/DATA	3037/DATA	3057/LAH	3060/DATA	3099/LAD	3102/DATA	
RESTORE	3218/LCH	3221/DATA	3243/LCH	3246/DATA	3264/LCD	3267/DATA	3531/DATA	
RETADDR	3534/DATA	3594/LH*	3595/LH*	3597/ANLZ	3600/DATA			
REPLAY	885/LW	893-B						
REPORT	748/BCS	749-LW						
RESET	234/XPSD	410-PZE						
RESTORE	7973/LW	7987-B						
RETADDR	913/LW	986-DATA						

RETEND	1051=PZE						
RETURN	219/XPSD	241/XPSD	242/XPSD	243/XPSD	244/XPSD	245/XPSD	246/XPSD
	247/XPSD	248/XPSD	249/XPSD	250/XPSD	251/XPSD	252/XPSD	253/XPSD
	254/XPSD	255/XPSD	256/XPSD	264/XPSD	271/XPSD	280/XPSD	288/XPSD
	296/XPSD	303/XPSD	311/XPSD	312/XPSD	313/XPSD	314/XPSD	315/XPSD
	316/XPSD	317/XPSD	318/XPSD	319/XPSD	320/XPSD	321/XPSD	322/XPSD
	323/XPSD	324/XPSD	325/XPSD	326/XPSD	334/XPSD	335/XPSD	336/XPSD
	337/XPSD	338/XPSD	339/XPSD	340/XPSD	341/XPSD	342/XPSD	343/XPSD
	344/XPSD	345/XPSD	346/XPSD	347/XPSD	348/XPSD	349/XPSD	357/XPSD
	358/XPSD	359/XPSD	360/XPSD	361/XPSD	362/XPSD	363/XPSD	364/XPSD
	365/XPSD	366/XPSD	367/XPSD	368/XPSD	369/XPSD	370/XPSD	371/XPSD
	372/XPSD	380/XPSD	381/XPSD	382/XPSD	383/XPSD	384/XPSD	385/XPSD
	386/XPSD	387/XPSD	388/XPSD	389/XPSD	390/XPSD	391/XPSD	392/XPSD
	393/XPSD	394/XPSD	395/XPSD	527/STW	545/XPSD	559/STW	914/STW
	989/STW	1259=PZE	1307/DATA	1369/XPSD	1370/XPSD	1937/XPSD	1938/XPSD
	1944/XPSD	1945/XPSD	1987/XPSD	1988/XPSD	2480/XPSD	2481/XPSD	2517/XPSD
	2518/XPSD	2527/XPSD	2528/XPSD	3184/LCW	3187/DATA	3643/GEN	3644/XPSD
	3645/XPSD	3685/DATA	3686/LS	3687/LS	3690/XPSD	3691/XPSD	3705/XPSD
	3706/XPSD	3721/XPSD	3722/XPSD	3737/XPSD	3738/XPSD	3753/XPSD	3754/XPSD
	3768/XPSD	3769/XPSD	3785/XPSD	3786/XPSD	3800/XPSD	3801/XPSD	3816/XPSD
	3817/XPSD	3831/XPSD	3832/XPSD	3847/XPSD	3848/XPSD	3861/XPSD	3862/XPSD
	3875/XPSD	3876/XPSD	5804/XPSD				
RINPUT	511/STW	512/STW	542/LD	636=DATA			
RI9CL1	675=E0R						
RI9CL2	682=E0R						
RI9CL3	689=E0R						
RI9CL4	696=E0R	5737/K					
RI9NA0	639=E0R	4437/K					
ROUTPUT	507/STW	508/STW	533/CD	539/LD	635=DATA		
RTC	924=CW	1016/B					
RTCMG	1155/P	1187=GEN					
S	89/0PEN						
S	89/0PEN	91=CNAME					
SAVE	418/LW	447/STW	460=LW	561/LW	1303/LW		
SAVE0	956/STW	962/LW	966=DATA				
SD01	4566=DATA						
SD02	4578=DATA						
SD03	4591=DATA						
SD04	4603=DATA						
SETFRM	767/STW	770=LW	800/LW				
SETINTR	944/B	946=LI	1015/BE				
SETN	766/STW	769=LW	799/LW				
SETPSW	489=LW	643/BCR	647/BCR	651/BCR	661/BCR	671/B	679/BCR
	686/BCR	693/BCR	700/BCR	706/B	1322/K	1328/DATA	1332/K
	1340/K	1346/K	1355/K	1380/K	1384/K	1388/K	1392/K
	1396/K	1406/K	1413/K	1423/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
1635/K	1643/K	1651/K	1659/K	1666/K	1672/K	1678/K
1685/K	1699/K	1703/K	1711/K	1720/K	1728/K	1736/K
1745/K	1753/K	1767/K	1771/K	1779/K	1788/K	1796/K
1804/K	1816/K	1824/K	1833/K	1841/K	1851/K	1871/K
