

XDS 900870D  
\$2.75

DIAGNOSTIC PROGRAM MANUAL  
SIGMA 5 AND 7  
CPU DIAGNOSTIC PROGRAM  
(VERIFY)

PROGRAM NO. 704042D

November 1969

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## RELATED PUBLICATIONS

The following publications contain information, supplementary to but not required, for a complete understanding of the Sigma 5 and 7 CPU Diagnostic Program (Verify).

<u>Publication Title</u>	<u>Publication No.</u>
XDS Sigma 7 Computer, Reference Manual	900950
Sigma 7 CPU Diagnostic System (Sense), Diagnostic Program Manual	900824
Sigma 7 Computer, Technical Manual	901060
XDS Sigma 5 Computer, Reference Manual	900959
Sigma 5 Computer, Technical Manual	901172

## SECTION I INTRODUCTION

### 1-1 SCOPE OF MANUAL

This manual describes the verify program, designed for the Sigma 5 and 7 Computers, manufactured by Xerox Data Systems, El Segundo, California.

This manual is made up of five sections. Section I is a general introduction to the Verify program. Section II is a detailed discussion of operating procedures. Section III is a detailed discussion of the program operations. Section IV contains the Verify program listing. Section V contains the concordance listing.

### 1-2 PROGRAM OBJECTIVE

The object of the program is to detect and diagnose errors pertaining to the Load Program Status Doubleword (LPSD), Load Word (LW), Store Word (STW), Branch on Conditions Set (BCS), Branch on Conditions Reset (BCR), AND Word (AND), Exclusive OR Word (EOR), and Branch and Incrementing Register (BIR) instructions. The LPSD, LW, STW,

EOR and AND instructions are checked only to the extent that their results can be verified by resultant condition code settings.

### 1-3 GENERAL SPECIFICATIONS

Table 1-1 lists general specifications for this program.

Table 1-1. General Specifications

Computer Configuration	Any Sigma 5 or 7 computer with card or paper tape reader
Prerequisites	The sense diagnostic test must have run successfully (on Sigma 7 only)

## SECTION II

### OPERATING INSTRUCTIONS

#### 2-1 GENERAL

The verify program consists of 133 separate and independent test routines or blocks. Upon the completion of each block, program control is transferred to the next sequential block unless the short loop is invoked. Program operation begins at hexadecimal location 140 and can be restarted at this location at any time. Registers 0 through 3 of page 0 are used throughout the program. The block number is maintained in register 1 of page 0, the error count in register 2 of page 0, and the pass count in register 3 of page 0.

The listing of each block is headed by a statement concerning the objective of the block which may be used as an aid to error diagnosis upon indication of a failure in that block.

#### 2-2 LOADING INSTRUCTIONS

Table 2-1 indicates initial switch settings. After the initial switch settings have been completed, the following procedures are required:

- a. Clear memory.
- b. Perform standard load procedure (see Sigma 7 Computer, Reference Manual, No. 900950).

Table 2-1. Initial Switch Settings

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

#### 2-3 SUCCESS INDICATIONS

After the final block has been executed, the program is re-executed starting with block No. 1 and a pass counter, which is maintained in register 3, is increased by one. If no error halts occur, the accumulated number of passes through the entire 133 block of tests may be inspected in register 3 during the report wait (see paragraph 2-5).

#### 2-4 ERROR INDICATIONS AND PROCEDURES

Each block contains its own error WAIT. The program will halt whenever a failure occurs unless the suppress error halt option (see paragraph 2-5) is invoked. During the error halt, inspection of register 1 will indicate the failing block number. The block heading will state the test objective, hence the nature of the failure may be deduced. The program may now be forced into a loop of the failing block if the short loop option (see paragraph 2-5) is invoked, or the program may be permitted to proceed to the next sequential block if the short loop operation is not invoked.

In either case, the error count maintained in register 2 is incremented whenever a failure occurs.

Clear the halt to continue.

#### 2-5 Options

REPORT. By setting SENSE switch 3, a program WAIT will occur at the beginning of the next block. Register 1 will continue the identification number of the preceding block.

SUPPRESS ERROR HALT. By setting SENSE switch 4, the program will continue to the next sequential block without halting upon detection of a failure.

SHORT LOOP. By setting SENSE switch 2, the program will cause the continual re-execution of the current test block.

### SECTION III PROGRAM DESCRIPTION

#### 3-1 GENERAL

All functions of LW are executed that will affect the lower condition code in all its configurations, i.e., zero to reset CC3 and CC4, a negative value to set CC4, and successive ones in each bit position to set CC3.

EOR is tested by executing an LW-EOR sequence with bit combinations of zeros on zeros, ones on ones, and one on zero in all bit positions. Verification of successful EOR execution is determined by the resultant setting of CC3 and CC4.

AND is tested by executing an LW-AND sequence with bit combinations of zero AND zero, zero AND one, one AND zero, one AND one in all bit positions. Verification of successful execution is determined by the resultant setting of CC3 and CC4.

STW is tested by storing zero, -1 on zero, -1 on -1, and zero on zero, reloading the stored values and comparing the reloaded value (via EOR and condition code setting) against the original value.

BCS and BCR are tested by executing these instructions after setting various combinations of lower condition codes

(via LW) and determining the validity of the resultant branch/no branch execution.

BIR is tested by successively filling the less significant bit positions of the test register (0, 1, 3, 7, F, . . . 3 FFFFFFF), executing the BIR, and checking if the following conditions resulted:

1. Did the expected branch/no branch execution occur?
2. Was the value resident in the test register properly incremented?
3. Was the resultant condition code setting correct?

An incidental bonus of this test is that one functional series of the adder carry logic is also tested.

After execution of the upper condition codes is examined, the LSD is tested by executing LSD with various condition code settings in PSW1.

The flow diagrams listed as figure 3-1 describe the operation and sequences of the 133 separate and independent test routines or blocks.

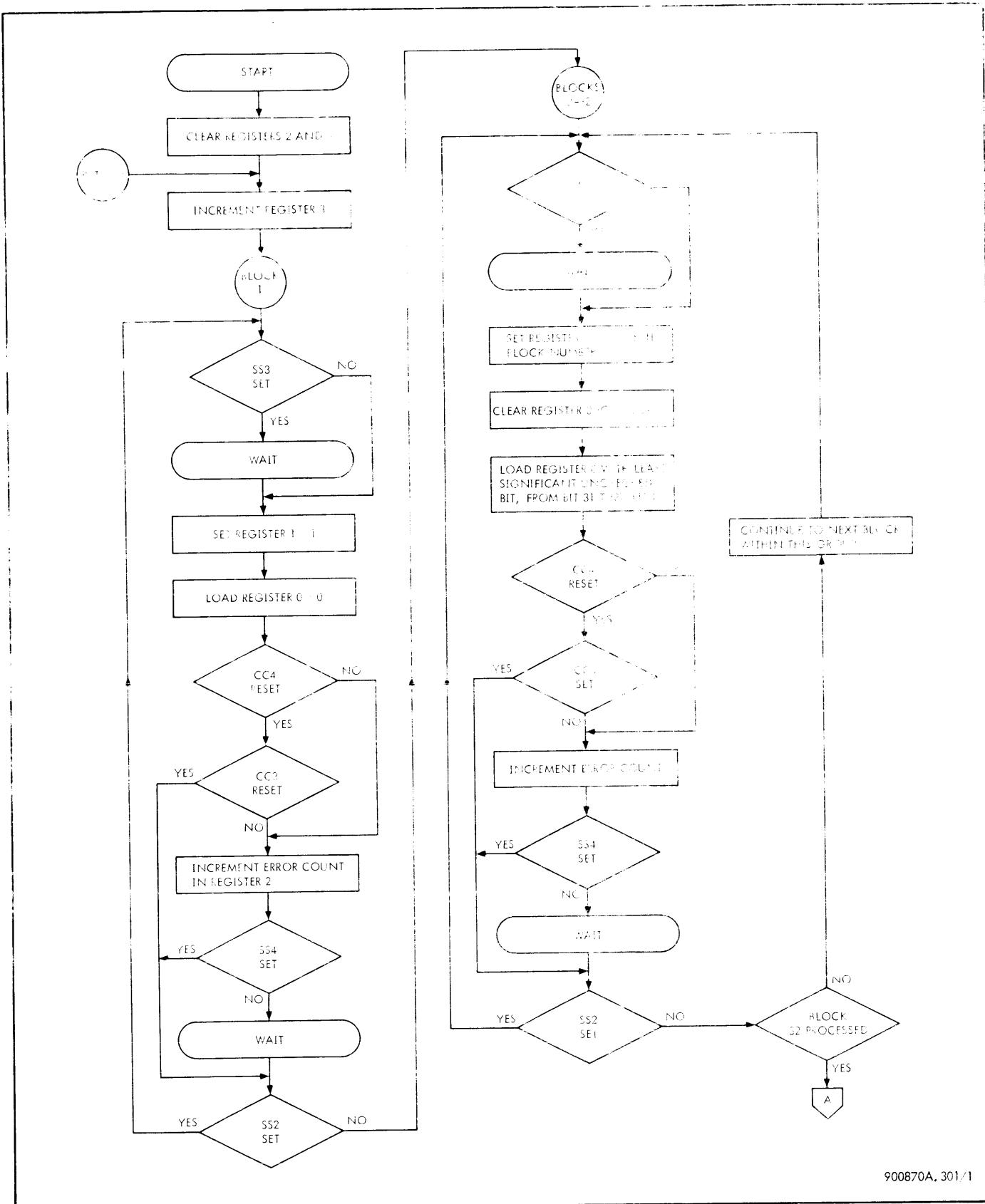


Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 1 of 13)

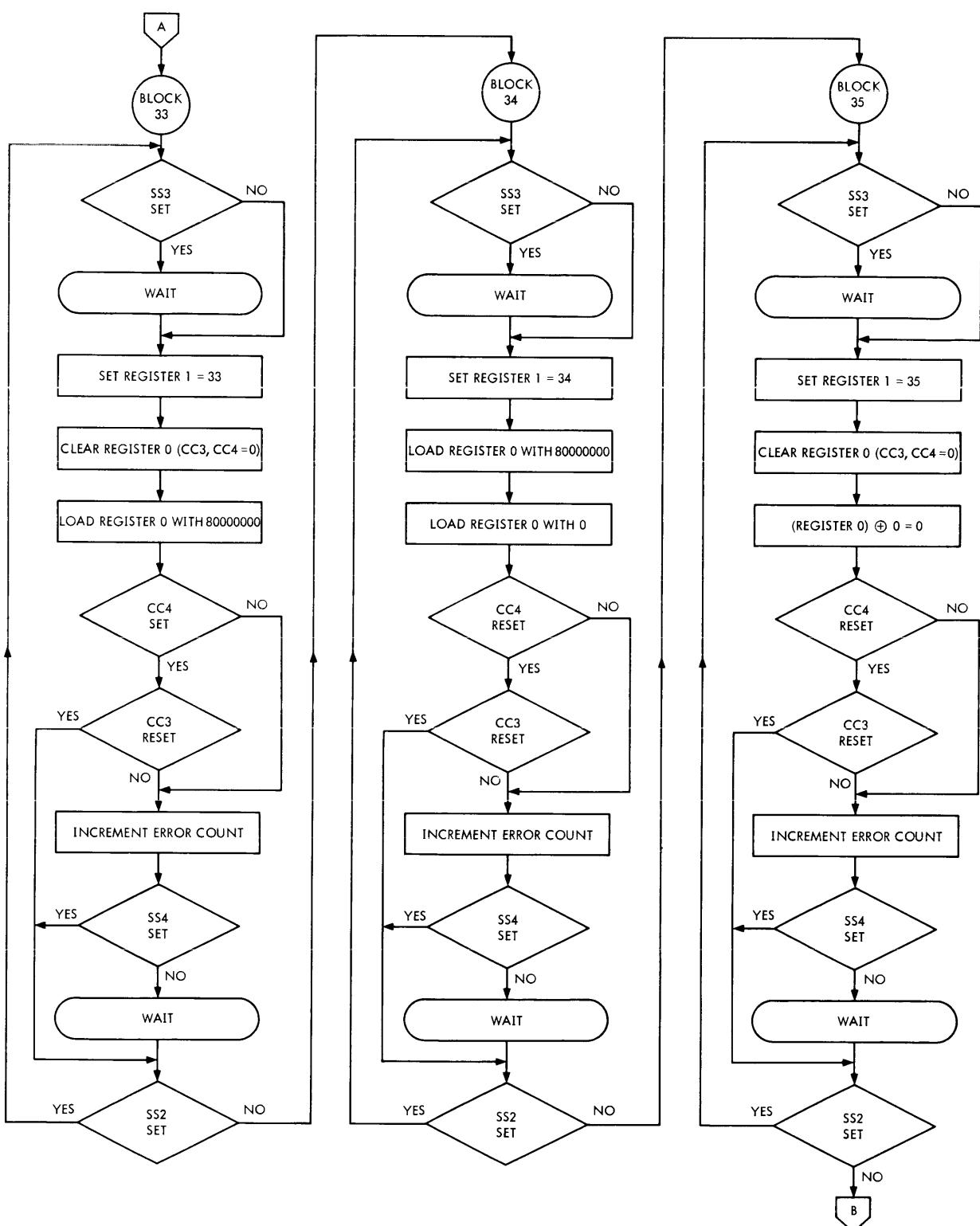


Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 2 of 13)

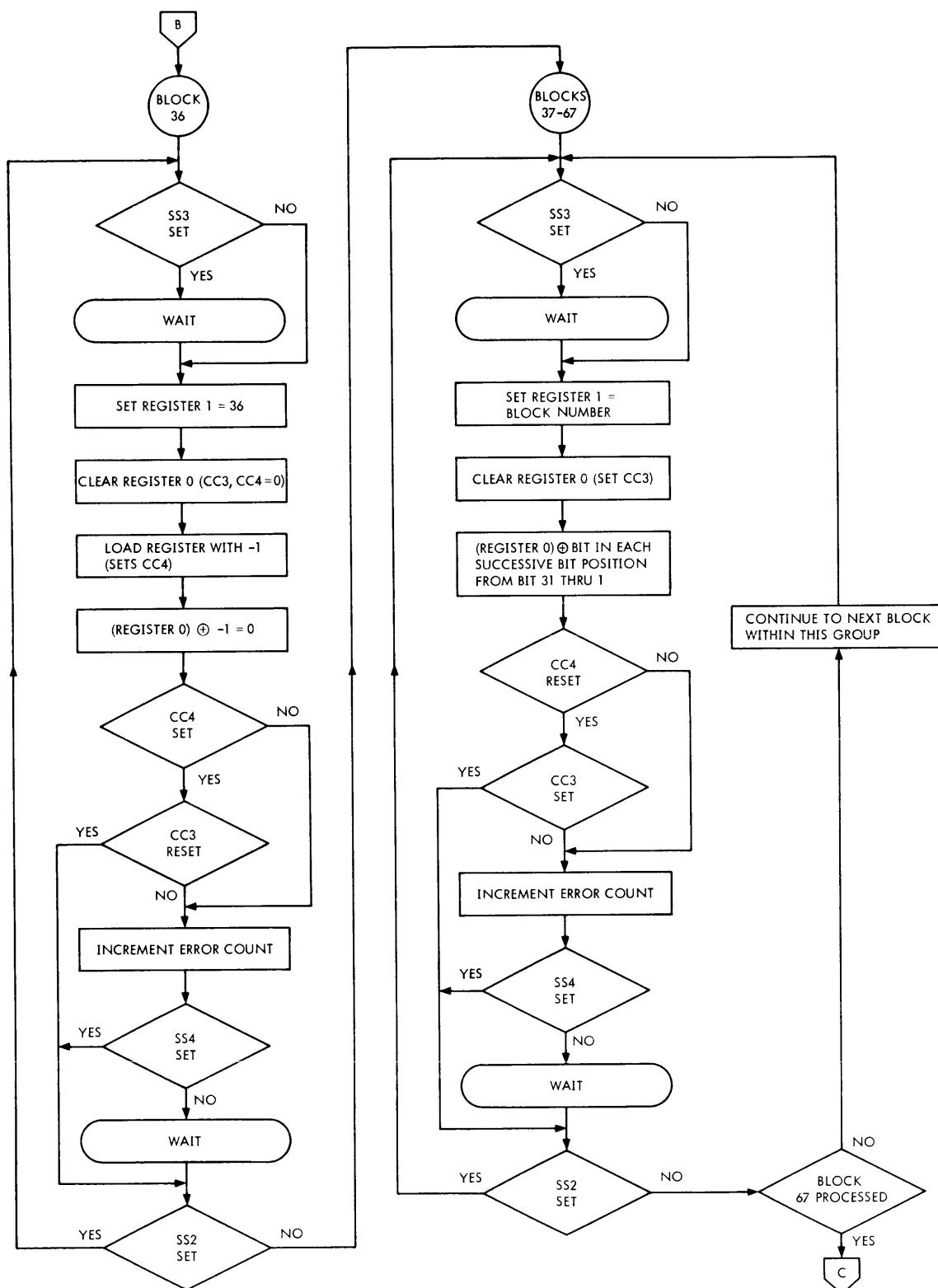


Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 3 of 13)

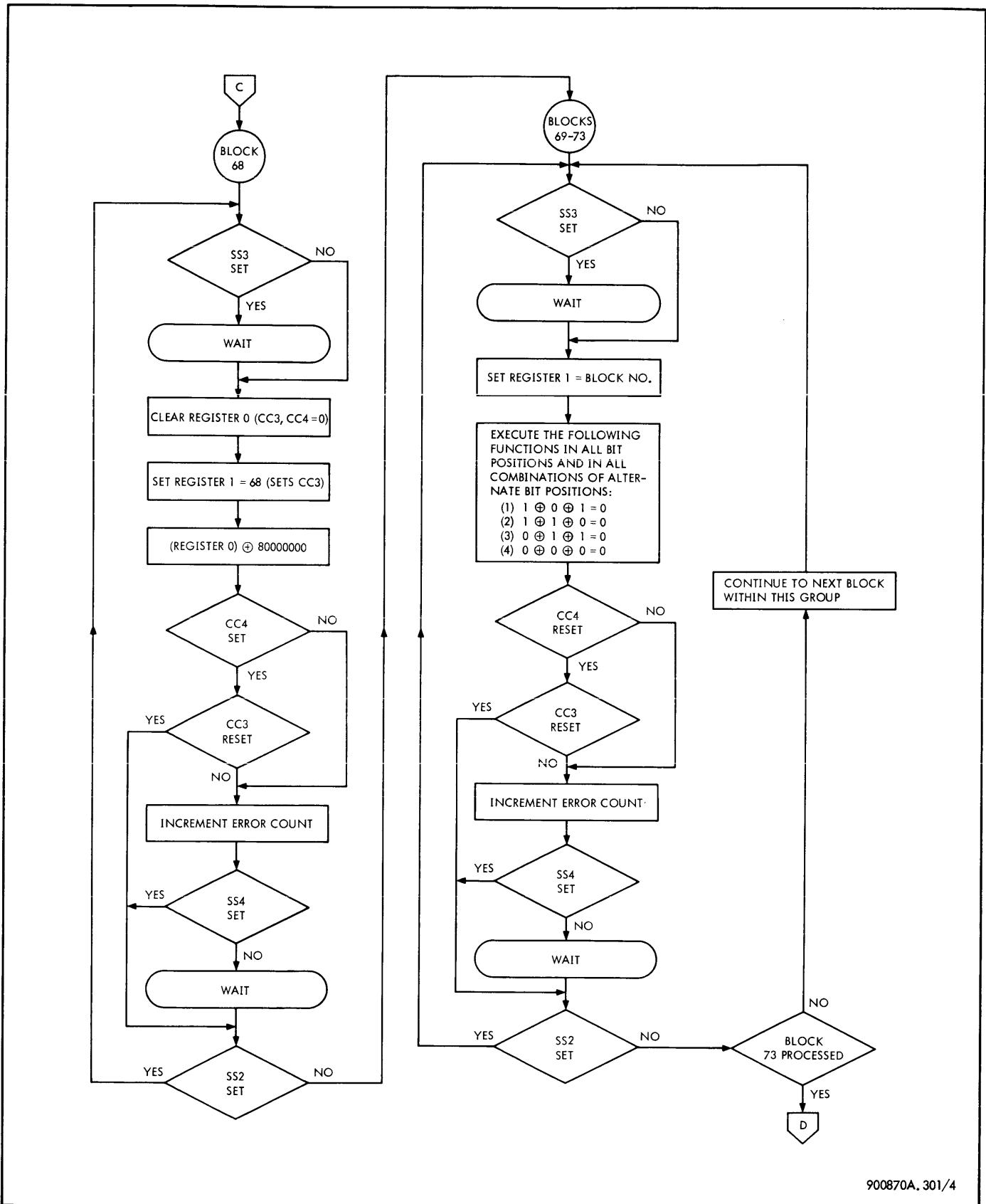
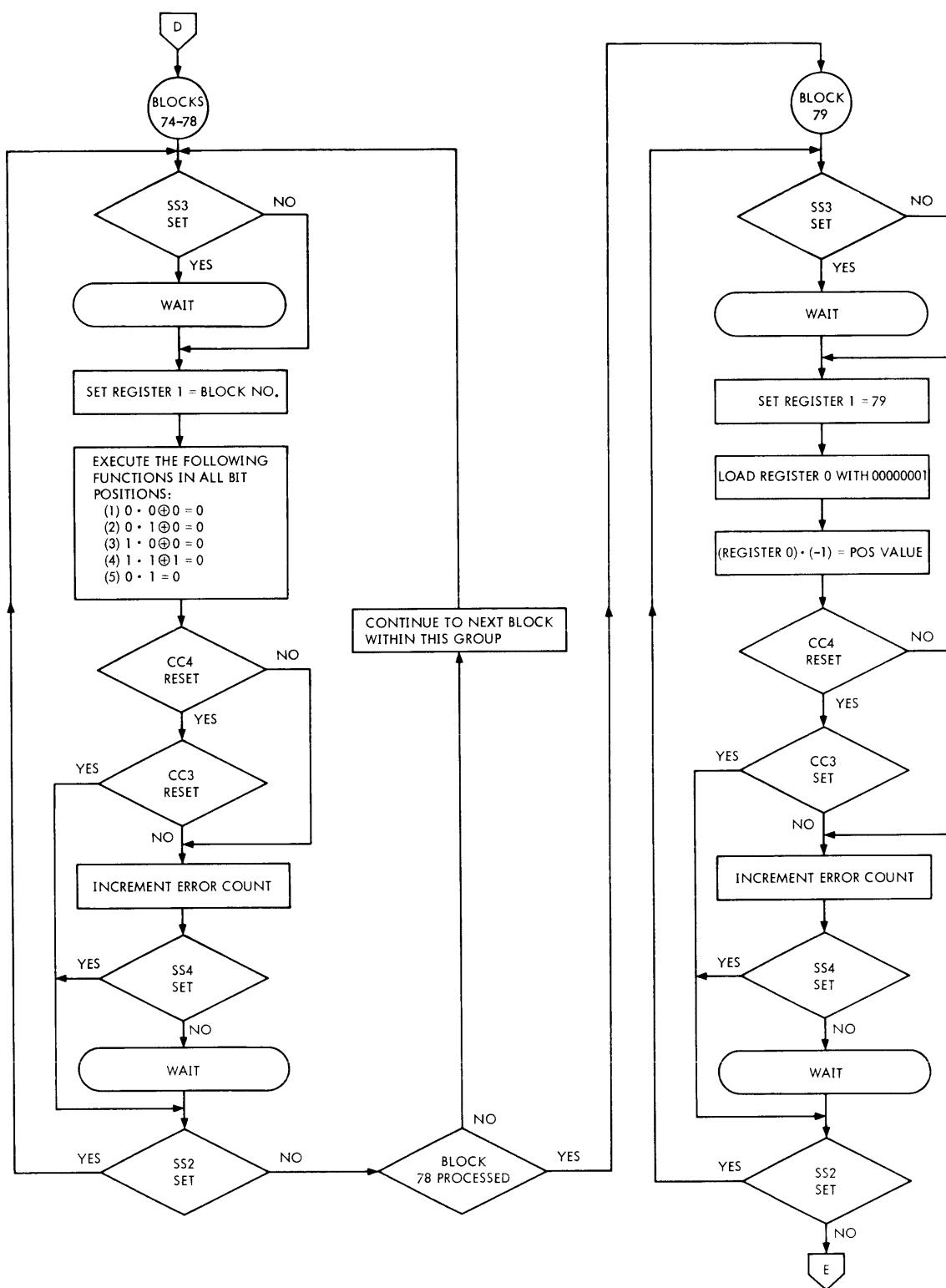


Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 4 of 13)



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Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 5 of 13)

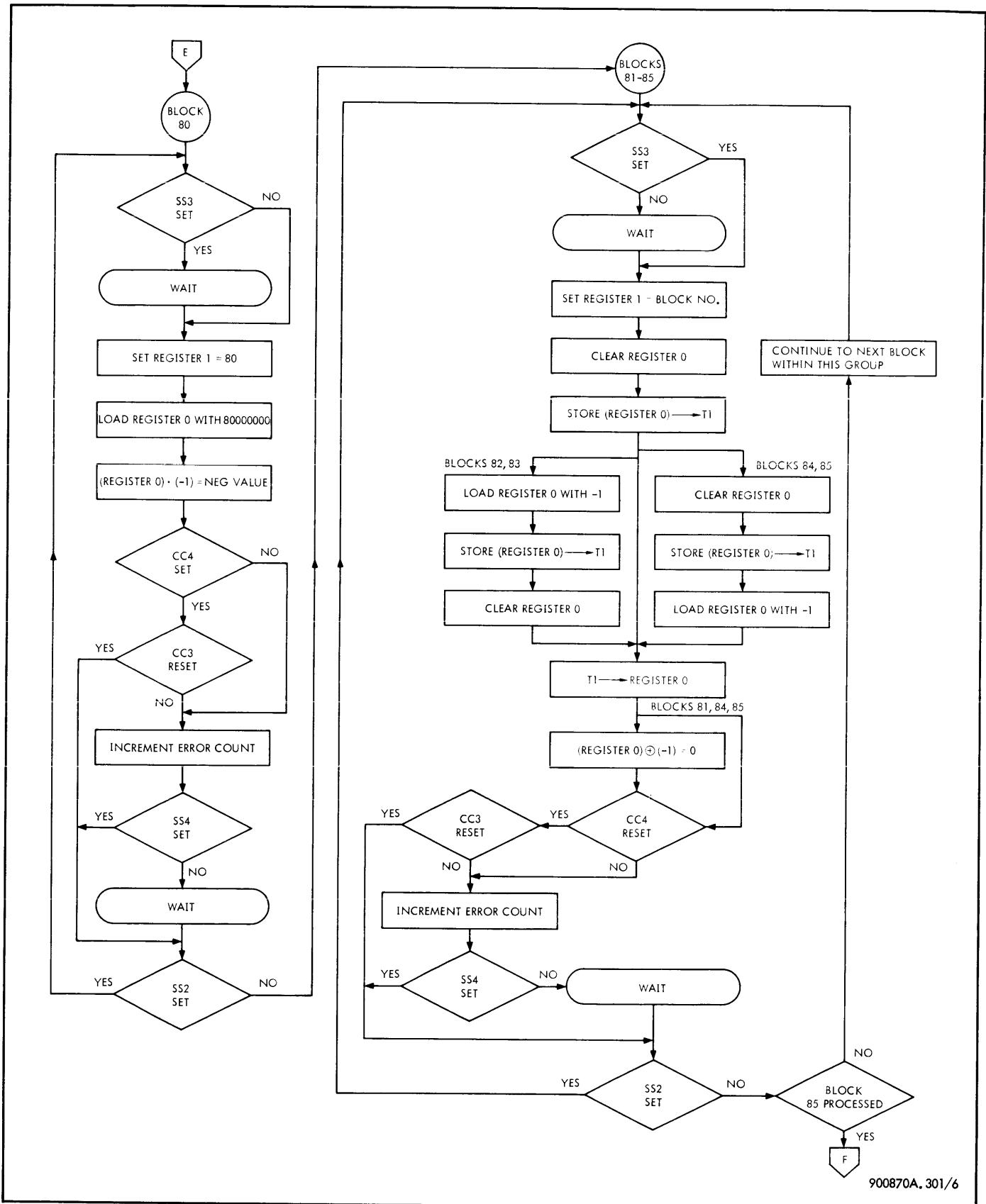


Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 6 of 13)

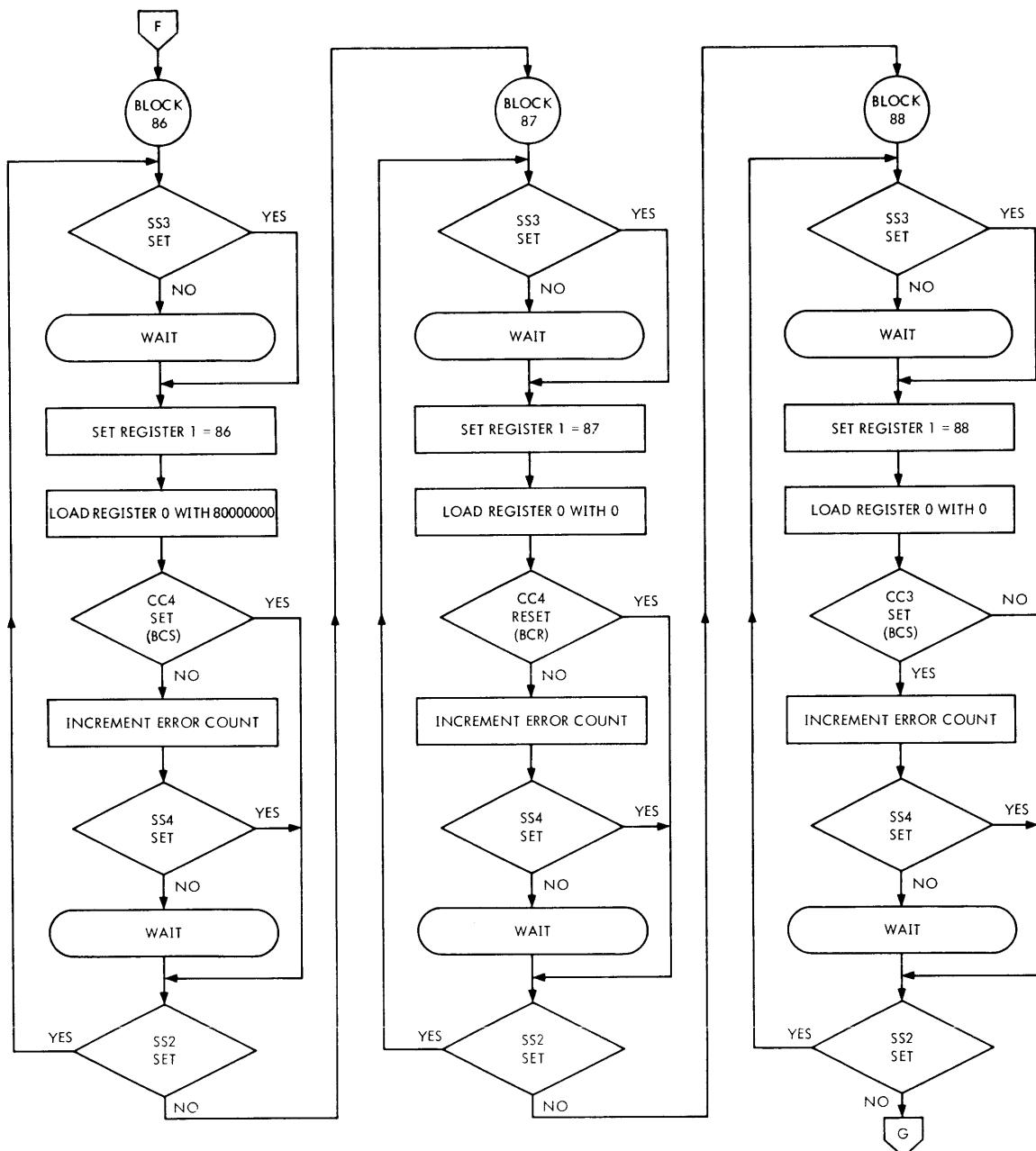


Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 7 of 13)

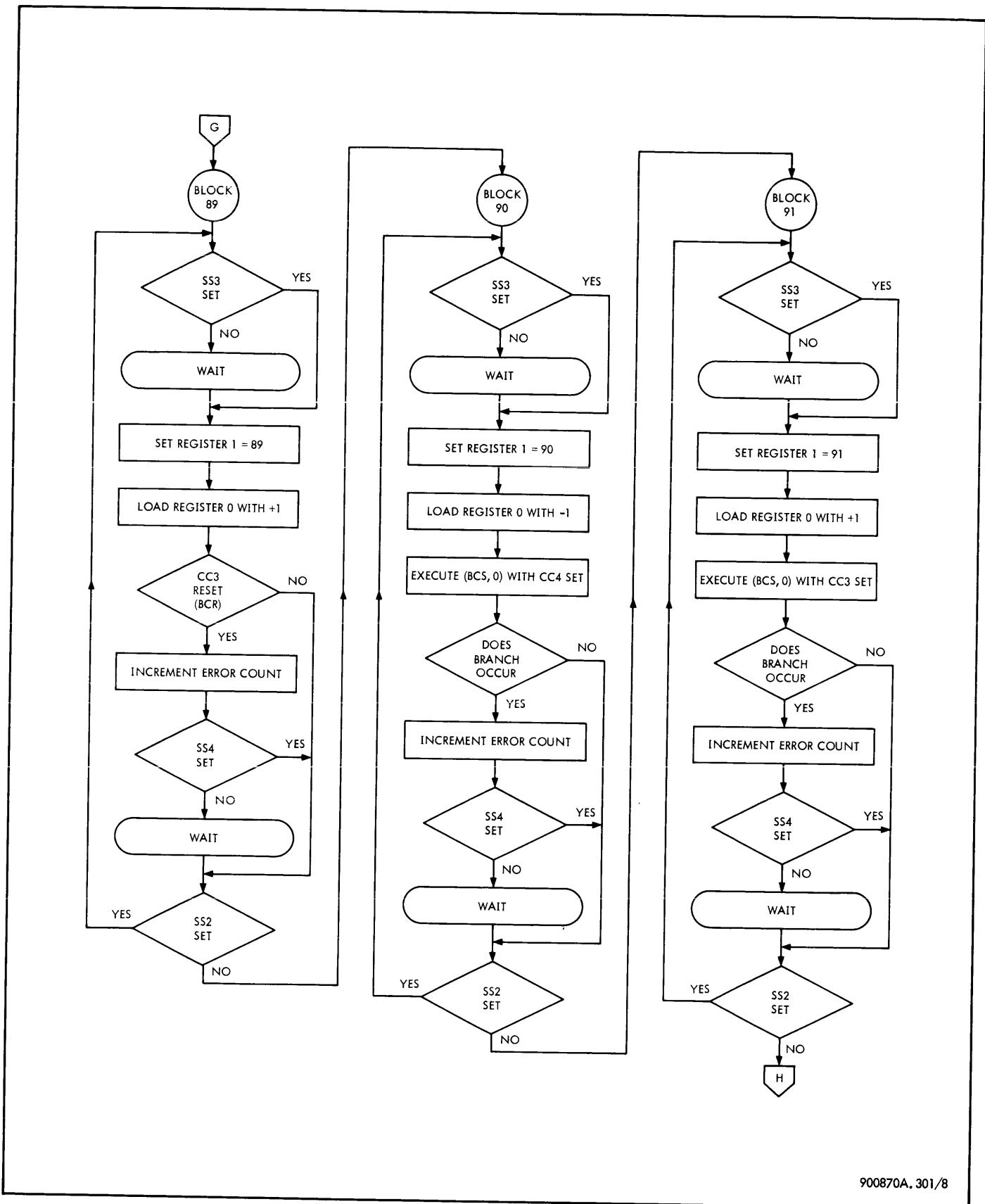


Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 8 of 13)

