

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
2				*****
3	*			
4	*			*Testcase IEEE LOAD FP INTEGER
5	*			Test case capability includes IEEE exceptions trappable and
6	*			otherwise. Test results, FPCR flags, and any DXC are saved for all
7	*			tests. Load FP Integer does not set the condition code.
8	*			
9	*			
10	*			*****
11	*			** IMPORTANT! **
12	*			*****
13	*			
14	*			This test uses the Hercules Diagnose X'008' interface
15	*			to display messages and thus your .tst runtest script
16	*			MUST contain a "DIAG8CMD ENABLE" statement within it!
17	*			
18	*			
19	*			*****
21	*			*****
22	*			
23	*			bfp-003-loadfpi.asm
24	*			
25	*			This assembly-language source file is part of the
26	*			Hercules Binary Floating Point Validation Package
27	*			by Stephen R. Orso
28	*			
29	*			Copyright 2016 by Stephen R Orso.
30	*			Runttest *Compare dependency removed by Fish on 2022-03-08
31	*			PADCSECT macro/usage removed by Fish on 2022-03-08
32	*			
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LOC	OBJECT CODE	ADDR1	ADDR2	STMT
57	*	OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT		
58	*	(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE		
59	*	OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.		
60	*			
61	*****	*****	*****	*****
63	*****	*****	*****	*****
64	*			
65	*	Tests the following three conversion instructions		
66	*	LOAD FP INTEGER (short BFP, RRE)		
67	*	LOAD FP INTEGER (long BFP, RRE)		
68	*	LOAD FP INTEGER (extended BFP, RRE)		
69	*	LOAD FP INTEGER (short BFP, RRF-e)		
70	*	LOAD FP INTEGER (long BFP, RRF-e)		
71	*	LOAD FP INTEGER (extended BFP, RRF-e)		
72	*			
73	*	Test data is compiled into this program. The test script that runs		
74	*	this program can provide alternative test data through Hercules R		
75	*	commands.		
76	*			
77	*	Test Case Order		
78	*	1) Short BFP inexact masking/trapping & SNaN/QNaN tests		
79	*	2) Short BFP rounding mode tests		
80	*	3) Long BFP inexact masking/trapping & SNaN/QNaN tests		
81	*	4) Long BFP rounding mode tests		
82	*	5) Extended BFP inexact masking/trapping & SNaN/QNaN tests		
83	*	6) Extended BFP rounding mode tests		
84	*			
85	*	Provided test data is 1, 1.5, SNaN, and QNaN.		
86	*	The second value will trigger an inexact exception when LOAD FP		
87	*	INTEGER is executed. The final value will trigger an invalid		
88	*	exception.		
89	*	Provided test data for rounding tests is		
90	*	-9.5, -5.5, -2.5, -1.5, -0.5, +0.5, +1.5, +2.5, +5.5, +9.5		
91	*	This data is taken from Table 9-11 on page 9-16 of SA22-7832-10.		
92	*			
93	*	Three input test data sets are provided, one each for short, long,		
94	*	and extended precision BFP inputs.		
95	*			
96	*	Also tests the following floating point support instructions		
97	*	LOAD (Short)		
98	*	LOAD (Long)		
99	*	LFPC (Load Floating Point Control Register)		
100	*	SRNMB (Set BFP Rounding Mode 2-bit)		
101	*	SRNMB (Set BFP Rounding Mode 3-bit)		
102	*	STORE (Short)		
103	*	STORE (Long)		
104	*	STFPC (Store Floating Point Control Register)		
105	*			
106	*****	*****	*****	*****

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				108 *
				109 * Note: for compatibility with the z/CMS test rig, do not change
				110 * or use R11, R14, or R15. Everything else is fair game.
				111 *
00000000	0000AE0B	112	BFPLDFPI START 0	
00000000	00000001	113	R0 EQU 0	Work register for cc extraction
00000001	00000001	114	R1 EQU 1	Available
00000002	00000001	115	R2 EQU 2	Holds count of test input values
00000003	00000001	116	R3 EQU 3	Points to next test input value(s)
00000004	00000001	117	R4 EQU 4	Available
00000005	00000001	118	R5 EQU 5	Available
00000006	00000001	119	R6 EQU 6	Available
00000007	00000001	120	R7 EQU 7	Pointer to next result value(s)
00000008	00000001	121	R8 EQU 8	Pointer to next FPCR result
00000009	00000001	122	R9 EQU 9	Available
0000000A	00000001	123	R10 EQU 10	Pointer to test address list
0000000B	00000001	124	R11 EQU 11	**Reserved for z/CMS test rig
0000000C	00000001	125	R12 EQU 12	Holds number of test cases in set
0000000D	00000001	126	R13 EQU 13	Mainline return address
0000000E	00000001	127	R14 EQU 14	**Return address for z/CMS test rig
0000000F	00000001	128	R15 EQU 15	**Base register on z/CMS or Hyperion
		129	*	
		130	*	Floating Point Register equates to keep the cross reference clean
		131	*	
00000000	00000001	132	FPR0 EQU 0	
00000001	00000001	133	FPR1 EQU 1	
00000002	00000001	134	FPR2 EQU 2	
00000003	00000001	135	FPR3 EQU 3	
00000004	00000001	136	FPR4 EQU 4	
00000005	00000001	137	FPR5 EQU 5	
00000006	00000001	138	FPR6 EQU 6	
00000007	00000001	139	FPR7 EQU 7	
00000008	00000001	140	FPR8 EQU 8	
00000009	00000001	141	FPR9 EQU 9	
0000000A	00000001	142	FPR10 EQU 10	
0000000B	00000001	143	FPR11 EQU 11	
0000000C	00000001	144	FPR12 EQU 12	
0000000D	00000001	145	FPR13 EQU 13	
0000000E	00000001	146	FPR14 EQU 14	
0000000F	00000001	147	FPR15 EQU 15	
		148	*	
00000000	00000000	149	USING *,R15	
00000000	0000AA40	150	USING HELPERS,R12	
		151	*	
		152	*	Above works on real iron (R15=0 after sysclear)
		153	*	and in z/CMS (R15 points to start of load module)
		154	*	
		156	*****	
		157	*	
		158	*	Low core definitions, Restart PSW, and Program Check Routine.
		159	*	
		160	*****	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
00000000 0000008E	0000 0000 0000 0000	00000000 00000150	0000008E 00000000	162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177	ORG PCINTCD DS * PCOLDPSW EQU BFPLDFPI+X'8E' H BFPLDFPI+X'150' z/Arch Program check old PSW ORG DC BFPLDFPI+X'1A0' X'0000001800000000',AD(START) ORG DC BFPLDFPI+X'1D0' X'0000000000000000',AD(PROGCHK) * Program check routine. If Data Exception, continue execution at * the instruction following the program check. Otherwise, hard wait. * No need to collect data. All interesting DXC stuff is captured * in the FPCR. *	Program check interruption code z/Arch Program check old PSW z/Arch Restart PSW z/Arch Program check NEW PSW * Program check routine. If Data Exception, continue execution at * the instruction following the program check. Otherwise, hard wait. * No need to collect data. All interesting DXC stuff is captured * in the FPCR.
00000090 000001A0	00000001 80000000	00000090 000001A0	00000000 00000000	178 179 180 181 182	ORG PROGCHK DS CLI JNE LPSWE PCINTCD+1,X'07' PCNOTDTA PCOLDPSW	BFPLDFPI+X'200' 0H Program check occurred... Data Exception? ..no, hardwait (not sure if R15 is ok) ..yes, resume program execution
000001B0 000001D0	00000000 00000000	000001B0 000001D0	00000000 00000000	184 185 186 187	PCNOTDTA L BAS LM	STM R12,AHELPERS R13,PGMCK R0,R15,SAVEREGS
000001E0	000001E0	00000200		188	PROGCHK	Save registers
00000200 00000200	9507 F08F	0000008F		189	LPSWE	Get address of helper subroutines
00000204	A774 0004	0000020C		190	PROGPSW	Report this unexpected program check
00000208	B2B2 F150	00000150		191	PROGPSW	..no, hardwait (not sure if R15 is ok)
0000020C	900F F23C	0000023C		192	PROGPSW	..yes, resume program execution
00000210	58C0 F27C	0000027C		193	FAIL	Not data exception, enter disabled wait
00000214	4DD0 C000	0000AA40		194	FAILPSW	X'0002000000000000',XL6'00',X'DEAD' Abnormal end
00000218	980F F23C	0000023C		195	SAVEREGS	Not data exception, enter disabled wait
0000021C	12EE			196	DC	Registers save area
0000021E	077E			197	DC	A(HELPERS)
00000220	B2B2 F228	00000228		198	DC	Address of helper subroutines
00000228	00020000 00000000			199	DC	
00000238	B2B2 F2E0	000002E0		200	DC	
0000023C	00000000 00000000			201	DC	
0000027C	0000AA40			202	DC	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
				197 ****		
				198 *		
				199 * Main program. Enable Advanced Floating Point, process test cases.		
				200 *		
				201 ****		
00000280				203 START DS 0H		
00000280	B600 F2F0	000002F0	204	STCTL R0,R0,CTRLR0	Store CR0 to enable AFP	
00000284	9604 F2F1	000002F1	205	OI CTRLR0+1,X'04'	Turn on AFP bit	
00000288	B700 F2F0	000002F0	206	LCTL R0,R0,CTRLR0	Reload updated CR0	
			207 *			
0000028C	41A0 F2FC	000002FC	208	LA R10,SHORTS	Point to short BFP test inputs	
00000290	4DD0 F35C	0000035C	209	BAS R13,FIEBR	Convert short BFP to integer short BFP	
00000294	41A0 F32C	0000032C	210	LA R10,RMSHORTS	Point to short BFP rounding test data	
00000298	4DD0 F3A2	000003A2	211	BAS R13,FIEBRA	Convert using all rounding mode options	
			212 *			
0000029C	41A0 F30C	0000030C	213	LA R10,LONGS	Point to long BFP test inputs	
000002A0	4DD0 F474	00000474	214	BAS R13,FIDBR	Convert long BFP to integer long BFP	
000002A4	41A0 F33C	0000033C	215	LA R10,RMLONGS	Point to long BFP rounding test data	
000002A8	4DD0 F4BA	000004BA	216	BAS R13,FIDBRA	Convert using all rounding mode options	
			217 *			
000002AC	41A0 F31C	0000031C	218	LA R10,EXTDS	Point to extended BFP test inputs	
000002B0	4DD0 F58C	0000058C	219	BAS R13,FIXBR	Convert extd BFP to integer extd BFP	
000002B4	41A0 F34C	0000034C	220	LA R10,RMEXTDS	Point to extended BFP rounding test data	
000002B8	4DD0 F5DE	000005DE	221	BAS R13,FIXBRA	Convert using all rounding mode options	
			222 *			
			223 ****			
			224 *	Verify test results...		