1886/K	1902/K	1917/K	1933/K	1942/K	1949/K	1955/K
1960/K	1965/K	1972/K	1978/K	1983/K	2002/K	2006/K
2014/K	2025/K	2392/K	2403/K	2412/K	2418/K	2424/K
2430/K	2457/K	2476/K	2485/K	2493/K	2500/K	2507/K
2513/K	2523/DATA	2531/K	2548/K	2556/K	2564/K	2573/K
2579/K	2586/K	2594/K	2606/K	2619/K	2627/K	2635/K
2643/K	2652/K	2660/K	2670/K	2676/K	2685/K	2692/K
2702/K	2714/K	2727/K	2739/K	2752/K	2764/K	2777/K
2789/K	2802/K	2814/K	2827/K	2839/K	2846/K	2852/K
2858/K	2864/K	2870/K	2876/K	2889/K	2899/K	2909/K
2927/K	2931/K	2938/K	2944/K	2956/K	2964/K	2970/DATA
2974/K	2978/K	2982/K	2986/DATA	2998/K	3003/K	3011/K
3019/K	3040/K	3050/K	3058/K	3066/K	3075/K	3087/K
3100/K	3112/K	3137/K	3150/K	3163/K	3171/K	3179/K
3194/K	3202/K	3211/K	3219/K	3227/K	3235/K	3244/K
3253/K	3265/K	3278/K	3291/K	3315/K	3326/K	3334/K
3347/K	3350/K	3359/K	3367/K	3376/K	3384/K	3392/K
3398/K	3407/K	3416/K	3428/K	3441/K	3453/K	3466/K
3477/K	3488/K	3496/K	3504/K	3512/K	3521/K	3529/K
3537/K	3545/K	3556/K	3566/K	3576/K	3590/K	3598/K
3606/K	3614/K	3623/K	3632/K	3640/K	3651/K	3661/K
3671/K	3682/K	3698/K	3713/K	3729/K	3745/K	3760/K
3777/K	3792/K	3808/K	3823/K	3839/K	3854/K	3869/K
3880/K	3899/K	3910/K	3919/K	3925/K	3934/K	3943/K
3952/K	3960/K	3968/K	3976/K	3985/K	3993/K	4001/K
4009/K	4019/K	4026/K	4033/K	4045/K	4058/K	4070/K
4084/K	4095/K	4106/K	4118/K	4129/K	4136/K	4148/K
4159/K	4171/K	4185/K	4199/K	4214/K	4228/K	4242/K
4261/K	4267/K	4285/K	4294/K	4300/K	4327/K	4336/K
4344/K	4352/*	4360/K	4369/K	4375/K	4381/K	4387/K
4493/K	4502/K	4537/K	4559/K	4568/K	4620/K	4626/K
4632/K	4639/K	4645/K	4651/K	4658/K	4665/K	4672/K
4678/K	4684/DATA	4690/DATA	4694/DATA	4699/DATA	4704/DATA	4708/DATA
4713/DATA	4719/DATA	4723/DATA	4728/DATA	4758/K	4765/K	4772/K
4780/K	4786/K	4792/K	4798/K	4805/K	4813/K	4819/K
4825/K	4831/K	4838/K	4844/K	4850/K	4856/K	4862/K
4869/K	4875/K	4881/K	4887/K	4893/K	4900/K	4906/K
4913/K	4919/K	4925/K	4931/K	4937/K	4948/K	4958/K
4968/K	4979/K	4989/K	4999/K	5016/DATA	5022/DATA	5028/DATA
5034/DATA	5053/DATA	5070/DATA	5091/DATA	5101/DATA	5123/K	5129/K
5135/K	5142/K	5148/K	5154/K	5161/K	5167/K	5173/K
5180/K	5186/K	5192/K	5199/K	5205/K	5211/K	5218/DATA
5222/DATA	5232/DATA	5238/DATA	5243/DATA	5250/DATA	5255/DATA	5260/DATA
5266/DATA	5271/DATA	5276/DATA	5282/DATA	5287/DATA	5292/DATA	5298/DATA
5303/DATA	5309/DATA	5314/DATA	5322/DATA	5327/DATA	5332/DATA	5338/DATA
5343/DATA	5348/DATA	5354/DATA	5359/DATA	5364/DATA	5370/DATA	5375/DATA
5380/DATA	5386/DATA	5391/DATA	5396/DATA	5402/DATA	5409/K	5782/DATA
5787/DATA	5793/K	5810/K	5815/K	7921/DATA	7933/DATA	
SETRPLY	885=LW	7992/END				
SF	89/OPEN					
SF	89/OPEN	90=CNAME				
SF001	5121=DATA					
SF002	5127=DATA					
SF003	5133=DATA					
SF004	5140=DATA					
SF005	5146=DATA					
SF006	5152=DATA					