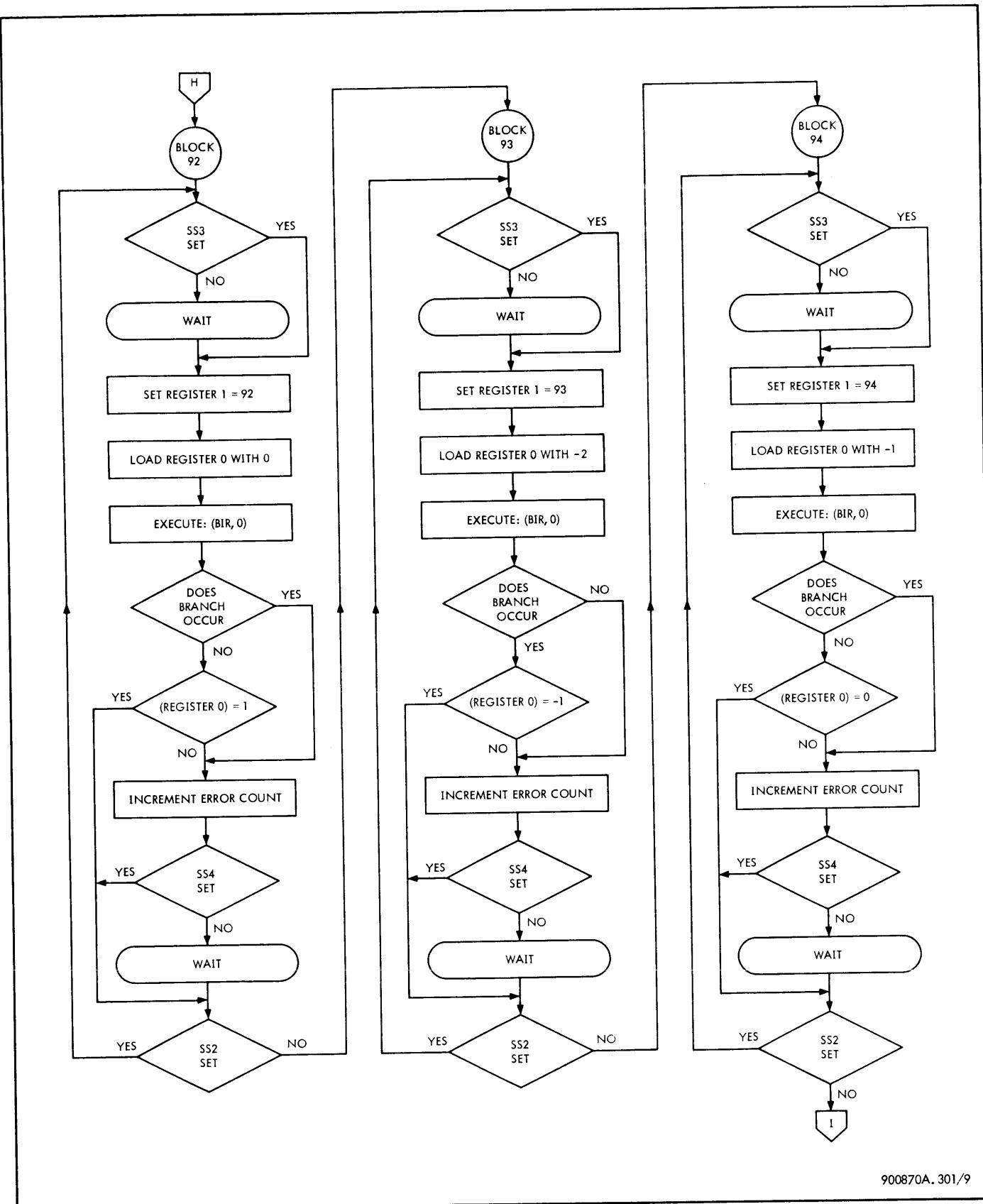
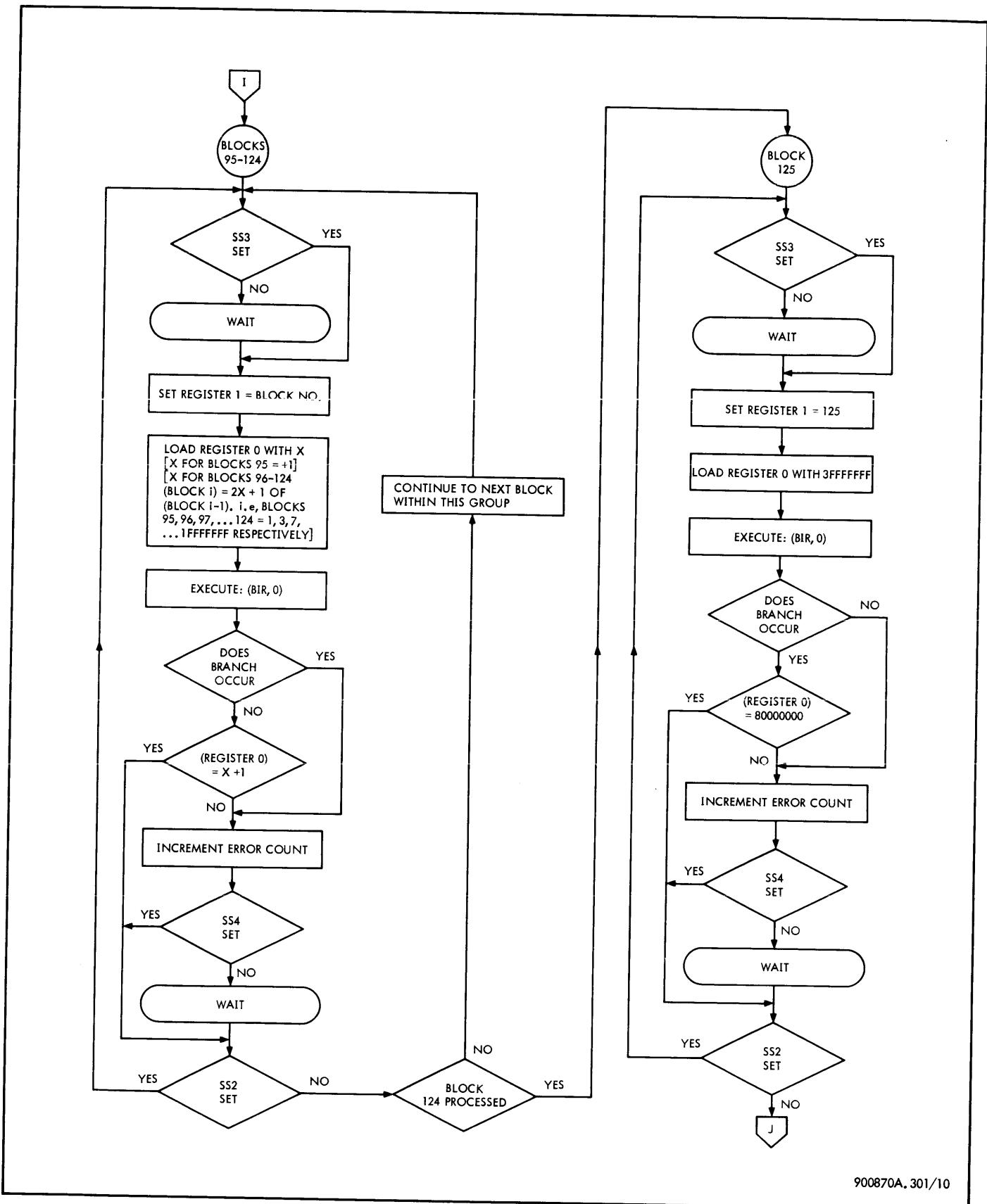


Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 9 of 13)



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Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 10 of 13)

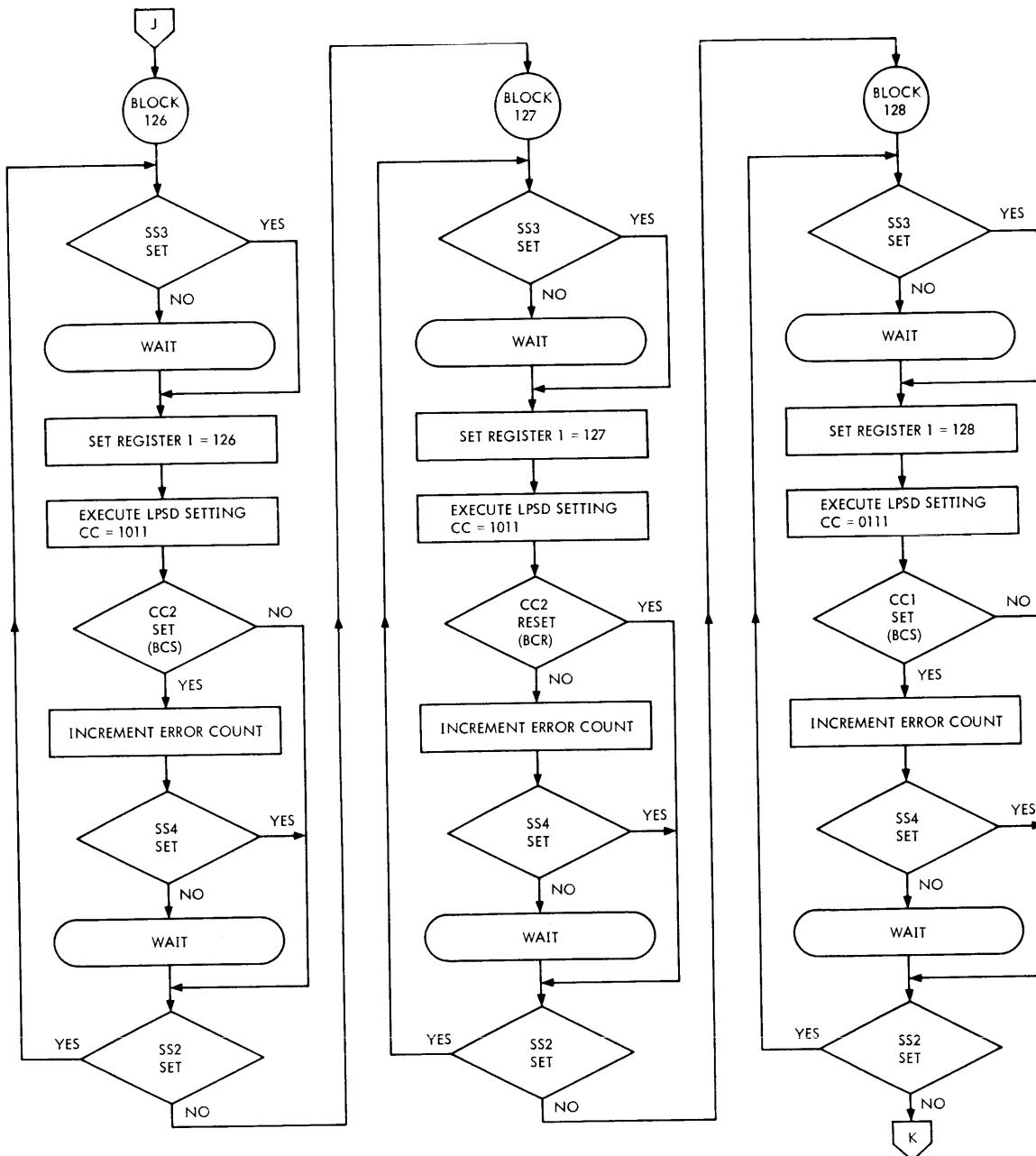
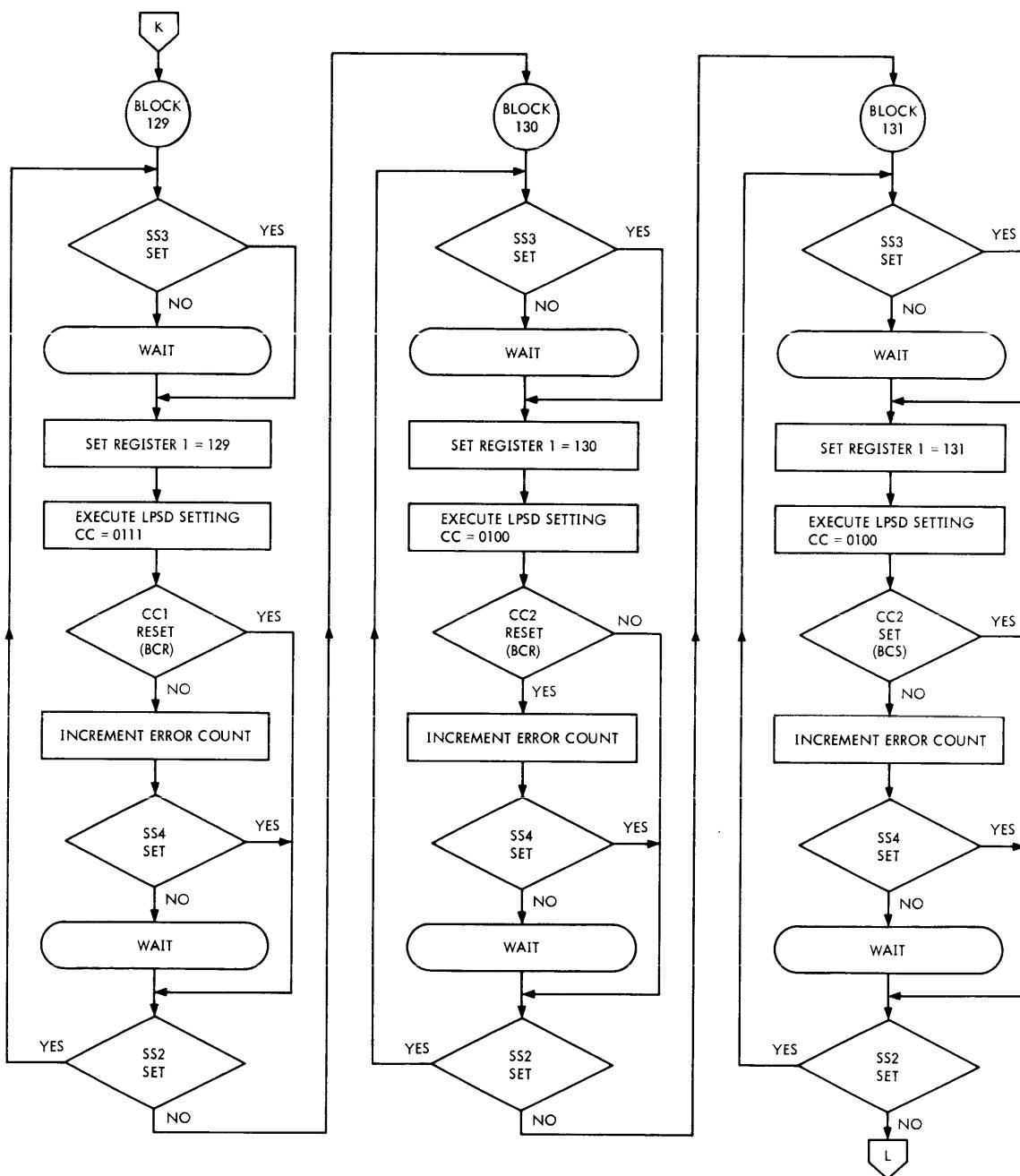


Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 11 of 13)

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Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 12 of 13)

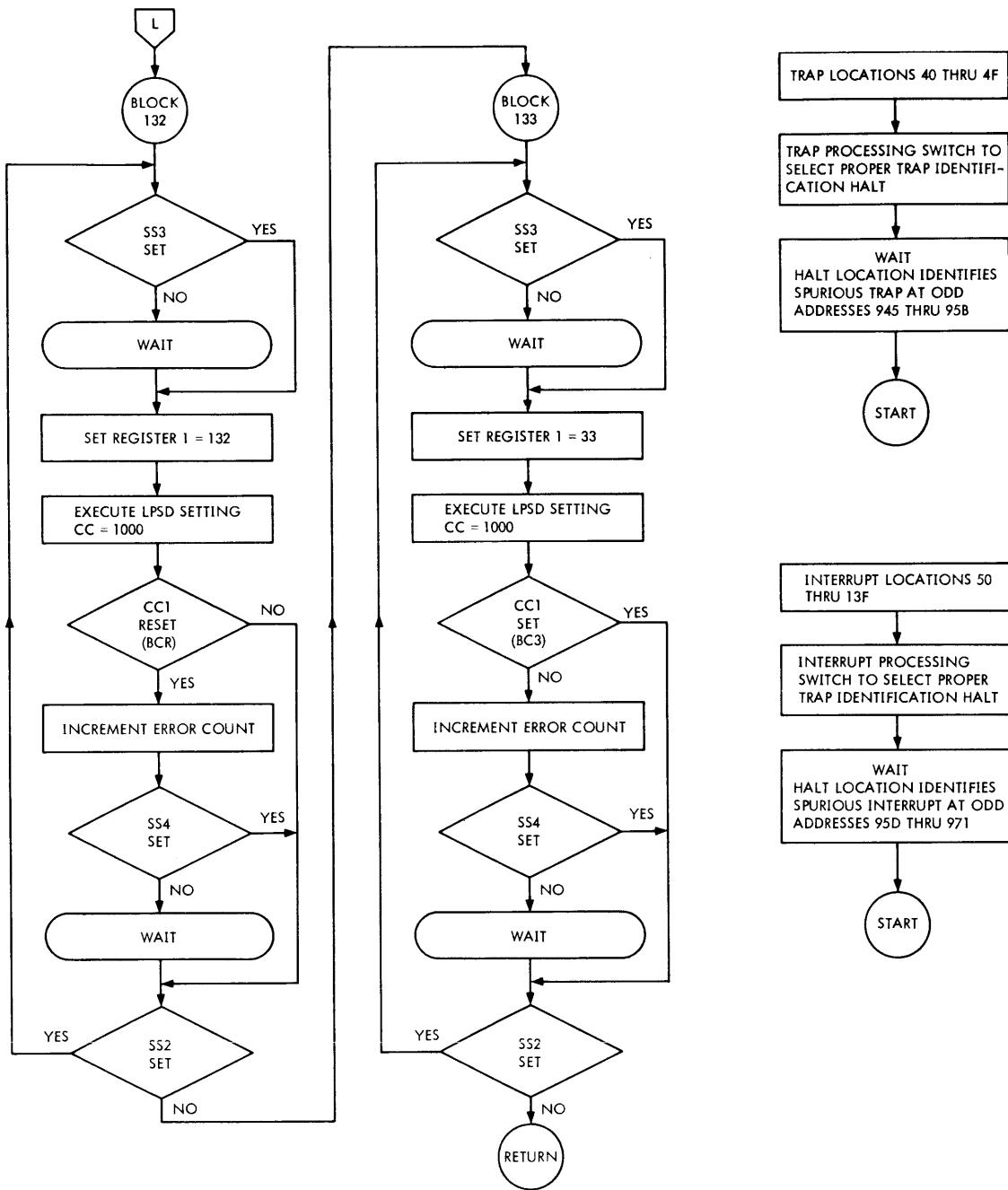


Figure 3-1. Flow Diagram of Verify Test Routines (Sheet 13 of 13)

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SECTION IV  
PROGRAM LISTING

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1								SIGMA 5/7 CPU TEST-VERIFY 704042-51D00 TITLE !SIGMA 5/7 CPU TEST-VERIFY 704042-51D00 JULY 01, 1969! SYSTEM SIG7FDP
2						*		
3						*		* REVISION D00 (7/01/69) DOCUMENTATION REFORMATTING CHANGE ONLY *D
4						*		
5						PAGE	OPEN PAGE	THIS INHIBITS *D
6						CNAME	PAGE	*D
7		00000000				PRBC	DIRECTIVE	*D
8						FEND	TO PERMIT MAX. LINEAGE/PAGE	*D
9						*		
10						*	PAGE	
11						*		
12						*		
13						*		
14						*		
15						*		
16						*		
17						*		
18						*		
19						*		
20						*		
21						*		
22						*		
23						*		
24						*		
25						*		
26						*		
27						*		
28						*		
29						*		
30						*		
31						*	REGISTER	CONTENTS
32						*	0	ALL ATTEMPTED OPERATIONS ADDRESS ONLY THIS REGISTER
33						*	1	ADDRESS OF LAST BLOCK ATTEMPTED OR ERRING BLOCK
34						*	2	ERROR COUNT
35						*	3	RUN COUNT
36						PAGE		
37					A	EQU X'1A'		
38					B	EQU X'1B'		
39					C	EQU X'1C'		
40	0000000A				D	EQU X'1D'		
41	0000000B				E	EQU X'1E'		
42	0000000C				F	EQU X'1F'		
43	0000000D					PAGE		
44	0000000E					SPINTR ASET		
45	0000000F					BRG X'40'		
46								
47	00 00000							
48	00 00040							
49	00 00040							
50						*		* TRAP LOCATIONS (ALL SPURIOUS)
51						*		
52	00 00040	0F0008E4 A				XPSD,0	NORMP	
53	00 00041	0F0008E8 A				XPSD,0	UNIMP	
54	00 00042	0F0008EC A				XPSD,0	STACK	
55	00 00043	0F0008F0 A				XPSD,0	BFLA	
56	00 00044	0F0008F4 A				XPSD,0	FLOAT	
57	00 00045	0F0008F8 A				XPSD,0	DEC	
58	00 00046	0F0008FC A				XPSD,0	TIMER	
59	00 00047	0F000900 A				XPSD,0	TUNASS	
60	00 00048	0F000904 A				XPSD,0	CALL1	
61	00 00049	0F000908 A				XPSD,0	CALL2	
62	00 0004A	0F00090C A				XPSD,0	CALL3	
63	00 0004B	0F000910 A				XPSD,0	CALL4	
64	00 0004C	0F000900 A				XPSD,0	TUNASS	
65	00 0004D	0F000900 A				XPSD,0	TUNASS	
66	00 0004E	0F000900 A				XPSD,0	TUNASS	
67	00 0004F	0F000900 A				XPSD,0	TUNASS	
68						PAGE		
69						*		* INTERRUPT LOCATIONS (ALL SPURIOUS)
70								

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR RIG	LABEL	OPERATION	OPERAND	COMMENTS
71			*					
72	00 00050	0F000914 A			XPSD,0	P8W8N		
73	00 00051	0F000918 A			XPSD,0	P8W8FF		
74	00 C0052	3300091C A			MTW,0	PULSE1		
75	00 C0053	3300091D A			MTW,0	PULSE2		
76	00 00054	3300091E A			MTW,0	PULSE3		
77	00 C0055	3300091F A			MTW,0	PULSE4		
78	00 C0056	0F000920 A			XPSD,0	MEMPAR		
79	00 00057	0F000924 A			XPSD,0	UNASIN		
80	00 C0058	0F000928 A			XPSD,0	COUNT1		
81	00 00059	0F00092C A			XPSD,0	COUNT2		
82	00 C005A	0F000930 A			XPSD,0	COUNT3		
83	00 0005B	0F000934 A			XPSD,0	COUNT4		
84	00 C005C	0F000938 A			XPSD,0	INPUT		
85	00 0005D	0F00093C A			XPSD,0	PANEL		
86	00 0005E	0F000924 A			XPSD,0	UNASIN		
87	00 C005F	0F000924 A			XPSD,0	UNASIN		
88	00 0005G	0F000940 A			XPSD,0	EXTERN		
89	00 C005H	0F000940 A			XPSD,0	EXTERN		
90	00 0005I	0F000940 A			XPSD,0	EXTERN		
91	00 C005J	0F000940 A			XPSD,0	EXTERN		
92	00 0005K	0F000940 A			XPSD,0	EXTERN		
93	00 0005L	0F000940 A			XPSD,0	EXTERN		
94	00 C005M	0F000940 A			XPSD,0	EXTERN		
95	00 0005N	0F000940 A			XPSD,0	EXTERN		
96	00 0005O	0F000940 A			XPSD,0	EXTERN		
97	00 C005P	0F000940 A			XPSD,0	EXTERN		
98	00 0005Q	0F000940 A			XPSD,0	EXTERN		
99	00 0005R	0F000940 A			XPSD,0	EXTERN		
100	00 0005S	0F000940 A			XPSD,0	EXTERN		
101	00 C005T	0F000940 A			XPSD,0	EXTERN		
102	00 0005U	0F000940 A			XPSD,0	EXTERN		
103	00 0005V	0F000940 A			XPSD,0	EXTERN		
104	00 C005W	0F000940 A			XPSD,0	EXTERN		
105	00 0005X	0F000940 A			XPSD,0	EXTERN		
106	00 C005Y	0F000940 A			XPSD,0	EXTERN		
107	00 0005Z	0F000940 A			XPSD,0	EXTERN		
108	00 C0060	0F000940 A			XPSD,0	EXTERN		
109	00 00061	0F000940 A			XPSD,0	EXTERN		
110	00 C0062	0F000940 A			XPSD,0	EXTERN		
111	00 00063	0F000940 A			XPSD,0	EXTERN		
112	00 00064	0F000940 A			XPSD,0	EXTERN		
113	00 00065	0F000940 A			XPSD,0	EXTERN		
114	00 C0066	0F000940 A			XPSD,0	EXTERN		
115	00 00067	0F000940 A			XPSD,0	EXTERN		
116	00 00068	0F000940 A			XPSD,0	EXTERN		
117	00 00069	0F000940 A			XPSD,0	EXTERN		
118	00 0006A	0F000940 A			XPSD,0	EXTERN		
119	00 0006B	0F000940 A			XPSD,0	EXTERN		
120	00 0006C	0F000940 A			XPSD,0	EXTERN		
121	00 0006D	0F000940 A			XPSD,0	EXTERN		
122	00 0006E	0F000940 A			XPSD,0	EXTERN		
123	00 0006F	0F000940 A			XPSD,0	EXTERN		
124	00 0006G	0F000940 A			XPSD,0	EXTERN		
125	00 0006H	0F000940 A			XPSD,0	EXTERN		
126	00 0006I	0F000940 A			XPSD,0	EXTERN		
127	00 0006J	0F000940 A			XPSD,0	EXTERN		
128	00 0006K	0F000940 A			XPSD,0	EXTERN		
129	00 0006L	0F000940 A			XPSD,0	EXTERN		
130	00 C006A	0F000940 A			XPSD,0	EXTERN		
131	00 0006B	0F000940 A			XPSD,0	EXTERN		
132	00 0006C	0F000940 A			XPSD,0	EXTERN		
133	00 0006D	0F000940 A			XPSD,0	EXTERN		
134	00 0006E	0F000940 A			XPSD,0	EXTERN		
135	00 0006F	0F000940 A			XPSD,0	EXTERN		
136	00 0006G	0F000940 A			XPSD,0	EXTERN		
137	00 0006H	0F000940 A			XPSD,0	EXTERN		
138	00 0006I	0F000940 A			XPSD,0	EXTERN		
139	00 0006J	0F000940 A			XPSD,0	EXTERN		
140	00 0006K	0F000940 A			XPSD,0	EXTERN		
141	00 0006L	0F000940 A			XPSD,0	EXTERN		

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
142	00 00096	0F000940	A			XPSD,0	EXTERN	
143	00 00097	0F000940	A			XPSD,0	EXTERN	
144	00 00098	0F000940	A			XPSD,0	EXTERN	
145	00 00099	0F000940	A			XPSD,0	EXTERN	
146	01 0009A	0F000940	A			XPSD,0	EXTERN	
147	00 0009B	0F000940	A			XPSD,0	EXTERN	
148	00 0009C	0F000940	A			XPSD,0	EXTERN	
149	00 0009D	0F000940	A			XPSD,0	EXTERN	
150	00 0009E	0F000940	A			XPSD,0	EXTERN	
151	00 0009F	0F000940	A			XPSD,0	EXTERN	
152	00 000A0	0F000940	A			XPSD,0	EXTERN	
153	00 000A1	0F000940	A			XPSD,0	EXTERN	
154	00 000A2	0F000940	A			XPSD,0	EXTERN	
155	00 000A3	0F000940	A			XPSD,0	EXTERN	
156	00 000A4	0F000940	A			XPSD,0	EXTERN	
157	00 000A5	0F000940	A			XPSD,0	EXTERN	
158	00 000A6	0F000940	A			XPSD,0	EXTERN	
159	00 000A7	0F000940	A			XPSD,0	EXTERN	
160	00 000A8	0F000940	A			XPSD,0	EXTERN	
161	00 000A9	0F000940	A			XPSD,0	EXTERN	
162	00 000AA	0F000940	A			XPSD,0	EXTERN	
163	00 000AB	0F000940	A			XPSD,0	EXTERN	
164	00 000AC	0F000940	A			XPSD,0	EXTERN	
165	00 000AD	0F000940	A			XPSD,0	EXTERN	
166	00 000AE	0F000940	A			XPSD,0	EXTERN	
167	00 000AF	0F000940	A			XPSD,0	EXTERN	
168	00 000B0	0F000940	A			XPSD,0	EXTERN	
169	00 000B1	0F000940	A			XPSD,0	EXTERN	
170	00 000B2	0F000940	A			XPSD,0	EXTERN	
171	00 000B3	0F000940	A			XPSD,0	EXTERN	
172	00 000B4	0F000940	A			XPSD,0	EXTERN	
173	00 000B5	0F000940	A			XPSD,0	EXTERN	
174	00 000B6	0F000940	A			XPSD,0	EXTERN	
175	00 000B7	0F000940	A			XPSD,0	EXTERN	
176	00 000B8	0F000940	A			XPSD,0	EXTERN	
177	00 000B9	0F000940	A			XPSD,0	EXTERN	
178	00 000BA	0F000940	A			XPSD,0	EXTERN	
179	00 000B9	0F000940	A			XPSD,0	EXTERN	
180	00 000BC	0F000940	A			XPSD,0	EXTERN	
181	00 000BD	0F000940	A			XPSD,0	EXTERN	
182	00 000BE	0F000940	A			XPSD,0	EXTERN	
183	00 000BF	0F000940	A			XPSD,0	EXTERN	
184	00 000C0	0F000940	A			XPSD,0	EXTERN	
185	00 000C1	0F000940	A			XPSD,0	EXTERN	
186	00 000C2	0F000940	A			XPSD,0	EXTERN	
187	00 000C3	0F000940	A			XPSD,0	EXTERN	
188	00 000C4	0F000940	A			XPSD,0	EXTERN	
189	00 000C5	0F000940	A			XPSD,0	EXTERN	
190	00 000C6	0F000940	A			XPSD,0	EXTERN	
191	00 000C7	0F000940	A			XPSD,0	EXTERN	
192	00 000C8	0F000940	A			XPSD,0	EXTERN	
193	00 000C9	0F000940	A			XPSD,0	EXTERN	
194	00 000CA	0F000940	A			XPSD,0	EXTERN	
195	00 000CB	0F000940	A			XPSD,0	EXTERN	
196	00 000CC	0F000940	A			XPSD,0	EXTERN	
197	00 000CD	0F000940	A			XPSD,0	EXTERN	
198	00 000CE	0F000940	A			XPSD,0	EXTERN	
199	00 000CF	0F000940	A			XPSD,0	EXTERN	
200	00 000D0	0F000940	A			XPSD,0	EXTERN	
201	00 000D1	0F000940	A			XPSD,0	EXTERN	
202	00 000D2	0F000940	A			XPSD,0	EXTERN	
203	00 000D3	0F000940	A			XPSD,0	EXTERN	
204	00 000D4	0F000940	A			XPSD,0	EXTERN	
205	00 000D5	0F000940	A			XPSD,0	EXTERN	
206	00 000D6	0F000940	A			XPSD,0	EXTERN	
207	00 000D7	0F000940	A			XPSD,0	EXTERN	
208	00 000D8	0F000940	A			XPSD,0	EXTERN	
209	00 000D9	0F000940	A			XPSD,0	EXTERN	
210	00 000DA	0F000940	A			XPSD,0	EXTERN	
211	00 000DB	0F000940	A			XPSD,0	EXTERN	
212	00 000DC	0F000940	A			XPSD,0	EXTERN	
213	00 000DD	0F000940	A			XPSD,0	EXTERN	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
214	00 00J0E	0F000940	A		XPSD,0	EXTERN		
215	00 00J0F	0F000940	A		XPSD,0	EXTERN		
216	00 00J0G	0F000940	A		XPSD,0	EXTERN		
217	00 00J0H	0F000940	A		XPSD,0	EXTERN		
218	00 00J0I	0F000940	A		XPSD,0	EXTERN		
219	00 00J0J	0F000940	A		XPSD,0	EXTERN		
220	00 00J0K	0F000940	A		XPSD,0	EXTERN		
221	00 00J0L	0F000940	A		XPSD,0	EXTERN		
222	00 00J0M	0F000940	A		XPSD,0	EXTERN		
223	00 00J0N	0F000940	A		XPSD,0	EXTERN		
224	00 00J0P	0F000940	A		XPSD,0	EXTERN		
225	00 00J0Q	0F000940	A		XPSD,0	EXTERN		
226	00 00J0A	0F000940	A		XPSD,0	EXTERN		
227	00 00J0B	0F000940	A		XPSD,0	EXTERN		
228	00 00J0C	0F000940	A		XPSD,0	EXTERN		
229	00 00J0D	0F000940	A		XPSD,0	EXTERN		
230	00 00J0E	0F000940	A		XPSD,0	EXTERN		
231	00 00J0F	0F000940	A		XPSD,0	EXTERN		
232	00 00J0G	0F000940	A		XPSD,0	EXTERN		
233	00 00J0H	0F000940	A		XPSD,0	EXTERN		
234	00 00J0I	0F000940	A		XPSD,0	EXTERN		
235	00 00J0J	0F000940	A		XPSD,0	EXTERN		
236	00 00J0K	0F000940	A		XPSD,0	EXTERN		
237	00 00J0L	0F000940	A		XPSD,0	EXTERN		
238	00 00J0M	0F000940	A		XPSD,0	EXTERN		
239	00 00J0N	0F000940	A		XPSD,0	EXTERN		
240	00 00J0P	0F000940	A		XPSD,0	EXTERN		
241	00 00J0Q	0F000940	A		XPSD,0	EXTERN		
242	00 00J0A	0F000940	A		XPSD,0	EXTERN		
243	00 00J0B	0F000940	A		XPSD,0	EXTERN		
244	00 00J0C	0F000940	A		XPSD,0	EXTERN		
245	00 00J0D	0F000940	A		XPSD,0	EXTERN		
246	00 00J0E	0F000940	A		XPSD,0	EXTERN		
247	00 00J0F	0F000940	A		XPSD,0	EXTERN		
248	00 00100	0F000940	A		XPSD,0	EXTERN		
249	00 00101	0F000940	A		XPSD,0	EXTERN		
250	00 00102	0F000940	A		XPSD,0	EXTERN		
251	00 00103	0F000940	A		XPSD,0	EXTERN		
252	00 00104	0F000940	A		XPSD,0	EXTERN		
253	00 00105	0F000940	A		XPSD,0	EXTERN		
254	00 00106	0F000940	A		XPSD,0	EXTERN		
255	00 00107	0F000940	A		XPSD,0	EXTERN		
256	00 00108	0F000940	A		XPSD,0	EXTERN		
257	00 00109	0F000940	A		XPSD,0	EXTERN		
258	00 0010A	0F000940	A		XPSD,0	EXTERN		
259	00 0010B	0F000940	A		XPSD,0	EXTERN		
260	00 0010C	0F000940	A		XPSD,0	EXTERN		
261	00 0010D	0F000940	A		XPSD,0	EXTERN		
262	00 0010E	0F000940	A		XPSD,0	EXTERN		
263	00 0010F	0F000940	A		XPSD,0	EXTERN		
264	00 00110	0F000940	A		XPSD,0	EXTERN		
265	00 00111	0F000940	A		XPSD,0	EXTERN		
266	00 00112	0F000940	A		XPSD,0	EXTERN		
267	00 00113	0F000940	A		XPSD,0	EXTERN		
268	00 00114	0F000940	A		XPSD,0	EXTERN		
269	00 00115	0F000940	A		XPSD,0	EXTERN		
270	00 00116	0F000940	A		XPSD,0	EXTERN		
271	00 00117	0F000940	A		XPSD,0	EXTERN		
272	00 00118	0F000940	A		XPSD,0	EXTERN		
273	00 00119	0F000940	A		XPSD,0	EXTERN		
274	00 0011A	0F000940	A		XPSD,0	EXTERN		
275	00 0011B	0F000940	A		XPSD,0	EXTERN		
276	00 0011C	0F000940	A		XPSD,0	EXTERN		
277	00 0011D	0F000940	A		XPSD,0	EXTERN		
278	00 0011E	0F000940	A		XPSD,0	EXTERN		
279	00 0011F	0F000940	A		XPSD,0	EXTERN		
280	00 00120	0F000940	A		XPSD,0	EXTERN		
281	00 00121	0F000940	A		XPSD,0	EXTERN		
282	00 00122	0F000940	A		XPSD,0	EXTERN		
283	00 00123	0F000940	A		XPSD,0	EXTERN		
284	00 00124	0F000940	A		XPSD,0	EXTERN		
285	00 00125	0F000940	A		XPSD,0	EXTERN		