			225 ****			
			226 *			
000002BC	58C0 F27C	0000027C	227	L R12,AHELPERS	Get address of helper subroutines	
000002C0	4DD0 C0A0	0000AAE0	228	BAS R13,VERISUB	Go verify results	
000002C4	12EE		229	LTR R14,R14	Was return address provided?	
000002C6	077E		230	BNZR R14	Yes, return to z/CMS test rig.	
000002C8	B2B2 F2D0	000002D0	231	LPSWE GOODPSW	Load SUCCESS PSW	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
000002D0				233 DS 0D	Ensure correct alignment for PSW	
000002D0	00020000 00000000			234 GOODPSW DC X'0002000000000000'	,AD(0) Normal end - disabled wait	
000002E0	00020000 00000000			235 FAILPSW DC X'0002000000000000'	,XL6'00',X'0BAD' Abnormal end	
000002F0	00000000			236 *		
000002F4	00000000			237 CTLR0 DS F		
000002F8	F8000000			238 FPCREGNT DC X'00000000'	FPCR, trap all IEEE exceptions, zero flags	
				239 FPCREGTR DC X'F8000000'	FPCR, trap no IEEE exceptions, zero flags	
				240 *		
				241 * Input values parameter list, four fullwords:		
				242 * 1) Count,		
				243 * 2) Address of inputs,		
				244 * 3) Address to place results, and		
				245 * 4) Address to place DXC/Flags/cc values.		
				246 *		
000002FC				247 SHORTS DS 0F	Inputs for short BFP testing	
000002FC	00000007			248 DC A(SBFPCT/4)		
00000300	000006DC			249 DC A(SBFPIN)		
00000304	00001000			250 DC A(SBFPOUT)		
00000308	00001080			251 DC A(SBFPFLGS)		
				252 *		
0000030C				253 LONGS DS 0F	Inputs for long BFP testing	
0000030C	00000007			254 DC A(LBFPCT/8)		
00000310	00000728			255 DC A(LBFPIN)		
00000314	00002000			256 DC A(LBFPOUT)		
00000318	00002100			257 DC A(LBFPFLGS)		
				258 *		
0000031C				259 EXTDS DS 0F	Inputs for Extended BFP testing	
0000031C	00000007			260 DC A(XBFPCT/16)		
00000320	000007C0			261 DC A(XBFPIN)		
00000324	00003000			262 DC A(XBFPOUT)		
00000328	00003200			263 DC A(XBFPMFLGS)		
				264 *		
0000032C				265 RMSHORTS DS 0F	Inputs for short BFP rounding testing	
0000032C	0000000C			266 DC A(SBFPRMCT/4)		
00000330	000006F8			267 DC A(SBFPINRM)		
00000334	00001100			268 DC A(SBFPRMO)		
00000338	00001400			269 DC A(SBFPRMOM)		
				270 *		
0000033C				271 RMLONGS DS 0F	Inputs for long BFP rounding testing	
0000033C	0000000C			272 DC A(LBFPCT/8)		
00000340	00000760			273 DC A(LBFPINRM)		
00000344	00002200			274 DC A(LBFPMO)		
00000348	00002800			275 DC A(LBFPROM)		
				276 *		
0000034C				277 RMEXTDS DS 0F	Inputs for extd BFP rounding testing	
0000034C	0000000C			278 DC A(XBFPCT/16)		
00000350	00000830			279 DC A(XBFPINRM)		
00000354	00003300			280 DC A(XBFPMO)		
00000358	00003F00			281 DC A(XBFPMOM)		

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
				283 *****		
				284 *		
				285 * Round short BFP inputs to integer short BFP. A pair of results is		
				286 * generated for each input: one with all exceptions non-trappable, and		
				287 * the second with all exceptions trappable. The FPCR is stored for		
				288 * each result.		
				289 *		
				290 *****		
0000035C				292 FIEBR DS 0H	Round short BFP inputs to integer BFP	
0000035C	9823 A000	00000000		293 LM R2,R3,0(R10)	Get count and address of test input values	
00000360	9878 A008	00000008		294 LM R7,R8,8(R10)	Get address of result area and flag area.	
00000364	1222			295 LTR R2,R2	Any test cases?	
00000366	078D			296 BZR R13	..No, return to caller	
00000368	0DC0			297 BASR R12,0	Set top of loop	
				298 *		
0000036A	7800 3000	00000000		299 LE FPR0,0(,R3)	Get short BFP test value	
0000036E	B29D F2F4	000002F4		300 LFPC FPCREGNT	Set exceptions non-trappable	
00000372	B357 0010			301 FIEBR FPR1,0,FPR0	Cvt float in FPR0 to int float in FPR1	
00000376	7010 7000	00000000		302 STE FPR1,0(,R7)	Store short BFP result	
0000037A	B29C 8000	00000000		303 STFPC 0(R8)	Store resulting FPCR flags and DXC	
				304 *		
0000037E	B29D F2F8	000002F8		305 LFPC FPCREGTR	Set exceptions trappable	
00000382	B374 0010			306 LZER FPR1	Eliminate any residual results	
00000386	B357 0010			307 FIEBR FPR1,0,FPR0	Cvt float in FPR0 to int float in FPR1	
0000038A	7010 7004	00000004		308 STE FPR1,4(,R7)	Store short BFP result	
0000038E	B29C 8004	00000004		309 STFPC 4(R8)	Store resulting FPCR flags and DXC	
				310 *		
00000392	4130 3004	00000004		311 LA R3,4(,R3)	Point to next input value	
00000396	4170 7008	00000008		312 LA R7,8(,R7)	Point to next rounded result value pair	
0000039A	4180 8008	00000008		313 LA R8,8(,R8)	Point to next FPCR result area	
0000039E	062C			314 BCTR R2,R12	Convert next input value.	
000003A0	07FD			315 BR R13	All converted; return.	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				317 **** 318 *
				319 * Convert short BFP to integer BFP using each possible rounding mode. 320 * Ten test results are generated for each input. A 48-byte test result 321 * section is used to keep results sets aligned on a quad-double word.
				322 * 323 * The first four tests use rounding modes specified in the FPCR with 324 * the IEEE Inexact exception suppressed. SRNM (2-bit) is used for 325 * the first two FPCR-controlled tests and SRNMB (3-bit) is used for 326 * the last two To get full coverage of that instruction pair. 327 * 328 * The next six results use instruction-specified rounding modes. 329 * 330 * The default rounding mode (0 for RNTE) is not tested in this section; 331 * prior tests used the default rounding mode. RNTE is tested 332 * explicitly as a rounding mode in this section. 333 * 334 ****
000003A2	9823 A000	00000000	336	FIEBRA LM R2,R3,0(R10) Get count and address of test input values
000003A6	9878 A008	00000008	337	LM R7,R8,8(R10) Get address of result area and flag area.
000003AA	1222		338	LTR R2,R2 Any test cases?
000003AC	078D		339	BZR R13 ..No, return to caller
000003AE	0DC0		340	BASR R12,0 Set top of loop
000003B0	7800 3000	00000000	342	LE FPR0,0(,R3) Get short BFP test value
			343 *	
			344 *	Test cases using rounding mode specified in the FPCR
			345 *	
000003B4	B29D F2F4	000002F4	346	LFPC FPCREGNT Set exceptions non-trappable, clear flags
000003B8	B299 0001	00000001	347	SRNM 1 SET FPCR to RZ, towards zero.