SF007 5159-DATA
SF008 5165-DATA
SF009 5171-DATA
SF01 5414-DATA
SF010 5178-DATA
SF011 5184-DATA
SF012 5190-DATA
SF013 5197-DATA
SF014 5203-DATA
SF015 5209-DATA
SF016 5216-DATA
SF017 5220-DATA
SF018 5230-DATA
SF019 5236-DATA
SF02 5426-DATA
SF020 5241-DATA
SF021 5248-DATA
SF022 5253-DATA
SF023 5258-DATA
SF024 5264-DATA
SF025 5269-DATA
SF026 5274-DATA
SF027 5280-DATA
SF028 5285-DATA
SF029 5290-DATA
SF03 5439-DATA
SF030 5296-DATA
SF031 5301-DATA
SF032 5307-DATA
SF033 5312-DATA
SF034 5320-DATA
SF035 5325-DATA
SF036 5330-DATA
SF037 5336-DATA
SF038 5341-DATA
SF039

SF04	5346-DATA	
	5452-DATA	
SF040	5352-DATA	
SF041	5357-DATA	
SF042	5362-DATA	
SF043	5368-DATA	
SF044	5373-DATA	
SF045	5378-DATA	
SF046	5384-DATA	
SF047	5389-DATA	
SF048	5394-DATA	
SF049	5400-DATA	
SF05	5464-DATA	
SF050	5407-DATA	
SF06	5477-DATA	
SF07	5489-DATA	
SF08	5502-DATA	
SF09	5514-DATA	
SF10	5527-DATA	
SF11	5539-DATA	
SF12	5552-DATA	
SF13	5564-DATA	
SF14	5577-DATA	
SF15	5590-DATA	
SF16	5602-DATA	
SF17	5615-DATA	
SF18	5627-DATA	
SF19	5640-DATA	
SF20	5652-DATA	
SF21	5665-DATA	
SF22	5678-DATA	
SF23	5690-DATA	
SHORT	522-STA	552/BCS
SHORTER	538/PE	541-STD
SHPTL	1143/P	1163-J
SHC1	4541-DATA	