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
286	00 00126	0F000940	A		XPSD,0	EXTERN		
287	00 00127	0F000940	A		XPSD,0	EXTERN		
288	00 00128	0F000940	A		XPSD,0	EXTERN		
289	00 00129	0F000940	A		XPSD,0	EXTERN		
290	00 0012A	0F000940	A		XPSD,0	EXTERN		
291	00 0012B	0F000940	A		XPSD,0	EXTERN		
292	00 0012C	0F000940	A		XPSD,0	EXTERN		
293	00 0012D	0F000940	A		XPSD,0	EXTERN		
294	00 0012E	0F000940	A		XPSD,0	EXTERN		
295	00 0012F	0F000940	A		XPSD,0	EXTERN		
296	00 00130	0F000940	A		XPSD,0	EXTERN		
297	00 00131	0F000940	A		XPSD,0	EXTERN		
298	00 00132	0F000940	A		XPSD,0	EXTERN		
299	00 00133	0F000940	A		XPSD,0	EXTERN		
300	00 00134	0F000940	A		XPSD,0	EXTERN		
301	00 00135	0F000940	A		XPSD,0	EXTERN		
302	00 00136	0F000940	A		XPSD,0	EXTERN		
303	00 00137	0F000940	A		XPSD,0	EXTERN		
304	00 00138	0F000940	A		XPSD,0	EXTERN		
305	00 00139	0F000940	A		XPSD,0	EXTERN		
306	00 0013A	0F000940	A		XPSD,0	EXTERN		
307	00 0013B	0F000940	A		XPSD,0	EXTERN		
308	00 0013C	0F000940	A		XPSD,0	EXTERN		
309	00 0013D	0F000940	A		XPSD,0	EXTERN		
310	00 0013E	0F000940	A		XPSD,0	EXTERN		
311	00 0013F	0F000940	A		XPSD,0	EXTERN		
312					PAGE			
313	00 00140				HRG	X'140'		
314					* PROGRAM INITIALIZATION			
315					*			
316	00 00140	32200975	A		START	LW,2	=0	
317	00 00141	32300975	A			LW,3	=0	
318	00 00142	64300143	A		RETURN	BIR,3	=+1	
319					PAGE			
320					*			
321					* BLOCK 1			
322					*			
323					* CHECK ABILITY OF LW = C TO NOT SET CC4 AND RESET CC3			
324					*			
325	00 00143	6C000010	A		BLK1	RD,C	X'10'	READ SENSE SWITCHES
326	00 00144	68200146	A			BCR,2	=+2	SSW 3 SET
327	00 00145	2E000000	A			WAIT		YES, REPORT
328	00 00146	32100976	A			LW,1	=1	INCREMENT BLOCK COUNTER AND SET CC3
329	00 00147	32000975	A			LW,0	=0	LOAD ZEROS
330	00 00148	6910014A	A			BCS,1	=+2	CC4 SET
331	00 00149	6820014F	A			BCR,2	=+5	NB, CC3 RESET
332	00 0014A	6520014B	A			BIR,2	=+1	NB, ERROR - INCREMENT ERROR COUNT
333	00 0014B	6C000010	A			RD,0	X'10'	
334	00 0014C	6910014E	A			BCS,1	=+2	SSW 4 SET
335	00 0014D	2E000000	A			WAIT		NB, HALT ON ERROR
336	00 0014E	6C000010	A			RD,0	X'10'	
337	00 0014F	69400143	A			BCS,4	BLK1	CHECK SSW 2 FOR LOOP/PROCEED
338					PAGE			
339					*			
340					* BLOCK 2			
341					*			
342					* CHECK ABILITY OF LW TO SET CC3 WITH BIT 31 = 1			
343					*			
344	00 00150	6C000010	A		BLK2	RD,0	X'10'	
345	00 00151	68200153	A			BCR,2	=+2	
346	00 00152	2E000000	A			WAIT		REPORT
347	00 00153	32100977	A			LW,1	=2	
348	00 00154	32000975	A			LW,0	=0	RESET CC3 AND CC4
349	00 00155	32000976	A			LW,0	=1	
350	00 00156	69100158	A			BCS,1	=+2	CC4 SET
351	00 00157	6920015C	A			BCS,2	=+5	NB, CC3 SET
352	00 00158	65200159	A			BIR,2	=+1	ERROR - CC3 RESET/CC4 SET
353	00 00159	6C000010	A			RD,0	X'10'	
354	00 0015A	6910015C	A			BCS,1	=+2	
355	00 0015B	2E000000	A			WAIT		ERROR HALT

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR G	LABEL	OPERATION	OPERAND	COMMENTS
356	00 0015C	6C000010 A				RD,0	X'10'	
357	00 0015D	69400150 A				BCS,4	BLK2	LOOP/PROCEED
358				PAGE				
359				*				
360				* BLOCK 3				
361				*				
362				* CHECK ABILITY OF LW TO SET CC3 WITH BIT 30 = 1				
363				*				
364	00 0015E	6C000010 A	BLK3		RD,0	X'10'		
365	00 0015F	68200161 A			BCR,2	\$+2		
366	00 00160	2E000000 A			WAIT			REPORT
367	00 00161	32100978 A			LW,1	=3		
368	00 00162	32000975 A			LW,0	=0		RESET CC3 AND CC4
369	00 00163	32000977 A			LW,0	=X'21'		
370	00 00164	69100166 A			BCS,1	\$+2		
371	00 00165	6920016A A			BCS,2	\$+5	CC4 SET	
372	00 00166	65200167 A			BIR,2	\$+1	N9, CC3 SET	
373	00 00167	6C000010 A			RD,0	X'10'	ERROR - CC3 RESET/CC4 SET	
374	00 00168	6910016A A			BCS,1	\$+2		
375	00 00169	2E000000 A			WAIT			ERROR HALT
376	00 0016A	6C000010 A			RD,0	X'10'		
377	00 0016B	6940015E A			BCS,4	BLK3	LOOP/PROCEED	
378				PAGE				
379				*				
380				* BLOCK 4				
381				*				
382				* CHECK ABILITY OF LW TO SET CC3 WITH BIT 29 = 1				
383				*				
384	00 0016C	6C000010 A	BLK4		RD,0	X'10'		
385	00 0016D	6820016F A			BCR,2	\$+2		
386	00 0016E	2E000000 A			WAIT			REPORT
387	00 0016F	32100979 A			LW,1	=4		
388	00 00170	32000975 A			LW,0	=0		
389	00 00171	32000979 A			LW,0	=X'14'		
390	00 00172	69100174 A			BCS,1	\$+2	CC4 SET	
391	00 00173	32000903 A			LW,0	979		
392	00 00174	69200179 A			BCS,2	\$+5	N9, CC3 SET	
393	00 00175	6C000010 A			RD,0	X'10'		
394	00 00176	69100178 A			BCS,1	\$+2		
395	00 00177	2E000000 A			WAIT			ERROR HALT
396	00 00178	6C000010 A			RD,0	X'10'		
397	00 00179	6940016C A			BCS,4	BLK4	LOOP/PROCEED	
398				PAGE				
399				*				
400				* BLOCK 5				
401				*				
402				* CHECK ABILITY OF LW TO SET CC3 WITH BIT 28 = 1				
403				*				
404	00 0017A	6C000010 A	BLK5		RD,0	X'10'		
405	00 0017B	6820017D A			BCR,2	\$+2		
406	00 0017C	2E000000 A			WAIT			REPORT
407	00 0017D	3210097A A			LW,1	=5		
408	00 0017E	32000975 A			LW,0	=0		
409	00 0017F	32000978 A			LW,0	=X'18'		
410	00 00180	69100182 A			BCS,1	\$+2	CC4 SET	
411	00 00181	69200186 A			BCS,2	\$+5	N9, CC3 SET	
412	00 00182	65200183 A			BIR,2	\$+1	ERROR - CC3 RESET/CC4 SET	
413	00 00183	6C000010 A			RD,0	X'10'		
414	00 00184	69100186 A			BCS,1	\$+2		
415	00 00185	2E000000 A			WAIT			ERROR HALT
416	00 00186	6C000010 A			RD,0	X'10'		
417	00 00187	6940017A A			BCS,4	BLK5	LOOP/PROCEED	
418				PAGE				
419				*				
420				* BLOCK 6				
421				*				
422				* CHECK ABILITY OF LW TO SET CC3 WITH BIT 27 = 1				
423				*				
424	00 00188	6C000010 A	BLK6		RD,0	X'10'		
425	00 00189	68200188 A			BCR,2	\$+2		
426	00 0018A	2E000000 A			WAIT			REPORT
427	00 0018B	3210097C A			LW,1	=6		

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
428	00 00180	32000075 A			LW,C	*0		
429	00 00180	32000070 A			LW,O	X'10'		
430	00 0018E	69100190 A			BCS,1	\$+2		CC4 SET
431	00 0018F	69100194 A			BCS,2	\$+5		NB, CC3 SET
432	00 00190	65200010 A			BIR,2	\$+1		ERROR - CC3 RESET/CC4 SET
433	00 00191	6C000010 A			RD,O	X'10'		
434	00 00192	69100194 A			BCS,1	\$+2		
435	00 00193	2E000000 A			WAIT			ERROR HALT
436	00 00194	6C000010 A			RD,O	X'10'		
437	00 00195	69400188 A			BCS,4	BLK6		LOOP/PROCEED
438					PAGE			
439					*			
440					*	BLK7		
441					*			
442					*	CHECK ABILITY OF LW TO SET CC3 WITH BIT 26 = 1		
443					*			
444	00 00196	6C000010 A			BLK7	RD,O	X'10'	
445	00 00197	68200199 A				BCR,2	\$+2	
446	00 00198	2E000000 A				WAIT		
447	00 00199	3210007E A				LW,1	#7	REPORT
448	00 0019A	32000075 A				LW,O	=0	
449	00 0019B	3200007F A				LW,C	X'120'	
450	00 0019C	6910019E A				BCS,1	\$+2	CC4 SET
451	00 0019D	692001A2 A				BCS,2	\$+5	NB, CC3 SET
452	00 0019E	65200010F A				BIR,2	\$+1	ERROR - CC3 RESET/CC4 SET
453	00 0019F	6C000010 A				RD,O	X'10'	
454	00 001A0	691001A2 A				BCS,1	\$+2	
455	00 001A1	2E000000 A				WAIT		ERROR HALT
456	00 001A2	6C000010 A				RD,O	X'10'	
457	00 001A3	69400196 A				BCS,4	BLK7	LOOP/PROCEED
458						PAGE		
459					*			
460					*	BLK8		
461					*			
462					*	CHECK ABILITY OF LW TO SET CC3 WITH BIT 25 = 1		
463					*			
464	00 001A4	6C000010 A			BLK8	RD,O	X'10'	
465	00 001A5	682001A7 A				BCR,2	\$+2	
466	00 001A6	2E000000 A				WAIT		REPORT
467	00 001A7	32100097E A				LW,1	#8	
468	00 001A8	32000075 A				LW,C	=0	
469	00 001A9	320000990 A				LW,O	X'140'	
470	00 001AA	691001AC A				BCS,1	\$+2	CC4 SET
471	00 001AB	692001B0 A				BCS,2	\$+5	NB, CC3 SET
472	00 001AC	6520001AD A				BIR,2	\$+1	ERROR - CC3 RESET/CC4 SET
473	00 001AD	6C000010 A				RD,O	X'10'	
474	00 001AE	691001B0 A				BCS,1	\$+2	
475	00 001AF	2E00000C A				WAIT		ERROR HALT
476	00 001B0	6C000010 A				RD,O	X'10'	
477	00 001B1	694001A4 A				BCS,4	BLK8	LOOP/PROCEED
478						PAGE		
479					*			
480					*	BLK9		
481					*			
482					*	CHECK ABILITY OF LW TO SET CC3 WITH BIT 24 = 1		
483					*			
484	00 001B2	6C000010 A			BLK9	RD,O	X'10'	
485	00 001B3	682001B5 A				BCR,2	\$+2	
486	00 001B4	2E000000 A				WAIT		
487	00 001B5	321000981 A				LW,1	#9	
488	00 001B6	320000975 A				LW,C	=0	
489	00 001B7	320000982 A				LW,O	X'180'	
490	00 001B8	691001BA A				BCS,1	\$+2	CC4 SET
491	00 001B9	692001BE A				BCS,2	\$+5	NB, CC3 SET
492	00 001BA	6520001BB A				BIR,2	\$+1	ERROR - CC3 RESET/CC4 SET
493	00 001BB	6C000010 A				RD,O	X'10'	
494	00 001BC	691001BE A				BCS,1	\$+2	
495	00 001BD	2E000000 A				WAIT		ERROR HALT
496	00 001BE	6C000010 A				RD,O	X'10'	
497	00 001BF	694001B2 A				BCS,4	BLK9	LOOP/PROCEED
498						PAGE		

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
499				*				
500				*				
501				*				
502				*				
503				*				
504	00 001C0	6C000010 A	BLK10	RD,0	X'10'			
505	00 001C1	682001C3 A		BCR,2	#+2			
506	00 001C2	2E000000 A		WAIT				
507	00 001C3	32100970 A		LW,1	#X'10'			REPORT
508	00 001C4	32000975 A		LW,0	#0			
509	00 001C5	32000983 A		LW,0	#X'100'			
510	00 001C6	691001C8 A		BCS,1	#+2			CC4 SET
511	00 001C7	692001CC A		BCS,2	#+5			N0, CC3 SET
512	00 001C8	652001C9 A		BIR,2	#+1			ERROR = CC3 RESET/CC4 SET
513	00 001C9	6C000010 A		RD,0	X'10'			
514	00 001CA	691001CC A		BCS,1	#+2			
515	00 001CB	2E000000 A		WAIT				ERROR HALT
516	00 001CC	6C000010 A		RD,0	X'10'			
517	00 001CD	694001C0 A		BCS,4	BLK10			LOOP/PROCEED
518				PAGE				
519				*				
520				*				
521				*				
522				*				
523				*				
524	00 001CE	6C000010 A	BLK11	RD,0	X'10'			
525	00 001CF	682001D1 A		BCR,2	#+2			
526	00 001D0	2E000000 A		WAIT				REPORT
527	00 001D1	32100984 A		LW,1	#X'11'			
528	00 001D2	32000975 A		LW,0	#0			
529	00 001D3	32000985 A		LW,0	#X'200'			
530	00 001D4	691001D6 A		BCS,1	#+2			CC4 SET
531	00 001D5	692001DA A		BCS,2	#+5			N0, CC3 SET
532	00 001D6	652001D7 A		BIR,2	#+1			ERROR = CC3 RESET/CC4 SET
533	00 001D7	6C000010 A		RD,0	X'10'			
534	00 001D8	691001DA A		BCS,1	#+2			
535	00 001D9	2E000000 A		WAIT				ERROR HALT
536	00 001DA	6C000010 A		RD,0	X'10'			
537	00 001DB	694001CE A		BCS,4	BLK11			LOOP/PROCEED
538				PAGE				
539				*				
540				*				
541				*				
542				*				
543				*				
544	00 001DC	6C000010 A	BLK12	RD,0	X'10'			
545	00 001DD	682001DF A		BCR,2	#+2			
546	00 001DE	2E000000 A		WAIT				REPORT
547	00 001DF	32100986 A		LW,1	#X'12'			
548	00 001E0	32000975 A		LW,0	#0			
549	00 001E1	32000987 A		LW,0	#X'400'			
550	00 001E2	691001E4 A		BCS,1	#+2			CC4 SET
551	00 001E3	692001E8 A		BCS,2	#+5			N0, CC3 SET
552	00 001E4	652001E5 A		BIR,2	#+1			ERROR = CC3 RESET/CC4 SET
553	00 001E5	6C000010 A		RD,0	X'10'			
554	00 001E6	691001E8 A		BCS,1	#+2			
555	00 001E7	2E000000 A		WAIT				ERROR HALT
556	00 001E8	6C000010 A		RD,0	X'10'			
557	00 001E9	694001DC A		BCS,4	BLK12			LOOP/PROCEED
558				PAGE				
559				*				
560				*				
561				*				
562				*				
563				*				
564	00 001EA	6C000010 A	BLK13	RD,0	X'10'			
565	00 001EB	682001ED A		BCR,2	#+2			
566	00 001EC	2E000000 A		WAIT				
567	00 001ED	32100988 A		LW,1	#X'13'			REPORT
568	00 001EE	32000975 A		LW,0	#0			
569	00 001EF	32000989 A		LW,0	#X'800'			
570	00 001FO	691001F2 A		BCS,1	#+2			CC4 SET

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
571	00 001F1	692001F6	A			BCS,2	\$+5	
572	00 001F2	652001F3	A			BIR,2	\$+1	
573	00 001F3	6C000010	A			RD,0	X'10'	
574	00 001F4	691001F6	A			BCS,1	\$+2	
575	00 001F5	2E000000	A			WAIT		ERROR HALT
576	00 001F6	6C000010	A			RD,0	X'10'	
577	00 001F7	694001EA	A			BCS,4	BLK13	LOOP/PROCEED
578					PAGE			
579				*				
580				*				
581				*				
582				*				* CHECK ABILITY OF LW TO SET CC3 WITH BIT 19 = 1
583				*				
584	00 001F8	6C000010	A		BLK14	RD,0	X'10'	
585	00 001F9	682001FB	A			BCR,2	\$+2	
586	00 001FA	2E000000	A			WAIT		REPORT
587	00 001FB	3210098A	A			LW,1	=X'14'	
588	00 001FC	32000975	A			LW,0	=0	
589	00 001FD	3200098B	A			LW,0	=X'1000'	
590	00 001FE	69100200	A			BCS,1	\$+2	CC4 SET
591	00 001FF	69200204	A			BCS,2	\$+5	N0, CC3 SET
592	00 00200	65200201	A			BIR,2	\$+1	ERROR = CC3 RESET/CC4 SET
593	00 00201	6C000010	A			RD,0	X'10'	
594	00 00202	69100204	A			BCS,1	\$+2	
595	00 00203	2E000000	A			WAIT		ERROR HALT
596	00 00204	6C000010	A			RD,0	X'10'	
597	00 00205	694001F8	A			BCS,4	BLK14	LOOP/PROCEED
598				PAGE				
599				*				
600				*				
601				*				
602				*				* CHECK ABILITY OF LW TO SET CC3 WITH BIT 18 = 1
603				*				
604	00 00206	6C000010	A		BLK15	RD,0	X'10'	
605	00 00207	68200209	A			BCR,2	\$+2	
606	00 00208	2E000000	A			WAIT		REPORT
607	00 00209	3210098C	A			LW,1	=X'15'	
608	00 0020A	32000975	A			LW,0	=0	
609	00 0020B	3200098D	A			LW,0	=X'2000'	
610	00 0020C	6910020E	A			BCS,1	\$+2	CC4 SET
611	00 0020D	69200212	A			BCS,2	\$+5	N0, CC3 SET
612	00 0020E	6520020F	A			BIR,2	\$+1	ERROR = CC3 RESET/CC4 SET
613	00 0020F	6C000010	A			RD,0	X'10'	
614	00 00210	69100212	A			BCS,1	\$+2	
615	00 00211	2E000000	A			WAIT		ERROR HALT
616	00 00212	6C000010	A			RD,0	X'10'	
617	00 00213	69400206	A			BCS,4	BLK15	LOOP/PROCEED
618				PAGE				
619				*				
620				*				
621				*				
622				*				* CHECK ABILITY OF LW TO SET CC3 WITH BIT 17 = 1
623				*				
624	00 00214	6C000010	A		BLK16	RD,0	X'10'	
625	00 00215	68200217	A			BCR,2	\$+2	
626	00 00216	2E000000	A			WAIT		REPORT
627	00 00217	3210098E	A			LW,1	=X'16'	
628	00 00218	32000975	A			LW,0	=0	
629	00 00219	3200098F	A			LW,0	=X'4000'	
630	00 0021A	6910021C	A			BCS,1	\$+2	CC4 SET
631	00 0021B	69200220	A			BCS,2	\$+5	N0, CC3 SET
632	00 0021C	6520021D	A			BIR,2	\$+1	ERROR = CC3 RESET/CC4 SET
633	00 0021D	6C000010	A			RD,0	X'10'	
634	00 0021E	69100220	A			BCS,1	\$+2	
635	00 0021F	2E000000	A			WAIT		ERROR HALT
636	00 00220	6C000010	A			RD,0	X'10'	
637	00 00221	69400214	A			BCS,4	BLK16	LOOP/PROCEED
638				PAGE				
639				*				
640				*				
641				*				
642				*				* CHECK ABILITY OF LW TO SET CC3 WITH BIT 16 = 1

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL O R I G	LABEL	OPERATION	OPERAND	COMMENTS
643			*					
644	00 00222	6C000010 A	BLK17		RD,0	X'10'		
645	00 00223	68200225 A			BCR,2	\$+2		
646	00 00224	2E000000 A			WAIT			
647	00 00225	32100990 A			LW,1	=X'17'		
648	00 00226	32000975 A			LW,0	=0		
649	00 00227	32000991 A			LW,0	=X'8000'		
650	00 00228	6910022A A			BCS,1	\$+2		
651	00 00229	6920022E A			BCS,2	\$+5	CC4 SET	
652	00 0022A	6520022B A			BIR,2	\$+1	NR, CC3 SET	
653	00 0022B	6C000010 A			RD,0	X'10'	ERROR - CC3 RESET/CC4 SET	
654	00 0022C	6910022E A			BCS,1	\$+2		
655	00 0022D	2E000000 A			WAIT			
656	00 0022E	6C000010 A			RD,0	X'10'	ERROR HALT	
657	00 0022F	69400222 A			BCS,4	BLK17		
658			PAGE					LOOP/PROCEED
659			*					
660			* BLOCK 18					
661			*					
662			* CHECK ABILITY OF LW TO SET CC3 WITH BIT 15 = 1					
663			*					
664	00 00230	6C000010 A	BLK18		RD,0	X'10'		
665	00 00231	68200233 A			BCR,2	\$+2		
666	00 00232	2E000000 A			WAIT			
667	00 00233	32100992 A			LW,1	=X'18'		
668	00 00234	32000975 A			LW,0	=0		
669	00 00235	32000993 A			LW,0	=X'10000'		
670	00 00236	69100238 A			BCS,1	\$+2	CC4 SET	
671	00 00237	6920023C A			BCS,2	\$+5	NR, CC3 SET	
672	00 00238	65200239 A			BIR,2	\$+1	ERROR - CC3 RESET/CC4 SET	
673	00 00239	6C000010 A			RD,0	X'10'		
674	00 0023A	6910023C A			BCS,1	\$+2		
675	00 0023B	2E000000 A			WAIT			
676	00 0023C	6C000010 A			RD,0	X'10'	ERROR HALT	
677	00 0023D	69400230 A			BCS,4	BLK18		
678			PAGE					LOOP/PROCEED
679			*					
680			* BLOCK 19					
681			*					
682			* CHECK ABILITY OF LW TO SET CC3 WITH BIT 14 = 1					
683			*					
684	00 0023E	6C000010 A	BLK19		RD,0	X'10'		
685	00 0023F	68200241 A			BCR,2	\$+2		
686	00 00240	2E000000 A			WAIT			
687	00 00241	32100994 A			LW,1	=X'19'		
688	00 00242	32000975 A			LW,0	=0		
689	00 00243	32000995 A			LW,0	=X'20000'		
690	00 00244	69100246 A			BCS,1	\$+2	CC4 SET	
691	00 00245	6920024A A			BCS,2	\$+5	NR, CC3 SET	
692	00 00246	65200247 A			BIR,2	\$+1	ERROR - CC3 RESET/CC4 SET	
693	00 00247	6C000010 A			RD,0	X'10'		
694	00 00248	6910024A A			BCS,1	\$+2		
695	00 00249	2E000000 A			WAIT			
696	00 0024A	6C000010 A			RD,0	X'10'	ERROR HALT	
697	00 0024B	6940023E A			BCS,4	BLK19		
698			PAGE					LOOP/PROCEED
699			*					
700			* BLOCK 20					
701			*					
702			* CHECK ABILITY OF LW TO SET CC3 WITH BIT 13 = 1					
703			*					
704	00 0024C	6C000010 A	BLK20		RD,0	X'10'		
705	00 0024D	6820024F A			BCR,2	\$+2		
706	00 0024E	2E000000 A			WAIT			
707	00 0024F	3210097F A			LW,1	=X'20'		
708	00 00250	32000975 A			LW,0	=0		
709	00 00251	32000996 A			LW,0	=X'40000'		
710	00 00252	69100254 A			BCS,1	\$+2	CC4 SET	
711	00 00253	69200258 A			BCS,2	\$+5	NR, CC3 SET	
712	00 00254	65200255 A			BIR,2	\$+1	ERROR - CC3 RESET/CC4 SET	
713	00 00255	6C000010 A			RD,0	X'10'		
714	00 00256	69100258 A			BCS,1	\$+2		

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR RIG	LABEL	OPERATION	OPERAND	COMMENTS
715	00 00257	2E000000	A			WAIT		ERROR HALT
716	00 00258	6C000010	A			RD,0	X'10'	
717	00 00259	6940024C	A			BCS,4	BLK20	LOOP/PROCEED
718			PAGE					
719			*					
720			* BLCK 21					
721			*					
722			* CHECK ABILITY OF LW TO SET CC3 WITH BIT 12 = 1					
723			*					
724	00 0025A	6C000010	A		BLK21	RD,0	X'10'	
725	00 0025B	6820025D	A			BCR,2	\$+2	
726	00 0025C	2E000000	A			WAIT		REPORT
727	00 0025D	32100997	A			LW,1	=X'21'	
728	00 0025E	32000975	A			LW,0	=0	
729	00 0025F	32000998	A			LW,0	=X'80000'	
730	00 00260	69100262	A			BCS,1	\$+2	CC4 SET
731	00 00261	69200266	A			BCS,2	\$+5	N0, CC3 SET
732	00 00262	65200263	A			BIR,2	\$+1	ERR0R - CC3 RESET/CC4 SET
733	00 00263	6C000010	A			RD,0	X'10'	
734	00 00264	69100266	A			BCS,1	\$+2	
735	00 00265	2E000000	A			WAIT		ERR0R HALT
736	00 00266	6C000010	A			RD,0	X'10'	
737	00 00267	6940025A	A			BCS,4	BLK21	LOOP/PROCEED
738			PAGE					
739			*					
740			* BLCK 22					
741			*					
742			* CHECK ABILITY OF LW TO SET CC3 WITH BIT 11 = 1					
743			*					
744	00 00268	6C000010	A		BLK22	RD,0	X'10'	
745	00 00269	6820026B	A			BCR,2	\$+2	
746	00 0026A	2E000000	A			WAIT		REPORT
747	00 0026B	32100997	A			LW,1	=X'22'	
748	00 0026C	32000975	A			LW,0	=0	
749	00 0026D	3200099A	A			LW,0	=X'100000'	
750	00 0026E	69100270	A			BCS,1	\$+2	CC4 SET
751	00 0026F	69200274	A			BCS,2	\$+5	N0, CC3 SET
752	00 00270	65200271	A			BIR,2	\$+1	ERR0R - CC3 RESET/CC4 SET
753	00 00271	6C000010	A			RD,0	X'10'	
754	00 00272	69100274	A			BCS,1	\$+2	
755	00 00273	2E000000	A			WAIT		ERR0R HALT
756	00 00274	6C000010	A			RD,0	X'10'	
757	00 00275	69400268	A			BCS,4	BLK22	LOOP/PROCEED
758			PAGE					
759			*					
760			* BLCK 23					
761			*					
762			* CHECK ABILITY OF LW TO SET CC3 WITH BIT 10 = 1					
763			*					
764	00 00276	6C000010	A		BLK23	RD,0	X'10'	
765	00 00277	68200279	A			BCR,2	\$+2	
766	00 00278	2E000000	A			WAIT		REPORT
767	00 00279	3210099B	A			LW,1	=X'23'	
768	00 0027A	32000975	A			LW,0	=0	
769	00 0027B	3200099C	A			LW,0	=X'200000'	
770	00 0027C	6910027E	A			BCS,1	\$+2	CC4 SET
771	00 0027D	69200282	A			BCS,2	\$+5	N0, CC3 SET
772	00 0027E	6520027F	A			BIR,2	\$+1	ERR0R - CC3 RESET/CC4 SET
773	00 0027F	6C000010	A			RD,0	X'10'	
774	00 00280	69100282	A			BCS,1	\$+2	
775	00 00281	2E000000	A			WAIT		ERR0R HALT
776	00 00282	6C000010	A			RD,0	X'10'	
777	00 00283	69400276	A			BCS,4	BLK23	LOOP/PROCEED
778			PAGE					
779			*					
780			* BLCK 24					
781			*					
782			* CHECK ABILITY OF LW TO SET CC3 WITH BIT 9 = 1					
783			*					
784	00 00284	6C000010	A		BLK24	RD,0	X'10'	
785	00 00285	68200287	A			BCR,2	\$+2	
786	00 00286	2E000000	A			WAIT		REPORT

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
787	00 00287	3210099D A			LW,1	=X'24'		
788	00 00288	32000975 A			LW,0	=0		
789	00 00289	3200099E A			LW,0	=X'400000'		
790	00 0028A	6910028C A			BGS,1	\$+2	CC4 SET	
791	00 0028B	69200290 A			BGS,2	\$+5	NA, CC3 SET	
792	00 0028C	6920028D A			BIR,2	\$+1	ERROR = CC3 RESET/CC4 SET	
793	00 0028D	6C000010 A			RD,0	X'10'		
794	00 0028E	69100290 A			BGS,1	\$+2		
795	00 0028F	2E000000 A			WAIT		ERROR HALT	
796	00 00290	6C000010 A			RD,0	X'10'		
797	00 00291	69400284 A			BGS,4	BLK24	LOOP/PROCEED	
798					PAGE			
799					*	BLACK 25		
800					*			
801					*	CHECK ABILITY OF LW TO SET CC3 WITH BIT 8 = 1		
802					*			
803					*			
804	00 00292	6C000010 A			BLK25	RD,0	X'10'	
805	00 00293	69200295 A			HCR,2	\$+2		
806	00 00294	2E000000 A			WAIT		REPORT	
807	00 00295	3210099F A			LW,1	=X'25'		
808	00 00296	32000975 A			LW,0	=0		
809	00 00297	320009A0 A			LW,0	=X'500000'		
810	00 00298	6910029A A			BGS,1	\$+2	CC4 SET	
811	00 00299	6920029E A			BGS,2	\$+5	NA, CC3 SET	
812	00 0029A	69200298 A			BIR,2	\$+1	ERROR = CC3 RESET/CC4 SET	
813	00 0029B	6C000010 A			RD,0	X'10'		
814	00 0029C	6910029E A			BGS,1	\$+2		
815	00 0029D	2E000000 A			WAIT		ERROR HALT	
816	00 0029E	6C000010 A			RD,0	X'10'		
817	00 0029F	69400292 A			BGS,4	BLK25	LOOP/PROCEED	
818					PAGE			
819					*	BLACK 26		
820					*			
821					*	CHECK ABILITY OF LW TO SET CC3 WITH BIT 7 = 1		
822					*			
823					*			
824	00 002A0	6C000010 A			BLK26	RD,0	X'10'	
825	00 002A1	692002A3 A			HCR,2	\$+2		
826	00 002A2	2E000000 A			WAIT			
827	00 002A3	321002A1 A			LW,1	=X'26'		
828	00 002A4	32000975 A			LW,0	=0		
829	00 002A5	320009A2 A			LW,0	=X'1000000'		
830	00 002A6	691002A8 A			BGS,1	\$+2	CC4 SET	
831	00 002A7	692002AC A			BGS,2	\$+5	NA, CC3 SET	
832	00 002A8	692002A9 A			BIR,2	\$+1	ERROR = CC3 RESET/CC4 SET	
833	00 002A9	6C000010 A			RD,0	X'10'		
834	00 002AA	691002AC A			BGS,1	\$+2		
835	00 002AB	2E000000 A			WAIT		ERROR HALT	
836	00 002AC	6C000010 A			RD,0	X'10'		
837	00 002AD	694002A0 A			BGS,4	BLK26	LOOP/PROCEED	
838					PAGE			
839					*	BLACK 27		
840					*			
841					*	CHECK ABILITY OF LW TO SET CC3 WITH BIT 6 = 1		
842					*			
843					*			
844	00 002AE	6C000010 A			BLK27	RD,0	X'10'	
845	00 002AF	692002B1 A			HCR,2	\$+2		
846	00 002B0	2E000000 A			WAIT		REPORT	
847	00 002B1	321009A3 A			LW,1	=X'27'		
848	00 002B2	32000975 A			LW,0	=0		
849	00 002B3	320009A4 A			LW,0	=X'2000000'		
850	00 002B4	691002B6 A			BGS,1	\$+2	CC4 SET	
851	00 002B5	692002BA A			BGS,2	\$+5	NA, CC3 SET	
852	00 002B6	692002B7 A			BIR,2	\$+1	ERROR = CC3 RESET/CC4 SET	
853	00 002B7	6C000010 A			RD,0	X'10'		
854	00 002B8	691002BA A			BGS,1	\$+2		
855	00 002B9	2E000000 A			WAIT		ERROR HALT	
856	00 002BA	6C000010 A			RD,0	X'10'		
857	00 002BB	694002AE A			BGS,4	BLK27	LOOP/PROCEED	
858					PAGE			