000003BC	B357 0410		348	FIEBRA FPR1,0,FPR0,B'0100' FPCR ctl'd rounding, inexact masked
000003C0	7010 7000	00000000	349	STE FPR1,0*4(,R7) Store integer BFP result
000003C4	B29C 8000	00000000	350	STFPC 0(R8) Store resulting FPCR flags and DXC
			351 *	
000003C8	B29D F2F4	000002F4	352	LFPC FPCREGNT Set exceptions non-trappable, clear flags
000003CC	B299 0002	00000002	353	SRNM 2 SET FPCR to RP, to +infinity
000003D0	B357 0410		354	FIEBRA FPR1,0,FPR0,B'0100' FPCR ctl'd rounding, inexact masked
000003D4	7010 7004	00000004	355	STE FPR1,1*4(,R7) Store integer BFP result
000003D8	B29C 8004	00000004	356	STFPC 1*4(R8) Store resulting FPCR flags and DXC
			357 *	
000003DC	B29D F2F4	000002F4	358	LFPC FPCREGNT Set exceptions non-trappable, clear flags
000003E0	B2B8 0003	00000003	359	SRNMB 3 SET FPCR to RM, to -infinity
000003E4	B357 0410		360	FIEBRA FPR1,0,FPR0,B'0100' FPCR ctl'd rounding, inexact masked
000003E8	7010 7008	00000008	361	STE FPR1,2*4(,R7) Store integer BFP result
000003EC	B29C 8008	00000008	362	STFPC 2*4(R8) Store resulting FPCR flags and DXC
			363 *	
000003F0	B29D F2F4	000002F4	364	LFPC FPCREGNT Set exceptions non-trappable, clear flags
000003F4	B2B8 0007	00000007	365	SRNMB 7 RPS, Prepare for Shorter Precision
000003F8	B357 0410		366	FIEBRA FPR1,0,FPR0,B'0100' FPCR ctl'd rounding, inexact masked
000003FC	7010 700C	0000000C	367	STE FPR1,3*4(,R7) Store integer BFP result
00000400	B29C 800C	0000000C	368	STFPC 3*4(R8) Store resulting FPCR flags and DXC
			369 *	
			370 *	Test cases using rounding mode specified in the instruction M3 field
			371 *	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
00000404	B29D F2F4		000002F4	372	LFPC FPCREGNT	Set exceptions non-trappable, clear flags
00000408	B357 1010			373	FIEBRA FPR1,1,FPR0,B'0000'	RNTA, to nearest, ties away
0000040C	7010 7010		00000010	374	STE FPR1,4*4(,R7)	Store integer BFP result
00000410	B29C 8010		00000010	375	STFPC 4*4(R8)	Store resulting FPCR flags and DXC
				376 *		
00000414	B29D F2F4		000002F4	377	LFPC FPCREGNT	Set exceptions non-trappable, clear flags
00000418	B357 3010			378	FIEBRA FPR1,3,FPR0,B'0000'	RFS, prepare for shorter precision
0000041C	7010 7014		00000014	379	STE FPR1,5*4(,R7)	Store integer BFP result
00000420	B29C 8014		00000014	380	STFPC 5*4(R8)	Store resulting FPCR flags and DXC
				381 *		
00000424	B29D F2F4		000002F4	382	LFPC FPCREGNT	Set exceptions non-trappable, clear flags
00000428	B357 4010			383	FIEBRA FPR1,4,FPR0,B'0000'	RNTE, to nearest, ties to even
0000042C	7010 7018		00000018	384	STE FPR1,6*4(,R7)	Store integer BFP result
00000430	B29C 8018		00000018	385	STFPC 6*4(R8)	Store resulting FPCR flags and DXC
				386 *		
00000434	B29D F2F4		000002F4	387	LFPC FPCREGNT	Set exceptions non-trappable, clear flags
00000438	B357 5010			388	FIEBRA FPR1,5,FPR0,B'0000'	RZ, toward zero
0000043C	7010 701C		0000001C	389	STE FPR1,7*4(,R7)	Store integer BFP result
00000440	B29C 801C		0000001C	390	STFPC 7*4(R8)	Store resulting FPCR flags and DXC
				391 *		
00000444	B29D F2F4		000002F4	392	LFPC FPCREGNT	Set exceptions non-trappable, clear flags
00000448	B357 6010			393	FIEBRA FPR1,6,FPR0,B'0000'	RP, to +inf
0000044C	7010 7020		00000020	394	STE FPR1,8*4(,R7)	Store integer BFP result
00000450	B29C 8020		00000020	395	STFPC 8*4(R8)	Store resulting FPCR flags and DXC
				396 *		
00000454	B29D F2F4		000002F4	397	LFPC FPCREGNT	Set exceptions non-trappable, clear flags
00000458	B357 7010			398	FIEBRA FPR1,7,FPR0,B'0000'	RM, to -inf
0000045C	7010 7024		00000024	399	STE FPR1,9*4(,R7)	Store integer BFP result
00000460	B29C 8024		00000024	400	STFPC 9*4(R8)	Store resulting FPCR flags and DXC
				401 *		
00000464	4130 3004		00000004	402	LA R3,4(,R3)	Point to next input values
00000468	4170 7030		00000030	403	LA R7,12*4(,R7)	Point to next short BFP converted values
0000046C	4180 8030		00000030	404	LA R8,12*4(,R8)	Point to next FPCR/CC result area
00000470	062C			405	BCTR R2,R12	Convert next input value.
00000472	07FD			406	BR R13	All converted; return.

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
				408 ****		
				409 *		
				410 * Round long BFP inputs to integer long BFP. A pair of results is		
				411 * generated for each input: one with all exceptions non-trappable, and		
				412 * the second with all exceptions trappable. The FPCR is stored for		
				413 * each result.		
				414 *		
				415 ****		
00000474	9823 A000	00000000	417	FIDBR LM R2,R3,0(R10)	Get count and address of test input values	
00000478	9878 A008	00000008	418	LM R7,R8,8(R10)	Get address of result area and flag area.	
0000047C	1222		419	LTR R2,R2	Any test cases?	
0000047E	078D		420	BZR R13	..No, return to caller	
00000480	0DC0		421	BASR R12,0	Set top of loop	
			422 *			
00000482	6800 3000	00000000	423	LD FPR0,0(,R3)	Get long BFP test value	
00000486	B29D F2F4	000002F4	424	LFPC FPCREGNT	Set exceptions non-trappable	
0000048A	B35F 0010		425	FIDBR FPR1,0,FPR0	Cvt float in FPR0 to int float in FPR1	
0000048E	6010 7000	00000000	426	STD R1,0(,R7)	Store long BFP result	
00000492	B29C 8000	00000000	427	STFPC 0(R8)	Store resulting FPCR flags and DXC	
			428 *			
00000496	B29D F2F8	000002F8	429	LFPC FPCREGTR	Set exceptions trappable	
0000049A	B375 0010		430	LZDR FPR1	Eliminate any residual results	
0000049E	B35F 0010		431	FIDBR FPR1,0,FPR0	Cvt float in FPR0 to int float in FPR1	
000004A2	6010 7008	00000008	432	STD FPR1,8(,R7)	Store int-32 result	
000004A6	B29C 8004	00000004	433	STFPC 4(R8)	Store resulting FPCR flags and DXC	
			434 *			
000004AA	4130 3008	00000008	435	LA R3,8(,R3)	Point to next input value	
000004AE	4170 7010	00000010	436	LA R7,16(,R7)	Point to next rounded long BFP result pair	
000004B2	4180 8008	00000008	437	LA R8,8(,R8)	Point to next FPCR result area	
000004B6	062C		438	BCTR R2,R12	Convert next input value.	
000004B8	07FD		439	BR R13	All converted; return.	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				441 **** 442 * 443 * Convert long BFP to integers using each possible rounding mode. 444 * Ten test results are generated for each input. A 48-byte test result 445 * section is used to keep results sets aligned on a quad-double word. 446 * 447 * The first four tests use rounding modes specified in the FPCR with 448 * the IEEE Inexact exception suppressed. SRNM (2-bit) is used for 449 * the first two FPCR-controlled tests and SRNMB (3-bit) is used for 450 * the last two To get full coverage of that instruction pair. 451 * 452 * The next six results use instruction-specified rounding modes. 453 * 454 * The default rounding mode (0 for RNTE) is not tested in this section; 455 * prior tests used the default rounding mode. RNTE is tested 456 * explicitly as a rounding mode in this section. 457 * 458 ****
000004BA	9823 A000	00000000	460	FIDBRA LM R2,R3,0(R10) Get count and address of test input values
000004BE	9878 A008	00000008	461	LM R7,R8,8(R10) Get address of result area and flag area.
000004C2	1222		462	LTR R2,R2 Any test cases?
000004C4	078D		463	BZR R13 ..No, return to caller
000004C6	0DC0		464	BASR R12,0 Set top of loop
000004C8	6800 3000	00000000	466	LD FPR0,0(,R3) Get long BFP test value
			467 *	
			468 *	Test cases using rounding mode specified in the FPCR
			469 *	
000004CC	B29D F2F4	000002F4	470	LFPC FPCREGNT Set exceptions non-trappable, clear flags
000004D0	B299 0001	00000001	471	SRNM 1 SET FPCR to RZ, towards zero.