SM02	4549=DATA							
SM03	4557=DATA							
SIX	581/EOR	1062=DATA						
SIXCR	1146/P	1157-J						
SI9CL1	674=LW	5706/K						
SI9CL2	681=LW	5710/K						
SI9CL3	688=LW	5714/K						
SI9CL4	695=LW	5718/K	5724/K	5732/K				
SI9NAR	638=LW	1365/K	1373/K	2541/K	2882/K	2994/K	5805/K	
	5821/K	5829/DATA	5838/DATA	5843/DATA	5848/DATA	5853/DATA	5859/DATA	
	5864/DATA	5869/DATA	5874/DATA	5879/DATA	5884/DATA	5890/DATA	5895/DATA	
	7001/K							
SKIP6	816/BIR	820=LW						
SL	214/XPSD	267-PZE	650/STW	1034/PZE				
SLAD	649/EOR	1034-PZE						
SLRET	271-XPSD							
SLSW	649-EOR							
SLTR	214-XPSD							
SPACE	1082=TEXT	1170/J	1174/J	1178/J	1182/J			
SPUR	1293/XPSD	1295-PZE						
SPURTRAP	1095/DATA	1293-XPSD						
STB01	3374=DATA							
STB02	3382=DATA							
STB03	3390=DATA							
STB04	3396=DATA							
STB05	3405=DATA							
STCF	89/OPEN							
STCF	89/OPEN	93-CNAME						
STCF01	3486=DATA							
STCF02	3494=DATA							
STCF03	3502=DATA							
STCF04	3510=DATA							
STD01	3414=DATA							
STD02	3426=DATA							
STD03	3439=DATA							
STD04	3451=DATA							
STH01	3324=DATA							

STH02	3332-DATA		
STH03	3340-DATA		
STH04	3348-DATA		
STH05	3357-DATA		
STH06	3365-DATA		
STARE	453/LW	465/LW	1052-STW
STRMG1	745/LW	1053-STW	
STRWD	768/STW	798-STW	801/LW
STS01	3464-DATA		
STS02	3475-DATA		
STW01	1743-DATA		
STW02	1751-DATA		
SW01	2421-DATA		
SW02	2430-DATA		
SW03	2440-DATA		
SW04	2448-DATA		
SW05	2451-DATA		
SW06	2468-DATA		
S001	4618-DATA		
S002	4624-DATA		
S003	4630-DATA		
S004	4637-DATA		
S005	4643-DATA		
S006	4649-DATA		
S007	4656-DATA		
S008	4663-DATA		
S009	4670-DATA		
S01	4732-DATA		
S010	4676-DATA		
S011	4682-DATA		
S012	4688-DATA		
S013	4692-DATA		
S014	4697-DATA		
S015	4702-DATA		
S016	4707-DATA		
S017	4707-DATA		

S018	4711-DATA
S019	4717-DATA
S02	4721-DATA
S020	4738-DATA
S03	4726-DATA
S04	4744-DATA
S05	4750-DATA
S06	4756-DATA
S07	4763-DATA
S08	4770-DATA
S09	4778-DATA
S10	4784-DATA
S11	4790-DATA
S12	4796-DATA
S13	4803-DATA
S14	4811-DATA
S15	4817-DATA
S16	4823-DATA
S17	4829-DATA
S18	4836-DATA
S19	4842-DATA
S20	4848-DATA
S21	4854-DATA
S22	4860-DATA
S23	4867-DATA
S24	4873-DATA
S25	4879-DATA
S26	4885-DATA
S27	4891-DATA
S28	4898-DATA
S29	4904-DATA
S30	4911-DATA
S31	4917-DATA
S32	4923-DATA
S33	4929-DATA
	4935-DATA