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
859				*				
860				* BL8CK 28				
861				*				
862				* CHECK ABILITY OF LW TO SET CC3 WITH BIT 5 = 1				
863				*				
864	00 002BC	6C000010 A	BLK28	RD,0 X'10'				
865	00 002BD	682002BF A		BCR,2 \$+2				
866	00 002BE	2E000000 A		WAIT				
867	00 002BF	321009A5 A		LW,1 =X'28'				
868	00 002CC	32000975 A		LW,0 =0				
869	00 002C1	320009A6 A		LW,0 =X'4000000'				
870	00 002C2	691002C4 A		BCS,1 \$+2			CC4 SET	
871	00 002C3	692002C8 A		BCS,2 \$+5			N8, CC3 SET	
872	00 002C4	652002C5 A		BIR,2 \$+1			ERR8R = CC3 RESET/CC4 SET	
873	00 002C5	6C000010 A		RD,0 X'10'				
874	00 002C6	691002C8 A		BCS,1 \$+2				
875	00 002C7	2E000000 A		WAIT			ERR8R HALT	
876	00 002C8	6C000010 A		RD,0 X'10'				
877	00 002C9	694002BC A		BCS,4 BLK28			LOOP/PROCEED	
878				PAGE				
879				*				
880				* BL8CK 29				
881				*				
882				* CHECK ABILITY OF LW TO SET CC3 WITH BIT 4 = 1				
883				*				
884	00 002CA	6C000010 A	BLK29	RD,0 X'10'				
885	00 002CB	682002CD A		BCR,2 \$+2				
886	00 002CC	2E000000 A		WAIT			REPORT	
887	00 002CD	321009A7 A		LW,1 =X'29'				
888	00 002CE	32000975 A		LW,0 =0				
889	00 002CF	320009A8 A		LW,0 =X'8000000'				
890	00 002D0	691002D2 A		BCS,1 \$+2			CC4 SET	
891	00 002D1	692002D6 A		BCS,2 \$+5			N8, CC3 SET	
892	00 002D2	652002D3 A		BIR,2 \$+1			ERR8R = CC3 RESET/CC4 SET	
893	00 002D3	6C000010 A		RD,0 X'10'				
894	00 002D4	691002D6 A		BCS,1 \$+2				
895	00 002D5	2E000000 A		WAIT			ERR8R HALT	
896	00 002D6	6C000010 A		RD,0 X'10'				
897	00 002D7	694002CA A		BCS,4 BLK29			LOOP/PROCEED	
898				PAGE				
899				*				
900				* BL8CK 30				
901				*				
902				* CHECK ABILITY OF LW TO SET CC3 WITH BIT 3 = 1				
903				*				
904	00 002D8	6C000010 A	BLK30	RD,0 X'10'				
905	00 002D9	682002DB A		BCR,2 \$+2				
906	00 002DA	2E000000 A		WAIT			REPORT	
907	00 002DB	321009A9 A		LW,1 =X'30'				
908	00 002DC	32000975 A		LW,0 =0				
909	00 002DD	320009AA A		LW,0 =X'10000000'				
910	00 002DE	691002E0 A		BCS,1 \$+2			CC4 SET	
911	00 002DF	692002E4 A		BCS,2 \$+5			N8, CC3 SET	
912	00 002E0	652002E1 A		BIR,2 \$+1			ERR8R = CC3 RESET/CC4 SET	
913	00 002E1	6C000010 A		RD,0 X'10'				
914	00 002E2	691002E4 A		BCS,1 \$+2				
915	00 002E3	2E000000 A		WAIT			ERR8R HALT	
916	00 002E4	6C000010 A		RD,0 X'10'				
917	00 002E5	694002DB A		BCS,4 BLK30			LOOP/PROCEED	
918				PAGE				
919				*				
920				* BL8CK 31				
921				*				
922				* CHECK ABILITY OF LW TO SET CC3 WITH BIT 2 = 1				
923				*				
924	00 002E6	6C000010 A	BLK31	RD,0 X'10'				
925	00 002E7	682002E9 A		BCR,2 \$+2				
926	00 002E8	2E000000 A		WAIT			REPORT	
927	00 002E9	321009AB A		LW,1 =X'31'				
928	00 002EA	32000975 A		LW,0 =0				
929	00 002EB	320009AC A		LW,0 =X'20000000'				
930	00 002EC	691002EE A		BCS,1 \$+2			CC4 SET	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
931	00 002ED	692002F2 A			BCS,2	\$+5		
932	00 002EE	652002EF A			BIR,2	\$+1		NO, CC3 SET
933	00 002EF	6C000010 A			RD,0	X'10'		ERROR - CC3 RESET/CC4 SET
934	00 002FO	691002F2 A			BCS,1	\$+2		
935	00 002F1	2E000000 A			WAIT			ERROR HALT
936	00 002F2	6C000010 A			RD,0	X'10'		
937	00 002F3	694002E6 A			BCS,4	BLK31		LOOP/PROCEED
938			PAGE					
939			*					
940			* BLOCK 32					
941			*					
942			* CHECK ABILITY OF LW TO SET CC3 WITH BIT 1 = 1					
943			*					
944	00 002F4	6C000010 A			BLK32	RD,0	X'10'	
945	00 002F5	682002F7 A			BCR,2	\$+2		
946	00 002F6	2E000000 A			WAIT			REPORT
947	00 002F7	321009AD A			LW,1	=X'32'		
948	00 002F8	32000975 A			LW,0	=0		
949	00 002F9	320009AE A			LW,0	=X'40000000'		
950	00 002FA	691002FC A			BCS,1	\$+2		CC4 SET
951	00 002FB	69200300 A			BCS,2	\$+5		NO, CC3 SET
952	00 002FC	652002FD A			BIR,2	\$+1		ERROR - CC3 RESET/CC4 SET
953	00 002FD	6C000010 A			RD,0	X'10'		
954	00 002FE	69100300 A			BCS,1	\$+2		
955	00 002FF	2E000000 A			WAIT			ERROR HALT
956	00 00300	6C000010 A			RD,0	X'10'		
957	00 00301	694002F4 A			BCS,4	BLK32		LOOP/PROCEED
958			PAGE					
959			*					
960			* BLOCK 33					
961			*					
962			* CHECK ABILITY OF LW TO SET CC4 WITH BIT 0 = 1					
963			*					
964	00 00302	6C000010 A			BLK33	RD,0	X'10'	
965	00 00303	68200305 A			BCR,2	\$+2		
966	00 00304	2E000000 A			WAIT			REPORT
967	00 00305	321009AF A			LW,1	=X'33'		
968	00 00306	32000975 A			LW,0	=0		
969	00 00307	320009B0 A			LW,0	=X'80000000'		
970	00 00308	6810030A A			BCR,1	\$+2		CC4 SET
971	00 00309	6820030E A			BCR,2	\$+5		YES, CC3 SET
972	00 0030A	6520030B A			BIR,2	\$+1		ERROR - CC3 SET/CC4 RESET
973	00 0030B	6C000010 A			RD,0	X'10'		
974	00 0030C	6910030E A			BCS,1	\$+2		
975	00 0030D	2E000000 A			WAIT			ERROR HALT
976	00 0030E	6C000010 A			RD,0	X'10'		
977	00 0030F	69400302 A			BCS,4	BLK33		LOOP/PROCEED
978			PAGE					
979			*					
980			* BLOCK 34					
981			*					
982			* CHECK ABILITY OF LW TO RESET CC4 WITH ALL BITS = ZERO					
983			*					
984	00 00310	6C000010 A			BLK34	RD,0	X'10'	
985	00 00311	68200313 A			BCR,2	\$+2		
986	00 00312	2E000000 A			WAIT			REPORT
987	00 00313	321009B1 A			LW,1	=X'34'		
988	00 00314	320009B0 A			LW,0	=X'80000000'		
989	00 00315	32000975 A			LW,0	=0		
990	00 00316	69100318 A			BCS,1	\$+2		CC4 SET
991	00 00317	6820031C A			BCR,2	\$+5		NO, CC3 SET
992	00 00318	65200319 A			BIR,2	\$+1		YES, ERROR - CC3/CC4 SET
993	00 00319	6C000010 A			RD,0	X'10'		
994	00 0031A	6910031C A			BCS,1	\$+2		
995	00 0031B	2E000000 A			WAIT			ERROR HALT
996	00 0031C	6C000010 A			RD,0	X'10'		
997	00 0031D	69400310 A			BCS,4	BLK34		LOOP/PROCEED
998			PAGE					
999			*					
1000			* BLOCK 35					
1001			*					
1002			* CHECK ABILITY OF LW-EOR SEQUENCE TO RESET CC3 AND NOT SET CC4 WITH					

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1003					*	ALL BITS = ZERO		
1004					*			
1005	00 0031E	6C000010 A	BLK35		RD,0	X'10'		
1006	00 0031F	68200321 A			BCR,2	\$+2		
1007	00 00320	2E000000 A			WAIT			REPORT
1008	00 00321	32100982 A			LW,1	=X'35'		
1009	00 00322	32000975 A			LW,0	=0		
1010	00 00323	48000975 A			EOR,0	=0		
1011	00 00324	69100326 A			BCS,1	\$+2		
1012	00 00325	6820032A A			BCR,2	\$+5		NO, CC3 SET
1013	00 00326	65200327 A			BIR,2	\$+1		YES, ERROR - CC3/CC4 SET
1014	00 00327	6C000010 A			RD,0	X'10'		
1015	00 00328	6910032A A			BCS,1	\$+2		
1016	00 00329	2E000000 A			WAIT			ERROR HALT
1017	00 0032A	6C000010 A			RD,0	X'10'		
1018	00 0032B	6940031E A			BCS,4	BLK35		LOOP/PROCEED
1019					PAGE			
1020					*			
1021					*	BLOCK 36		
1022					*			
1023					*	CHECK ABILITY OF LW-EOR SEQUENCE TO RESET CC4 AND NOT SET CC3 WITH		
1024					*	ALL BITS = 1		
1025					*			
1026	00 0032C	6C000010 A	BLK36		RD,0	X'10'		
1027	00 0032D	6820032F A			BCR,2	\$+2		
1028	00 0032E	2E000000 A			WAIT			REPORT
1029	00 0032F	32100983 A			LW,1	=X'36'		
1030	00 00330	32000975 A			LW,0	=0		
1031	00 00331	32000984 A			LW,0	=-1		
1032	00 00332	48000984 A			EOR,0	=-1		
1033	00 00333	69100335 A			BCS,1	\$+2		
1034	00 00334	68200339 A			BCR,2	\$+5		NO, CC3 SET
1035	00 00335	65200336 A			BIR,2	\$+1		YES, ERROR - CC3/CC4 SET
1036	00 00336	6C000010 A			RD,0	X'10'		
1037	00 00337	69100339 A			BCS,1	\$+2		
1038	00 00338	2E000000 A			WAIT			ERROR HALT
1039	00 00339	6C000010 A			RD,0	X'10'		
1040	00 0033A	6940032C A			BCS,4	BLK36		LOOP/PROCEED
1041					PAGE			
1042					*			
1043					*	BLOCK 37		
1044					*			
1045					*	CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 31 = 1		
1046					*			
1047	00 0033B	6C000010 A	BLK37		RD,0	X'10'		
1048	00 0033C	6820033E A			BCR,2	\$+2		
1049	00 0033D	2E000000 A			WAIT			REPORT
1050	00 0033E	32100985 A			LW,1	=X'37'		
1051	00 0033F	32000975 A			LW,0	=0		
1052	00 00340	48000976 A			EOR,0	=X'11'		
1053	00 00341	69100343 A			BCS,1	\$+2		
1054	00 00342	69200347 A			BCS,2	\$+5		CC4 SET
1055	00 00343	65200344 A			BIR,2	\$+1		NO, CC3 SET
1056	00 00344	6C000010 A			RD,0	X'10'		ERROR - CC3 RESET/CC4 SET
1057	00 00345	69100347 A			BCS,1	\$+2		
1058	00 00346	2E000000 A			WAIT			ERROR HALT
1059	00 00347	6C000010 A			RD,0	X'10'		
1060	00 00348	6940033B A			BCS,4	BLK37		LOOP/PROCEED
1061					PAGE			
1062					*			
1063					*	BLOCK 38		
1064					*			
1065					*	CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 30 = 1		
1066					*			
1067	00 00349	6C000010 A	BLK38		RD,0	X'10'		
1068	00 0034A	6820034C A			BCR,2	\$+2		
1069	00 0034B	2E000000 A			WAIT			REPORT
1070	00 0034C	32100986 A			LW,1	=X'38'		
1071	00 0034D	32000975 A			LW,0	=0		
1072	00 0034E	48000977 A			EOR,0	=X'12'		
1073	00 0034F	69100351 A			BCS,1	\$+2		
1074	00 00350	69200355 A			BCS,2	\$+5		NO, CC3 SET

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1075	00 00351	65200352 A			BIR,2	\$+1		
1076	00 00352	6C000010 A			RD,0	X'10'		
1077	00 00353	69100355 A			BCS,1	\$+2		
1078	00 00354	2E000000 A			WAIT			ERROR HALT
1079	00 00355	6C000010 A			RD,0	X'10'		
1080	00 00356	69400349 A			BCS,4	BLK38		LOOP/PROCEED
1081					PAGE			
1082				*				
1083				*	* BLOCK 39			
1084				*				
1085				*	* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 29 = 1			
1086				*				
1087	00 00357	6C000010 A			BLK39	RD,0	X'10'	
1088	00 00358	6820035A A				BCR,2	\$+2	
1089	00 00359	2E000000 A				WAIT		REPORT
1090	00 0035A	32100987 A				LW,1	=X'39'	
1091	00 0035B	32000975 A				LW,0	=0	
1092	00 0035C	48000979 A				EOR,0	=X'41'	
1093	00 0035D	6910035F A				BCS,1	\$+2	CC4 SET
1094	00 0035E	69200363 A				BCS,2	\$+5	N0, CC3 SET
1095	00 0035F	65200360 A				BIR,2	\$+1	ERROR - CC3 RESET/CC4 SET
1096	00 00360	6C000010 A				RD,0	X'10'	
1097	00 00361	69100363 A				BCS,1	\$+2	
1098	00 00362	2E000000 A				WAIT		ERROR HALT
1099	00 00363	6C000010 A				RD,0	X'10'	
1100	00 00364	69400357 A				BCS,4	BLK39	LOOP/PROCEED
1101				PAGE				
1102				*				
1103				*	* BLOCK 40			
1104				*				
1105				*	* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 28 = 1			
1106				*				
1107	00 00365	6C000010 A			BLK40	RD,0	X'10'	
1108	00 00366	68200368 A				BCR,2	\$+2	
1109	00 00367	2E000000 A				WAIT		REPORT
1110	00 00368	32100980 A				LW,1	=X'40'	
1111	00 00369	32000975 A				LW,0	=0	
1112	00 0036A	48000978 A				EOR,0	=X'8'	
1113	00 0036B	6910036D A				BCS,1	\$+2	CC4 SET
1114	00 0036C	69200371 A				BCS,2	\$+5	N0, CC3 SET
1115	00 0036D	6520036E A				BIR,2	\$+1	ERROR - CC3 RESET/CC4 SET
1116	00 0036E	6C000010 A				RD,0	X'10'	
1117	00 0036F	69100371 A				BCS,1	\$+2	
1118	00 00370	2E000000 A				WAIT		ERROR HALT
1119	00 00371	6C000010 A				RD,0	X'10'	
1120	00 00372	69400365 A				BCS,4	BLK40	LOOP/PROCEED
1121				PAGE				
1122				*				
1123				*	* BLOCK 41			
1124				*				
1125				*	* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 27 = 1			
1126				*				
1127	00 00373	6C000010 A			BLK41	RD,0	X'10'	
1128	00 00374	68200376 A				BCR,2	\$+2	
1129	00 00375	2E000000 A				WAIT		REPORT
1130	00 00376	32100988 A				LW,1	=X'41'	
1131	00 00377	32000975 A				LW,0	=0	
1132	00 00378	4800097D A				EOR,0	=X'10'	
1133	00 00379	6910037B A				BCS,1	\$+2	
1134	00 0037A	6920037F A				BCS,2	\$+5	N0, CC3 SET
1135	00 0037B	6520037C A				BIR,2	\$+1	ERROR - CC3 RESET/CC4 SET
1136	00 0037C	6C000010 A				RD,0	X'10'	
1137	00 0037D	6910037F A				BCS,1	\$+2	
1138	00 0037E	2E000000 A				WAIT		ERROR HALT
1139	00 0037F	6C000010 A				RD,0	X'10'	
1140	00 00380	69400373 A				BCS,4	BLK41	LOOP/PROCEED
1141				PAGE				
1142				*				
1143				*	* BLOCK 42			
1144				*				
1145				*	* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 26 = 1			
1146				*				

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1147	00 00381	6C000010 A	BLK42		RD,0	X'10'		
1148	00 00382	68200384 A			BCR,2	\$+2		
1149	00 00383	2E000000 A			WAIT			REPORT
1150	00 00384	321009B9 A			LW,1	=X'1421		
1151	00 00385	32000975 A			LW,0	=0		
1152	00 00386	4800097F A			EOR,0	=X'1201		
1153	00 00387	69100389 A			BCS,1	\$+2		CC4 SET
1154	00 00388	69200380 A			BCS,2	\$+5		NB, CC3 SET
1155	00 00389	6520038A A			BIR,2	\$+1		ERROR - CC3 RESET/CC4 SET
1156	00 0038A	6C000010 A			RD,0	X'10'		
1157	00 0038B	6910038D A			BCS,1	\$+2		
1158	00 0038C	2E000000 A			WAIT			ERROR HALT
1159	00 0038D	6C000010 A			RD,0	X'10'		
1160	00 0038E	69400381 A			BCS,4	BLK42		LOOP/PROCEED
1161					PAGE			
1162				*				
1163				* BLOCK 43				
1164				*				
1165				* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 25 = 1				
1166				*				
1167	00 0038F	6C000010 A	BLK43		RD,0	X'10'		
1168	00 00390	68200392 A			BCR,2	\$+2		
1169	00 00391	2E000000 A			WAIT			REPORT
1170	00 00392	321009BA A			LW,1	=X'1431		
1171	00 00393	32000975 A			LW,0	=0		
1172	00 00394	48000980 A			EOR,0	=X'1401		
1173	00 00395	69100397 A			BCS,1	\$+2		CC4 SET
1174	00 00396	69200398 A			BCS,2	\$+5		NB, CC3 SET
1175	00 00397	65200398 A			BIR,2	\$+1		ERROR - CC3 RESET/CC4 SET
1176	00 00398	6C000010 A			RD,0	X'10'		
1177	00 00399	69100398 A			BCS,1	\$+2		
1178	00 0039A	2E000000 A			WAIT			ERROR HALT
1179	00 0039B	6C000010 A			RD,0	X'10'		
1180	00 0039C	6940038F A			BCS,4	BLK43		LOOP/PROCEED
1181				PAGE				
1182				*				
1183				* BLOCK 44				
1184				*				
1185				* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 24 = 1				
1186				*				
1187	00 0039D	6C000010 A	BLK44		RD,0	X'10'		
1188	00 0039E	682003A0 A			BCR,2	\$+2		
1189	00 0039F	2E000000 A			WAIT			REPORT
1190	00 003A0	321009BB A			LW,1	=X'1441		
1191	00 003A1	32000975 A			LW,0	=0		
1192	00 003A2	48000982 A			EOR,0	=X'1801		
1193	00 003A3	691003A5 A			BCS,1	\$+2		CC4 SET
1194	00 003A4	692003A9 A			BCS,2	\$+5		NB, CC3 SET
1195	00 003A5	652003A6 A			BIR,2	\$+1		ERROR - CC3 RESET/CC4 SET
1196	00 003A6	6C000010 A			RD,0	X'10'		
1197	00 003A7	691003A9 A			BCS,1	\$+2		
1198	00 003A8	2E000000 A			WAIT			ERROR HALT
1199	00 003A9	6C000010 A			RD,0	X'10'		
1200	00 003AA	6940039D A			BCS,4	BLK44		LOOP/PROCEED
1201				PAGE				
1202				*				
1203				* BLOCK 45				
1204				*				
1205				* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 23 = 1				
1206				*				
1207	00 003AB	6C000010 A	BLK45		RD,0	X'10'		
1208	00 003AC	682003AE A			BCR,2	\$+2		
1209	00 003AD	2E000000 A			WAIT			REPORT
1210	00 003AE	321009BC A			LW,1	=X'1451		
1211	00 003AF	32000975 A			LW,0	=0		
1212	00 003B0	48000983 A			EOR,0	=X'1001		
1213	00 003B1	691003B3 A			BCS,1	\$+2		CC4 SET
1214	00 003B2	692003B7 A			BCS,2	\$+5		NB, CC3 SET
1215	00 003B3	652003B4 A			BIR,2	\$+1		ERROR - CC3 RESET/CC4 SET
1216	00 003B4	6C000010 A			RD,0	X'10'		
1217	00 003B5	691003B7 A			BCS,1	\$+2		
1218	00 003B6	2E000000 A			WAIT			ERROR HALT

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1219	00 003B7	6C000010 A				RD,0	X'10'	
1220	00 003B8	694003AB A				BCS,4	BLK45	
1221						PAGE		LOOP/PROCEED
1222				*				
1223				*				* BLOCK 46
1224				*				
1225				*				* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 22 = 1
1226				*				
1227	00 003B9	6C000010 A		BLK46		RD,0	X'10'	
1228	00 003BA	682003BC A				BCR,2	\$+2	
1229	00 003BB	2E000000 A				WAIT		
1230	00 003BC	3210098D A				LW,1	=X'461	
1231	00 003BD	32000975 A				LW,0	=0	
1232	00 003BE	48C00985 A				EOR,0	=X'200'	
1233	00 003BF	691003C1 A				BCS,1	\$+2	
1234	00 003C0	692003C5 A				BCS,2	\$+5	CC4 SET
1235	00 003C1	652003C2 A				BIR,2	\$+1	N0, CC3 SET
1236	00 003C2	6C000010 A				RD,0	X'10'	ERROR - CC3 RESET/CC4 SET
1237	00 003C3	691003C5 A				BCS,1	\$+2	
1238	00 003C4	2E000000 A				WAIT		
1239	00 003C5	6C000010 A				RD,0	X'10'	ERROR HALT
1240	00 003C6	694003B9 A				BCS,4	BLK46	
1241						PAGE		LOOP/PROCEED
1242				*				
1243				*				* BLOCK 47
1244				*				
1245				*				* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 21 = 1
1246				*				
1247	00 003C7	6C000010 A		BLK47		RD,0	X'10'	
1248	00 003C8	682003CA A				BCR,2	\$+2	
1249	00 003C9	2E000000 A				WAIT		
1250	00 003CA	3210098E A				LW,1	=X'471	
1251	00 003CB	32000975 A				LW,0	=0	
1252	00 003CC	48000987 A				EOR,0	=X'400'	
1253	00 003CD	691003CF A				BCS,1	\$+2	CC4 SET
1254	00 003CE	692003D3 A				BCS,2	\$+5	N0, CC3 SET
1255	00 003CF	652003D0 A				BIR,2	\$+1	ERROR - CC3 RESET/CC4 SET
1256	00 003D0	6C000010 A				RD,0	X'10'	
1257	00 003D1	691003D3 A				BCS,1	\$+2	
1258	00 003D2	2E000000 A				WAIT		
1259	00 003D3	6C000010 A				RD,0	X'10'	ERROR HALT
1260	00 003D4	694003C7 A				BCS,4	BLK47	
1261						PAGE		LOOP/PROCEED
1262				*				
1263				*				* BLOCK 48
1264				*				
1265				*				* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 20 = 1
1266				*				
1267	00 003D5	6C000010 A		BLK48		RD,0	X'10'	
1268	00 003D6	682003D8 A				BCR,2	\$+2	
1269	00 003D7	2E000000 A				WAIT		
1270	00 003D8	321009BF A				LW,1	=X'481	
1271	00 003D9	32000975 A				LW,0	=0	
1272	00 003DA	48000989 A				EOR,0	=X'800'	
1273	00 003DB	691003DD A				BCS,1	\$+2	CC4 SET
1274	00 003DC	692003E1 A				BCS,2	\$+5	N0, CC3 SET
1275	00 003DD	652003DE A				BIR,2	\$+1	ERROR - CC3 RESET/CC4 SET
1276	00 003DE	6C000010 A				RD,0	X'10'	
1277	00 003DF	691003E1 A				BCS,1	\$+2	
1278	00 003E0	2E000000 A				WAIT		
1279	00 003E1	6C000010 A				RD,0	X'10'	ERROR HALT
1280	00 003E2	694003D5 A				BCS,4	BLK48	
1281						PAGE		LOOP/PROCEED
1282				*				
1283				*				* BLOCK 49
1284				*				
1285				*				* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 19 = 1
1286				*				
1287	00 003E3	6C000010 A		BLK49		RD,0	X'10'	
1288	00 003E4	682003E6 A				BCR,2	\$+2	
1289	00 003E5	2E000000 A				WAIT		
1290	00 003E6	321009C0 A				LW,1	=X'491	
								REPORT

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1291	00	003E7	32000975 A			LW,0	#0	
1292	00	003E8	4800098B A			EOR,0	=X'1000'	
1293	00	003E9	691003EB A			BCS,1	#+2	
1294	00	003EA	692003EF A			BCS,2	#+5	CC4 SET
1295	00	003EB	652003EC A			BIR,2	#+1	N0, CC3 SET
1296	00	003EC	6C000010 A			RD,0	X'10!	ERROR = CC3 RESET/CC4 SET
1297	00	003ED	691003EF A			BCS,1	#+2	
1298	00	003EE	2E000000 A			WAIT		ERROR HALT
1299	00	003EF	6C000010 A			RD,0	X'10!	
1300	00	003F0	694003E3 A			BCS,4	BLK49	LOOP/PROCEED
1301						PAGE		
1302			*					
1303			* BLOCK 50					
1304			*					
1305			* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 18 = 1					
1306			*					
1307	00	003F1	6C000010 A		BLK50	RD,0	X'10!	
1308	00	003F2	682003F4 A			BCR,2	#+2	
1309	00	003F3	2E000000 A			WAIT		REPORT
1310	00	003F4	321009C1 A			LW,1	=X'50!	
1311	00	003F5	32000975 A			LW,0	#0	
1312	00	003F6	4800098D A			EOR,0	=X'2000!	
1313	00	003F7	691003F9 A			BCS,1	#+2	CC4 SET
1314	00	003F8	692003FD A			BCS,2	#+5	N0, CC3 SET
1315	00	003F9	652003FA A			BIR,2	#+1	ERROR = CC3 RESET/CC4 SET
1316	00	003FA	6C000010 A			RD,0	X'10!	
1317	00	003FB	691003FD A			BCS,1	#+2	
1318	00	003FC	2E000000 A			WAIT		ERROR HALT
1319	00	003FD	6C000010 A			RD,0	X'10!	
1320	00	003FE	694003F1 A			BCS,4	BLK50	LOOP/PROCEED
1321			PAGE					
1322			*					
1323			* BLOCK 51					
1324			*					
1325			* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 17 = 1					
1326			*					
1327	00	003FF	6C000010 A		BLK51	RD,0	X'10!	
1328	00	00400	68200402 A			BCR,2	#+2	
1329	00	00401	2E000000 A			WAIT		REPORT
1330	00	00402	321009C2 A			LW,1	=X'51!	
1331	00	00403	32000975 A			LW,0	#0	
1332	00	00404	4800098F A			EOR,0	=X'4000!	
1333	00	00405	69100407 A			BCS,1	#+2	CC4 SET
1334	00	00406	6920040B A			BCS,2	#+5	N0, CC3 SET
1335	00	00407	65200408 A			BIR,2	#+1	ERROR = CC3 RESET/CC4 SET
1336	00	00408	6C000010 A			RD,0	X'10!	
1337	00	00409	6910040B A			BCS,1	#+2	
1338	00	0040A	2E000000 A			WAIT		ERROR HALT
1339	00	0040B	6C000010 A			RD,0	X'10!	
1340	00	0040C	694003FF A			BCS,4	BLK51	LOOP/PROCEED
1341			PAGE					
1342			*					
1343			* BLOCK 52					
1344			*					
1345			* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 16 = 1					
1346			*					
1347	00	0040D	6C000010 A		BLK52	RD,0	X'10!	
1348	00	0040E	68200410 A			BCR,2	#+2	
1349	00	0040F	2E000000 A			WAIT		
1350	00	00410	321009C3 A			LW,1	=X'52!	
1351	00	00411	32000975 A			LW,0	#0	
1352	00	00412	48000991 A			EOR,0	=X'8000!	
1353	00	00413	69100415 A			BCS,1	#+2	CC4 SET
1354	00	00414	69200419 A			BCS,2	#+5	N0, CC3 SET
1355	00	00415	65200416 A			BIR,2	#+1	ERROR = CC3 RESET/CC4 SET
1356	00	00416	6C000010 A			RD,0	X'10!	
1357	00	00417	69100419 A			BCS,1	#+2	
1358	00	00418	2E000000 A			WAIT		ERROR HALT
1359	00	00419	6C000010 A			RD,0	X'10!	
1360	00	0041A	6940040D A			BCS,4	BLK52	LOOP/PROCEED
1361			PAGE					
1362			*					

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1363					* BLOCK 53			
1364					*			
1365					* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 15 = 1			
1366					*			
1367	00 0041B	6C000010 A	BLK53		RD,0	X'10'		
1368	00 0041C	6820041E A			BCR,2	\$+2		
1369	00 0041D	2E000000 A			WAIT			
1370	00 0041E	321009C4 A			LW,1	=X'53'		REPORT
1371	00 0041F	32000975 A			LW,0	=0		
1372	00 00420	48000993 A			EOR,0	=X'10000'		
1373	00 00421	69100423 A			BCS,1	\$+2		CC4 SET
1374	00 00422	69200427 A			BCS,2	\$+5		N8, CC3 SET
1375	00 00423	65200424 A			BIR,2	\$+1		ERROR - CC3 RESET/CC4 SET
1376	00 00424	6C000010 A			RD,0	X'10'		
1377	00 00425	69100427 A			BCS,1	\$+2		
1378	00 00426	2E000000 A			WAIT			ERROR HALT
1379	00 00427	6C000010 A			RD,0	X'10'		
1380	00 00428	6940041B A			BCS,4	BLK53		LOOP/PROCEED
1381					PAGE			
1382					*			
1383					* BLOCK 54			
1384					*			
1385					* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 14 = 1			
1386					*			
1387	00 00429	6C000010 A	BLK54		RD,0	X'10'		
1388	00 0042A	6820042C A			BCR,2	\$+2		
1389	00 0042B	2E000000 A			WAIT			
1390	00 0042C	321009C5 A			LW,1	=X'54'		REPORT
1391	00 0042D	32000975 A			LW,0	=0		
1392	00 0042E	48000995 A			EOR,0	=X'20000'		
1393	00 0042F	69100431 A			BCS,1	\$+2		CC4 SET
1394	00 00430	69200435 A			BCS,2	\$+5		N8, CC3 SET
1395	00 00431	65200432 A			BIR,2	\$+1		ERROR - CC3 RESET/CC4 SET
1396	00 00432	6C000010 A			RD,0	X'10'		
1397	00 00433	69100435 A			BCS,1	\$+2		
1398	00 00434	2E000000 A			WAIT			ERROR HALT
1399	00 00435	6C000010 A			RD,0	X'10'		
1400	00 00436	69400429 A			BCS,4	BLK54		LOOP/PROCEED
1401					PAGE			
1402					*			
1403					* BLOCK 55			
1404					*			
1405					* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 13 = 1			
1406					*			
1407	00 00437	6C000010 A	BLK55		RD,0	X'10'		
1408	00 00438	6820043A A			BCR,2	\$+2		
1409	00 00439	2E000000 A			WAIT			
1410	00 0043A	321009C6 A			LW,1	=X'55'		REPORT
1411	00 0043B	32000975 A			LW,0	=0		
1412	00 0043C	48000996 A			EOR,0	=X'40000'		
1413	00 0043D	6910043F A			BCS,1	\$+2		CC4 SET
1414	00 0043E	69200443 A			BCS,2	\$+5		N8, CC3 SET
1415	00 0043F	65200440 A			BIR,2	\$+1		ERROR - CC3 RESET/CC4 SET
1416	00 00440	6C000010 A			RD,0	X'10'		
1417	00 00441	69100443 A			BCS,1	\$+2		
1418	00 00442	2E000000 A			WAIT			ERROR HALT
1419	00 00443	6C000010 A			RD,0	X'10'		
1420	00 00444	69400437 A			BCS,4	BLK55		LOOP/PROCEED
1421					PAGE			
1422					*			
1423					* BLOCK 56			
1424					*			
1425					* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 12 = 1			
1426					*			
1427	00 00445	6C000010 A	BLK56		RD,0	X'10'		
1428	00 00446	68200448 A			BCR,2	\$+2		
1429	00 00447	2E000000 A			WAIT			
1430	00 00448	321009C7 A			LW,1	=X'56'		REPORT
1431	00 00449	32000975 A			LW,0	=0		
1432	00 0044A	48000998 A			EOR,0	=X'80000'		
1433	00 0044B	6910044D A			BCS,1	\$+2		CC4 SET
1434	00 0044C	69200451 A			BCS,2	\$+5		N8, CC3 SET

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1435	00 00440	6520044E	A		BIR,2	\$+1		ERROR = CC3 RESET/CC4 SET
1436	00 0044E	6C000010	A		RD,0	X'10'		
1437	00 0044F	69100451	A		BCS,1	\$+2		
1438	00 00450	2E000000	A		WAIT			ERROR HALT
1439	00 00451	6C000010	A		RD,0	X'10'		
1440	00 00452	69400445	A		BCS,4	BLK56		LOOP/PROCEED
1441					PAGE			
1442				*				
1443				*				
1444				*				
1445				*				* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 11 = 1
1446				*				
1447	00 00453	6C000010	A	BLK57	RD,0	X'10'		
1448	00 00454	68200456	A		BCR,2	\$+2		
1449	00 00455	2E000000	A		WAIT			REPORT
1450	00 00456	321009C8	A		LW,1	=X'57'		
1451	00 00457	32000975	A		LW,0	=0		
1452	00 00458	4800099A	A		EOR,0	=X'100000'		
1453	00 00459	6910045B	A		BCS,1	\$+2		CC4 SET
1454	00 0045A	6920045F	A		BCS,2	\$+5		NO, CC3 SET
1455	00 0045B	6520045C	A		BIR,2	\$+1		ERROR = CC3 RESET/CC4 SET
1456	00 0045C	6C000010	A		RD,0	X'10'		
1457	00 0045D	6910045F	A		BCS,1	\$+2		
1458	00 0045E	2E000000	A		WAIT			ERROR HALT
1459	00 0045F	6C000010	A		RD,0	X'10'		
1460	00 00460	69400453	A		BCS,4	BLK57		LOOP/PROCEED
1461				PAGE				
1462				*				
1463				*				
1464				*				
1465				*				* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 10 = 1
1466				*				
1467	00 00461	6C000010	A	BLK58	RD,0	X'10'		
1468	00 00462	68200464	A		BCR,2	\$+2		
1469	00 00463	2E000000	A		WAIT			REPORT
1470	00 00464	321009C9	A		LW,1	=X'58'		
1471	00 00465	32000975	A		LW,0	=0		
1472	00 00466	4800099C	A		EOR,0	=X'200000'		
1473	00 00467	69100469	A		BCS,1	\$+2		CC4 SET
1474	00 00468	6920046D	A		BCS,2	\$+5		NO, CC3 SET
1475	00 00469	6520046A	A		BIR,2	\$+1		ERROR = CC3 RESET/CC4 SET
1476	00 0046A	6C000010	A		RD,0	X'10'		
1477	00 0046B	6910046D	A		BCS,1	\$+2		
1478	00 0046C	2E000000	A		WAIT			ERROR HALT
1479	00 0046D	6C000010	A		RD,0	X'10'		
1480	00 0046E	69400461	A		BCS,4	BLK58		LOOP/PROCEED
1481				PAGE				
1482				*				
1483				*				
1484				*				
1485				*				* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 9 = 1
1486				*				
1487	00 0046F	6C000010	A	BLK59	RD,0	X'10'		
1488	00 00470	68200472	A		BCR,2	\$+2		
1489	00 00471	2E000000	A		WAIT			REPORT
1490	00 00472	321009CA	A		LW,1	=X'59'		
1491	00 00473	32000975	A		LW,0	=0		
1492	00 00474	4800099E	A		EOR,0	=X'400000'		
1493	00 00475	69100477	A		BCS,1	\$+2		CC4 SET
1494	00 00476	69200478	A		BCS,2	\$+5		NO, CC3 SET
1495	00 00477	65200478	A		BIR,2	\$+1		ERROR = CC3 RESET/CC4 SET
1496	00 00478	6C000010	A		RD,0	X'10'		
1497	00 00479	69100478	A		BCS,1	\$+2		
1498	00 0047A	2E000000	A		WAIT			ERROR HALT
1499	00 0047B	6C000010	A		RD,0	X'10'		
1500	00 0047C	6940046F	A		BCS,4	BLK59		LOOP/PROCEED
1501				PAGE				
1502				*				
1503				*				
1504				*				
1505				*				* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 8 = 1
1506				*				