000004D4	B35F 0410		472	FIDBRA FPR1,0,FPR0,B'0100' FPCR ctl'd rounding, inexact masked
000004D8	6010 7000	00000000	473	STD FPR1,0*8(,R7) Store integer BFP result
000004DC	B29C 8000	00000000	474	STFPC 0(R8) Store resulting FPCR flags and DXC
			475 *	
000004E0	B29D F2F4	000002F4	476	LFPC FPCREGNT Set exceptions non-trappable, clear flags
000004E4	B299 0002	00000002	477	SRNM 2 SET FPCR to RP, to +infinity
000004E8	B35F 0410		478	FIDBRA FPR1,0,FPR0,B'0100' FPCR ctl'd rounding, inexact masked
000004EC	6010 7008	00000008	479	STD FPR1,1*8(,R7) Store integer BFP result
000004F0	B29C 8004	00000004	480	STFPC 1*4(R8) Store resulting FPCR flags and DXC
			481 *	
000004F4	B29D F2F4	000002F4	482	LFPC FPCREGNT Set exceptions non-trappable, clear flags
000004F8	B2B8 0003	00000003	483	SRNMB 3 SET FPCR to RM, to -infinity
000004FC	B35F 0410		484	FIDBRA FPR1,0,FPR0,B'0100' FPCR ctl'd rounding, inexact masked
00000500	6010 7010	00000010	485	STD FPR1,2*8(,R7) Store integer BFP result
00000504	B29C 8008	00000008	486	STFPC 2*4(R8) Store resulting FPCR flags and DXC
			487 *	
00000508	B29D F2F4	000002F4	488	LFPC FPCREGNT Set exceptions non-trappable, clear flags
0000050C	B2B8 0007	00000007	489	SRNMB 7 RPS, Prepare for Shorter Precision
00000510	B35F 0410		490	FIDBRA FPR1,0,FPR0,B'0100' FPCR ctl'd rounding, inexact masked
00000514	6010 7018	00000018	491	STD FPR1,3*8(,R7) Store integer BFP result
00000518	B29C 800C	0000000C	492	STFPC 3*4(R8) Store resulting FPCR flags and DXC
			493 *	
			494 *	Test cases using rounding mode specified in the instruction M3 field
			495 *	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
0000051C	B29D F2F4		000002F4	496	LFPC FPCREGNT	Set exceptions non-trappable, clear flags	
00000520	B35F 1010			497	FIDBRA FPR1,1,FPR0,B'0000'	RNTA, to nearest, ties away	
00000524	6010 7020		00000020	498	STD FPR1,4*8(,R7)	Store integer BFP result	
00000528	B29C 8010		00000010	499	STFPC 4*4(R8)	Store resulting FPCR flags and DXC	
				500 *			
0000052C	B29D F2F4		000002F4	501	LFPC FPCREGNT	Set exceptions non-trappable, clear flags	
00000530	B35F 3010			502	FIDBRA FPR1,3,FPR0,B'0000'	RFS, prepare for shorter precision	
00000534	6010 7028		00000028	503	STD FPR1,5*8(,R7)	Store integer BFP result	
00000538	B29C 8014		00000014	504	STFPC 5*4(R8)	Store resulting FPCR flags and DXC	
				505 *			
0000053C	B29D F2F4		000002F4	506	LFPC FPCREGNT	Set exceptions non-trappable, clear flags	
00000540	B35F 4010			507	FIDBRA FPR1,4,FPR0,B'0000'	RNTE, to nearest, ties to even	
00000544	6010 7030		00000030	508	STD FPR1,6*8(,R7)	Store integer BFP result	
00000548	B29C 8018		00000018	509	STFPC 6*4(R8)	Store resulting FPCR flags and DXC	
				510 *			
0000054C	B29D F2F4		000002F4	511	LFPC FPCREGNT	Set exceptions non-trappable, clear flags	
00000550	B35F 5010			512	FIDBRA FPR1,5,FPR0,B'0000'	RZ, toward zero	
00000554	6010 7038		00000038	513	STD FPR1,7*8(,R7)	Store integer BFP result	
00000558	B29C 801C		0000001C	514	STFPC 7*4(R8)	Store resulting FPCR flags and DXC	
				515 *			
0000055C	B29D F2F4		000002F4	516	LFPC FPCREGNT	Set exceptions non-trappable, clear flags	
00000560	B35F 6010			517	FIDBRA FPR1,6,FPR0,B'0000'	RP, to +inf	
00000564	6010 7040		00000040	518	STD FPR1,8*8(,R7)	Store integer BFP result	
00000568	B29C 8020		00000020	519	STFPC 8*4(R8)	Store resulting FPCR flags and DXC	
				520 *			
0000056C	B29D F2F4		000002F4	521	LFPC FPCREGNT	Set exceptions non-trappable, clear flags	
00000570	B35F 7010			522	FIDBRA FPR1,7,FPR0,B'0000'	RM, to -inf	
00000574	6010 7048		00000048	523	STD FPR1,9*8(,R7)	Store integer BFP result	
00000578	B29C 8024		00000024	524	STFPC 9*4(R8)	Store resulting FPCR flags and DXC	
				525 *			
0000057C	4130 3008		00000008	526	LA R3,8(,R3)	Point to next input values	
00000580	4170 7050		00000050	527	LA R7,10*8(,R7)	Point to next long BFP converted values	
00000584	4180 8030		00000030	528	LA R8,12*4(,R8)	Point to next FPCR/CC result area	
00000588	062C			529	BCTR R2,R12	Convert next input value.	
0000058A	07FD			530	BR R13	All converted; return.	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
				532 *****		
				533 *		
				534 * Round extended BFP to integer extended BFP. A pair of results is		
				535 * generated for each input: one with all exceptions non-trappable, and		
				536 * the second with all exceptions trappable. The FPCR is stored for		
				537 * each result.		
				538 *		
				539 *****		
0000058C	9823 A000		00000000	541 FIXBR	LM R2,R3,0(R10)	Get count and address of test input values
00000590	9878 A008		00000008	542	LM R7,R8,8(R10)	Get address of result area and flag area.
00000594	1222			543	LTR R2,R2	Any test cases?
00000596	078D			544	BZR R13	..No, return to caller
00000598	0DC0			545	BASR R12,0	Set top of loop
				546 *		
0000059A	6800 3000		00000000	547	LD FPR0,0(,R3)	Get extended BFP test value part 1
0000059E	6820 3008		00000008	548	LD FPR2,8(,R3)	Get extended BFP test value part 2
000005A2	B29D F2F4		000002F4	549	LFPC FPCREGNT	Set exceptions non-trappable
000005A6	B347 0010			550	FIXBR FPR1,0,FPR0	Cvt FPR0-FPR2 to int float in FPR1-FPR3
000005AA	6010 7000		00000000	551	STD FPR1,0(,R7)	Store integer BFP result part 1
000005AE	6030 7008		00000008	552	STD FPR3,8(,R7)	Store integer BFP result part 2
000005B2	B29C 8000		00000000	553	STFPC 0(R8)	Store resulting FPCR flags and DXC
				554 *		
000005B6	B29D F2F8		000002F8	555	LFPC FPCREGTR	Set exceptions trappable
000005BA	B376 0010			556	LZXR FPR1	Eliminate any residual results
000005BE	B347 0010			557	FIXBR FPR1,0,FPR0	Cvt FPR0-FPR2 to int float in FPR1-FPR3
000005C2	6010 7010		00000010	558	STD FPR1,16(,R7)	Store integer BFP result part 1
000005C6	6030 7018		00000018	559	STD FPR3,24(,R7)	Store integer BFP result part 2
000005CA	B29C 8004		00000004	560	STFPC 4(R8)	Store resulting FPCR flags and DXC
				561 *		
000005CE	4130 3010		00000010	562	LA R3,16(,R3)	Point to next extended BFP input value
000005D2	4170 7020		00000020	563	LA R7,32(,R7)	Point to next extd BFP rounded result pair
000005D6	4180 8008		00000008	564	LA R8,8(,R8)	Point to next FPCR/CC result area
000005DA	062C			565	BCTR R2,R12	Convert next input value.
000005DC	07FD			566	BR R13	All converted; return.

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
				568 ****			
				569 *			
				570 * Convert extended BFP to integers using each possible rounding mode.			
				571 * Ten test results are generated for each input. A 48-byte test result			
				572 * section is used to keep results sets aligned on a quad-double word.			
				573 *			
				574 * The first four tests use rounding modes specified in the FPCR with			
				575 * the IEEE Inexact exception suppressed. SRNM (2-bit) is used for			
				576 * the first two FPCR-controlled tests and SRNMB (3-bit) is used for			
				577 * the last two To get full coverage of that instruction pair.			
				578 *			
				579 * The next six results use instruction-specified rounding modes.			
				580 *			
				581 * The default rounding mode (0 for RNTE) is not tested in this section;			
				582 * prior tests used the default rounding mode. RNTE is tested			
				583 * explicitly as a rounding mode in this section.			
				584 *			
				585 ****			
000005DE	9823 A000		00000000	587 FIXBRA	LM	R2,R3,0(R10)	Get count and address of test input values
000005E2	9878 A008		00000008	588	LM	R7,R8,8(R10)	Get address of result area and flag area.
000005E6	1222			589	LTR	R2,R2	Any test cases?
000005E8	078D			590	BZR	R13	..No, return to caller
000005EA	0DC0			591	BASR	R12,0	Set top of loop
000005EC	6800 3000		00000000	593	LD	FPR0,0(,R3)	Get extended BFP test value part 1
000005F0	6820 3008		00000008	594	LD	FPR2,8(,R3)	Get extended BFP test value part 2
				595 *			
				596 * Test cases using rounding mode specified in the FPCR			
				597 *			
000005F4	B29D F2F4		000002F4	598	LFPC FPCREGNT		Set exceptions non-trappable, clear flags
000005F8	B299 0001		00000001	599	SRNM 1		SET FPCR to RZ, towards zero.