S34	4946=DATA						
S35	4956=DATA						
S36	4966=DATA						
S37	4977=DATA						
S38	4987=DATA						
S39	4997=DATA						
S40	5008=DATA						
S41	5014=DATA						
S42	5020=DATA						
S43	5026=DATA						
S44	5032=DATA						
S45	5039=DATA						
S46	5045=DATA						
S47	5051=DATA						
S48	5058=DATA						
S49	5068=DATA						
S50	5078=DATA						
S51	5089=DATA						
S52	5099=DATA						
S53	5109=DATA						
TABLE	456/STW 501/LW 515/LW 591/LW 1052/STW	470/STW 502/LW 524/LW 597/LW 1235=RES	477/LW 505/LW 525/LW 599/LW 1850/XPSD	481/LW 506/LW 530/LW 605/LW 7958/LW	489/LW 509/LW 566/LW 609/LW	493/LW 510/LW 579/LW 614/LW	496/LW 514/LW 587/LW 705/STCF
TEMP	842/STW	845/LW	1084=DATA				
TEST	557/STW 586/LW 1287/EQU	560/STW 590/LW	562/STW 596/LW	563/STW 604/LW	565/LW 1256=RES	578/LW 1285/EQU	582/LW 1286/EQU
TESTID	728=AI0	731/BCR	736/BEZ				
TITLE	1147/P	1159/J					
T0	468/STW	470=STW					
T0P	846/AND	1085=DATA					
TSTDVC	717/BCS	719=8IR					
TTL	1157/J	1159/J	1180/J	1193=DATA			
TYPE	419/LW 1088=DATA	423/STW 1304/LW	729/TI0* 1314/STW	814/LW	838/TDV*	867/SI0*	876/TI0*
UII	213/XPSD	260=PZE	646/STW	972/XPSD	1035/PZE		
UIIAD	645/E0R	1035=PZE					

UIIRET	264-XPSD	5902/K					
UIISW	645-EOR	666/BCR	5901/K				
UIITP	213-XPSD	901/STW	911/STW				
WDTR	218/XPSD	299-PZE	1036/PZE				
WDTRAD	1036-PZE						
WDTRET	307-XPSC						
WDTRTR	218-XPSD						
WKB	772/STW	794/EOR	1276-PZE				
WBRD	753/STW	781/AND	1277-PZE				
WBRDS	766-STW	805/BIR					
XP	112-SET	114/BRG					
XPSD	478/LW	570/LW	1281-EQU				
XPSDID	568/LW	1072-I					
XRTC	934-B						
XW01	3519-DATA						
XW02	3527-DATA						
XW03	3535-DATA						
XW04	3543-DATA						
Y	1284-EQU						
ZERE	429/LW	430/LW	446/LW	484/LW	616/LW	776/LW	891/LW
	1278-EQU	1288/EQU	1289/EQU				
ZI0A	943/STW	945-DATA	961/SI0*				
ZI0AIN	139/DATA	144/DATA	941-B				
ZR	620/BCS	722-LW					
2Q3	1059-DATA						
6Q3	725/LW	734/AND	735/EOR	872/AND	873/EOR	881/AND	882/EOR
	1058-GEN						
\$	82/D0	112/SET	112/SET	113/D0	113/D0	114/BRG	239/PZE
	262/PZE	269/PZE	277/PZE	285/PZE	293/PZE	301/PZE	309/PZE
	332/PZE	355/PZE	378/PZE	401/PZE	412/PZE	455/STW	457/BIR
	471/BIR	472/BIR	589/BIR	603/BIR	618/BCS	626/BIR	713/PZE
	719/BIR	732/BCR	787/BIR	795/BIR	796/BIR	802/BIR	803/BIR
	804/BIR	808/BIR	839/BCR	840/BCR	851/BCS	864/PZE	870/BCR
	879/BCR	920/B	941/B	986/DATA	1002/CW	1231/FILL	1257/FILL
	1297/PZE	1311/BRG	5705/CAL1	5709/CAL2	5713/CAL3	5717/CAL4	5731/CAL4
	5736/CAL4	7946/EQU					

STAPLE

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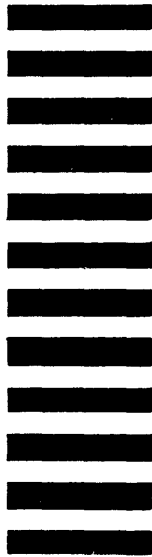
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