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1507	00 0047D	6C000010 A			BLK60	RD,0	X'10'	
1508	00 0047E	68200480 A				BCR,2	\$+2	
1509	00 0047F	2E000000 A				WAIT		
1510	00 00480	321009CB A				LW,1	=X'1601	
1511	00 00481	32000975 A				LW,0	=0	
1512	00 00482	480009A0 A				EOR,0	=X'10000001	
1513	00 00483	69100485 A				BCS,1	\$+2	CC4 SET
1514	00 00484	69200489 A				BCS,2	\$+5	NO, CC3 SET
1515	00 00485	65200486 A				BIR,2	\$+1	ERROR = CC3 RESET/CC4 SET
1516	00 00486	6C000010 A				RD,0	X'10'	
1517	00 00487	69100489 A				BCS,1	\$+2	
1518	00 00488	2E000000 A				WAIT		ERROR HALT
1519	00 C0489	6C000010 A				RD,0	X'10'	
1520	00 0048A	6940047D A				BCS,4	BLK60	LOOP/PROCEED
1521						PAGE		
1522			*					
1523			* BLOCK 61					
1524			*					
1525			* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 7 = 1					
1526			*					
1527	00 0048B	6C000010 A			BLK61	RD,0	X'10'	
1528	00 C048C	6820048E A				BCR,2	\$+2	
1529	00 C048D	2E000000 A				WAIT		
1530	00 C048E	321009CC A				LW,1	=X'61'	
1531	00 0048F	32000975 A				LW,0	=0	
1532	00 00490	480009A2 A				EOR,0	=X'10000001	
1533	00 00491	69100493 A				BCS,1	\$+2	CC4 SET
1534	00 00492	69200497 A				BCS,2	\$+5	NO, CC3 SET
1535	00 00493	65200494 A				BIR,2	\$+1	ERROR = CC3 RESET/CC4 SET
1536	00 00494	6C000010 A				RD,0	X'10'	
1537	00 00495	69100497 A				BCS,1	\$+2	
1538	00 C0496	2E000000 A				WAIT		ERROR HALT
1539	00 00497	6C000010 A				RD,0	X'10'	
1540	00 00498	6940048B A				BCS,4	BLK61	LOOP/PROCEED
1541			PAGE					
1542			*					
1543			* BLOCK 62					
1544			*					
1545			* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 6 = 1					
1546			*					
1547	00 00499	6C000010 A			BLK62	RD,0	X'10'	
1548	00 0049A	6820049C A				BCR,2	\$+2	
1549	00 0049B	2E000000 A				WAIT		
1550	00 0049C	321009CD A				LW,1	=X'1621	
1551	00 0049D	32000975 A				LW,0	=0	
1552	00 0049E	480009A4 A				EOR,0	=X'20000001	
1553	00 0049F	691004A1 A				BCS,1	\$+2	CC4 SET
1554	00 004A0	692004A5 A				BCS,2	\$+5	NO, CC3 SET
1555	00 004A1	652004A2 A				BIR,2	\$+1	ERROR = CC3 RESET/CC4 SET
1556	00 004A2	6C000010 A				RD,0	X'10'	
1557	00 004A3	691004A5 A				BCS,1	\$+2	
1558	00 C04A4	2E000000 A				WAIT		ERROR HALT
1559	00 004A5	6C000010 A				RD,0	X'10'	
1560	00 C04A6	69400499 A				BCS,4	BLK62	LOOP/PROCEED
1561			PAGE					
1562			*					
1563			* BLOCK 63					
1564			*					
1565			* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC3 WITH BIT 5 = 1					
1566			*					
1567	00 004A7	6C000010 A			BLK63	RD,0	X'10'	
1568	00 004A8	682004AA A				BCR,2	\$+2	
1569	00 004A9	2E000000 A				WAIT		
1570	00 004AA	321009CE A				LW,1	=X'1631	
1571	00 004AB	32000975 A				LW,0	=0	
1572	00 004AC	480009A6 A				EOR,0	=X'40000001	
1573	00 004AD	691004AF A				BCS,1	\$+2	CC4 SET
1574	00 004AE	692004B3 A				BCS,2	\$+5	NO, CC3 SET
1575	00 004AF	652004B0 A				BIR,2	\$+1	ERROR = CC3 RESET/CC4 SET
1576	00 004B0	6C000010 A				RD,0	X'10'	
1577	00 004B1	691004B3 A				BCS,1	\$+2	
1578	00 004B2	2E000000 A				WAIT		ERROR HALT

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1579	00 004B3	6C000010 A				RD,0	X'10'	
1580	00 004B4	694004A7 A		PAGE		BCS,4	BLK63	LOOP/PROCEED
1581					*			
1582					*			
1583					*			
1584					*			
1585					*			
1586					*			
1587	00 004B5	6C000010 A			BLK64	RD,0	X'10'	
1588	00 004B6	682004B8 A				BCR,2	*+2	
1589	00 004B7	2E000000 A				WAIT		REPORT
1590	00 004B8	321009CF A				LW,1	=X'64'	
1591	00 004B9	32000975 A				LW,0	=0	
1592	00 004BA	480009A8 A				EOR,0	=X'80000000'	
1593	00 004BB	691004BD A				BCS,1	*+2	CC4 SET
1594	00 004BC	692004C1 A				BCS,2	*+5	NO, CC3 SET
1595	00 004BD	652004BE A				BIR,2	*+1	ERROR = CC3 RESET/CC4 SET
1596	00 004BE	6C000010 A				RD,0	X'10'	
1597	00 004BF	691004C1 A				BCS,1	*+2	
1598	00 004C0	2E000000 A				WAIT		ERROR HALT
1599	00 004C1	6C000010 A				RD,0	X'10'	
1600	00 004C2	694004B5 A		PAGE		BCS,4	BLK64	LOOP/PROCEED
1601					*			
1602					*			
1603					*			
1604					*			
1605					*			
1606					*			
1607	00 004C3	6C000010 A			BLK65	RD,0	X'10'	
1608	00 004C4	682004C6 A				BCR,2	*+2	
1609	00 004C5	2E000000 A				WAIT		REPORT
1610	00 004C6	321009D0 A				LW,1	=X'65'	
1611	00 004C7	32000975 A				LW,0	=0	
1612	00 004C8	480009AA A				EOR,0	=X'10000000'	
1613	00 004C9	691004CB A				BCS,1	*+2	CC4 SET
1614	00 004CA	692004CF A				BCS,2	*+5	NO, CC3 SET
1615	00 004CB	652004CC A				BIR,2	*+1	ERROR = CC3 RESET/CC4 SET
1616	00 004CC	6C000010 A				RD,0	X'10'	
1617	00 004CD	691004CF A				BCS,1	*+2	
1618	00 004CE	2E000000 A				WAIT		ERROR WAIT
1619	00 004CF	6C000010 A				RD,0	X'10'	
1620	00 004DD	694004C3 A		PAGE		BCS,4	BLK65	LOOP/PROCEED
1621					*			
1622					*			
1623					*			
1624					*			
1625					*			
1626					*			
1627	00 004D1	6C000010 A			BLK66	RD,0	X'10'	
1628	00 004D2	682004D4 A				BCR,2	*+2	
1629	00 004D3	2E000000 A				WAIT		REPORT
1630	00 004D4	321009D1 A				LW,1	=X'66'	
1631	00 004D5	32000975 A				LW,0	=0	
1632	00 004D6	480009AC A				EOR,0	=X'20000000'	
1633	00 004D7	691004D9 A				BCS,1	*+2	
1634	00 004D8	692004DD A				BCS,2	*+5	CC4 SET
1635	00 004D9	652004DA A				BIR,2	*+1	NO, CC3 SET
1636	00 004DA	6C000010 A				RD,0	X'10'	ERROR = CC3 RESET/CC4 SET
1637	00 004DB	691004DD A				BCS,1	*+2	
1638	00 004DC	2E000000 A				WAIT		ERROR HALT
1639	00 004DD	6C000010 A				RD,0	X'10'	
1640	00 004DE	694004D1 A		PAGE		BCS,4	BLK66	LOOP/PROCEED
1641					*			
1642					*			
1643					*			
1644					*			
1645	!				*			
1646					*			
1647	00 004DF	6C000010 A			BLK67	RD,0	X'10'	
1648	00 004E0	682004E2 A				BCR,2	*+2	
1649	00 004E1	2E000000 A				WAIT		REPORT
1650	00 004E2	321009D2 A				LW,1	=X'67'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1651	00 004E3	32000975 A			LW,Q	=0		
1652	00 004E4	480009AE A			EOR,0	=X'140000000'		
1653	00 004E5	691004E7 A			BCS,1	=+2		
1654	00 004E6	692004EB A			BCS,2	=+5		
1655	00 004E7	652004E8 A			BIR,2	=+1		
1656	00 004E8	6C000010 A			RD,0	X'10'		
1657	00 004E9	691004EB A			BCS,1	=+2		
1658	00 004EA	2E000000 A			WAIT			
1659	00 004EB	6C000010 A			RD,0	X'10'		
1660	00 004EC	694004DF A			BCS,4	BLK67		LOOP/PROCEED
1661				PAGE				
1662				*				
1663				* BLOCK 68				
1664				*				
1665				* CHECK ABILITY OF LW-EOR SEQUENCE TO SET CC4 AND RESET CC3 WITH BIT 0 = 1				
1666				*				
1667	00 004ED	6C000010 A	BLK68	RD,0	X'10'			
1668	00 004EE	682004F0 A		BCR,2	=+2			
1669	00 004EF	2E000000 A		WAIT				
1670	00 004F0	32000975 A		LW,0	=0			
1671	00 004F1	321009D3 A		LW,1	=X'68'			
1672	00 004F2	480009B0 A		EOR,0	=X'80000000'			SET CC4 AND RESET CC3
1673	00 004F3	681004F5 A		BCR,1	=+2			CC4 SET
1674	00 004F4	682004F9 A		BCR,2	=+5			YES, CC3 SET
1675	00 004F5	652004F6 A		BIR,2	=+1			ERROR = CC4 RESET/CC3 SET
1676	00 004F6	6C000010 A		RD,0	X'10'			
1677	00 004F7	691004F9 A		BCS,1	=+2			
1678	00 004F8	2E000000 A		WAIT				
1679	00 004F9	6C000010 A		RD,0	X'10'			
1680	00 004FA	694004ED A		BCS,4	BLK68			LOOP/PROCEED
1681				PAGE				
1682				*				
1683				* BLOCK 69				
1684				*				
1685				* CHECK ABILITY OF LW-EOR SEQUENCE TO RESET CC4 WITH EVEN BITS = 1				
1686				*				
1687	00 004FB	6C000010 A	BLK69	RD,0	X'10'			
1688	00 004FC	682004FE A		BCR,2	=+2			
1689	00 004FD	2E000000 A		WAIT				
1690	00 004FE	321009D4 A		LW,1	=X'69'			
1691	00 004FF	320009B4 A		LW,0	=-1			SET CC4, RESET CC3
1692	00 00500	48000975 A		EOR,0	=0			NO CHANGE
1693	00 00501	480009B4 A		EOR,0	=-1			RESET CC4
1694	00 00502	69100504 A		BCS,1	=+2			CC4 SET
1695	00 00503	68200508 A		BCR,2	=+5			NO, CC3 SET
1696	00 00504	65200505 A		BIR,2	=+1			YES, ERROR = CC3/CC4 SET
1697	00 00505	6C000010 A		RD,0	X'10'			
1698	00 00506	69100508 A		BCS,1	=+2			
1699	00 00507	2E000000 A		WAIT				
1700	00 00508	6C000010 A		RD,0	X'10'			
1701	00 00509	694004FB A		BCS,4	BLK69			LOOP/PROCEED
1702				PAGE				
1703				*				
1704				* BLOCK 70				
1705				*				
1706				* CHECK ABILITY OF LW-EOR SEQUENCE TO RESET CC4 WITH BIT CONFIGURATION				
1707				* 0F 10 0R 01 AND 11 0R 00				
1708				*				
1709	00 0050A	6C000010 A	BLK70	RD,0	X'10'			
1710	00 0050B	6820050D A		BCR,2	=+2			
1711	00 0050C	2E000000 A		WAIT				
1712	00 0050D	321009D5 A		LW,1	=X'70'			
1713	00 0050E	32000975 A		LW,0	=0			RESET CC3,CC4
1714	00 0050F	320009D6 A		LW,0	=X'1A5A5A5A5'			SET CC4
1715	00 00510	480009D7 A		EOR,0	=X'1A5A5AA5A5'			=FFFF0000 - CC CHANGE
1716	00 00511	480009D8 A		EOR,0	=X'1FFF0000'			=0 - RESET CC4
1717	00 00512	69100514 A		BCS,1	=+2			CC4 SET
1718	00 00513	68200518 A		BCR,2	=+5			NO, CC3 SET
1719	00 00514	65200515 A		BIR,2	=+1			YES, ERROR = CC3/CC4 SET
1720	00 00515	6C000010 A		RD,0	X'10'			
1721	00 00516	69100518 A		BCS,1	=+2			
1722	00 00517	2E000000 A		WAIT				

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORING	LABEL	OPERATION	OPERAND	COMMENTS
1723	00 00518	6C000010 A				RD,0	X'10'	
1724	00 00519	6940050A A				BCS,4	BLK70	LOOP/PROCEED
1725					PAGE			
1726					* BLOCK 71			
1727					*			
1728					* CHECK ABILITY OF LW-EOR SEQUENCE TO RESET CC3 WITH BIT CONFIGURATION			
1729					* BF 11 OR 00 AND 10 OR 01			
1730					*			
1731					*			
1732	00 0051A	6C000010 A	BLK71		RD,0	X'10'		
1733	00 0051B	6820051D A			BCR,2	\$+2		
1734	00 0051C	2E000000 A			WAIT			REPORT
1735	00 0051D	321009D9 A			LW,1	=X'171'		
1736	00 0051E	32000975 A			LW,0	=0		RESET CC3, CC4
1737	00 0051F	320009D6 A			LW,0	=X'15A5A5A5A'		SET CC4
1738	00 00520	480009DA A			EOR,0	=X'15A5A5A5A'		=0000FFFF - SET CC3/RESET CC4
1739	00 00521	480009DB A			EOR,0	=X'0000FFFF'		=0 - RESET CC3
1740	00 00522	69100524 A			BCS,1	\$+2		CC4 SET
1741	00 00523	68200528 A			BCR,2	\$+5		N0, CC3 SET
1742	00 00524	65200525 A			BIR,2	\$+1		ERR0R - CC3/CC4 SET
1743	00 00525	6C000010 A			RD,0	X'10'		
1744	00 00526	69100528 A			BCS,1	\$+2		
1745	00 00527	2E000000 A			WAIT			ERROR HALT
1746	00 00528	6C000010 A			RD,0	X'10'		
1747	00 00529	6940051A A			BCS,4	BLK71		LOOP/PROCEED
1748					PAGE			
1749					*			
1750					* BLOCK 72			
1751					*			
1752					* CHECK ABILITY OF LW-EOR SEQUENCE TO RESET CC4 WITH BIT CONFIGURATION			
1753					* BF 01 OR 10 AND 00 OR 11			
1754					*			
1755	00 0052A	6C000010 A	BLK72		RD,0	X'10'		
1756	00 0052B	6820052D A			BCR,2	\$+2		
1757	00 0052C	2E000000 A			WAIT			REPORT
1758	00 0052D	321009DC A			LW,1	=X'172'		
1759	00 0052E	32000975 A			LW,0	=0		RESET CC3, CC4
1760	00 0052F	320009DD A			LW,0	=X'15A5A5A5A'		SET CC3
1761	00 00530	480009DA A			EOR,0	=X'15A5A5A5A'		=FFFF0000, SET CC4
1762	00 00531	480009D8 A			EOR,0	=X'FFFF0000'		=0, RESET CC4
1763	00 00532	69100534 A			BCS,1	\$+2		CC4 SET
1764	00 00533	68200538 A			BCR,2	\$+5		N0, CC3 SET
1765	00 00534	65200535 A			BIR,2	\$+1		YES, ERROR - CC3/CC4 SET
1766	00 00535	6C000010 A			RD,0	X'10'		
1767	00 00536	69100538 A			BCS,1	\$+2		
1768	00 00537	2E000000 A			WAIT			ERROR HALT
1769	00 00538	6C000010 A			RD,0	X'10'		
1770	00 00539	6940052A A			BCS,4	BLK72		LOOP/PROCEED
1771					PAGE			
1772					*			
1773					* BLOCK 73			
1774					*			
1775					* CHECK ABILITY OF LW-EOR SEQUENCE TO RESET CC3 WITH BIT CONFIGURATION			
1776					* BF 00 OR 11 AND 01 OR 10			
1777					*			
1778	00 0053A	6C000010 A	BLK73		RD,0	X'10'		
1779	00 0053B	6820053D A			BCR,2	\$+2		
1780	00 0053C	2E000000 A			WAIT			REPORT
1781	00 0053D	321009DE A			LW,1	=X'173'		
1782	00 0053E	32000975 A			LW,0	=0		RESET CC3, CC4
1783	00 0053F	320009DD A			LW,0	=X'15A5A5A5A'		SET CC3
1784	00 00540	480009D7 A			EOR,0	=X'15A5AA5A5'		=0000FFFF, N0 CC CHANGE
1785	00 00541	480009DB A			EOR,0	=X'0000FFFF'		=0, RESET CC3
1786	00 00542	69100544 A			BCS,1	\$+2		CC4 SET
1787	00 00543	68200548 A			BCR,2	\$+5		N0, CC3 SET
1788	00 00544	65200545 A			BIR,2	\$+1		YES, ERROR - CC3/CC4 SET
1789	00 00545	6C000010 A			RD,0	X'10'		
1790	00 00546	69100548 A			BCS,1	\$+2		
1791	00 00547	2E000000 A			WAIT			ERROR HALT
1792	00 00548	6C000010 A			RD,0	X'10'		
1793	00 00549	6940053A A			BCS,4	BLK73		LOOP/PROCEED
1794					PAGE			

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1795				*				
1796				* BLOCK 74				
1797				*				
1798				* CHECK AND FOR PROPER RESULTS IN ALL BIT POSITIONS WITH BIT				
1799				* CONFIGURATION OF 0'S AND 1'S				
1800				*				
1801	00 0054A	6C000010 A	BLK74	RD,0	X'10'			
1802	00 0054B	6820054D A		BCR,2	\$+2			
1803	00 0054C	2E000000 A		WAIT				REPORT
1804	00 0054D	321009DF A		LW,1	=X'174'			
1805	00 0054E	32000975 A		LW,0	=0			REST CC3, CC4
1806	00 0054F	48000975 A		AND,0	=0			SHOULD = 0
1807	00 00550	48000975 A		EOR,0	=0			
1808	00 00551	69100553 A		BCS,1	\$+2			CC4 SET
1809	00 00552	68200557 A		BCR,2	\$+5			N0, CC3 SET
1810	00 00553	65200554 A		BIR,2	\$+1			YES, ERROR - CC3/CC4 SET
1811	00 00554	6C000010 A		RD,0	X'10'			
1812	00 00555	69100557 A		BCS,1	\$+2			
1813	00 00556	2E000000 A		WAIT				ERROR HALT
1814	00 00557	6C000010 A		RD,0	X'10'			
1815	00 00558	6940054A A		BCS,4	BLK74			LOOP/PROCEED
1816				PAGE				
1817				*				
1818				* BLOCK 75				
1819				*				
1820				* CHECK AND FOR PROPER RESULTS IN ALL BIT POSITIONS WITH BIT				
1821				* CONFIGURATION OF 0'S AND 1'S				
1822				*				
1823	00 00559	6C000010 A	BLK75	RD,0	X'10'			
1824	00 0055A	6820055C A		BCR,2	\$+2			
1825	00 00558	2E000000 A		WAIT				REPORT
1826	00 0055C	321009E0 A		LW,1	=X'175'			
1827	00 0055D	32000975 A		LW,0	=0			RESET CC3, CC4
1828	00 0055E	480009B4 A		AND,0	=-1			SHOULD = 0
1829	00 0055F	48000975 A		EOR,0	=0			
1830	00 00560	69100562 A		BCS,1	\$+2			CC4 SET
1831	00 00561	68200566 A		BCR,2	\$+5			N0, CC3 SET
1832	00 00562	65200563 A		BIR,2	\$+1			YES, ERROR - CC3/CC4 SET
1833	00 00563	6C000010 A		RD,0	X'10'			
1834	00 00564	69100566 A		BCS,1	\$+2			
1835	00 00565	2E000000 A		WAIT				ERROR HALT
1836	00 00566	6C000010 A		RD,0	X'10'			
1837	00 00567	69400559 A		BCS,4	BLK75			LOOP/PROCEED
1838				PAGE				
1839				*				
1840				* BLOCK 76				
1841				*				
1842				* CHECK AND FOR PROPER RESULTS IN ALL BIT POSITIONS WITH BIT				
1843				* CONFIGURATION OF 1'S AND 0'S				
1844				*				
1845	00 00568	6C000010 A	BLK76	RD,0	X'10'			
1846	00 00569	6820056B A		BCR,2	\$+2			
1847	00 0056A	2E000000 A		WAIT				REPORT
1848	00 0056B	321009E1 A		LW,1	=X'176'			
1849	00 0056C	320009B4 A		LW,0	=-1			SET CC4, RESET CC3
1850	00 0056D	48000975 A		AND,0	=0			SHOULD = 0 AND RESET CC4
1851	00 0056E	48000975 A		EOR,0	=0			
1852	00 0056F	69100571 A		BCS,1	\$+2			CC4 SET
1853	00 00570	68200575 A		BCR,2	\$+5			N0, CC3 SET
1854	00 00571	65200572 A		BIR,2	\$+1			YES, ERROR - CC3/CC4 SET
1855	00 00572	6C000010 A		RD,0	X'10'			
1856	00 00573	69100575 A		BCS,1	\$+2			
1857	00 00574	2E000000 A		WAIT				ERROR HALT
1858	00 00575	6C000010 A		RD,0	X'10'			
1859	00 00576	69400568 A		BCS,4	BLK76			LOOP/PROCEED
1860				PAGE				
1861				*				
1862				* BLOCK 77				
1863				*				
1864				* CHECK AND FOR PROPER RESULTS IN ALL BIT POSITIONS WITH BIT				
1865				* CONFIGURATION OF 1'S AND 1'S				
1866				*				

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1867	00 00577	6C000010 A	BLK77	RD,0	X'10'			
1868	00 00578	6820057A A		BCR,2	*+2			
1869	00 00579	2E000000 A		WAIT				REPORT
1870	00 0057A	321009E2 A		LW,1	=X'77'			
1871	00 0057B	320009B4 A		LW,0	*=1			
1872	00 0057C	480009B4 A		AND,0	*=1			SHOULD = -1
1873	00 0057D	480009B4 A		EOR,0	*=1			SHOULD = 0 AND RESET CC3, CC4
1874	00 0057E	69100580 A		BCS,1	*+2			CC4 SET
1875	00 0057F	68200584 A		BCR,2	*+5			NO, CC3 SET
1876	00 00580	65200581 A		BIR,2	*+1			YES, ERROR = CC3/CC4 SET
1877	00 00581	6C000010 A		RD,0	X'10'			
1878	00 00582	69100584 A		BCS,1	*+2			ERROR HALT
1879	00 00583	2E000000 A		WAIT				
1880	00 00584	6C000010 A		RD,0	X'10'			
1881	00 00585	69400577 A		BCS,4	BLK77			LOOP/PROCEED
1882			PAGE					
1883		*						
1884		*	BLBCK 78					
1885		*						
1886		*	CHECK ABILITY OF AND TO NOT SET CC3 OR CC4 WHEN RESULT = 0					
1887		*						
1888	00 00586	6C000010 A	BLK78	RD,0	X'10'			
1889	00 00587	68200589 A		BCR,2	*+2			
1890	00 00588	2E000000 A		WAIT				REPORT
1891	00 00589	321009E3 A		LW,1	=X'78'			
1892	00 0058A	32000975 A		LW,0	*=0			RESET CC3, CC4
1893	00 0058B	480009B4 A		AND,0	*=1			SHOULD = 0
1894	00 0058C	6910058E A		BCS,1	*+2			CC4 SET
1895	00 0058D	68200592 A		BCR,2	*+5			NO, CC3 SET
1896	00 0058E	6520058F A		BIR,2	*+1			YES, ERROR = CC3/CC4 SET
1897	00 0058F	6C000010 A		RD,0	X'10'			
1898	00 00590	69100592 A		BCS,1	*+2			
1899	00 00591	2E000000 A		WAIT				ERROR HALT
1900	00 00592	6C000010 A		RD,0	X'10'			
1901	00 00593	69400586 A		BCS,4	BLK78			LOOP/PROCEED
1902		PAGE						
1903		*						
1904		*	BLBCK 79					
1905		*						
1906		*	CHECK ABILITY OF AND TO SET CC3 WHEN RESULT IS POSITIVE					
1907		*						
1908	00 00594	6C000010 A	BLK79	RD,0	X'10'			
1909	00 00595	68200597 A		BCR,2	*+2			
1910	00 00596	2E000000 A		WAIT				REPORT
1911	00 00597	321009E4 A		LW,1	=X'79'			
1912	00 00598	32000976 A		LW,0	*=1			SET CC3
1913	00 00599	480009B4 A		AND,0	*=1			SHOULD = 00000001, NO CC CHANGE
1914	00 0059A	6910059C A		BCS,1	*+2			CC4 SET
1915	00 0059B	692005A0 A		BCS,2	*+5			NO, CC3 SET
1916	00 0059C	6520059D A		BIR,2	*+1			ERROR = CC3 RESET/CC4 SET
1917	00 0059D	6C000010 A		RD,0	X'10'			
1918	00 0059E	691005A0 A		BCS,1	*+2			
1919	00 0059F	2E000000 A		WAIT				ERROR HALT
1920	00 005A0	6C000010 A		RD,0	X'10'			
1921	00 005A1	69400594 A		BCS,4	BLK79			LOOP/PROCEED
1922		PAGE						
1923		*						
1924		*	BLBCK 80					
1925		*						
1926		*	CHECK ABILITY OF AND TO SET CC4 WHEN RESULT IS NEGATIVE					
1927		*						
1928	00 005A2	6C000010 A	BLK80	RD,0	X'10'			
1929	00 005A3	682005A5 A		BCR,2	*+2			
1930	00 005A4	2E000000 A		WAIT				REPORT
1931	00 005A5	32100982 A		LW,1	=X'80'			
1932	00 005A6	32000980 A		LW,0	=X'80000000'			
1933	00 005A7	480009B4 A		AND,0	*=1			SHOULD = 80000000, SET CC4
1934	00 005A8	681005AA A		BCR,1	*+2			CC4 SET
1935	00 005A9	682005AE A		BCR,2	*+5			YES, CC3 SET
1936	00 005AA	652005AB A		BIR,2	*+1			ERROR = CC3 SET/CC4 RESET
1937	00 005AB	6C000010 A		RD,0	X'10'			
1938	00 005AC	691005AE A		BCS,1	*+2			

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1939	00 005AD	2E000000 A				WAIT		
1940	00 005AE	6C000010 A				RD,0	X'10'	ERROR HALT
1941	00 005AF	694005A2 A				BCS,4	BLK80	LOOP/PROCEED
1942						PAGE		
1943			*					
1944			* BLOCK 81					
1945			*					
1946			* CHECK ABILITY OF STW TO STORE ZEROS					
1947			*					
1948	00 005B0	6C000010 A			BLK81	RD,0	X'10'	
1949	00 005B1	682005B3 A				BCR,2	\$+2	
1950	00 005B2	2E000000 A				WAIT		
1951	00 005B3	321009E5 A				LW,1	=X'81'	REPORT
1952	00 005B4	32000975 A				LW,0	=0	
1953	00 005B5	35000974 A				STW,0	T1	
1954	00 005B6	32000974 A				LW,0	T1	
1955	00 005B7	691005B9 A				BCS,1	\$+2	SHOULD RESET CC3, CC4
1956	00 005B8	682005BD A				BCR,2	\$+5	CC4 SET
1957	00 005B9	652005BA A				BIR,2	\$+1	NO, CC3 SET
1958	00 005BA	6C000010 A				RD,0	X'10'	YES, ERROR = CC3/CC4 SET
1959	00 005BB	691005BD A				BCS,1	\$+2	
1960	00 005BC	2E000000 A				WAIT		ERROR HALT
1961	00 005BD	6C000010 A				RD,0	X'10'	
1962	00 005BE	694005B0 A				BCS,4	BLK81	LOOP/PROCEED
1963			PAGE					
1964			*					
1965			* BLOCK 82					
1966			*					
1967			* CHECK ABILITY OF STW TO STORE ONES ON ZEROS					
1968			*					
1969	00 005BF	6C000010 A			BLK82	RD,0	X'10'	
1970	00 005C0	682005C2 A				BCR,2	\$+2	
1971	00 005C1	2E000000 A				WAIT		
1972	00 005C2	321009E5 A				LW,1	=X'81'	REPORT
1973	00 005C3	32000975 A				LW,0	=0	
1974	00 005C4	35000974 A				STW,0	T1	CLEAR T1
1975	00 005C5	320009B4 A				LW,0	==1	
1976	00 005C6	35000974 A				STW,0	T1	FILL T1 WITH ONES
1977	00 005C7	32000975 A				LW,0	=0	
1978	00 005C8	32000974 A				LW,0	T1	
1979	00 005C9	480009B4 A				EOR,0	==1	SHOULD == 0, RESET CC3, CC4
1980	00 005CA	691005CC A				BCS,1	\$+2	CC4 SET
1981	00 005CB	682005D0 A				BCR,2	\$+5	NO, CC3 SET
1982	00 005CC	652005CD A				BIR,2	\$+1	YES, ERROR = CC3/CC4 SET
1983	00 005CD	6C000010 A				RD,0	X'10'	
1984	00 005CE	691005D0 A				BCS,1	\$+2	ERROR HALT
1985	00 005CF	2E000000 A				WAIT		
1986	00 005D0	6C000010 A				RD,0	X'10'	
1987	00 005D1	694005BF A				BCS,4	BLK82	LOOP/PROCEED
1988			PAGE					
1989			*					
1990			* BLOCK 83					
1991			*					
1992			* CHECK ABILITY OF STW TO STORE ONES ON ONES					
1993			*					
1994	00 005D2	6C000010 A			BLK83	RD,0	X'10'	
1995	00 005D3	682005D5 A				BCR,2	\$+2	
1996	00 005D4	2E000000 A				WAIT		
1997	00 005D5	321009E6 A				LW,1	=X'81'	REPORT
1998	00 005D6	32000975 A				LW,0	=0	
1999	00 005D7	320009B4 A				LW,0	==1	
2000	00 005D8	35000974 A				STW,0	T1	
2001	00 005D9	320009B4 A				LW,0	==1	
2002	00 005DA	35000974 A				STW,0	T1	
2003	00 005DB	32000975 A				LW,0	=0	
2004	00 005DC	32000974 A				LW,0	T1	
2005	00 005DD	480009B4 A				EOR,0	==1	SHOULD == 0, RESET CC3, CC4
2006	00 005DE	691005E0 A				BCS,1	\$+2	CC4 SET
2007	00 005DF	682005E4 A				BCR,2	\$+5	NO, CC3 SET
2008	00 005EO	652005E1 A				BIR,2	\$+1	YES, ERROR = CC3/CC4 SET
2009	00 005E1	6C000010 A				RD,0	X'10'	
2010	00 005E2	691005E4 A				BCS,1	\$+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL O R I G	LABEL	OPERATION	OPERAND	COMMENTS
2011	00 005E3	2E000000 A				WAIT		ERROR HALT
2012	00 005E4	6C000010 A				RD,0	X'10'	
2013	00 005E5	694005D2 A				BCS,4	BLK83	LOOP/PROCEED
2014					PAGE			
2015			*					
2016			* BLOCK 84					
2017			*					
2018			* CHECK ABILITY OF STW TO STORE ZEROS ON ONES					
2019			*					
2020	00 005E6	6C000010 A	BLK84		RD,0	X'10'		
2021	00 005E7	682005E9 A			BCR,2	\$+2		
2022	00 005E8	2E000000 A			WAIT			REPORT
2023	00 005E9	321009E7 A			LW,1	=X'84'		
2024	00 005EA	32000975 A			LW,0	=0		
2025	00 005EB	320009B4 A			LW,0	=-1		
2026	00 005EC	35000974 A			STW,0	T1		
2027	00 005ED	32000975 A			LW,0	=0		
2028	00 005EE	35000974 A			STW,0	T1		
2029	00 005EF	320009B4 A			LW,0	=-1		
2030	00 005F0	32000974 A			LW,0	T1		
2031	00 005F1	691005F3 A			BCS,1	\$+2		SHOULD = 0, CC3, CC4 RESET
2032	00 005F2	682005F7 A			BCR,2	\$+5		CC4 SET
2033	00 005F3	652005F4 A			BIR,2	\$+1		N0, CC3 SET
2034	00 005F4	6C000010 A			RD,0	X'10'		YES, ERROR = CC3/CC4 SET
2035	00 005F5	691005F7 A			BCS,1	\$+2		
2036	00 005F6	2E000000 A			WAIT			ERROR HALT
2037	00 005F7	6C000010 A			RD,0	X'10'		
2038	00 005F8	694005E6 A			BCS,4	BLK84		
2039			PAGE					
2040			*					
2041			* BLOCK 85					
2042			*					
2043			* CHECK ABILITY OF STW TO STORE ZEROS ON ZEROS					
2044			*					
2045	00 005F9	6C000010 A	BLK85		RD,0	X'10'		
2046	00 005FA	682005FC A			BCR,2	\$+2		
2047	00 005FB	2E000000 A			WAIT			REPORT
2048	00 005FC	321009E8 A			LW,1	=X'85'		
2049	00 005FD	32000975 A			LW,0	=0		
2050	00 005FE	35000974 A			STW,0	T1		
2051	00 005FF	32000975 A			LW,0	=0		
2052	00 00600	35000974 A			STW,0	T1		
2053	00 00601	320009B4 A			LW,0	=-1		
2054	00 00602	32000974 A			LW,0	T1		FILL REG 0 WITH ONES, SET CC4
2055	00 00603	69100605 A			BCS,1	\$+2		SHOULD = 0, RESET CC3, CC4
2056	00 00604	68200609 A			BCR,2	\$+5		CC4 SET
2057	00 00605	65200606 A			BIR,2	\$+1		N0, CC3 SET
2058	00 00606	6C000010 A			RD,0	X'10'		YES, ERROR = CC3/CC4 SET
2059	00 00607	69100609 A			BCS,1	\$+2		
2060	00 00608	2E000000 A			WAIT			ERROR HALT
2061	00 00609	6C000010 A			RD,0	X'10'		
2062	00 0060A	694005F9 A			BCS,4	BLK85		LOOP/PROCEED
2063			PAGE					
2064			*					
2065			* BLOCK 86					
2066			*					
2067			* CHECK BCS,1 WITH CC4 SET, CC3 RESET					
2068			*					
2069	00 00608	6C000010 A	BLK86		RD,0	X'10'		
2070	00 0060C	6820060E A			BCR,2	\$+2		
2071	00 0060D	2E000000 A			WAIT			REPORT
2072	00 0060E	321009E9 A			LW,1	=X'86'		
2073	00 0060F	320009B0 A			LW,0	=X'80000000'		SET CC4
2074	00 00610	69100615 A			BCS,1	\$+5		SHOULD BRANCH
2075	00 00611	65200612 A			BIR,2	\$+1		ERROR
2076	00 00612	6C000010 A			RD,0	X'10'		
2077	00 00613	69100615 A			BCS,1	\$+2		
2078	00 00614	2E000000 A			WAIT			ERROR HALT
2079	00 00615	6C000010 A			RD,0	X'10'		
2080	00 00616	6940060B A			BCS,4	BLK86		LOOP/PROCEED
2081			PAGE					
2082			*					