000005FC	B347 0410			600	FIXBRA FPR1,0,FPR0,B'0100'	FPCR ctl'd rounding, inexact masked	
00000600	6010 7000		00000000	601	STD FPR1,0*16(,R7)		Store integer BFP result part 1
00000604	6030 7008		00000008	602	STD FPR3,(0*16)+8(,R7)		Store integer BFP result part 2
00000608	B29C 8000		00000000	603	STFPC 0(R8)		Store resulting FPCR flags and DXC
				604 *			
0000060C	B29D F2F4		000002F4	605	LFPC FPCREGNT		Set exceptions non-trappable, clear flags
00000610	B299 0002		00000002	606	SRNM 2		SET FPCR to RP, to +infinity
00000614	B347 0410			607	FIXBRA FPR1,0,FPR0,B'0100'	FPCR ctl'd rounding, inexact masked	
00000618	6010 7010		00000010	608	STD FPR1,1*16(,R7)		Store integer BFP result part 1
0000061C	6030 7018		00000018	609	STD FPR3,(1*16)+8(,R7)		Store integer BFP result part 2
00000620	B29C 8004		00000004	610	STFPC 1*4(R8)		Store resulting FPCR flags and DXC
				611 *			
00000624	B29D F2F4		000002F4	612	LFPC FPCREGNT		Set exceptions non-trappable, clear flags
00000628	B2B8 0003		00000003	613	SRNMB 3		SET FPCR to RM, to -infinity
0000062C	B347 0410			614	FIXBRA FPR1,0,FPR0,B'0100'	FPCR ctl'd rounding, inexact masked	
00000630	6010 7020		00000020	615	STD FPR1,2*16(,R7)		Store integer BFP result part 1
00000634	6030 7028		00000028	616	STD FPR3,(2*16)+8(,R7)		Store integer BFP result part 2
00000638	B29C 8008		00000008	617	STFPC 2*4(R8)		Store resulting FPCR flags and DXC
				618 *			
0000063C	B29D F2F4		000002F4	619	LFPC FPCREGNT		Set exceptions non-trappable, clear flags
00000640	B2B8 0007		00000007	620	SRNMB 7		RFS, Prepare for Shorter Precision
00000644	B347 0410			621	FIXBRA FPR1,0,FPR0,B'0100'	FPCR ctl'd rounding, inexact masked	
00000648	6010 7030		00000030	622	STD FPR1,3*16(,R7)		Store integer BFP result part 1

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
0000064C	6030 7038		00000038	623	STD FPR3,(3*16)+8(,R7)	Store integer BFP result part 2	
00000650	B29C 800C		0000000C	624	STFPC 3*4(R8)	Store resulting FPCR flags and DXC	
				625 *			
				626 *	Test cases using rounding mode specified in the instruction M3 field		
				627 *			
00000654	B29D F2F4		000002F4	628	LFPC FPCREGNT	Set exceptions non-trappable, clear flags	
00000658	B347 1010			629	FIXBRA FPR1,1,FPR0,B'0000'	RNTA, to nearest, ties away	
0000065C	6010 7040		00000040	630	STD FPR1,4*16(,R7)	Store integer BFP result part 1	
00000660	6030 7048		00000048	631	STD FPR3,(4*16)+8(,R7)	Store integer BFP result part 2	
00000664	B29C 8010		00000010	632	STFPC 4*4(R8)	Store resulting FPCR flags and DXC	
				633 *			
00000668	B29D F2F4		000002F4	634	LFPC FPCREGNT	Set exceptions non-trappable, clear flags	
0000066C	B347 3010			635	FIXBRA FPR1,3,FPR0,B'0000'	RFS, prepare for shorter precision	
00000670	6010 7050		00000050	636	STD FPR1,5*16(,R7)	Store integer BFP result part 1	
00000674	6030 7058		00000058	637	STD FPR3,(5*16)+8(,R7)	Store integer BFP result part 2	
00000678	B29C 8014		00000014	638	STFPC 5*4(R8)	Store resulting FPCR flags and DXC	
				639 *			
0000067C	B29D F2F4		000002F4	640	LFPC FPCREGNT	Set exceptions non-trappable, clear flags	
00000680	B347 4010			641	FIXBRA FPR1,4,FPR0,B'0000'	RNTE, to nearest, ties to even	
00000684	6010 7060		00000060	642	STD FPR1,6*16(,R7)	Store integer BFP result part 1	
00000688	6030 7068		00000068	643	STD FPR3,(6*16)+8(,R7)	Store integer BFP result part 2	
0000068C	B29C 8018		00000018	644	STFPC 6*4(R8)	Store resulting FPCR flags and DXC	
				645 *			
00000690	B29D F2F4		000002F4	646	LFPC FPCREGNT	Set exceptions non-trappable, clear flags	
00000694	B347 5010			647	FIXBRA FPR1,5,FPR0,B'0000'	RZ, toward zero	
00000698	6010 7070		00000070	648	STD FPR1,7*16(,R7)	Store integer BFP result part 1	
0000069C	6030 7078		00000078	649	STD FPR3,(7*16)+8(,R7)	Store integer BFP result part 2	
000006A0	B29C 801C		0000001C	650	STFPC 7*4(R8)	Store resulting FPCR flags and DXC	
				651 *			
000006A4	B29D F2F4		000002F4	652	LFPC FPCREGNT	Set exceptions non-trappable, clear flags	
000006A8	B347 6010			653	FIXBRA FPR1,6,FPR0,B'0000'	RP, to +inf	
000006AC	6010 7080		00000080	654	STD FPR1,8*16(,R7)	Store integer BFP result part 1	
000006B0	6030 7088		00000088	655	STD FPR3,(8*16)+8(,R7)	Store integer BFP result part 2	
000006B4	B29C 8020		00000020	656	STFPC 8*4(R8)	Store resulting FPCR flags and DXC	
				657 *			
000006B8	B29D F2F4		000002F4	658	LFPC FPCREGNT	Set exceptions non-trappable, clear flags	
000006BC	B347 7010			659	FIXBRA FPR1,7,FPR0,B'0000'	RM, to -inf	
000006C0	6010 7090		00000090	660	STD FPR1,9*16(,R7)	Store integer BFP result part 1	
000006C4	6030 7098		00000098	661	STD FPR3,(9*16)+8(,R7)	Store integer BFP result part 2	
000006C8	B29C 8024		00000024	662	STFPC 9*4(R8)	Store resulting FPCR flags and DXC	
				663 *			
000006CC	4130 3010		00000010	664	LA R3,16(,R3)	Point to next input value	
000006D0	4170 70A0		000000A0	665	LA R7,10*16(,R7)	Point to next long BFP converted values	
000006D4	4180 8030		00000030	666	LA R8,12*4(,R8)	Point to next FPCR/CC result area	
000006D8	062C			667	BCTR R2,R12	Convert next input value.	
000006DA	07FD			668	BR R13	All converted; return.	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				670 **** 671 * 672 * Short integer inputs for Load FP Integer testing. The same 673 * values are used for short, long, and extended formats. 674 * 675 ****
000006DC				677 SBFPIN DS 0F Inputs for short BFP testing 678 DC X'3F800000' +1.0 Exact 679 DC X'BFC00000' -1.5 Inexact, incremented 680 DC X'40200000' +2.5 Inexact only 681 DC X'7F810000' SNaN 682 DC X'7FC10000' QNaN 683 DC X'3F400000' +.75 Inexact, incremented 684 DC X'BE800000' -.25 Inexact 685 SBFPCT EQU *-SBFPIN Count of short BFP in list * 4 686 *
000006F8				687 SBFPINRM DS 0F Inputs for short BFP rounding testing 688 DC X'C1180000' -9.5 689 DC X'C0B00000' -5.5 690 DC X'C0200000' -2.5 691 DC X'BFC00000' -1.5 692 DC X'BF000000' -.5 693 DC X'3F000000' +0.5 694 DC X'3FC00000' +1.5 695 DC X'40200000' +2.5 696 DC X'40B00000' +5.5 697 DC X'41180000' +9.5 698 DC X'3F400000' +.75 699 DC X'BE800000' -.25 700 SBPRMCT EQU *-SBFPINRM Count of short BFP rounding tests * 4 701 *
00000728				702 LBFPIN DS 0F Inputs for long BFP testing 703 DC X'3FF0000000000000000' +1.0 704 DC X'BFF8000000000000000' -1.5 705 DC X'40040000000000000000' +2.5 706 DC X'7FF0100000000000000' SNaN 707 DC X'7FF8100000000000000' QNaN 708 DC X'3FE8000000000000000' +.75 709 DC X'BFD0000000000000000' -.25 710 LBFPCT EQU *-LBFPIN Count of long BFP in list * 8 711 *
00000760				712 LBFPINRM DS 0F 713 DC X'C023000000000000000' -9.5 714 DC X'C016000000000000000' -5.5 715 DC X'C004000000000000000' -2.5 716 DC X'BFF8000000000000000' -1.5 717 DC X'BFE0000000000000000' -.5 718 DC X'3FE0000000000000000' +0.5 719 DC X'3FF8000000000000000' +1.5 720 DC X'40040000000000000000' +2.5 721 DC X'40160000000000000000' +5.5 722 DC X'40230000000000000000' +9.5 723 DC X'3FE8000000000000000' +.75 724 DC X'BFD0000000000000000' -.25

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
		00000060	00000001	725 LBFPRMCT EQU 726 *	*-LBFPINRM	Count of long BFP rounding tests * 8	
000007C0				727 XBFPIN DS 0D		Inputs for long BFP testing	
000007C0	3FFF0000 00000000			728 DC X'3FFF0000000000000000000000000000'		+1.0	
000007D0	BFFF8000 00000000			729 DC X'BFFF8000000000000000000000000000'		-1.5	
000007E0	40004000 00000000			730 DC X'40004000000000000000000000000000'		+2.5	
000007F0	7FFF0100 00000000			731 DC X'7FFF0100000000000000000000000000'		SNaN	
00000800	7FFF8100 00000000			732 DC X'7FFF8100000000000000000000000000'		QNaN	
00000810	3FFE8000 00000000			733 DC X'3FFE8000000000000000000000000000'		+0.75	
00000820	BFFD0000 00000000			734 DC X'BFFD0000000000000000000000000000'		-0.25	
		00000070	00000001	735 XBFPCT EQU 736 *	*-XBFPIN	Count of extended BFP in list * 16	
00000830				737 XBFPINRM DS 0D			
00000830	C0023000 00000000			738 DC X'C0023000000000000000000000000000'		-9.5	
00000840	C0016000 00000000			739 DC X'C0016000000000000000000000000000'		-5.5	
00000850	C0004000 00000000			740 DC X'C0004000000000000000000000000000'		-2.5	
00000860	BFFF8000 00000000			741 DC X'BFFF8000000000000000000000000000'		-1.5	
00000870	BFFE0000 00000000			742 DC X'BFFE0000000000000000000000000000'		-0.5	
00000880	3FFE0000 00000000			743 DC X'3FFE0000000000000000000000000000'		+0.5	
00000890	3FFF8000 00000000			744 DC X'3FFF8000000000000000000000000000'		+1.5	
000008A0	40004000 00000000			745 DC X'40004000000000000000000000000000'		+2.5	
000008B0	40016000 00000000			746 DC X'40016000000000000000000000000000'		+5.5	
000008C0	40023000 00000000			747 DC X'40023000000000000000000000000000'		+9.5	
000008D0	3FFE8000 00000000			748 DC X'3FFE8000000000000000000000000000'		+0.75	
000008E0	BFFD0000 00000000			749 DC X'BFFD0000000000000000000000000000'		-0.25	
		000000C0	00000001	750 XBFPRMCT EQU *-XBFPINRM	Count of extended BFP rounding tests * 16		

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				752 **** 753 * ACTUAL results saved here 754 **** 755 *	***** *****
				756 * Locations for ACTUAL results 757 * 758 *	
	00001000	00000000	759	SBFPOUT EQU BFPLDFPI+X'1000'	Integer short BFP rounded results
			760	*	..7 used, room for 16
	00001080	00000000	761	SBFPFLGS EQU BFPLDFPI+X'1080'	FPCR flags and DXC from short BFP
			762	*	..7 used, room for 16
	00001100	00000000	763	SBFPRMO EQU BFPLDFPI+X'1100'	Short BFP rounding mode test results
			764	*	..12 used, room for 16
	00001400	00000000	765	SBFPRMOP EQU BFPLDFPI+X'1400'	Short BFP rounding mode FPCR results
			766	*	..12 used
			767	*	
	00002000	00000000	768	LBFPOUT EQU BFPLDFPI+X'2000'	Integer long BFP rounded results
			769	*	..7 used, room for 16
	00002100	00000000	770	LBFPFLGS EQU BFPLDFPI+X'2100'	FPCR flags and DXC from long BFP
			771	*	..7 used, room for 32
	00002200	00000000	772	LBFPRMO EQU BFPLDFPI+X'2200'	Long BFP rounding mode test results
			773	*	..12 used, room for 16
	00002800	00000000	774	LBFPRMOP EQU BFPLDFPI+X'2800'	Long BFP rounding mode FPCR results
			775	*	..12 used
			776	*	
	00003000	00000000	777	XBFPOUT EQU BFPLDFPI+X'3000'	Integer extended BFP rounded results
			778	*	..7 used, room for 16
	00003200	00000000	779	XBFPFLGS EQU BFPLDFPI+X'3200'	FPCR flags and DXC from extended BFP
			780	*	..7 used, room for 32
	00003300	00000000	781	XBFPRMO EQU BFPLDFPI+X'3300'	Extd BFP rounding mode test results
			782	*	..12 used, room for 16
	00003F00	00000000	783	XBFPRMOP EQU BFPLDFPI+X'3F00'	Extd BFP rounding mode FPCR results
			784	*	..12 used

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
00005530	80000000 80000000			842 DC XL16 '8000000080000000BF800000BF800000'
00005540	C3C6C5C2 D9C14060			843 DC CL48 'CFEBRA -0.5 M3 modes 1, 3-5'
00005570	BF800000 BF800000			844 DC XL16 'BF800000BF8000008000000080000000'
00005580	C3C6C5C2 D9C14060			845 DC CL48 'CFEBRA -0.5 M3 modes 6, 7'
000055B0	80000000 BF800000			846 DC XL16 '80000000BF80000000000000000000000'
000055C0	C3C6C5C2 D9C140F0			847 DC CL48 'CFEBRA 0.5 FPC modes 1-3, 7'
000055F0	00000000 3F800000			848 DC XL16 '00000003F80000000000003F800000'
00005600	C3C6C5C2 D9C140F0			849 DC CL48 'CFEBRA 0.5 M3 modes 1, 3-5'
00005630	3F800000 3F800000			850 DC XL16 '3F800003F80000000000000000000000'
00005640	C3C6C5C2 D9C140F0			851 DC CL48 'CFEBRA 0.5 M3 modes 6, 7'
00005670	3F800000 00000000			852 DC XL16 '3F800000000000000000000000000000'
00005680	C3C6C5C2 D9C140F1			853 DC CL48 'CFEBRA 1.5 FPC modes 1-3, 7'
000056B0	3F800000 40000000			854 DC XL16 '3F8000040000003F800003F800000'
000056C0	C3C6C5C2 D9C140F1			855 DC CL48 'CFEBRA 1.5 M3 modes 1, 3-5'
000056F0	40000000 3F800000			856 DC XL16 '40000003F8000040000003F800000'
00005700	C3C6C5C2 D9C140F1			857 DC CL48 'CFEBRA 1.5 M3 modes 6, 7'
00005730	40000000 3F800000			858 DC XL16 '40000003F80000000000000000000000'
00005740	C3C6C5C2 D9C140F2			859 DC CL48 'CFEBRA 2.5 FPC modes 1-3, 7'
00005770	40000000 40400000			860 DC XL16 '40000004040000400000040400000'
00005780	C3C6C5C2 D9C140F2			861 DC CL48 'CFEBRA 2.5 M3 modes 1, 3-5'
000057B0	40400000 40400000			862 DC XL16 '40400004040000400000040000000'
000057C0	C3C6C5C2 D9C140F2			863 DC CL48 'CFEBRA 2.5 M3 modes 6, 7'
000057F0	40400000 40000000			864 DC XL16 '40400004000000000000000000000000'
00005800	C3C6C5C2 D9C140F5			865 DC CL48 'CFEBRA 5.5 FPC modes 1-3, 7'
00005830	40A00000 40C00000			866 DC XL16 '40A000040C000040A000040A00000'
00005840	C3C6C5C2 D9C140F5			867 DC CL48 'CFEBRA 5.5 M3 modes 1, 3-5'
00005870	40C00000 40A00000			868 DC XL16 '40C000040A000040C000040A00000'
00005880	C3C6C5C2 D9C140F5			869 DC CL48 'CFEBRA 5.5 M3 modes 6, 7'
000058B0	40C00000 40A00000			870 DC XL16 '40C000040A0000000000000000000000'
000058C0	C3C6C5C2 D9C140F9			871 DC CL48 'CFEBRA 9.5 FPC modes 1-3, 7'
000058F0	41100000 41200000			872 DC XL16 '41100004120000411000041100000'
00005900	C3C6C5C2 D9C140F9			873 DC CL48 'CFEBRA 9.5 M3 modes 1, 3-5'
00005930	41200000 41100000			874 DC XL16 '41200004110000412000041100000'
00005940	C3C6C5C2 D9C140F9			875 DC CL48 'CFEBRA 9.5 M3 modes 6, 7'
00005970	41200000 41100000			876 DC XL16 '41200004110000000000000000000000'
00005980	C3C6C5C2 D9C1404E			877 DC CL48 'CFEBRA +0.75 FPC modes 1-3, 7'
000059B0	00000000 3F800000			878 DC XL16 '00000003F80000000000003F800000'
000059C0	C3C6C5C2 D9C1404E			879 DC CL48 'CFEBRA +0.75 M3 modes 1, 3-5'
000059F0	3F800000 3F800000			880 DC XL16 '3F800003F800003F80000000000000'
00005A00	C3C6C5C2 D9C1404E			881 DC CL48 'CFEBRA +0.75 M3 modes 6, 7'
00005A30	3F800000 00000000			882 DC XL16 '3F800000000000000000000000000000'
00005A40	C3C6C5C2 D9C14060			883 DC CL48 'CFEBRA -0.25 FPC modes 1-3, 7'
00005A70	80000000 80000000			884 DC XL16 '80000008000000BF800000BF800000'
00005A80	C3C6C5C2 D9C14060			885 DC CL48 'CFEBRA -0.25 M3 modes 1, 3-5'
00005AB0	80000000 BF800000			886 DC XL16 '8000000BF80000800000080000000'
00005AC0	C3C6C5C2 D9C14060			887 DC CL48 'CFEBRA -0.25 M3 modes 6, 7'
00005AF0	80000000 BF800000			888 DC XL16 '8000000BF80000000000000000000000'
		00000024 00000001		889 SBFPRMO_NUM EQU (*-SBFPRMO_GOOD)/64
				890 *
				891 *
		00005B00 00000001		892 SBFPRMOF_GOOD EQU *
00005B00	C3C6C5C2 D9C14060			893 DC CL48 'CFEBRA -9.5 FPC modes 1-3, 7 FCPR'
00005B30	00000001 00000002			894 DC XL16 '0000001000000200000030000007'
00005B40	C3C6C5C2 D9C14060			895 DC CL48 'CFEBRA -9.5 M3 modes 1, 3-5 FPCR'
00005B70	00080000 00080000			896 DC XL16 '000800000800000080000008000000800000'
00005B80	C3C6C5C2 D9C14060			897 DC CL48 'CFEBRA -9.5 M3 modes 5-7 - FCPR'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
00005BB0	00080000 00080000			898 DC XL16 '00080000008000000000000000000000'
00005BC0	C3C6C5C2 D9C14060			899 DC CL48 'CFEBRA -5.5 FPC modes 1-3, 7 FCPR'
00005BF0	00000001 00000002			900 DC XL16 '000000100000002000000030000007'