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORING	LABEL	OPERATION	OPERAND	COMMENTS
2083						* BLOCK 87		
2084						*		
2085						* CHECK BCR,1 WITH CC3, CC4 RESET		
2086						*		
2087	00 00617	6C000010 A	BLK87		RD,0	X'10'		
2088	00 00618	6820061A A			BCR,2	\$+2		
2089	00 00619	2E000000 A			WAIT			REPORT
2090	00 0061A	321009EA A			LW,1	=X'87'		
2091	00 0061B	32000975 A			LW,0	=0		RESET CC3, CC4
2092	00 0061C	68100621 A			BCR,1	\$+5		SHOULD BRANCH
2093	00 0061D	6520061E A			BIR,2	\$+1		ERROR
2094	00 0061E	6C000010 A			RD,0	X'10'		
2095	00 0061F	69100621 A			BCS,1	\$+2		
2096	00 00620	2E000000 A			WAIT			ERROR HALT
2097	00 00621	6C000010 A			RD,0	X'10'		
2098	00 00622	69400617 A			BCS,4	BLK87		LOOP/PROCEED
2099					PAGE			
2100					*			
2101					** BLOCK 88			
2102					*			
2103					* CHECK BCS,2 WITH CC3, CC4 RESET			
2104					*			
2105	00 00623	6C000010 A	BLK88		RD,0	X'10'		
2106	00 00624	68200626 A			BCR,2	\$+2		
2107	00 00625	2E000000 A			WAIT			REPORT
2108	00 00626	321009EB A			LW,1	=X'88'		
2109	00 00627	32000975 A			LW,0	=0		RESET CC3, CC4
2110	00 00628	6920062A A			BCS,2	\$+2		SHOULD NOT BRANCH
2111	00 00629	6800062E A			BCR,0	\$+5		SHOULD BRANCH
2112	00 0062A	65200628 A			BIR,2	\$+1		ERROR
2113	00 0062B	6C000010 A			RD,0	X'10'		
2114	00 0062C	6910062E A			BCS,1	\$+2		
2115	00 0062D	2E000000 A			WAIT			ERROR HALT
2116	00 0062E	6C000010 A			RD,0	X'10'		
2117	00 0062F	69400623 A			BCS,4	BLK88		LOOP/PROCEED
2118					PAGE			
2119					*			
2120					** BLOCK 89			
2121					*			
2122					* CHECK BCR,2 WITH CC3 SET AND CC4 RESET			
2123					*			
2124	00 00630	6C000010 A	BLK89		RD,0	X'10'		
2125	00 00631	68200633 A			BCR,2	\$+2		
2126	00 00632	2E000000 A			WAIT			REPORT
2127	00 00633	321009EC A			LW,1	=X'89'		
2128	00 00634	32000975 A			LW,0	=0		
2129	00 00635	32000976 A			LW,0	=1		SET CC3, RESET CC4
2130	00 00636	68200638 A			BCR,2	\$+2		SHOULD NOT BRANCH
2131	00 00637	6800063C A			BCR,0	\$+5		SHOULD BRANCH
2132	00 00638	65200639 A			BIR,2	\$+1		ERROR
2133	00 00639	6C000010 A			RD,0	X'10'		
2134	00 0063A	6910063C A			BCS,1	\$+2		
2135	00 0063B	2E000000 A			WAIT			ERROR HALT
2136	00 0063C	6C000010 A			RD,0	X'10'		
2137	00 0063D	69400630 A			BCS,4	BLK89		LOOP/PROCEED
2138					PAGE			
2139					*			
2140					** BLOCK 90			
2141					*			
2142					* CHECK BCS,0 WITH CC3 RESET AND CC4 SET			
2143					*			
2144	00 0063E	6C000010 A	BLK90		RD,0	X'10'		
2145	00 0063F	68200641 A			BCR,2	\$+2		
2146	00 00640	2E000000 A			WAIT			
2147	00 00641	321009ED A			LW,1	=X'90'		REPORT
2148	00 00642	32000975 A			LW,0	=0		
2149	00 00643	320009B4 A			LW,0	=1		SET CC4
2150	00 00644	69000646 A			BCS,0	\$+2		SHOULD NOT BRANCH
2151	00 00645	6800064A A			BCR,0	\$+5		SHOULD BRANCH
2152	00 00646	65200647 A			BIR,2	\$+1		ERROR
2153	00 00647	6C000010 A			RD,0	X'10'		
2154	00 00648	6910064A A			BCS,1	\$+2		

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2155	00 00649	2E000000 A				WAIT		ERROR HALT
2156	00 0064A	6C000010 A				RD,0	X'10'	
2157	00 0064B	6940063E A				BCS,4	BLK90	LOOP/PROCEED
2158					PAGE			
2159			*					
2160			* BLOCK 91					
2161			*					
2162			* CHECK BCS,0 WITH CC3 SET AND CC4 RESET					
2163			*					
2164	00 0064C	6C000010 A	BLK91		RD,0	X'10'		
2165	00 0064D	6820064F A			BCR,2	#+2		
2166	00 0064E	2E000000 A			WAIT			REPORT
2167	00 0064F	321009EE A			LW,1	=X'91'		
2168	00 00650	32000976 A			LW,0	=1		
2169	00 00651	69000653 A			BCS,0	#+2		SETCC3 SHOULD NOT BRANCH
2170	00 00652	68000657 A			BCR,0	#+5		SHOULD BRANCH
2171	00 00653	65200654 A			BIR,2	#+1		ERROR
2172	00 00654	6C000010 A			RD,0	X'10'		
2173	00 00655	69100657 A			BCS,1	#+2		
2174	00 00656	2E000000 A			WAIT			ERROR HALT
2175	00 00657	6C000010 A			RD,0	X'10'		
2176	00 00658	6940064C A			BCS,4	BLK91		LOOP/PROCEED
2177			PAGE					
2178			*					
2179			* BLOCK 92					
2180			*					
2181			* CHECK BIR FOR ADDER INPUTS OF A(0=31)=0, CS(0=30)=0, AND K(0=31)=0					
2182			*					
2183	00 00659	6C000010 A	BLK92		RD,0	X'10'		
2184	00 0065A	6820065C A			BCR,2	#+2		
2185	00 0065B	2E000000 A			WAIT			REPORT
2186	00 0065C	321009EF A			LW,1	=X'92'		
2187	00 0065D	32000975 A			LW,0	=0		
2188	00 0065E	65000663 A			BIR,0	#+5		A = 0 REG 0 = 1, NO BRANCH
2189	00 0065F	480000976 A			EOR,0	#1		#0, RESET CC3, CC4
2190	00 00660	69100662 A			BCS,1	#+2		
2191	00 00661	68200666 A			BCR,2	#+5		
2192	00 00662	65200663 A			BIR,2	#+1		ERROR + CC3/CC4 SET
2193	00 00663	6C000010 A			RD,0	X'10'		
2194	00 00664	69100666 A			BCS,1	#+2		
2195	00 00665	2E000000 A			WAIT			ERROR HALT
2196	00 00666	6C000010 A			RD,0	X'10'		
2197	00 00667	69400659 A			BCS,4	BLK92		LOOP/PROCEED
2198			PAGE					
2199			*					
2200			* BLOCK 93					
2201			*					
2202			* CHECK BIR FOR ADDER INPUTS OF A(0=30)=1, CS(0=30)=0, AND K(0=31)=0					
2203			*					
2204	00 00668	6C000010 A	BLK93		RD,0	X'10'		
2205	00 00669	6820066B A			BCR,2	#+2		
2206	00 0066A	2E000000 A			WAIT			REPORT
2207	00 0066B	321009F0 A			LW,1	=X'93'		
2208	00 0066C	320009F1 A			LW,0	=X'FFFFFFFFFF'		SET A(0=30)
2209	00 0066D	6500066F A			BIR,0	#+2		=1, SHOULD BRANCH
2210	00 0066E	68000673 A			BCR,0	#+5		ERROR + NO BRANCH
2211	00 0066F	48000984 A			EOR,0	#+1		RESULT = 0, RESET CC3, CC4
2212	00 00670	69100672 A			BCS,1	#+2		
2213	00 00671	68200676 A			BCR,2	#+5		
2214	00 00672	65200673 A			BIR,2	#+1		ERROR + CC3/CC4 SET
2215	00 00673	6C000010 A			RD,0	X'10'		
2216	00 00674	69100676 A			BCS,1	#+2		
2217	00 00675	2E000000 A			WAIT			ERROR HALT
2218	00 00676	6C000010 A			RD,0	X'10'		
2219	00 00677	69400668 A			BCS,4	BLK93		LOOP/PROCEED
2220			PAGE					
2221			*					
2222			* BLOCK 94					
2223			*					
2224			* CHECK BIR FOR ADDER INPUTS OF A(0=31)=1, CS(0=30)=0, AND K(0=30)=1					
2225			*					

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2226	00 00678	6C000010 A	BLK94		RD,0	X'10'		
2227	00 00679	68200678 A			BCR,2	\$+2		
2228	00 0067A	2E000000 A			WAIT			
2229	00 0067B	321009F2 A			LW,1	=X'94'		REPORT
2230	00 0067C	320009B4 A			LW,0	=1		
2231	00 0067D	65000682 A			BIR,0	\$+5		SET A(0-31)
2232	00 0067E	48000975 A			EOR,0	=0		INCREMENT TO ZERO - NO BRANCH
2233	00 0067F	69100681 A			BCS,1	\$+2		CC3,CC4 SHOULD RESET
2234	00 00680	68200685 A			BCR,2	\$+5		CC4 SCT
2235	00 00681	65200682 A			BIR,2	\$+1		NO, CC3 SET
2236	00 00682	6C000010 A			RD,0	X'10'		YES = ERROR
2237	00 00683	69100685 A			BCS,1	\$+2		
2238	00 00684	2E000000 A			WAIT			ERROR HALT
2239	00 00685	6C000010 A			RD,0	X'10'		
2240	00 00686	69400678 A			BCS,4	BLK94		LOOP/PROCEED
2241					PAGE			
2242				*				
2243				*	BLK95			
2244				*				
2245				*	CHECK BIR FOR ADDER INPUTS A(0-30)=0, CS(0-30)=0, AND K30=1			
2246				*				
2247				*				
2248	00 00687	6C000010 A	BLK95		RD,0	X'10'		
2249	00 00688	6820068A A			BCR,2	\$+2		
2250	00 00689	2E000000 A			WAIT			REPORT
2251	00 0068A	321009F3 A			LW,1	=X'95'		
2252	00 0068B	32000976 A			LW,0	=1		SCT A31
2253	00 0068C	65000691 A			BIR,0	\$+5		REG 0 = 2
2254	00 0068D	48000977 A			EOR,0	=2		SUM=2
2255	00 0068E	69100690 A			BCS,1	\$+2		NO
2256	00 0068F	68200694 A			BCR,2	\$+5		YES
2257	00 00690	65200691 A			BIR,2	\$+1		
2258	00 00691	6C000010 A			RD,0	X'10'		
2259	00 00692	69100694 A			BCS,1	\$+2		
2260	00 00693	2E000000 A			WAIT			ERROR HALT
2261	00 00694	6C000010 A			RD,0	X'10'		
2262	00 00695	69400687 A			BCS,4	BLK95		LOOP/PROCEED
2263					PAGE			
2264				*				
2265				*	BLK96			
2266				*				
2267				*	CHECK BIR FOR ADDER INPUTS OF A29=0, CS29=0, AND K29=1			
2268				*				
2269	00 00696	6C000010 A	BLK96		RD,0	X'10'		
2270	00 00697	68200699 A			BCR,2	\$+2		
2271	00 00698	2E000000 A			WAIT			REPORT
2272	00 00699	321009F4 A			LW,1	=X'96'		
2273	00 0069A	32000978 A			LW,0	=3		A29=0
2274	00 0069B	650006A0 A			BIR,0	\$+5		REG 0 = 4
2275	00 0069C	48000979 A			EOR,0	=4		SUM=4
2276	00 0069D	6910069F A			BCS,1	\$+2		NO
2277	00 0069E	682006A3 A			BCR,2	\$+5		YES
2278	00 0069F	652006A0 A			BIR,2	\$+1		
2279	00 006A0	6C000010 A			RD,0	X'10'		
2280	00 006A1	691006A3 A			BCS,1	\$+2		
2281	00 006A2	2E000000 A			WAIT			ERROR HALT
2282	00 006A3	6C000010 A			RD,0	X'10'		
2283	00 006A4	69400696 A			BCS,4	BLK96		LOOP/PROCEED
2284					PAGE			
2285				*				
2286				*	BLK97			
2287				*				
2288				*	CHECK BIR FOR ADDER INPUTS OF A28=0, CS28=0, AND K28=1			
2289				*				
2290	00 006A5	6C000010 A	BLK97		RD,0	X'10'		
2291	00 006A6	682006A8 A			BCR,2	\$+2		
2292	00 006A7	2E000000 A			WAIT			
2293	00 006A8	321009F5 A			LW,1	=X'97'		REPORT
2294	00 006A9	3200097E A			LW,0	=7		
2295	00 006AA	650006AF A			BIR,0	\$+5		A28=0
2296	00 006AB	4800097B A			EOR,0	=8		REG 0 = 8
2297	00 006AC	691006AE A			BCS,1	\$+2		SUM=8 (3)

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2298	00 C06AU	682006B2	A		BCR,2	\$+5		YES
2299	00 C06AE	652006AF	A		BIR,2	\$+1		
2300	00 C06AF	6C000010	A		RD,0	X'10'		
2301	00 006B0	691006B2	A		BCS,1	\$+2		
2302	00 006B1	2E000000	A		WAIT			ERROR HALT
2303	00 006B2	6C000010	A		RD,0	X'10'		
2304	00 006B3	694006A5	A		BCS,4	BLK97		LOOP/PROCEED
2305					PAGE			
2306			*					
2307			* BLOCK 98					
2308			*					
2309			* CHECK BIR FOR ADDER INPUTS OF A27=0, CS27=0, AND K27=1					
2310			*					
2311	00 006B4	6C000010	A		BLK98	RD,0	X'10'	
2312	00 006B5	682006B7	A			BCR,2	\$+2	
2313	00 006B6	2E000000	A			WAIT		REPORT
2314	00 006B7	321009F6	A			LW,1	=X'98'	
2315	00 006B8	320009F7	A			LW,0	=X'F'	
2316	00 006B9	650006BE	A			BIR,0	\$+5	A27=0 REG 0 = 10
2317	00 006BA	4800097D	A			EOR,0	=X'10'	SUM=10
2318	00 006BB	691006BD	A			BCS,1	\$+2	NO
2319	00 006BC	682006C1	A			BCR,2	\$+5	YES
2320	00 006BD	652006BE	A			BIR,2	\$+1	
2321	00 006BE	6C000010	A			RD,0	X'10'	
2322	00 006BF	691006C1	A			BCS,1	\$+2	
2323	00 006C0	2E000000	A			WAIT		ERROR HALT
2324	00 006C1	6C000010	A			RD,0	X'10'	
2325	00 006C2	694006B4	A			BCS,4	BLK98	LOOP/PROCEED
2326			PAGE					
2327			*					
2328			* BLOCK 99					
2329			*					
2330			* CHECK BIR FOR ADDER INPUTS OF A26=0, CS26=0, K26=1					
2331			*					
2332	00 006C3	6C000010	A		BLK99	RD,0	X'10'	
2333	00 006C4	682006C6	A			BCR,2	\$+2	
2334	00 006C5	2E000000	A			WAIT		REPORT
2335	00 006C6	321009F8	A			LW,1	=X'99'	
2336	00 006C7	320009F9	A			LW,0	=X'1F'	
2337	00 006C8	650006CD	A			BIR,0	\$+5	A26=0 REG 0 = 20
2338	00 006C9	4800097F	A			EOR,0	=X'20'	SUM=20
2339	00 006CA	691006CC	A			BCS,1	\$+2	NO
2340	00 006CB	682006D0	A			BCR,2	\$+5	YES
2341	00 006CC	652006CD	A			BIR,2	\$+1	
2342	00 006CD	6C000010	A			RD,0	X'10'	
2343	00 006CE	691006D0	A			BCS,1	\$+2	
2344	00 006CF	2E000000	A			WAIT		ERROR HALT
2345	00 006D0	6C000010	A			RD,0	X'10'	
2346	00 006D1	694006C3	A			BCS,4	BLK99	LOOP/PROCEED
2347			PAGE					
2348			*					
2349			* BLOCK 100					
2350			*					
2351			* CHECK BIR FOR ADDER INPUTS OF A25=0, CS25=0, AND K25=1					
2352			*					
2353	00 006D2	6C000010	A		BLK100	RD,0	X'10'	
2354	00 006D3	682006D5	A			BCR,2	\$+2	
2355	00 006D4	2E000000	A			WAIT		REPORT
2356	00 006D5	32100983	A			LW,1	=X'100'	
2357	00 006D6	320009FA	A			LW,0	=X'3F'	
2358	00 006D7	650006DC	A			BIR,0	\$+5	A25=0 REG 0 = 40
2359	00 006D8	48000980	A			EOR,0	=X'40'	SUM=40
2360	00 006D9	691006DB	A			BCS,1	\$+2	NO
2361	00 006DA	682006DF	A			BCR,2	\$+5	YES
2362	00 006DB	652006DC	A			BIR,2	\$+1	
2363	00 006DC	6C000010	A			RD,0	X'10'	
2364	00 006DD	691006DF	A			BCS,1	\$+2	
2365	00 006DE	2E000000	A			WAIT		ERROR HALT
2366	00 006DF	6C000010	A			RD,0	X'10'	
2367	00 006EO	694006D2	A			BCS,4	BLK100	LOOP/PROCEED
2368			PAGE					
2369			*					

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2370				*		* BLOCK 101		
2371				*				
2372				*		* CHECK BIR FOR ADDER INPUTS OF A24=0, CS24=0, AND K24=1		
2373				*				
2374	00 C0EE1	6C0000C10 A	BLK101	RD <sub>0</sub> C	X'101'			
2375	00 C0EE2	682006E4 A		BCR <sub>2</sub>	\$+2			
2376	00 C0EE3	2E000000 A		WAIT				
2377	00 C0EE4	321000FB A		LW <sub>1</sub>	=X'101'			REPORT
2378	00 C0EE5	320000FC A		LW <sub>0</sub> C	=X'7F'			
2379	00 C0EE6	650006EB A		BIR <sub>0</sub>	\$+5	A24=0		
2380	00 C0EE7	48000082 A		EPR <sub>0</sub>	=X'301'	REG 0 = 80		
2381	00 C0EE8	691006EA A		HCS <sub>1</sub>	\$+2	SUM=80		
2382	00 C0EE9	682006EE A		BCR <sub>2</sub>	\$+5	NA		
2383	00 C0EEA	652006EB A		BIR <sub>2</sub>	\$+1	YES		
2384	00 C0EEB	6C0000C10 A		RD <sub>0</sub>	X'101'			
2385	00 C0EEC	691006EE A		HCS <sub>1</sub>	\$+2			
2386	00 C0EED	2E000000 A		WAIT				ERROR HALT
2387	00 C0EEE	6C0000C10 A		RD <sub>0</sub>	X'101'			
2388	00 C0EEF	694006E1 A		HCS <sub>4</sub>	BLK101			LOOP/PROCEED
2389				PAGE				
2390				*				
2391				*		* BLOCK 102		
2392				*				
2393				*		* CHECK BIR FOR ADDER INPUTS OF A23=0, CS23=0, AND K23=1		
2394				*				
2395	00 C0EF0	6C0000C10 A	BLK102	RD <sub>0</sub> O	X'101'			
2396	00 C0EF1	682006F3 A		BCR <sub>2</sub>	\$+2			
2397	00 C0EF2	2E000000 A		WAIT				REPORT
2398	00 C0EF3	321000FD A		LW <sub>1</sub>	=X'102'			
2399	00 C0EF4	320000FF A		LW <sub>0</sub> C	=X'FFF'	A23=0		
2400	00 C0EF5	650006FA A		BIR <sub>0</sub>	\$+5	REG 0 = 100		
2401	00 C0EF6	48000083 A		EPR <sub>0</sub>	=X'100'	SUM=100		
2402	00 C0EF7	691006F9 A		HCS <sub>1</sub>	\$+2	NA		
2403	00 C0EF8	682006FD A		BCR <sub>2</sub>	\$+5	YES		
2404	00 C0EF9	652006FA A		BIR <sub>2</sub>	\$+1			
2405	00 C0EFA	6C0000C10 A		RD <sub>0</sub>	X'101'			
2406	00 C0EFB	691006FD A		HCS <sub>1</sub>	\$+2			
2407	00 C0EFC	2E000000 A		WAIT				ERROR HALT
2408	00 C0EFD	6C0000C10 A		RD <sub>0</sub>	X'101'			
2409	00 C0EFE	694006F0 A		HCS <sub>4</sub>	BLK102			LOOP/PROCEED
2410				PAGE				
2411				*				
2412				*		* BLOCK 103		
2413				*				
2414				*		* CHECK BIR FOR ADDER INPUTS OF A22=0, CS22=0, K22=1		
2415				*				
2416	00 C06FF	6C0000C10 A	BLK103	RD <sub>0</sub> O	X'101'			
2417	00 C0700	68200702 A		BCR <sub>2</sub>	\$+2			
2418	00 C0701	2E000000 A		WAIT				REPORT
2419	00 C0702	321009FF A		LW <sub>1</sub>	=X'103'			
2420	00 C0703	32000A00 A		LW <sub>0</sub> O	=X'1FFF'	A22=0		
2421	00 C0704	65000709 A		BIR <sub>0</sub>	\$+5	REG 0 = 200		
2422	00 C0705	480000985 A		EPR <sub>0</sub>	=X'200'	SUM=200		
2423	00 C0706	69100708 A		HCS <sub>1</sub>	\$+2	NA		
2424	00 C0707	6820070C A		BCR <sub>2</sub>	\$+5	YES		
2425	00 C0708	65200709 A		BIR <sub>2</sub>	\$+1			
2426	00 C0709	6C0000C10 A		RD <sub>0</sub>	X'101'			
2427	00 C070A	6910070C A		HCS <sub>1</sub>	\$+2			
2428	00 C070B	2E000000 A		WAIT				ERROR HALT
2429	00 C070C	6C0000C10 A		RD <sub>0</sub>	X'101'			
2430	00 C070D	694006FF A		HCS <sub>4</sub>	BLK103			LOOP/PROCEED
2431				PAGE				
2432				*				
2433				*		* BLOCK 104		
2434				*				
2435				*		* CHECK BIR FOR ADDER INPUTS OF A21=0, CS21=0, K21=1		
2436				*				
2437	00 C070E	6C0000C10 A	BLK104	RD <sub>0</sub> O	X'101'			
2438	00 C070F	68200711 A		BCR <sub>2</sub>	\$+2			
2439	00 C0710	2E000000 A		WAIT				REPORT
2440	00 C0711	32100A01 A		LW <sub>1</sub>	=X'104'			
2441	00 C0712	32000A02 A		LW <sub>0</sub> O	=X'3FFF'	A21=0		

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2442	00	C0713	65000718 A			BIR,0	\$+5	
2443	00	C0714	48000987 A			E0R,0	=X'400'	SUM=400
2444	00	C0715	69100717 A			BCS,1	\$+2	NO
2445	00	C0716	68200718 A			BCR,2	\$+5	YES
2446	00	C0717	65200718 A			BIR,2	\$+1	
2447	00	C0718	6C000010 A			RD,0	X'10'	
2448	00	C0719	69100718 A			BCS,1	\$+2	
2449	00	C071A	2E000000 A			WAIT		ERROR HALT
2450	00	C071B	6C000010 A			RD,C	X'10'	
2451	00	C071C	6940070E A			BCS,4	BLK104	LOOP/PROCEED
2452						PAGE		
2453			*					
2454			* BLACK 105					
2455			*					
2456			* CHECK BIR FOR ADDER INPUTS SF A20=0, CS20=0, K20=1					
2457			*					
2458	00	C071D	6C000010 A		BLK105	RD,C	X'10'	
2459	00	C071E	68200720 A			BCR,2	\$+2	
2460	00	C071F	2E000000 A			WAIT		
2461	00	C0720	32100A03 A			LW,1	=X'105'	
2462	00	C0721	32000A04 A			LW,0	=X'7FF'	A20=0
2463	00	C0722	65000727 A			BIR,0	\$+5	REG 0 = 800
2464	00	C0723	48000989 A			E0R,0	=X'800'	SUM=800
2465	00	C0724	69100726 A			BCS,1	\$+2	NO
2466	00	C0725	68200724 A			BCR,2	\$+5	YES
2467	00	C0726	65200727 A			BIR,2	\$+1	
2468	00	C0727	6C000010 A			RD,0	X'10'	
2469	00	C0728	69100724 A			BCS,1	\$+2	
2470	00	C0729	2E000000 A			WAIT		ERROR HALT
2471	00	C072A	6C000010 A			RD,0	X'10'	
2472	00	C072B	6940071D A			BCS,4	BLK105	LOOP/PROCEED
2473			PAGE					
2474			*					
2475			* BLACK 106					
2476			*					
2477			* CHECK BIR FOR ADDER INPUTS SF A19=0, CS19=0, K19=1					
2478			*					
2479	00	C072C	6C000010 A		BLK106	RD,0	X'10'	
2480	00	C072D	6820072F A			BCR,2	\$+2	
2481	00	C072E	2E000000 A			WAIT		
2482	00	C072F	32100A05 A			LW,1	=X'106'	
2483	00	C0730	32000A06 A			LW,0	=X'FFF'	A19=0
2484	00	C0731	65000736 A			BIR,0	\$+5	REG 0 = 1000
2485	00	C0732	48000988 A			E0R,0	=X'1000'	SUM=1000
2486	00	C0733	69100735 A			BCS,1	\$+2	NO
2487	00	C0734	68200739 A			BCR,2	\$+5	YES
2488	00	C0735	65200736 A			BIR,2	\$+1	
2489	00	C0736	6C000010 A			RD,0	X'10'	
2490	00	C0737	69100739 A			BCS,1	\$+2	
2491	00	C0738	2E000000 A			WAIT		ERROR HALT
2492	00	C0739	6C000010 A			RD,0	X'10'	
2493	00	C073A	6940072C A			BCS,4	BLK106	LOOP/PROCEED
2494			PAGE					
2495			*					
2496			* BLACK 107					
2497			*					
2498			* CHECK BIR FOR ADDER INPUTS SF A18=0, CS18=0, K18=1					
2499			*					
2500	00	C073B	6C000010 A		BLK107	RD,0	X'10'	
2501	00	C073C	6820073E A			BCR,2	\$+2	
2502	00	C073D	2E000000 A			WAIT		
2503	00	C073E	32100A07 A			LW,1	=X'107'	
2504	00	C073F	32000A08 A			LW,0	=X'1FFF'	A18=0
2505	00	C0740	65000745 A			BIR,0	\$+5	REG 0 = 2000
2506	00	C0741	4800098D A			E0R,0	=X'2000'	SUM=2000X
2507	00	C0742	69100744 A			BCS,1	\$+2	NO
2508	00	C0743	68200748 A			BCR,2	\$+5	YES
2509	00	C0744	65200745 A			BIR,2	\$+1	
2510	00	C0745	6C000010 A			RD,0	X'10'	
2511	00	C0746	69100748 A			BCS,1	\$+2	
2512	00	C0747	2E000000 A			WAIT		ERROR HALT
2513	00	C0748	6C000010 A			RD,0	X'10'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORING	LABEL	OPERATION	OPERAND	COMMENTS
2514	00 00742	69400738 A			BCS,4	BLK107		LOOP/PROCEED
2515					PAGE			
2516				*				
2517				*				
2518				*				
2519				*				
2520				*				
2521	00 0074A	6C000010 A			BLK108	RD,0	X'10'	
2522	00 0074B	68200740 A				BCR,2	\$+2	
2523	00 0074C	2E000000 A				WAIT		REPORT
2524	00 0074D	32100A09 A				LW,1	=X'108'	
2525	00 0074E	32000A0A A				LW,0	=X'3FFF'	
2526	00 0074F	65000754 A				BIR,0	\$+5	A17=0
2527	00 00750	480000FF A				EUR,0	=X'4000'	REG 0 = 4000
2528	00 00751	69100753 A				BCS,1	\$+2	SUM=4000
2529	00 00752	68200757 A				BCR,2	\$+5	NE
2530	00 00753	65200754 A				BIR,2	\$+1	YES
2531	00 00754	6C000010 A				RD,0	X'10'	
2532	00 00755	69100757 A				BCS,1	\$+2	ERROR HALT
2533	00 00756	2E000000 A				WAIT		
2534	00 00757	6C000010 A				RD,0	X'10'	
2535	00 00758	6940074A A				BCS,4	BLK108	LOOP/PROCEED
2536					PAGE			
2537				*				
2538				*				
2539				*				
2540				*				
2541				*				
2542	00 00759	6C000010 A			BLK109	RD,0	X'10'	
2543	00 0075A	6820075C A				BCR,2	\$+2	
2544	00 0075B	2E000000 A				WAIT		REPORT
2545	00 0075C	32100A0B A				LW,1	=X'109'	
2546	00 0075D	32000A0C A				LW,0	=X'3FFF'	A15=0
2547	00 0075E	65000763 A				BIR,0	\$+5	REG 0 = 8000
2548	00 0075F	48000991 A				EUR,0	=X'3000'	SUM = 8000
2549	00 00760	69100762 A				BCS,1	\$+2	(3)
2550	00 00761	68200766 A				BCR,2	\$+5	YES
2551	00 00762	65200763 A				BIR,2	\$+1	
2552	00 00763	6C000010 A				RD,0	X'10'	
2553	00 00764	69100766 A				BCS,1	\$+2	ERROR HALT
2554	00 00765	2E000000 A				WAIT		
2555	00 00766	6C000010 A				RD,0	X'10'	
2556	00 00767	69400759 A				BCS,4	BLK109	LOOP/PROCEED
2557					PAGE			
2558				*				
2559				*				
2560				*				
2561				*				
2562				*				
2563	00 00768	6C000010 A			BLK110	RD,0	X'10'	
2564	00 00769	68200768 A				BCR,2	\$+2	
2565	00 0076A	2E000000 A				WAIT		
2566	00 0076B	32100ACD A				LW,1	=X'110'	
2567	00 0076C	320009DB A				LW,0	=X'FFFF'	
2568	00 0076D	65000772 A				BIR,0	\$+5	A15=0
2569	00 0076E	48000993 A				EUR,0	=X'10000'	REG 0 = 10000
2570	00 0076F	69100771 A				BCS,1	\$+2	SUM=10000
2571	00 00770	63200775 A				BCR,2	\$+5	NE
2572	00 00771	65200772 A				BIR,2	\$+1	YES
2573	00 00772	6C000010 A				RD,0	X'10'	
2574	00 00773	69100775 A				BCS,1	\$+2	
2575	00 00774	2E000000 A				WAIT		ERROR HALT
2576	00 00775	6C000010 A				RD,0	X'10'	
2577	00 00776	69400768 A				BCS,4	BLK110	LOOP/PROCEED
2578					PAGE			
2579				*				
2580				*				
2581				*				
2582				*				
2583				*				
2584	00 00777	6C000010 A			BLK111	RD,0	X'10'	
2585	00 00778	6820077A A				BCR,2	\$+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2586	00	C0779	2E000000 A			WAIT		REPORT
2587	00	0077A	32100AOE A			LW,1	=X'1111'	
2588	00	0077B	32000A0F A			LW,0	=X'1FFFFF'	A14=0
2589	00	0077C	65000781 A			BIR,0	\$+5	REG 0 = 20000
2590	00	0077D	48000995 A			EOR,0	=X'20000'	SUM=20000
2591	00	0077E	69100780 A			BCS,1	\$+2	NO
2592	00	0077F	68200784 A			BCR,2	\$+5	YES
2593	00	00780	65200781 A			BIR,2	\$+1	
2594	00	00781	6C000010 A			RD,0	X'10'	
2595	00	00782	69100784 A			BCS,1	\$+2	
2596	00	00783	2E000000 A			WAIT		ERROR HALT
2597	00	00784	6C000010 A			RD,0	X'10'	
2598	00	00785	69400777 A			BCS,4	BLK111	LOOP/PROCEED
2599						PAGE		
2600			*					
2601			* BLOCK 112					
2602			*					
2603			* CHECK BIR FOR ADDER INPUTS OF A13=0, CS13=0, K13=1					
2604			*					
2605	00	C0786	6C000010 A		BLK112	RD,0	X'10'	
2606	00	00787	68200789 A			BCR,2	\$+2	
2607	00	00788	2E000000 A			WAIT		REPORT
2608	00	C0789	32100A10 A			LW,1	=X'1121'	
2609	00	C078A	32000A11 A			LW,0	=X'13FFFF'	A13=0
2610	00	C078B	65000790 A			BIR,0	\$+5	REG 0 = 40000
2611	00	C078C	48000996 A			EOR,0	=X'40000'	SUM=40000
2612	00	C078D	6910078F A			BCS,1	\$+2	NO
2613	00	C078E	68200793 A			BCR,2	\$+5	YES
2614	00	C078F	65200790 A			BIR,2	\$+1	
2615	00	C0790	6C000010 A			RD,0	X'10'	
2616	00	C0791	69100793 A			BCS,1	\$+2	
2617	00	C0792	2E000000 A			WAIT		ERROR HALT
2618	00	C0793	6C000010 A			RD,0	X'10'	
2619	00	C0794	69400786 A			BCS,4	BLK112	LOOP/PROCEED
2620			PAGE					
2621			*					
2622			* BLOCK 113					
2623			*					
2624			* CHECK BIR FOR ADDER INPUTS OF A12=0, CS12=0, K12=1					
2625			*					
2626	00	00795	6C000010 A		BLK113	RD,0	X'10'	
2627	00	00796	68200798 A			BCR,2	\$+2	
2628	00	00797	2E000000 A			WAIT		REPORT
2629	00	00798	32100A12 A			LW,1	=X'1131'	
2630	00	00799	32000A13 A			LW,0	=X'17FFFF'	A12=0
2631	00	0079A	6500079F A			BIR,0	\$+5	REG 0 = 80000
2632	00	0079B	48000998 A			EOR,0	=X'80000'	SUM=80000
2633	00	0079C	6910079E A			BCS,1	\$+2	NO
2634	00	0079D	682007A2 A			BCR,2	\$+5	YES
2635	00	0079E	6520079F A			BIR,2	\$+1	
2636	00	0079F	6C000010 A			RD,0	X'10'	
2637	00	007A0	691007A2 A			BCS,1	\$+2	
2638	00	007A1	2E000000 A			WAIT		ERROR HALT
2639	00	007A2	6C000010 A			RD,0	X'10'	
2640	00	007A3	69400795 A			BCS,4	BLK113	LOOP/PROCEED
2641			PAGE					
2642			*					
2643			* BLOCK 114					
2644			*					
2645			* CHECK BIR FOR ADDER INPUTS OF A11=0, CS11=0, K11=1					
2646			*					
2647	00	007A4	6C000010 A		BLK114	RD,0	X'10'	
2648	00	007A5	682007A7 A			BCR,2	\$+2	
2649	00	007A6	2E000000 A			WAIT		REPORT
2650	00	007A7	32100A14 A			LW,1	=X'1141'	
2651	00	007A8	32000A15 A			LW,0	=X'1FFFFF'	A11=0
2652	00	007A9	650007AE A			BIR,0	\$+5	REG 0 = 100000
2653	00	007AA	4800099A A			EOR,0	=X'100000'	SUM=100000
2654	00	007AB	691007AD A			BCS,1	\$+2	NO
2655	00	007AC	682007B1 A			BCR,2	\$+5	YES
2656	00	007AD	652007AE A			BIR,2	\$+1	
2657	00	007AE	6C000010 A			RD,0	X'10'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2658	00 C07AF	691007B1 A			BCS,1	\$+2		
2659	00 C07B0	2E000000 A			WAIT			ERROR HALT
2660	00 C07B1	6C000010 A			RD,0	x'10'		
2661	00 C07B2	694007A4 A			BCS,4	BLK114		LOOP/PROCEED
2662					PAGE			
2663		*						
2664		*			*	BLOCK 115		
2665		*						
2666		*			*	CHECK BIR FOR ADDER INPUTS OF A10=0, CS10=0, K10=1		
2667		*						
2668	00 C07B3	6C000010 A			BLK115	RD,0	x'10'	
2669	00 C07B4	682007B6 A				BCR,2	\$+2	
2670	00 C07B5	2E000000 A				WAIT		REPORT
2671	00 C07B6	32100A16 A				LW,1	=x'1115'	
2672	00 C07B7	32000A17 A				LW,0	=x'1FFFFFF'	A10=0
2673	00 C07B8	650007B0 A				BIR,0	\$+5	REG 0 = 200000
2674	00 C07B9	4800009C A				EPR,0	=x'2000000'	SUM=200000
2675	00 C07BA	691007B0 A				BCS,1	\$+2	NR
2676	00 C07B3	682007C0 A				BCR,2	\$+5	YES
2677	00 C07B0	652007B0 A				BIR,2	\$+1	
2678	00 C07B0	6C000010 A				RD,0	x'10'	
2679	00 C07B5	681007C0 A				BCS,1	\$+2	
2680	00 C07B6	2E000000 A				WAIT		ERROR HALT
2681	00 C07B0	6C000010 A				RD,0	x'10'	
2682	00 C07B1	694007B3 A				BCS,4	BLK115	LOOP/PROCEED
2683					PAGE			
2684		*						
2685		*			*	BLOCK 116		
2686		*						
2687		*			*	CHECK BIR FOR ADDER INPUTS OF A9=0, CS9=0, K9=1		
2688		*						
2689	00 C07C2	6C000010 A			BLK116	RD,0	x'10'	
2690	00 C07C3	682007C5 A				BCR,2	\$+2	
2691	00 C07C4	2E000000 A				WAIT		
2692	00 C07C5	32100A18 A				LW,1	=x'1116'	
2693	00 C07C6	32000A19 A				LW,0	=x'1FFFFFF'	A9=0
2694	00 C07C7	650007CC A				BIR,0	\$+5	REG 0 = 400000
2695	00 C07C8	4800009E A				EPR,0	=x'4000000'	SUM=400000
2696	00 C07C9	691007C8 A				BCS,1	\$+2	NR
2697	00 C07CA	682007CF A				BCR,2	\$+5	YES
2698	00 C07CB	652007CC A				BIR,2	\$+1	
2699	00 C07CC	6C000010 A				RD,0	x'10'	
2700	00 C07CD	691007CF A				BCS,1	\$+2	
2701	00 C07CE	2E000000 A				WAIT		ERROR HALT
2702	00 C07CF	6C000010 A				RD,0	x'10'	
2703	00 C07D0	694007C2 A				BCS,4	BLK116	LOOP/PROCEED
2704					PAGE			
2705		*						
2706		*			*	BLOCK 117		
2707		*						
2708		*			*	CHECK BIR FOR ADDER INPUTS OF A8=0, CS8=0, K8=1		
2709		*						
2710	00 C07D1	6C000010 A			BLK117	RD,0	x'10'	
2711	00 C07D2	682007D4 A				BCR,2	\$+2	
2712	00 C07D3	2E000000 A				WAIT		
2713	00 C07D4	32100A1A A				LW,1	=x'1117'	
2714	00 C07D5	32000A1B A				LW,0	=x'1FFFFFF'	A8=0
2715	00 C07D6	650007DB A				BIR,0	\$+5	REG 0 = 800000
2716	00 C07D7	48000090 A				EPR,0	=x'8000000'	SUM=800000
2717	00 C07D8	691007DA A				BCS,1	\$+2	NR
2718	00 C07D9	682007DE A				BCR,2	\$+5	YES
2719	00 C07DA	652007DB A				BIR,2	\$+1	
2720	00 C07DB	6C000010 A				RD,0	x'10'	
2721	00 C07DC	691007DE A				BCS,1	\$+2	
2722	00 C07DD	2E000000 A				WAIT		ERROR HALT
2723	00 C07DE	6C000010 A				RD,0	x'10'	
2724	00 C07DF	694007D1 A				BCS,4	BLK117	LOOP/PROCEED
2725					PAGE			
2726		*						
2727		*			*	BLOCK 118		
2728		*						
2729		*			*	CHECK BIR FOR ADDER INPUTS OF A7=0, CS7=0, K7=1		