00005C00	C3C6C5C2 D9C14060			901 DC CL48 'CFEBRA -5.5 M3 modes 1, 3-5 FPCR'
00005C30	00080000 00080000			902 DC XL16 '0008000000800000008000000080000'
00005C40	C3C6C5C2 D9C14060			903 DC CL48 'CFEBRA -5.5 M3 modes 6, 7 FCPR'
00005C70	00080000 00080000			904 DC XL16 '00080000008000000000000000000000'
00005C80	C3C6C5C2 D9C14060			905 DC CL48 'CFEBRA -2.5 FPC modes 1-3, 7 FCPR'
00005CB0	00000001 00000002			906 DC XL16 '000000100000002000000030000007'
00005CC0	C3C6C5C2 D9C14060			907 DC CL48 'CFEBRA -2.5 M3 modes 1, 3-5 FPCR'
00005CF0	00080000 00080000			908 DC XL16 '0008000000080000000800000080000'
00005D00	C3C6C5C2 D9C14060			909 DC CL48 'CFEBRA -2.5 M3 modes 6, 7 FCPR'
00005D30	00080000 00080000			910 DC XL16 '00080000008000000000000000000000'
00005D40	C3C6C5C2 D9C14060			911 DC CL48 'CFEBRA -1.5 FPC modes 1-3, 7 FCPR'
00005D70	00000001 00000002			912 DC XL16 '000000100000002000000030000007'
00005D80	C3C6C5C2 D9C14060			913 DC CL48 'CFEBRA -1.5 M3 modes 1, 3-5 FPCR'
00005DB0	00080000 00080000			914 DC XL16 '0008000000080000000800000080000'
00005DC0	C3C6C5C2 D9C14060			915 DC CL48 'CFEBRA -1.5 M3 modes 6, 7 FCPR'
00005DF0	00080000 00080000			916 DC XL16 '00080000000800000000000000000000'
00005E00	C3C6C5C2 D9C14060			917 DC CL48 'CFEBRA -0.5 FPC modes 1-3, 7 FCPR'
00005E30	00000001 00000002			918 DC XL16 '000000100000002000000030000007'
00005E40	C3C6C5C2 D9C14060			919 DC CL48 'CFEBRA -0.5 M3 modes 1, 3-5 FPCR'
00005E70	00080000 00080000			920 DC XL16 '0008000000080000000800000080000'
00005E80	C3C6C5C2 D9C14060			921 DC CL48 'CFEBRA -0.5 M3 modes 6, 7 FCPR'
00005EB0	00080000 00080000			922 DC XL16 '00080000000800000000000000000000'
00005EC0	C3C6C5C2 D9C1404E			923 DC CL48 'CFEBRA +0.5 FPC modes 1-3, 7 FCPR'
00005EF0	00000001 00000002			924 DC XL16 '000000100000002000000030000007'
00005F00	C3C6C5C2 D9C1404E			925 DC CL48 'CFEBRA +0.5 M3 modes 1, 3-5 FPCR'
00005F30	00080000 00080000			926 DC XL16 '0008000000080000000800000080000'
00005F40	C3C6C5C2 D9C1404E			927 DC CL48 'CFEBRA +0.5 M3 modes 6, 7 FCPR'
00005F70	00080000 00080000			928 DC XL16 '00080000000800000000000000000000'
00005F80	C3C6C5C2 D9C1404E			929 DC CL48 'CFEBRA +1.5 FPC modes 1-3, 7 FCPR'
00005FB0	00000001 00000002			930 DC XL16 '000000100000002000000030000007'
00005FC0	C3C6C5C2 D9C1404E			931 DC CL48 'CFEBRA +1.5 M3 modes 1, 3-5 FPCR'
00005FF0	00080000 00080000			932 DC XL16 '0008000000080000000800000080000'
00006000	C3C6C5C2 D9C1404E			933 DC CL48 'CFEBRA +1.5 M3 modes 6, 7 FCPR'
00006030	00080000 00080000			934 DC XL16 '00080000000800000000000000000000'
00006040	C3C6C5C2 D9C1404E			935 DC CL48 'CFEBRA +2.5 FPC modes 1-3, 7 FCPR'
00006070	00000001 00000002			936 DC XL16 '000000100000002000000030000007'
00006080	C3C6C5C2 D9C1404E			937 DC CL48 'CFEBRA +2.5 M3 modes 1, 3-5 FPCR'
000060B0	00080000 00080000			938 DC XL16 '0008000000080000000800000080000'
000060C0	C3C6C5C2 D9C1404E			939 DC CL48 'CFEBRA +2.5 M3 modes 6, 7 FCPR'
000060F0	00080000 00080000			940 DC XL16 '00080000000800000000000000000000'
00006100	C3C6C5C2 D9C1404E			941 DC CL48 'CFEBRA +5.5 FPC modes 1-3, 7 FCPR'
00006130	00000001 00000002			942 DC XL16 '000000100000002000000030000007'
00006140	C3C6C5C2 D9C1404E			943 DC CL48 'CFEBRA +5.5 M3 modes 1, 3-5 FPCR'
00006170	00080000 00080000			944 DC XL16 '0008000000080000000800000080000'
00006180	C3C6C5C2 D9C1404E			945 DC CL48 'CFEBRA +5.5 M3 modes 6, 7 FCPR'
000061B0	00080000 00080000			946 DC XL16 '00080000000800000000000000000000'
000061C0	C3C6C5C2 D9C1404E			947 DC CL48 'CFEBRA +9.5 FPC modes 1-3, 7 FCPR'
000061F0	00000001 00000002			948 DC XL16 '000000100000002000000030000007'
00006200	C3C6C5C2 D9C1404E			949 DC CL48 'CFEBRA +9.5 M3 modes 1, 3-5 FPCR'
00006230	00080000 00080000			950 DC XL16 '0008000000080000000800000080000'
00006240	C3C6C5C2 D9C1404E			951 DC CL48 'CFEBRA +9.5 M3 modes 6, 7 FCPR'
00006270	00080000 00080000			952 DC XL16 '00080000000800000000000000000000'
00006280	C3C6C5C2 D9C1404E			953 DC CL48 'CFEBRA +0.75 FPC modes 1-3, 7 FCPR'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
000062B0	00000001 00000002			954 DC XL16 '00000001000000020000000300000007'
000062C0	C3C6C5C2 D9C1404E			955 DC CL48 'CFEBRA +0.75 M3 modes 1, 3-5 FPCR'
000062F0	00080000 00080000			956 DC XL16 '000800000080000008000000080000'
00006300	C3C6C5C2 D9C1404E			957 DC CL48 'CFEBRA +0.75 M3 modes 6, 7 FCPR'
00006330	00080000 00080000			958 DC XL16 '00080000008000000000000000000000'
00006340	C3C6C5C2 D9C14060			959 DC CL48 'CFEBRA -0.25 FPC modes 1-3, 7 FCPR'
00006370	00000001 00000002			960 DC XL16 '00000001000000020000000300000007'
00006380	C3C6C5C2 D9C14060			961 DC CL48 'CFEBRA -0.25 M3 modes 1, 3-5 FPCR'
000063B0	00080000 00080000			962 DC XL16 '0008000000800000008000000080000'
000063C0	C3C6C5C2 D9C14060			963 DC CL48 'CFEBRA -0.25 M3 modes 6, 7 FCPR'
000063F0	00080000 00080000			964 DC XL16 '00080000008000000000000000000000'
		00000024	00000001	965 SBFPRM0F_NUM EQU (*-SBFPRM0F_GOOD)/64
				966 *
				967 *
		00006400	00000001	968 LBFP0UT_GOOD EQU *
00006400	C3C6C4C2 D9409985			969 DC CL48 'CFDBR result pair 1'
00006430	3FF00000 00000000			970 DC XL16 '3FF0000000000003FF00000000000000'
00006440	C3C6C4C2 D9409985			971 DC CL48 'CFDBR result pair 2'
00006470	C0000000 00000000			972 DC XL16 'C0000000000000C0000000000000000'
00006480	C3C6C4C2 D9409985			973 DC CL48 'CFDBR result pair 3'
000064B0	40000000 00000000			974 DC XL16 '40000000000000400000000000000000'
000064C0	C3C6C4C2 D9409985			975 DC CL48 'CFDBR result pair 4'
000064F0	7FF81000 00000000			976 DC XL16 '7FF810000000000000000000000000000'
00006500	C3C6C4C2 D9409985			977 DC CL48 'CFDBR result pair 5'
00006530	7FF81000 00000000			978 DC XL16 '7FF810000000007FF8100000000000000'
00006540	C3C6C4C2 D9409985			979 DC CL48 'CFDBR result pair 6'
00006570	3FF00000 00000000			980 DC XL16 '3FF000000000003FF0000000000000000'
00006580	C3C6C4C2 D9409985			981 DC CL48 'CFDBR result pair 7'
000065B0	80000000 00000000			982 DC XL16 '80000000000000800000000000000000'
		00000007	00000001	983 LBFP0UT_NUM EQU (*-LBFP0UT_GOOD)/64
				984 *
				985 *
		000065C0	00000001	986 LBFPFLGS_GOOD EQU *
000065C0	C3C6C4C2 D940C6D7			987 DC CL48 'CFDBR FPC pairs 1-2'
000065F0	00000000 F8000000			988 DC XL16 '0000000F80000000008000F8000C00'
00006600	C3C6C4C2 D940C6D7			989 DC CL48 'CFDBR FPC pairs 3-4'
00006630	00080000 F8000800			990 DC XL16 '0008000F8000800080000F800800'
00006640	C3C6C4C2 D940C6D7			991 DC CL48 'CFDBR FPC pairs 5-6'
00006670	00000000 F8000000			992 DC XL16 '0000000F8000000080000F8000C00'
00006680	C3C6C4C2 D940C6D7			993 DC CL48 'CFDBR FPC pair 7'
000066B0	00080000 F8000800			994 DC XL16 '0008000F800080000000000000000000'
		00000004	00000001	995 LBFPFLGS_NUM EQU (*-LBFPFLGS_GOOD)/64
				996 *
				997 *
		000066C0	00000001	998 LBFP0MO_GOOD EQU *
000066C0	C3C6C4C2 D9C14060			999 DC CL48 'CFDBRA -9.5 FPC modes 1, 2'
000066F0	C0220000 00000000			1000 DC XL16 'C022000000000C0220000000000000'
00006700	C3C6C4C2 D9C14060			1001 DC CL48 'CFDBRA -9.5 FPC modes 3, 7'
00006730	C0240000 00000000			1002 DC XL16 'C024000000000C0220000000000000000'
00006740	C3C6C4C2 D9C14060			1003 DC CL48 'CFDBRA -9.5 M3 modes 1, 3'
00006770	C0240000 00000000			1004 DC XL16 'C024000000000C0220000000000000000'
00006780	C3C6C4C2 D9C14060			1005 DC CL48 'CFDBRA -9.5 M3 modes 4, 5'