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL O R I G	LABEL	OPERATION	OPERAND	COMMENTS
2730			*					
2731	00 007E0	6C000010 A	BLK118		RD,0	X'10'		
2732	00 007E1	682007E3 A			BCR,2	\$+2		
2733	00 007E2	2E000000 A			WAIT			
2734	00 007E3	32100A1C A			LW,1	=X'118'		
2735	00 007E4	32000A1D A			LW,0	=X'FFFFF'		
2736	00 007E5	650007EA A			BIR,0	\$+5	A700	
2737	00 007E6	480009A2 A			EOR,0	=X'1000000'	REG 0 = 1000000	
2738	00 007E7	691007E9 A			BCS,1	\$+2	SUM=1000000	
2739	00 007E8	682007ED A			BCR,2	\$+5	NO	
2740	00 007E9	652007EA A			BIR,2	\$+1	YES	
2741	00 007EA	6C000010 A			RD,0	X'10'		
2742	00 007EB	691007ED A			BCS,1	\$+2		
2743	00 007EC	2E000000 A			WAIT		ERROR HALT	
2744	00 007ED	6C000010 A			RD,0	X'10'		
2745	00 007EE	694007E0 A			BCS,4	BLK118	LOOP/PROCEED	
2746			PAGE					
2747			*					
2748			* BLOCK 119					
2749			*					
2750			* CHECK BIR FOR ADDER INPUTS OF A6=0, CS6=0, K6=1					
2751			*					
2752	00 007EF	6C000010 A	BLK119		RD,0	X'10'		
2753	00 007F0	682007F2 A			BCR,2	\$+2		
2754	00 007F1	2E000000 A			WAIT			
2755	00 007F2	32100A1E A			LW,1	=X'119'		
2756	00 007F3	32000A1F A			LW,0	=X'1FFFFFF'	A6=0	
2757	00 007F4	650007F9 A			BIR,0	\$+5	REG 0 = 2000000	
2758	00 007F5	480009A4 A			EOR,0	=X'12000000'	SUM=2000000	
2759	00 007F6	691007F8 A			BCS,1	\$+2	NO	
2760	00 007F7	682007FC A			BCR,2	\$+5	YES	
2761	00 007F8	652007F9 A			BIR,2	\$+1		
2762	00 007F9	6C000010 A			RD,0	X'10'		
2763	00 007FA	691007FC A			BCS,1	\$+2		
2764	00 007FB	2E000000 A			WAIT		ERROR HALT	
2765	00 007FC	6C000010 A			RD,0	X'10'		
2766	00 007FD	694007EF A			BCS,4	BLK119	LOOP/PROCEED	
2767			PAGE					
2768			*					
2769			* BLOCK 120					
2770			*					
2771			* CHECK BIR FOR ADDER INPUTS OF A5=0, CS5=0, K5=1					
2772			*					
2773	00 007FE	6C000010 A	BLK120		RD,0	X'10'		
2774	00 007FF	68200801 A			BCR,2	\$+2		
2775	00 00800	2E000000 A			WAIT			
2776	00 00801	32100A20 A			LW,1	=X'120'		
2777	00 00802	32000A21 A			LW,0	=X'13FFFFFF'	A5=0	
2778	00 00803	65000808 A			BIR,0	\$+5	REG 0 = 4000000	
2779	00 00804	480009A6 A			EOR,0	=X'14000000'	SUM=4000000	
2780	00 00805	69100807 A			BCS,1	\$+2	NO	
2781	00 00806	68200808 A			BCR,2	\$+5	YES	
2782	00 00807	65200808 A			BIR,2	\$+1		
2783	00 00808	6C000010 A			RD,0	X'10'		
2784	00 00809	69100808 A			BCS,1	\$+2		
2785	00 0080A	2E000000 A			WAIT		ERROR HALT	
2786	00 0080B	6C000010 A			RD,0	X'10'		
2787	00 0080C	694007FE A			BCS,4	BLK120	LOOP/PROCEED	
2788			PAGE					
2789			*					
2790			* BLOCK 121					
2791			*					
2792			* CHECK BIR FOR ADDER INPUTS OF A4=0, CS4=0, K4=1					
2793			*					
2794	00 0080D	6C000010 A	BLK121		RD,0	X'10'		
2795	00 0080E	68200810 A			BCR,2	\$+2		
2796	00 0080F	2E000000 A			WAIT			
2797	00 00810	32100A22 A			LW,1	=X'121'		
2798	00 00811	32000A23 A			LW,0	=X'17FFFFFF'	A4=0	
2799	00 00812	65000817 A			BIR,0	\$+5	REG 0 = 8000000	
2800	00 00813	480009A8 A			EOR,0	=X'18000000'	SUM=8000000	
2801	00 00814	69100816 A			BCS,1	\$+2	NO	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2802	00 00815	6820081A	A			BCR,2	\$+5	
2803	00 00816	65200817	A			BIR,2	\$+1	
2804	00 00817	6C000010	A			RD,0	X'10'	
2805	00 00818	6910081A	A			BCS,1	\$+2	
2806	00 00819	2E000000	A			WAIT		
2807	00 0081A	6C000010	A			RD,0	X'10'	ERROR HALT
2808	00 0081B	6940080D	A			BCS,4	BLK121	LOOP/PROCEED
2809						PAGE		
2810			*					
2811			* BLOCK 122					
2812			*					
2813			* CHECK BIR FOR ADDER INPUTS OF A3=0, CS3=0, K3=1					
2814			*					
2815	00 0081C	6C000010	A		BLK122	RD,0	X'10'	
2816	00 0081D	6820081F	A			BCR,2	\$+2	
2817	00 0081E	2E000000	A			WAIT		REPORT
2818	00 0081F	32100A24	A			LW,1	=X'1221	
2819	00 00820	32000A25	A			LW,0	=X'FFFFFF'	
2820	00 00821	65200826	A			BIR,0	\$+5	A3=0
2821	00 00822	480000AA	A			E8R,0	=X'10000000'	REG 0 = 10000000
2822	00 00823	69100825	A			BCS,1	\$+2	SUM=10000000
2823	00 00824	68200829	A			BCR,2	\$+5	NA
2824	00 00825	65200826	A			BIR,2	\$+1	YES
2825	00 00826	6C000010	A			RD,0	X'10'	
2826	00 00827	69100829	A			BCS,1	\$+2	
2827	00 00828	2E000000	A			WAIT		
2828	00 00829	6C000010	A			RD,0	X'10'	ERROR WAIT
2829	00 0082A	6940081C	A			BCS,4	BLK122	LOOP/PROCEED
2830			PAGE					
2831			*					
2832			* BLOCK 123					
2833			*					
2834			* CHECK BIR FOR ADDER INPUTS OF A2=0, CS2=0, K2=1					
2835			*					
2836	00 0082B	6C000010	A		BLK123	RD,0	X'10'	
2837	00 0082C	6820082E	A			BCR,2	\$+2	
2838	00 0082D	2E000000	A			WAIT		
2839	00 0082E	32100A26	A			LW,1	=X'1231	REPORT
2840	00 0082F	32000A27	A			LW,0	=X'1FFFFFF'	
2841	00 00830	65000835	A			BIR,0	\$+5	A2=0
2842	00 00831	480009AC	A			E8R,0	=X'20000000'	REG 0 = 20000000
2843	00 00832	69100834	A			BCS,1	\$+2	SUM=20000000
2844	00 00833	68200838	A			BCR,2	\$+5	NA
2845	00 00834	65200835	A			BIR,2	\$+1	YES
2846	00 00835	6C000010	A			RD,0	X'10'	
2847	00 00836	69100838	A			BCS,1	\$+2	
2848	00 00837	2E000000	A			WAIT		
2849	00 00838	6C000010	A			RD,0	X'10'	ERROR HALT
2850	00 00839	6940082B	A			BCS,4	BLK123	LOOP/PROCEED
2851			PAGE					
2852			*					
2853			* BLOCK 124					
2854			*					
2855			* CHECK BIR FOR ADDER INPUTS OF A1=0, CS1=0, K1=1					
2856			*					
2857	00 0083A	6C000010	A		BLK124	RD,0	X'10'	
2858	00 0083B	6820083D	A			BCR,2	\$+2	
2859	00 0083C	2E000000	A			WAIT		
2860	00 0083D	32100A28	A			LW,1	=X'1241	
2861	00 0083E	32000A29	A			LW,0	=X'3FFFFFF'	
2862	00 0083F	65000844	A			BIR,0	\$+5	A1=0
2863	00 00840	480009AE	A			E8R,0	=X'40000000'	REG 0 = 40000000
2864	00 00841	69100843	A			BCS,1	\$+2	SUM=40000000
2865	00 00842	68200847	A			BCR,2	\$+5	NA
2866	00 00843	65200844	A			BIR,2	\$+1	YES
2867	00 00844	6C000010	A			RD,0	X'10'	
2868	00 00845	69100847	A			BCS,1	\$+2	
2869	00 00846	2E000000	A			WAIT		
2870	00 00847	6C000010	A			RD,0	X'10'	ERROR HALT
2871	00 00848	6940083A	A			BCS,4	BLK124	LOOP/PROCEED
2872			PAGE					
2873			*					

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2874					*	BLOCK 125		
2875					*			
2876					*	CHECK BIR FOR ADDER INPUTS OF A0=0, C80=0, K0=1		
2877					*			
2878	00 00849	6C000010 A	BLK125		RD,0	X'10'		
2879	00 0084A	6820084C A			BCR,2	\$+2		
2880	00 0084B	2E000000 A			WAIT			REPORT
2881	00 0084C	32100A2A A			LW,1	=X'125'		
2882	00 0084D	32000A2B A			LW,0	=X'7FFFFFFF'	A0=0	
2883	00 0084E	65C000850 A			BIR,0	\$+2	REG 0 = 80000000	
2884	00 0084F	680000854 A			BCR,0	\$+5	ERROR	
2885	00 00850	480000980 A			E8R,0	=X'80000000'	SUM=80000000	
2886	00 00851	69100853 A			BCS,1	\$+2	N8	
2887	00 00852	68200857 A			BCR,2	\$+5	YES	
2888	00 00853	652C0854 A			BIR,2	\$+1		
2889	00 00854	6C000010 A			RD,0	X'10'		
2890	00 00855	69100857 A			BCS,1	\$+2		
2891	00 00856	2E000000 A			WAIT			ERROR HALT
2892	00 00857	6C000010 A			RD,0	X'10'		
2893	00 00858	69400849 A			BCS,4	BLK125		LOOP/PROCEED
2894					PAGE			
2895					*			
2896					*	BLOCK 126		
2897					*			
2898					*	USING LPSD, LOAD CC WITH BIT CONFIGURATION OF 1011 AND CHECK BCS,4		
2899					*	FOR PROPER DETECTION OF UCC		
2900					*			
2901	00 00859	6C000010 A	BLK126		RD,0	X'10'		
2902	00 0085A	6820085C A			BCR,2	\$+2		
2903	00 0085B	2E000000 A			WAIT			REPORT
2904	00 0085C	32100A2C A			LW,1	=X'126'		
2905	00 0085D	0E0000860 A			LPSD,0	W1	SET CC=B, SET INHIBITS, SET P=W1+3	
2906	00 0085E	2E000000 A			WAIT		ERROR IN EXECUTION OF LPSD	
2907					BOUND	8		
2908	00 00860	80000863 A	W1		GEN,4,28 B,\$+3		GENERATE PSW1	
2909	00 00861	07000000 A			DATA	X'70000000'	PSW2 TO SET INHIBITS	
2910	00 00862	2E000000 A			WAIT		ERROR	
2911	00 00863	69400865 A			BCS,4	\$+2	ERROR IF BRANCH OCCURS	
2912	00 00864	68000869 A			BCR,0	\$+5		
2913	00 00865	65200866 A			BIR,2	\$+1	ERROR DUE TO SET CONDITION OF CC,	
2914	00 00866	6C000010 A			RD,0	X'10'		
2915	00 00867	69100869 A			BCS,1	\$+2		
2916	00 00868	2E000000 A			WAIT		ERROR HALT	
2917	00 00869	6C000010 A			RD,0	X'10'		
2918	00 0086A	69400859 A			BCS,4	BLK126		LOOP/PROCEED
2919					PAGE			
2920					*			
2921					*	BLOCK 127		
2922					*			
2923					*	USING LPSD, LOAD CC WITH BIT CONFIGURATION OF 1011 AND CHECK BCR,4		
2924					*	FOR PROPER DETECTION OF UCC		
2925					*			
2926	00 0086B	6C000010 A	BLK127		RD,0	X'10'		
2927	00 0086C	6820086E A			BCR,2	\$+2		
2928	00 0086D	2E000000 A			WAIT			REPORT
2929	00 0086E	32100A2D A			LW,1	=X'127'		
2930	00 0086F	0E0000872 A			LPSD,0	W2	SET CC=B, SET INHIBITS, SET P=W2+3	
2931	00 00870	2E000000 A			WAIT		ERROR IN EXECUTION OF LPSD	
2932					BOUND	8		
2933	00 00872	80000875 A	W2		GEN,4,28 B,\$+3		GENERATE PSW1	
2934	00 00873	07000000 A			DATA	X'70000000'	PSW2	
2935	00 00874	2E000000 A			WAIT		ERROR	
2936	00 00875	6840087A A			BCR,4	\$+5		
2937	00 00876	65200877 A			BIR,2	\$+1	ERROR = CC2 SET	
2938	00 00877	6C000010 A			RD,0	X'10'		
2939	00 00878	6910087A A			BCS,1	\$+2		
2940	00 00879	2E000000 A			WAIT		ERROR HALT	
2941	00 0087A	6C000010 A			RD,0	X'10'		
2942	00 0087B	6940086B A			BCS,4	BLK127		LOOP/PROCEED
2943					PAGE			
2944					*			
2945					*	BLOCK 128		

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2946				*				
2947				* USING LPSD, LOAD CC WITH BIT CONFIGURATION OF 0111 AND CHECK BCS,8				
2948				* FOR PROPER DETECTION OF UCC				
2949				*				
2950	00 0087C	6C000010 A	BLK128	RD,0	X'10'			
2951	00 0087D	6820087F A		BCR,2	\$+2			
2952	00 0087E	2E000000 A		WAIT				
2953	00 0087F	32100A2E A		LW,1	=X'128'			REPORT
2954	00 00880	0E000882 A		LPSD,0	W3			
2955	00 00881	2E000000 A		WAIT				SET CC=7, SET INHIBITS, SET P=W3+3
2956				BUND	8			ERROR IN EXECUTION OF LPSD
2957	00 00882	70000885 A	W3	GEN,4,28	7,\$+3			
2958	00 00883	07000000 A		DATA	X'70000000'			GENERATE PSW1
2959	00 00884	2E000000 A		WAIT				PSW2
2960	00 00885	69800587 A		BCR,8	\$+2			ERROR
2961	00 00886	68000888 A		BCR,0	\$+5			
2962	00 00887	65200888 A		BIR,2	\$+1			ERROR - CC1 SET
2963	00 00888	6C000010 A		RD,0	X'10'			
2964	00 00889	69100888 A		BCS,1	\$+2			
2965	00 0088A	2E000000 A		WAIT				ERROR HALT
2966	00 0088B	6C000010 A		RD,0	X'10'			
2967	00 0088C	6940087C A		BCS,4	BLK128			LOOP/PROCEED
2968				PAGE				
2969				*				
2970				* BLOCK 129				
2971				*				
2972				* USING LPSD, LOAD CC WITH BIT CONFIGURATION OF 0111 AND CHECK BCR,8				
2973				* FOR PROPER DETECTION OF UCC				
2974				*				
2975	00 00890	6C000010 A	BLK129	RD,0	X'10'			
2976	00 0089E	68200890 A		BCR,2	\$+2			
2977	00 0089F	2E000000 A		WAIT				REPORT
2978	00 00890	32100A2F A		LW,1	=X'129'			
2979	00 00891	0E000894 A		LPSD,0	W4			SET CC=7, SET INHIBITS, SET P=W4+3
2980	00 00892	2E000000 A		WAIT				ERROR IN EXECUTION OF LPSD
2981				BUND	8			
2982	00 00894	70000897 A	W4	GEN,4,28	7,\$+3			GENERATE PSW1
2983	00 00895	07000000 A		DATA	X'70000000'			PSW2
2984	00 00896	2E000000 A		WAIT				ERROR
2985	00 00897	6880089C A		BCR,8	\$+5			
2986	00 00898	65200899 A		BIR,2	\$+1			ERROR - CC1 SET
2987	00 00899	6C000010 A		RD,0	X'10'			
2988	00 0089A	6910089C A		BCS,1	\$+2			
2989	00 0089B	2E000000 A		WAIT				ERROR HALT
2990	00 0089C	6C000010 A		RD,0	X'10'			
2991	00 0089D	6940088D A		BCS,4	BLK129			LOOP/PROCEED
2992				PAGE				
2993				*				
2994				* BLOCK 130				
2995				*				
2996				* USING LPSD, LOAD CC WITH BIT CONFIGURATION OF 0100 AND CHECK BCR,4				
2997				* FOR PROPER DETECTION OF UCC				
2998				*				
2999	00 0089E	6C000010 A	BLK130	RD,0	X'10'			
3000	00 0089F	682008A1 A		BCR,2	\$+2			
3001	00 008A0	2E000000 A		WAIT				REPORT
3002	00 008A1	32100A30 A		LW,1	=X'130'			
3003	00 008A2	0E0008A4 A		LPSD,0	W5			SET CC=4, SET INHIBITS, SET P=W5+3
3004	00 008A3	2E000000 A		WAIT				ERROR IN EXECUTION OF LPSD
3005				BUND	8			
3006	00 008A4	400008A7 A	W5	GEN,4,28	4,\$+3			GENERATE PSW1
3007	00 008A5	07000000 A		DATA	X'70000000'			PSW2
3008	00 008A6	2E000000 A		WAIT				ERROR
3009	00 008A7	684008A9 A		BCR,4	\$+2			
3010	00 008A8	680008AD A		BCR,0	\$+5			
3011	00 008A9	652008AA A		BIR,2	\$+1			ERROR - CC2 RESET
3012	00 008AA	6C000010 A		RD,0	X'10'			
3013	00 008AB	691008AD A		BCS,1	\$+2			
3014	00 008AC	2E000000 A		WAIT				ERROR HALT
3015	00 008AD	6C000010 A		RD,0	X'10'			
3016	00 008AE	6940089E A		BCS,4	BLK130			LOOP/PROCEED
3017				PAGE				

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR RIG	LABEL	OPERATION	OPERAND	COMMENTS
3018				*				
3019				*				
3020				*				
3021				*				* USING LPSD, LOAD CC WITH BIT CONFIGURATION OF 0100 AND CHECK BCS,4
3022				*				* FOR PROPER DETECTION OF UCC
3023				*				
3024	00 008AF	6C000010 A	BLK131	RD,0	X'10'			
3025	00 008B0	682008B2 A		BCR,2	\$+2			
3026	00 008B1	2E000000 A		WAIT				
3027	00 008B2	32100A31 A		LW,1	=X'131'			
3028	00 008B3	0E0008B6 A		LPSD,0	W6			
3029	00 008B4	2E000000 A		WAIT				
3030				BOUND	8			
3031	00 008B6	400008B9 A	W6	GEN,4,28	4,\$+3			
3032	00 008B7	07000000 A		DATA	X'7000000'			
3033	00 008B8	2E000000 A		WAIT				
3034	00 008B9	694008BE A		BCS,4	\$+5			
3035	00 008BA	652008BB A		BIR,2	\$+1			
3036	00 008B8	6C000010 A		RD,0	X'10'			
3037	00 008BC	691008BE A		BCS,1	\$+2			
3038	00 008BD	2E000000 A		WAIT				
3039	00 008BE	6C000010 A		RD,0	X'10'			
3040	00 008BF	694008AF A		BCS,4	BLK131			
3041				PAGE				
3042				*				
3043				*				
3044				*				
3045				*				* USING LPSD, LOAD CC WITH BIT CONFIGURATION OF 1000 AND CHECK BCR,8
3046				*				* FOR PROPER DETECTION OF UCC
3047				*				
3048	00 008C0	6C000010 A	BLK132	RD,0	X'10'			
3049	00 008C1	682008C3 A		BCR,2	\$+2			
3050	00 008C2	2E000000 A		WAIT				
3051	00 008C3	32100A32 A		LW,1	=X'132'			
3052	00 008C4	0E0008C6 A		LPSD,0	W7			
3053	00 008C5	2E000000 A		WAIT				
3054				BOUND	8			
3055	00 008C6	800008C9 A	W7	GEN,4,28	8,\$+3			
3056	00 008C7	07000000 A		DATA	X'7000000'			
3057	00 008C8	2E000000 A		WAIT				
3058	00 008C9	688008CB A		BCR,8	\$+2			
3059	00 008CA	680008CF A		BCR,0	\$+5			
3060	00 008C8	652008CC A		BIR,2	\$+1			
3061	00 008CC	6C000010 A		RD,0	X'10'			
3062	00 008CD	691008CF A		BCS,1	\$+2			
3063	00 008CE	2E000000 A		WAIT				
3064	00 008CF	6C000010 A		RD,0	X'10'			
3065	00 008DO	694008C0 A		BCS,4	BLK132			
3066				PAGE				
3067				*				
3068				*				
3069				*				
3070				*				* USING LPSD, LOAD CC WITH BIT CONFIGURATION OF 1000 AND CHECK BCS,8
3071				*				* FOR PROPER DETECTION OF UCC
3072				*				
3073	00 008D1	6C000010 A	BLK133	RD,0	X'10'			
3074	00 008D2	682008D4 A		BCR,2	\$+2			
3075	00 008D3	2E000000 A		WAIT				
3076	00 008D4	32100A33 A		LW,1	=X'133'			
3077	00 008D5	0E0008D8 A		LPSD,0	W8			
3078	00 008D6	2E000000 A		WAIT				
3079				BOUND	8			
3080	00 008D8	800008DB A	W8	GEN,4,28	8,\$+3			
3081	00 008D9	07000000 A		DATA	X'7000000'			
3082	00 008DA	2E000000 A		WAIT				
3083	00 008DB	698008E0 A		BCS,8	\$+5			
3084	00 008DC	652008DD A		BIR,2	\$+1			
3085	00 008DD	6C000010 A		RD,0	X'10'			
3086	00 008DE	691008E0 A		BCS,1	\$+2			
3087	00 008DF	2E000000 A		WAIT				
3088	00 008EO	6C000010 A		RD,0	X'10'			

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
3089	00 00xE1	694008D1	A		BCS,4	BLK133		L88P/PROCEED
3090					PAGE			
3091	00 00xE2	68000142	A		HCR,0	RETURN		
3092	00 00xE3	2E000000	A		WAIT			
3093					PAGE			
3094			*					
3095			*					* TRAP PROCESSING SWITCH TO SET UP IDENTIFICATION OF SPURIOUS TRAPS
3096			*					
3097								
3098	00 00xE4	00000000	A	N8N8P	B8UND	8		
3099	00 00xE5	00000000	A		DATA	0		
3100	00 00xE6	00000944	A		DATA	0		
3101	00 00xE7	00000000	A		DATA	TRAP40		
3102	00 00xE8	00000000	A	UNIMP	DATA	0		
3103	00 00xE9	00000000	A		DATA	0		
3104	00 00xEA	00000946	A		DATA	TRAP41		
3105	00 00xEB	00000000	A		DATA	C		
3106	00 00xEC	00000000	A	STACK	DATA	0		
3107	00 00xED	00000000	A		DATA	C		
3108	00 00xEE	00000948	A		DATA	TRAP42		
3109	00 00xEF	00000000	A		DATA	C		
3110	00 00xF0	00000000	A	8FL8	DATA	0		
3111	00 00xF1	00000000	A		DATA	0		
3112	00 00xF2	0000094A	A		DATA	TRAP43		
3113	00 00xF3	00000000	A		DATA	C		
3114	00 00xF4	00000000	A	F8BAT	DATA	C		
3115	00 00xF5	00000000	A		DATA	0		
3116	00 00xF6	0000094C	A		DATA	TRAP44		
3117	00 00xF7	00000000	A		DATA	0		
3118	00 00xF8	00000000	A	DEC	DATA	C		
3119	00 00xF9	00000000	A		DATA	0		
3120	00 00xFA	0000094E	A		DATA	TRAP45		
3121	00 00xFB	00000000	A		DATA	0		
3122	00 00xFC	00000000	A	TIMER	DATA	C		
3123	00 00xFD	00000000	A		DATA	0		
3124	00 00xFE	00000950	A		DATA	TRAP46		
3125	00 00xFF	00000000	A		DATA	C		
3126	00 00900	00000000	A	TUNASS	DATA	C		
3127	00 00901	00000000	A		DATA	C		
3128	00 00902	00000952	A		DATA	TRAPUN		
3129	00 00903	00000000	A		DATA	C		
3130					PAGE			
3131	00 00904	00000000	A	CALL1	DATA	C		
3132	00 00905	00000000	A		DATA	0		
3133	00 00906	00000954	A		DATA	TRAP48		
3134	00 00907	00000000	A		DATA	C		
3135	00 00908	00000000	A	CALL2	DATA	0		
3136	00 00909	00000000	A		DATA	0		
3137	00 0090A	00000956	A		DATA	TRAP49		
3138	00 0090B	00000000	A		DATA	C		
3139	00 0090C	00000000	A	CALL3	DATA	C		
3140	00 0090D	00000000	A		DATA	C		
3141	00 0090E	00000958	A		DATA	TRAP4A		
3142	00 0090F	00000000	A		DATA	0		
3143	00 00910	00000000	A	CALL4	DATA	C		
3144	00 00911	00000000	A		DATA	0		
3145	00 00912	0000095A	A		DATA	TRAP4B		
3146	00 00913	00000000	A		DATA	0		
3147					PAGE			
3148			*					
3149			*					* INTERRUPT SWITCH TO SET UP IDENTIFICATION OF SPURIOUS INTERRUPTS
3150			*					
3151								
3152	00 00914	00000000	A	P8W8N	B8UND	8		
3153	00 00915	00000000	A		DATA	0		
3154	00 00916	0000095C	A		DATA	INT50		
3155	00 00917	00000000	A		DATA	0		
3156	00 00918	00000000	A	P8W8FF	DATA	0		
3157	00 00919	00000000	A		DATA	0		
3158	00 0091A	0000095E	A		DATA	INT51		
3159	00 0091B	00000000	A		DATA	0		
3160	00 0031C	00000000	A	PULSE1	DATA	0		

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL O R I G	LABEL	OPERATION	OPERAND	COMMENTS
3161	00 0091D	00000000	A	PULSE2	DATA	0		
3162	00 0091E	00000000	A	PULSE3	DATA	0		
3163	00 0091F	00000000	A	PULSE4	DATA	0		
3164	00 00920	00000000	A	MEMPAR	DATA	0		
3165	00 00921	00000000	A		DATA	0		
3166	00 00922	00000960	A		DATA	INT56		
3167	00 00923	00000000	A		DATA	0		
3168	00 00924	00000000	A	UNASIN	DATA	0		
3169	00 00925	00000000	A		DATA	0		
3170	00 00926	00000962	A		DATA	IUNASS		
3171	00 00927	00000000	A		DATA	0		
3172	00 00928	00000000	A	COUNT1	DATA	0		
3173	00 00929	00000000	A		DATA	0		
3174	00 0092A	00000964	A		DATA	INT58		
3175	00 0092B	00000000	A		DATA	0		
3176	00 0092C	00000000	A	COUNT2	DATA	0		
3177	00 0092D	00000000	A		DATA	0		
3178	00 0092E	00000966	A		DATA	INT59		
3179	00 0092F	00000000	A		DATA	0		
3180	00 00930	00000000	A	COUNT3	DATA	0		
3181	00 00931	00000000	A		DATA	0		
3182	00 00932	00000968	A		DATA	INT5A		
3183	00 00933	00000000	A		DATA	0		
3184					PAGE			
3185	00 00934	00000000	A	COUNT4	DATA	0		
3186	00 00935	00000000	A		DATA	0		
3187	00 00936	0000096A	A		DATA	INT5B		
3188	00 00937	00000000	A		DATA	0		
3189	00 00938	00000000	A	INPUT	DATA	0		
3190	00 00939	00000000	A		DATA	0		
3191	00 0093A	0000096C	A		DATA	INT5C		
3192	00 0093B	00000000	A		DATA	0		
3193	00 0093C	00000000	A	PANEL	DATA	0		
3194	00 0093D	00000000	A		DATA	0		
3195	00 0093E	0000096E	A		DATA	INT5D		
3196	00 0093F	00000000	A		DATA	0		
3197	00 00940	00000000	A	EXTERN	DATA	0		
3198	00 00941	00000000	A		DATA	0		
3199	00 00942	00000970	A		DATA	EXTINT		
3200	00 00943	00000000	A		DATA	0		
3201					PAGE			
3202			*					
3203			* TRAP HALTS FOR IDENTIFICATION OF SPURIOUS TRAPS					
3204			*					
3205	00 00944	2E000000	A	TRAP40	WAIT			NON-ALLOWED OPERATION
3206	00 00945	68000140	A		BCR,0	START		UNIMPLEMENTED INSTRUCTION
3207	00 00946	2E000000	A	TRAP41	WAIT			
3208	00 00947	68000140	A		BCR,0	START		
3209	00 00948	2E000000	A	TRAP42	WAIT			PUSH-DOWN STACK LIMIT REACHED
3210	00 00949	68000140	A		BCR,0	START		
3211	00 0094A	2E000000	A	TRAP43	WAIT			FIXED-POINT ARITHMETIC OVERFLOW
3212	00 0094B	68000140	A		BCR,0	START		
3213	00 0094C	2E000000	A	TRAP44	WAIT			FLOATING POINT FAULT
3214	00 0094D	68000140	A		BCR,0	START		
3215	00 0094E	2E000000	A	TRAP45	WAIT			DECIMAL ARITHMETIC FAULT
3216	00 0094F	68000140	A		BCR,0	START		
3217	00 00950	2E000000	A	TRAP46	WAIT			WATCHDOG TIMER RUNOUT
3218	00 00951	68000140	A		BCR,0	START		
3219	00 00952	2E000000	A	TRAPUN	WAIT			UNASSIGNED TRAP 47, 4C=4F
3220	00 00953	68000140	A		BCR,0	START		
3221	00 00954	2E000000	A	TRAP48	WAIT			
3222	00 00955	68000140	A		BCR,0	START		
3223	00 00956	2E000000	A	TRAP49	WAIT			
3224	00 00957	68000140	A		BCR,0	START		
3225	00 00958	2E000000	A	TRAP4A	WAIT			
3226	00 00959	68000140	A		BCR,0	START		
3227	00 0095A	2E000000	A	TRAP4B	WAIT			
3228	00 0095B	68000140	A		BCR,0	START		
3229			PAGE					
3230			*					
3231			* INTERRUPT HALTS FOR IDENTIFICATION OF SPURIOUS INTERRUPTS					
3232			*					

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
3233	00	0095C	2E000000 A		INT50	WAIT		
3234	00	0095D	0E000972 A			LPSD,0	RESTART	POWER ON
3235	00	0095E	2E000000 A		INT51	WAIT		POWER OFF
3236	00	0095F	0E000972 A			LPSD,0	RESTART	MEMORY PARITY
3237	00	00960	2E000000 A		INT56	WAIT		UNASSIGNED INTERRUPT 57, 5E, 5F 5F
3238	00	00961	0E000972 A		IUNASS	LPSD,0	RESTART	
3239	00	00962	2E000000 A			WAIT		
3240	00	00963	0E000972 A			LPSD,0	RESTART	COUNTER 1 ZERO
3241	00	00964	2E000000 A		INT58	WAIT		COUNTER 2 ZERO
3242	00	00965	0E000972 A			LPSD,0	RESTART	COUNTER 3 ZERO
3243	00	00966	2E000000 A		INT59	WAIT		COUNTER 4 ZERO
3244	00	00967	0E000972 A			LPSD,0	RESTART	INPUT/OUTPUT
3245	00	00968	2E000000 A		INT5A	WAIT		PANEL INTERRUPT
3246	00	00969	0E000972 A			LPSD,0	RESTART	EXTERNAL GROUP 2-15
3247	00	0097A	2E000000 A		INT5B	WAIT		
3248	00	0097B	0E000972 A			LPSD,0	RESTART	
3249	00	0097C	2E000000 A		INT5C	WAIT		
3250	00	0097D	0E000972 A			LPSD,0	RESTART	
3251	00	0097E	2E000000 A		INT5D	WAIT		
3252	00	0097F	0E000972 A			LPSD,0	RESTART	
3253	00	0097G	2E000000 A		EXTINT	WAIT		
3254	00	0097H	0E000972 A			LPSD,0	RESTART	
3255						PAGE		
3256						BOUND	8	
3257	00	0097I	00000140 A		RESTART	DATA	START	
3258	00	0097J	00000000 A			DATA	0	
3259	00	0097K	00000000 A		T1	DATA	0	
3260	00	00140				END	START	
			00000000 A					
			00000001 A					
			00000002 A					
			00000003 A					
			00000004 A					
			00000005 A					
			00000008 A					
			00000006 A					
			00000010 A					
			00000007 A					
			00000020 A					
			00000040 A					
			00000009 A					
			00000080 A					
			00000100 A					
			00000011 A					
			00000200 A					
			00000012 A					
			00000400 A					
			00000013 A					
			00000800 A					
			00000014 A					
			00001000 A					
			00000015 A					
			00002000 A					
			00000016 A					
			00004000 A					
			00000017 A					
			00008000 A					
			00000018 A					
			00010000 A					
			00000019 A					
			00020000 A					
			00040000 A					
			00000021 A					
			00080000 A					
			00000022 A					
			00100000 A					
			00000023 A					
			00200000 A					
			00000024 A					
			00400000 A					
			00000025 A					
			00800000 A					

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
00	009A1	00000026	A					
00	C09A2	01000000	A					
00	009A3	00000027	A					
00	009A4	02000000	A					
00	009A5	00000028	A					
00	009A6	04000000	A					
00	009A7	00000029	A					
00	009A8	08000000	A					
00	009A9	00000030	A					
00	009AA	10000000	A					
00	009AB	00000031	A					
00	009AC	20000000	A					
00	009AD	00000032	A					
00	009AE	40000000	A					
00	009AF	00000033	A					
00	009B0	80000000	A					
00	009B1	00000034	A					
00	009B2	00000035	A					
00	009B3	00000036	A					
00	009B4	FFFFFFFFFF	A					
00	009B5	00000037	A					
00	009B6	00000038	A					
00	009B7	00000039	A					
00	009B8	00000041	A					
00	009B9	00000042	A					
00	009BA	00000043	A					
00	009BB	00000044	A					
00	009BC	00000045	A					
00	009BD	00000046	A					
00	009BE	C0000047	A					
00	009BF	00000048	A					
00	009C0	00000049	A					
00	009C1	00000050	A					
00	009C2	00000051	A					
00	009C3	00000052	A					
00	009C4	00000053	A					
00	009C5	00000054	A					
00	009C6	00000055	A					
00	009C7	00000056	A					
00	009C8	00000057	A					
00	009C9	00000058	A					
00	009CA	00000059	A					
00	009CB	00000060	A					
00	009CC	00000061	A					
00	009CD	00000062	A					
00	009CE	00000063	A					
00	009CF	00000064	A					
00	009D0	00000065	A					
00	009D1	00000066	A					
00	009D2	00000067	A					
00	009D3	00000068	A					
00	009D4	00000069	A					
00	009D5	00000070	A					
00	009D6	A5A5A5A5	A					
00	009D7	5A5AA5A5	A					
00	009D8	FFFF0000	A					
00	009D9	00000071	A					
00	009DA	A5A55A5A	A					
00	009DB	0000FFFF	A					
00	009DC	00000072	A					
00	009DD	5A5A5A5A	A					
00	009DE	00000073	A					
00	009DF	00000074	A					
00	009E0	00000075	A					
00	009E1	00000076	A					
00	009E2	00000077	A					
00	009E3	00000078	A					
00	009E4	00000079	A					
00	009E5	00000081	A					
00	009E6	00000083	A					
00	009E7	00000084	A					
00	009E8	00000085	A					

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
00 009E9		00000086	A					
00 009EA		00000087	A					
00 009EB		00000088	A					
00 009EC		00000089	A					
00 009ED		00000090	A					
00 009EE		00000091	A					
00 009EF		00000092	A					
00 009F0		00000093	A					
00 009F1		FFFFFFFFFFE	A					
00 009F2		00000094	A					
00 009F3		00000095	A					
00 009F4		00000096	A					
00 009F5		00000097	A					
00 009F6		00000098	A					
00 009F7		0000009F	A					
00 009F8		00000099	A					
00 009F9		0000001F	A					
00 009FA		0000003F	A					
00 009FB		00000101	A					
00 009FC		0000007F	A					
00 009FD		00000102	A					
00 009FE		000000FF	A					
00 009FF		00000103	A					
00 00A00		000001FF	A					
00 00A01		00000104	A					
00 00A02		000003FF	A					
00 00A03		00000105	A					
00 00A04		000007FF	A					
00 00A05		00000106	A					
00 00A06		00000FFF	A					
00 00A07		00000107	A					
00 00A08		00001FFF	A					
00 00A09		00000108	A					
00 00A0A		00003FFF	A					
00 00A0B		00000109	A					
00 00A0C		00007FFF	A					
00 00A0D		00000110	A					
00 00A0E		00000111	A					
00 00A0F		0001FFFF	A					
00 00A10		00000112	A					
00 00A11		0003FFFF	A					
00 00A12		00000113	A					
00 00A13		0007FFFF	A					
00 00A14		00000114	A					
00 00A15		000FFFFF	A					
00 00A16		00000115	A					
00 00A17		001FFFFF	A					
00 00A18		00000116	A					
00 00A19		003FFFFF	A					
00 00A1A		00000117	A					
00 00A1B		007FFFFF	A					
00 00A1C		00000118	A					
00 00A1D		00FFFFFF	A					
00 00A1E		00000119	A					
00 00A1F		01FFFFFF	A					
00 00A20		00000120	A					
00 00A21		03FFFFFF	A					
00 00A22		00000121	A					
00 00A23		07FFFFFF	A					
00 00A24		00000122	A					
00 00A25		0FFFxFFFF	A					
00 00A26		00000123	A					
00 00A27		1FFFFFFF	A					
00 00A28		00000124	A					
00 00A29		3FFFFFFF	A					
00 00A2A		00000125	A					
00 00A2B		7FFFFFFF	A					
00 00A2C		00000126	A					
00 00A2D		00000127	A					
00 00A2E		00000128	A					
00 00A2F		00000129	A					
00 00A30		00000130	A					

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
	00 00A31	00000131	A					
	00 00A32	00000132	A					
	00 00A33	00000133	A					
CONTROL SECTION SUMMARY: 01 00000 PT 0								

SECTION V  
CONCORDANCE LISTING

## SIGMA 5/7 CPU TEST-VERIFY 704042-51D00

A	40-EQU
B	41-EQU
BLK1	325-RD
BLK10	504-RD
BLK100	2353-RD
BLK101	2374-RD
BLK102	2395-RD
BLK103	2416-RD
BLK104	2437-RD
BLK105	2458-RD
BLK106	2479-RD
BLK107	2500-RD
BLK108	2521-RD
BLK109	2542-RD
BLK11	524-RD
BLK110	2563-RD
BLK111	2584-RD
BLK112	2605-RD
BLK113	2626-RD
BLK114	2647-RD
BLK115	2668-RD
BLK116	2689-RD
BLK117	2710-RD
BLK118	2731-RD
BLK119	2752-RD
BLK12	544-RD
BLK120	2773-RD
BLK121	2794-RD
BLK122	2815-RD
BLK123	2836-RD
BLK124	2857-RD
BLK125	2878-RD
BLK126	2901-RD
BLK127	2926-RD
BLK128	2950-RD
BLK129	2975-RD
	2991/BCS
	2933/GEN
	337/BCS
	517/BCS
	2367/BCS
	2388/BCS
	2409/BCS
	2430/BCS
	2451/BCS
	2472/BCS
	2493/BCS
	2514/BCS
	2535/BCS
	2556/BCS
	537/BCS
	2577/BCS
	2598/BCS
	2619/BCS
	2640/BCS
	2661/BCS
	2682/BCS
	2703/BCS
	2724/BCS
	2745/BCS
	2766/BCS
	557/BCS
	2787/BCS
	2808/BCS
	2829/BCS
	2850/BCS
	2871/BCS
	2893/BCS
	2918/BCS
	2942/BCS
	2967/BCS

BLK13	564=RD	577/BCS
BLK130	2999=RD	3016/BCS
BLK131	3024=RD	3040/BCS
BLK132	3048=RD	3065/BCS
BLK133	3073=RD	3089/BCS
BLK14	584=RD	597/BCS
BLK15	604=RD	617/BCS
BLK16	624=RD	637/BCS
BLK17	644=RD	657/BCS
BLK18	664=RD	677/BCS
BLK19	684=RD	697/BCS
BLK2	344=RD	357/BCS
BLK20	704=RD	717/BCS
BLK21	724=RD	737/BCS
BLK22	744=RD	757/BCS
BLK23	764=RD	777/BCS
BLK24	784=RD	797/BCS
BLK25	804=RD	817/BCS
BLK26	824=RD	837/BCS
BLK27	844=RD	857/BCS
BLK28	864=RD	877/BCS
BLK29	884=RD	897/BCS
BLK3	364=RD	377/BCS
BLK30	904=RD	917/BCS
BLK31	924=RD	937/BCS
BLK32	944=RD	957/BCS
BLK33	964=RD	977/BCS
BLK34	984=RD	997/BCS
BLK35	1005=RD	1018/BCS
BLK36	1026=RD	1040/BCS
BLK37	1047=RD	1060/BCS
BLK38	1067=RD	1080/BCS
BLK39	1087=RD	1100/BCS
BLK4	384=RD	397/BCS
BLK40	1107=RD	1120/BCS
BLK41	1127=RD	1140/BCS
BLK42	1147=RD	1160/BCS
BLK43	1167=RD	1180/BCS

BLK44		
	1187-RD	1200/BCS
BLK45	1207-RD	1220/BCS
BLK46	1227-RD	1240/BCS
BLK47	1247-RD	1260/BCS
BLK48	1267-RD	1280/BCS
BLK49	1287-RD	1300/BCS
BLK5	404-RD	417/BCS
BLK50	1307-RD	1320/BCS
BLK51	1327-RD	1340/BCS
BLK52	1347-RD	1360/BCS
BLK53	1367-RD	1380/BCS
BLK54	1387-RD	1400/BCS
BLK55	1407-RD	1420/BCS
BLK56	1427-RD	1440/BCS
BLK57	1447-RD	1460/BCS
BLK58	1467-RD	1480/BCS
BLK59	1487-RD	1500/BCS
BLK6	424-RD	437/BCS
BLK60	1507-RD	1520/BCS
BLK61	1527-RD	1540/BCS
BLK62	1547-RD	1560/BCS
BLK63	1567-RD	1580/BCS
BLK64	1587-RD	1600/BCS
BLK65	1607-RD	1620/BCS
BLK66	1627-RD	1640/BCS
BLK67	1647-RD	1660/BCS
BLK68	1667-RD	1680/BCS
BLK69	1687-RD	1701/BCS
BLK7	444-RD	457/BCS
BLK70	1709-RD	1724/BCS
BLK71	1732-RD	1747/BCS
BLK72	1755-RD	1770/BCS
BLK73	1778-RD	1793/BCS
BLK74	1801-RD	1815/BCS
BLK75	1823-RD	1837/BCS
BLK76	1845-RD	1859/BCS
BLK77	1867-RD	1881/BCS
BLK78	1888-RD	1901/BCS

BLK79	1908=RD	1921/BCS					
BLK8	464=RD	477/BCS					
BLK80	1928=RD	1941/BCS					
BLK81	1948=RD	1962/BCS					
BLK82	1969=RD	1987/BCS					
BLK83	1994=RD	2013/BCS					
BLK84	2020=RD	2038/BCS					
BLK85	2045=RD	2062/BCS					
BLK86	2069=RD	2080/BCS					
BLK87	2087=RD	2098/BCS					
BLK88	2105=RD	2117/BCS					
BLK89	2124=RD	2137/BCS					
BLK9	484=RD	497/BCS					
BLK90	2144=RD	2157/BCS					
BLK91	2164=RD	2176/BCS					
BLK92	2183=RD	2197/BCS					
BLK93	2204=RD	2219/BCS					
BLK94	2226=RD	2240/BCS					
BLK95	2248=RD	2262/BCS					
BLK96	2269=RD	2283/BCS					
BLK97	2290=RD	2304/BCS					
BLK98	2311=RD	2325/BCS					
BLK99	2332=RD	2346/BCS					
C	42=EQU						
CALL1	60/XPSD	3131=DATA					
CALL2	61/XPSD	3135=DATA					
CALL3	62/XPSD	3139=DATA					
CALL4	63/XPSD	3143=DATA					
COUNT1	80/XPSD	3172=DATA					
COUNT2	81/XPSD	3176=DATA					
COUNT3	82/XPSD	3180=DATA					
COUNT4	83/XPSD	3185=DATA					
D	43=EQU						
DEC	57/XPSD	3118=DATA					
E	44=EQU						
EXTERN	88/XPSD	89/XPSD	90/XPSD	91/XPSD	92/XPSD	93/XPSD	94/XPSD
	95/XPSD	96/XPSD	97/XPSD	98/XPSD	99/XPSD	100/XPSD	101/XPSD
	102/XPSD	103/XPSD	104/XPSD	105/XPSD	106/XPSD	107/XPSD	108/XPSD
	109/XPSD	110/XPSD	111/XPSD	112/XPSD	113/XPSD	114/XPSD	115/XPSD
	116/XPSD	117/XPSD	118/XPSD	119/XPSD	120/XPSD	121/XPSD	122/XPSD
	123/XPSD	124/XPSD	125/XPSD	126/XPSD	127/XPSD	128/XPSD	129/XPSD

130/XPSD	131/XPSD	132/XPSD	133/XPSD	134/XPSD	135/XPSD	136/XPSD
137/XPSD	138/XPSD	139/XPSD	140/XPSD	141/XPSD	142/XPSD	143/XPSD
144/XPSD	145/XPSD	146/XPSD	147/XPSD	148/XPSD	149/XPSD	150/XPSD
151/XPSD	152/XPSD	153/XPSD	154/XPSD	155/XPSD	156/XPSD	157/XPSD
158/XPSD	159/XPSD	160/XPSD	161/XPSD	162/XPSD	163/XPSD	164/XPSD
165/XPSD	166/XPSD	167/XPSD	168/XPSD	169/XPSD	170/XPSD	171/XPSD
172/XPSD	173/XPSD	174/XPSD	175/XPSD	176/XPSD	177/XPSD	178/XPSD
179/XPSD	180/XPSD	181/XPSD	182/XPSD	183/XPSD	184/XPSD	185/XPSD
186/XPSD	187/XPSD	188/XPSD	189/XPSD	190/XPSD	191/XPSD	192/XPSD
193/XPSD	194/XPSD	195/XPSD	196/XPSD	197/XPSD	198/XPSD	199/XPSD
200/XPSD	201/XPSD	202/XPSD	203/XPSD	204/XPSD	205/XPSD	206/XPSD
207/XPSD	208/XPSD	209/XPSD	210/XPSD	211/XPSD	212/XPSD	213/XPSD
214/XPSD	215/XPSD	216/XPSD	217/XPSD	218/XPSD	219/XPSD	220/XPSD
221/XPSD	222/XPSD	223/XPSD	224/XPSD	225/XPSD	226/XPSD	227/XPSD
228/XPSD	229/XPSD	230/XPSD	231/XPSD	232/XPSD	233/XPSD	234/XPSD
235/XPSD	236/XPSD	237/XPSD	238/XPSD	239/XPSD	240/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	257/XPSD	258/XPSD	259/XPSD	260/XPSD	261/XPSD	262/XPSD
263/XPSD	264/XPSD	265/XPSD	266/XPSD	267/XPSD	268/XPSD	269/XPSD
271/XPSD	271/XPSD	272/XPSD	273/XPSD	274/XPSD	275/XPSD	276/XPSD
277/XPSD	278/XPSD	279/XPSD	280/XPSD	281/XPSD	282/XPSD	283/XPSD
284/XPSD	285/XPSD	286/XPSD	287/XPSD	288/XPSD	289/XPSD	290/XPSD
291/XPSD	292/XPSD	293/XPSD	294/XPSD	295/XPSD	296/XPSD	297/XPSD
298/XPSD	299/XPSD	300/XPSD	301/XPSD	302/XPSD	303/XPSD	304/XPSD
305/XPSD	306/XPSD	307/XPSD	308/XPSD	309/XPSD	310/XPSD	311/XPSD
3197•DATA						
EXTINT	3199/DATA	3253•WAIT				
F	45•EQU					
FLAGAT	56/XPSD	3114•DATA				
INPUT	84/XPSD	3189•DATA				
INT5A	3182/DATA	3245•WAIT				
INT5B	3187/DATA	3247•WAIT				
INT5C	3191/DATA	3249•WAIT				
INT5D	3195/DATA	3251•WAIT				
INT50	3154/DATA	3233•WAIT				
INT51	3158/DATA	3235•WAIT				
INT56	3166/DATA	3237•WAIT				
INT58	3174/DATA	3241•WAIT				
INT59	3178/DATA	3243•WAIT				
IUNASS	3179/DATA	3239•WAIT				
MEMPAR	78/XPSD	3164•DATA				
N8NEP	52/XPSD	3098•DATA				
BFL8	55/XPSD	3110•DATA				
PAGE	6/BOPEN					
PAGE	6/BOPEN	7•CNAME				
PANEL	85/XPSD	3193•DATA				
POWOFF	73/XPSD	3156•DATA				
POWON	72/XPSD	3152•DATA				
PULSE1	74/MTW	3160•DATA				
PULSE2	75/MTW	3161•DATA				
PULSE3	76/MTW	3162•DATA				

PULSE4	77/MTW	3163•DATA					
RESTART	3234/LPSD	3236/LPSD	3238/LPSD	3240/LPSD	3242/LPSD	3244/LPSD	3246/LPSD
	3248/LPSD	3250/LPSD	3252/LPSD	3254/LPSD	3257•DATA		
RETURN	318•BIR	3091/BCR					
SPINTR	47•ASECT						
STACK	54/XPSD	3106•DATA					
START	316•LW	3206/BCR	3208/BCR	3210/BCR	3212/BCR	3214/BCR	3216/BCR
	3218/BCR	3220/BCR	3222/BCR	3224/BCR	3226/BCR	3228/BCR	3257•DATA
TIMER	58/XPSD	3122•DATA					
TRAPUN	3128•DATA	3219•WAIT					
TRAP4A	3141•DATA	3225•WAIT					
TRAP4B	3145•DATA	3227•WAIT					
TRAP4C	3100•DATA	3205•WAIT					
TRAP41	3104•DATA	3207•WAIT					
TRAP42	3108•DATA	3209•WAIT					
TRAP43	3112•DATA	3211•WAIT					
TRAP44	3116•DATA	3213•WAIT					
TRAP45	3120•DATA	3215•WAIT					
TRAP46	3124•DATA	3217•WAIT					
TRAP48	3133•DATA	3221•WAIT					
TRAP49	3137•DATA	3223•WAIT					
TUNASS	59/XPSD	64/XPSD	65/XPSD	66/XPSD	67/XPSD	3126•DATA	
T1	1953/STW	1954/LW	1974/STW	1976/STW	1978/LW	2000/STW	2002/STW
	2004/LW	2026/STW	2028/STW	2030/LW	2050/STW	2052/STW	2054/LW
UNASIN	3259•DATA						
UNIMP	79/XPSD	86/XPSD	87/XPSD	3168•DATA			
	53/XPSD	3102•DATA					
W1	2905/LPSD	2908•GEN					
W2	2930/LPSD	2933•GEN					
W3	2954/LPSD	2957•GEN					
W4	2979/LPSD	2982•GEN					
W5	3003/LPSD	3006•GEN					
W6	3028/LPSD	3031•GEN					
W7	3052/LPSD	3055•GEN					
W8	3077/LPSD	3080•GEN					
\$	318•BIR	326/BCR	330/BCS	331/BCR	332/BIR	334/BCS	345/BCR
	350/BCS	351/BCS	352/BIR	354/BCS	365/BCR	370/BCS	371/BCS
	372/BIR	374/BCS	385/BCR	390/BCS	392/BCS	394/BCS	405/BCR
	410/BCS	411/BCS	412/BIR	414/BCS	425/BCR	430/BCS	431/BCS
	432/BIR	434/BCS	445/BCR	450/BCS	451/BCS	452/BIR	454/BCS
	465/BCR	470/BCS	471/BCS	472/BIR	474/BCS	485/BCR	490/BCS
	491/BCS	492/BIR	494/BCS	505/BCR	510/BCS	511/BCS	512/BIR
	514/BCS	525/BCR	530/BCS	531/BCS	532/BIR	534/BCS	545/BCR
	550/BCS	551/BCS	552/BIR	554/BCS	565/BCR	570/BCS	571/BCS

572/BCR	574/PCS	585/BCR	590/BCS	591/BCS	592/BCR	594/BCS
605/BCR	610/PCS	611/BCS	612/BCR	614/BCS	625/BCR	630/BCS
631/BCS	632/BIR	634/BCS	645/BCR	650/BCS	651/BCS	652/BIR
654/BCS	665/BCR	670/BCS	671/BCS	672/BIR	674/BCS	685/BCR
690/BCS	691/BCS	692/BIR	694/BCS	705/BCR	710/BCS	711/BCS
712/PIR	714/BCS	725/BCR	730/BCS	731/BCS	732/BIR	734/BCS
745/BCR	750/BCS	751/BCS	752/BIR	754/BCS	765/BCR	770/BCS
771/BCS	772/BIR	774/BCS	785/BCR	790/BCS	791/BCS	792/BIR
794/BCS	805/PCR	810/PCS	811/BCS	812/BIR	814/BCS	825/BCR
830/BCS	831/BCS	832/BIR	834/BCS	845/BCR	850/BCS	851/BCS
852/BIR	854/BCS	865/BCR	870/BCS	871/BCS	872/BIR	874/BCS
885/BCR	890/PCS	891/BCS	892/BIR	894/BCS	905/BCR	910/BCS
911/BCS	912/BIR	914/BCS	925/BCR	930/BCS	931/BCS	932/BIR
934/BCS	945/BCR	950/BCS	951/BCS	952/BIR	954/BCS	965/BCR
970/BCR	971/BCR	972/BIR	974/BCS	985/BCR	990/BCS	991/BCR
992/BIR	994/BCS	1006/BCR	1011/BCS	1012/BCR	1013/BIR	1015/BCS
1027/BCR	1033/BCS	1034/BCR	1035/BIR	1037/BCS	1048/BCR	1053/BCS
1054/BCS	1055/BIR	1057/BCS	1068/BCR	1073/BCS	1074/BCS	1075/BIR
1077/BCS	1088/BCR	1093/BCS	1094/BCS	1095/BIR	1097/BCS	1108/BCR
1113/BCS	1114/BCS	1115/BIR	1117/BCS	1128/BCR	1133/BCS	1134/BCS
1135/BIR	1137/BCS	1148/BCR	1153/BCS	1154/BCS	1155/BIR	1157/BCS
1168/BCR	1173/BCS	1174/BCS	1175/BIR	1177/BCS	1188/BCR	1193/BCS
1194/BCS	1195/BIR	1197/BCS	1208/BCR	1213/BCS	1214/BCS	1215/BIR
1217/BCS	1228/PCR	1233/BCS	1234/BCS	1235/BIR	1237/BCS	1248/BCR
1253/BCS	1254/PCS	1255/BIR	1257/BCS	1268/BCR	1273/BCS	1274/BCS
1275/BIR	1277/BCS	1288/BCR	1293/BCS	1294/BCS	1295/BIR	1297/BCS
1308/BCR	1313/BCS	1314/BCS	1315/BIR	1317/BCS	1328/BCR	1333/BCS
1334/BCS	1335/BIR	1337/BCS	1348/BCR	1353/BCS	1354/BCS	1355/BIR
1357/BCS	1368/BCR	1373/BCS	1374/BCS	1375/BIR	1377/BCS	1388/BCR
1393/BCS	1394/BCS	1395/BIR	1397/BCS	1408/BCR	1413/BCS	1414/BCS
1415/BIR	1417/BCS	1428/BCR	1433/BCS	1434/BCS	1435/BIR	1437/BCS
1448/BCR	1453/BCS	1454/BCS	1455/BIR	1457/BCS	1468/BCR	1473/BCS
1474/BCS	1475/BIR	1477/BCS	1488/BCR	1493/BCS	1494/BCS	1495/BIR
1497/BCS	1508/BCR	1513/BCS	1514/BCS	1515/BIR	1517/BCS	1528/BCR
1533/BCS	1534/BCS	1535/BIR	1537/BCS	1548/BCR	1553/BCS	1554/BCS
1555/BIR	1557/BCS	1568/BCR	1573/BCS	1574/BCS	1575/BIR	1577/BCS
1588/BCR	1593/BCS	1594/BCS	1595/BIR	1597/BCS	1608/BCR	1613/BCS
1614/BCS	1615/PIR	1617/BCS	1628/BCR	1633/BCS	1634/BCS	1635/BIR
1637/BCS	1648/BCR	1653/BCS	1654/BCS	1655/BIR	1657/BCS	1668/BCR
1673/BCR	1674/BCR	1675/BIR	1677/BCS	1688/BCR	1694/BCS	1695/BCR
1696/BIR	1698/BCS	1710/BCR	1717/BCS	1718/BCR	1719/BIR	1721/BCS
1733/BCR	1740/BCS	1741/BCR	1742/BCR	1744/BCS	1756/BCR	1763/BCS
1764/BCR	1765/BIR	1767/BCS	1779/BCR	1786/BCS	1787/BCR	1788/BIR
1790/BCS	1802/BCR	1808/PCS	1809/BCR	1810/BIR	1812/BCS	1824/BCR
1830/BCS	1831/BCR	1832/BIR	1834/BCS	1846/BCR	1852/BCS	1853/BCR
1854/BIR	1856/BCS	1868/BCR	1874/BCS	1875/BCR	1876/BIR	1878/BCS
1889/BCR	1894/BCS	1895/BCR	1896/BIR	1898/BCS	1909/BCR	1914/BCS
1915/BCS	1916/BIR	1918/BCS	1929/BCR	1934/BCR	1935/BCR	1936/BIR
1938/BCS	1949/BCR	1955/BCS	1956/BCR	1957/BIR	1959/BCS	1970/BCR
1980/BCS	1981/BIR	1982/BIR	1984/BCS	1995/BCR	2006/BCS	2007/BCR
2008/BIR	2010/BCS	2021/BCR	2031/BCS	2032/BCR	2033/BIR	2035/BCS
2046/BCR	2055/BCS	2056/BCR	2057/BIR	2059/BCS	2070/BCR	2074/BCS
2075/BIR	2077/PCS	2088/BCR	2092/BCR	2093/BIR	2095/BCS	2106/BCR
2110/BCS	2111/BCR	2112/BIR	2114/BCS	2125/BCR	2130/BCR	2131/BCR
2132/BIR	2134/BCS	2145/PCR	2150/BCS	2151/BCR	2152/BIR	2154/BCS
2165/BCR	2169/BCS	2170/BCR	2171/BIR	2173/BCS	2184/BCR	2188/BIR
2190/BCS	2191/BIR	2192/BIR	2194/BCS	2205/BCR	2209/BIR	2210/BCR
2212/BCS	2213/BCR	2214/BIR	2216/BCS	2227/BCR	2231/BIR	2233/BCS
2234/BCR	2235/BIR	2237/BCS	2249/BCR	2253/BIR	2255/BCS	2256/BCR
2257/BIR	2259/BCS	2270/BCR	2274/BIR	2276/BCS	2277/BCR	2278/BIR
2280/BCS	2291/BCR	2295/BIR	2297/BCS	2298/BCR	2299/BIR	2301/BCS
2312/BCR	2316/BIR	2318/BCS	2319/BCR	2320/BIR	2322/BCS	2333/BCR
2337/BIR	2339/BCS	2340/BCR	2341/BIR	2343/BCS	2354/BCR	2358/BIR
2360/BCS	2361/BIR	2362/BIR	2364/BCS	2375/BCR	2379/BIR	2381/BCS
2382/BCR	2383/BIR	2385/BCS	2396/BCR	2400/BIR	2402/BCS	2403/BCR
2404/BIR	2406/BCS	2417/BCR	2421/BIR	2423/BCS	2424/BCR	2425/BIR
2427/BCS	2438/BCR	2442/BIR	2444/BCS	2445/BCR	2446/BIR	2448/BCS
2459/BCR	2463/BIR	2465/BCS	2466/BCR	2467/BIR	2469/BCS	2480/BCR
2484/BIR	2486/BCS	2487/BCR	2488/BIR	2490/BCS	2501/BCR	2505/BIR
2507/BCS	2508/BCR	2509/BIR	2511/BCS	2522/BCR	2526/BIR	2528/BCS
2529/BCR	2530/BIR	2532/BCS	2543/BCR	2547/BIR	2549/BCS	2550/BCR
2551/BIR	2553/BCS	2564/BCR	2568/BIR	2570/BCS	2571/BCR	2572/BIR
2574/BCS	2585/BCR	2589/BIR	2591/BCS	2592/BCR	2593/BIR	2595/BCS
2606/BCR	2610/BIR	2612/BCS	2613/BCR	2614/BIR	2616/BCS	2627/BCR
2631/BIR	2633/BCS	2634/BCR	2635/BIR	2637/BCS	2648/BCR	2662/BIR
2654/BCS	2655/BCR	2656/BIR	2658/BCS	2669/BCR	2673/BIR	2675/BCS
2676/BCR	2677/BIR	2679/BCS	2690/BCR	2694/BIR	2696/BCS	2697/BCR

2698/BIR	2700/BCS	2711/BCR	2715/BIR	2717/BCS	2718/BCR	2719/BIR
2721/BCS	2732/BCR	2736/BIR	2738/BCS	2739/BCR	2740/BIR	2742/BCS
2753/BCR	2757/BIR	2759/BCS	2760/BCR	2761/BIR	2763/BCS	2774/BCR
2778/BIR	2780/BCS	2781/BCR	2782/BIR	2784/BCS	2795/BCR	2799/BIR
2801/BCS	2802/BCR	2803/BIR	2805/BCS	2816/BCR	2820/BIR	2822/BCS
2823/BCR	2824/BIR	2826/BCS	2837/BCR	2841/BIR	2843/BCS	2844/BCR
2845/BIR	2847/BCS	2858/BCR	2862/BIR	2864/BCS	2865/BCR	2866/BIR
2863/BCS	2879/BCR	2883/BIR	2884/BCR	2886/BCS	2887/BCR	2888/BIR
2890/BCS	2902/BCR	2908/GEN	2911/BCS	2912/BCR	2913/AIR	2915/BCS
2927/BCR	2933/GEN	2936/BCR	2937/BIR	2939/BCS	2951/BCR	2957/GEN
2960/BCS	2961/BCR	2962/BIR	2964/BCS	2976/BCR	2982/GEN	2985/BCR
2986/BIR	2988/BCS	3000/BCR	3006/GEN	3009/BCR	3010/BCR	3011/BIR
3013/BCS	3025/BCR	3031/GEN	3034/BCS	3035/BIR	3037/BCS	3049/BCR
3055/GEN	3058/BCR	3059/BCR	3060/BIR	3062/BCS	3074/BCR	3080/GEN
3083/BCS	3084/BIR	3086/BCS				