000067B0	C0240000 00000000			1006 DC XL16 'C024000000000C0220000000000000000'
000067C0	C3C6C4C2 D9C14060			1007 DC CL48 'CFDBRA -9.5 M3 modes 6, 7'
000067F0	C0220000 00000000			1008 DC XL16 'C022000000000C0240000000000000000'
00006800	C3C6C4C2 D9C14060			1009 DC CL48 'CFDBRA -5.5 FPC modes 1, 2'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
00006830	C0140000 00000000			1010 DC XL16 'C0140000000000000C0140000000000000'
00006840	C3C6C4C2 D9C14060			1011 DC CL48 'CFDBRA -5.5 FPC modes 3, 7'
00006870	C0180000 00000000			1012 DC XL16 'C0180000000000000C0140000000000000'
00006880	C3C6C4C2 D9C14060			1013 DC CL48 'CFDBRA -5.5 M3 modes 1, 3'
000068B0	C0180000 00000000			1014 DC XL16 'C0180000000000000C0140000000000000'
000068C0	C3C6C4C2 D9C14060			1015 DC CL48 'CFDBRA -5.5 M3 modes 4, 5'
00006F0	C0180000 00000000			1016 DC XL16 'C0180000000000000C0140000000000000'
00006900	C3C6C4C2 D9C14060			1017 DC CL48 'CFDBRA -5.5 M3 modes 6, 7'
00006930	C0140000 00000000			1018 DC XL16 'C0140000000000000C0180000000000000'
00006940	C3C6C4C2 D9C14060			1019 DC CL48 'CFDBRA -2.5 FPC modes 1, 2'
00006970	C0000000 00000000			1020 DC XL16 'C0000000000000000C0000000000000000'
00006980	C3C6C4C2 D9C14060			1021 DC CL48 'CFDBRA -2.5 FPC modes 3, 7'
000069B0	C0080000 00000000			1022 DC XL16 'C0080000000000000C0080000000000000'
000069C0	C3C6C4C2 D9C14060			1023 DC CL48 'CFDBRA -2.5 M3 modes 1, 3'
000069F0	C0080000 00000000			1024 DC XL16 'C0080000000000000C0080000000000000'
00006A00	C3C6C4C2 D9C14060			1025 DC CL48 'CFDBRA -2.5 M3 modes 4, 5'
00006A30	C0000000 00000000			1026 DC XL16 'C0000000000000000C0000000000000000'
00006A40	C3C6C4C2 D9C14060			1027 DC CL48 'CFDBRA -2.5 M3 modes 6, 7'
00006A70	C0000000 00000000			1028 DC XL16 'C0000000000000000C0080000000000000'
00006A80	C3C6C4C2 D9C14060			1029 DC CL48 'CFDBRA -1.5 FPC modes 1, 2'
00006AB0	BFF00000 00000000			1030 DC XL16 'BFF00000000000000BFF00000000000000'
00006AC0	C3C6C4C2 D9C14060			1031 DC CL48 'CFDBRA -1.5 FPC modes 3, 7'
00006AF0	C0000000 00000000			1032 DC XL16 'C0000000000000000BFF00000000000000'
00006B00	C3C6C4C2 D9C14060			1033 DC CL48 'CFDBRA -1.5 M3 modes 1, 3'
00006B30	C0000000 00000000			1034 DC XL16 'C0000000000000000BFF00000000000000'
00006B40	C3C6C4C2 D9C14060			1035 DC CL48 'CFDBRA -1.5 M3 modes 4, 5'
00006B70	C0000000 00000000			1036 DC XL16 'C0000000000000000BFF00000000000000'
00006B80	C3C6C4C2 D9C14060			1037 DC CL48 'CFDBRA -1.5 M3 modes 6, 7'
00006BB0	BFF00000 00000000			1038 DC XL16 'BFF00000000000000C0000000000000000'
00006BC0	C3C6C4C2 D9C14060			1039 DC CL48 'CFDBRA -0.5 FPC modes 1, 2'
00006BF0	80000000 00000000			1040 DC XL16 '80000000000000008000000000000000'
00006C00	C3C6C4C2 D9C14060			1041 DC CL48 'CFDBRA -0.5 FPC modes 3, 7'
00006C30	BFF00000 00000000			1042 DC XL16 'BFF00000000000000BFF00000000000000'
00006C40	C3C6C4C2 D9C14060			1043 DC CL48 'CFDBRA -0.5 M3 modes 1, 3'
00006C70	BFF00000 00000000			1044 DC XL16 'BFF00000000000000BFF00000000000000'
00006C80	C3C6C4C2 D9C14060			1045 DC CL48 'CFDBRA -0.5 M3 modes 4, 5'
00006CB0	80000000 00000000			1046 DC XL16 '80000000000000008000000000000000'
00006CC0	C3C6C4C2 D9C14060			1047 DC CL48 'CFDBRA -0.5 M3 modes 6, 7'
00006CF0	80000000 00000000			1048 DC XL16 '8000000000000000BFF00000000000000'
00006D00	C3C6C4C2 D9C140F0			1049 DC CL48 'CFDBRA 0.5 FPC modes 1, 2'
00006D30	00000000 00000000			1050 DC XL16 '0000000000000003FF00000000000000'
00006D40	C3C6C4C2 D9C140F0			1051 DC CL48 'CFDBRA 0.5 FPC modes 3, 7'
00006D70	00000000 00000000			1052 DC XL16 '0000000000000003FF00000000000000'
00006D80	C3C6C4C2 D9C140F0			1053 DC CL48 'CFDBRA 0.5 M3 modes 1, 3'
00006DB0	3FF00000 00000000			1054 DC XL16 '3FF00000000000003FF00000000000000'
00006DC0	C3C6C4C2 D9C140F0			1055 DC CL48 'CFDBRA 0.5 M3 modes 4, 5'
00006DF0	00000000 00000000			1056 DC XL16 '00000000000000000000000000000000'
00006E00	C3C6C4C2 D9C140F0			1057 DC CL48 'CFDBRA 0.5 M3 modes 6, 7'
00006E30	3FF00000 00000000			1058 DC XL16 '3FF000000000000000000000000000000'
00006E40	C3C6C4C2 D9C140F1			1059 DC CL48 'CFDBRA 1.5 FPC modes 1, 2'
00006E70	3FF00000 00000000			1060 DC XL16 '3FF000000000000040000000000000000'
00006E80	C3C6C4C2 D9C140F1			1061 DC CL48 'CFDBRA 1.5 FPC modes 3, 7'
00006EB0	3FF00000 00000000			1062 DC XL16 '3FF00000000000003FF00000000000000'
00006EC0	C3C6C4C2 D9C140F1			1063 DC CL48 'CFDBRA 1.5 M3 modes 1, 3'
00006EF0	40000000 00000000			1064 DC XL16 '4000000000000003FF00000000000000'
00006F00	C3C6C4C2 D9C140F1			1065 DC CL48 'CFDBRA 1.5 M3 modes 4, 5'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
		000075C0	00000001	1122 LBFPRMOF_GOOD EQU *
000075C0	C3C6C4C2 D9C14060			1123 DC CL48'CFDBRA -9.5 FPC modes 1-3, 7 FPCR'
000075F0	00000001 00000002			1124 DC XL16'0000001000000200000030000007'
00007600	C3C6C4C2 D9C14060			1125 DC CL48'CFDBRA -9.5 M3 modes 1, 3-5 FPCR'
00007630	00080000 00080000			1126 DC XL16'00080000008000000800000080000'
00007640	C3C6C4C2 D9C14060			1127 DC CL48'CFDBRA -9.5 M3 modes 6, 7 FPCR'
00007670	00080000 00080000			1128 DC XL16'00080000008000000000000000000000'
00007680	C3C6C4C2 D9C14060			1129 DC CL48'CFDBRA -5.5 FPC modes 1-3, 7 FPCR'
000076B0	00000001 00000002			1130 DC XL16'0000001000000200000030000007'
000076C0	C3C6C4C2 D9C14060			1131 DC CL48'CFDBRA -5.5 M3 modes 1, 3-5 FPCR'
000076F0	00080000 00080000			1132 DC XL16'00080000008000000800000080000'
00007700	C3C6C4C2 D9C14060			1133 DC CL48'CFDBRA -5.5 M3 modes 6, 7 FPCR'
00007730	00080000 00080000			1134 DC XL16'00080000008000000000000000000000'
00007740	C3C6C4C2 D9C14060			1135 DC CL48'CFDBRA -2.5 FPC modes 1-3, 7 FPCR'
00007770	00000001 00000002			1136 DC XL16'0000001000000200000030000007'
00007780	C3C6C4C2 D9C14060			1137 DC CL48'CFDBRA -2.5 M3 modes 1, 3-5 FPCR'
000077B0	00080000 00080000			1138 DC XL16'00080000008000000800000080000'
000077C0	C3C6C4C2 D9C14060			1139 DC CL48'CFDBRA -2.5 M3 modes 6, 7 FPCR'
000077F0	00080000 00080000			1140 DC XL16'00080000008000000000000000000000'
00007800	C3C6C4C2 D9C14060			1141 DC CL48'CFDBRA -1.5 FPC modes 1-3, 7 FPCR'
00007830	00000001 00000002			1142 DC XL16'0000001000000200000030000007'
00007840	C3C6C4C2 D9C14060			1143 DC CL48'CFDBRA -1.5 M3 modes 1, 3-5 FPCR'
00007870	00080000 00080000			1144 DC XL16'00080000008000000800000080000'
00007880	C3C6C4C2 D9C14060			1145 DC CL48'CFDBRA -1.5 M3 modes 6, 7 FPCR'
000078B0	00080000 00080000			1146 DC XL16'00080000008000000000000000000000'
000078C0	C3C6C4C2 D9C14060			1147 DC CL48'CFDBRA -0.5 FPC modes 1-3, 7 FPCR'
000078F0	00000001 00000002			1148 DC XL16'0000001000000200000030000007'
00007900	C3C6C4C2 D9C14060			1149 DC CL48'CFDBRA -0.5 M3 modes 1, 3-5 FPCR'
00007930	00080000 00080000			1150 DC XL16'00080000008000000800000080000'
00007940	C3C6C4C2 D9C14060			1151 DC CL48'CFDBRA -0.5 M3 modes 6, 7 FPCR'
00007970	00080000 00080000			1152 DC XL16'00080000008000000000000000000000'
00007980	C3C6C4C2 D9C1404E			1153 DC CL48'CFDBRA +0.5 FPC modes 1-3, 7 FPCR'
000079B0	00000001 00000002			1154 DC XL16'0000001000000200000030000007'
000079C0	C3C6C4C2 D9C1404E			1155 DC CL48'CFDBRA +0.5 M3 modes 1, 3-5 FPCR'
000079F0	00080000 00080000			1156 DC XL16'00080000008000000800000080000'
00007A00	C3C6C4C2 D9C1404E			1157 DC CL48'CFDBRA +0.5 M3 modes 6, 7 FPCR'
00007A30	00080000 00080000			1158 DC XL16'00080000008000000000000000000000'
00007A40	C3C6C4C2 D9C1404E			1159 DC CL48'CFDBRA +1.5 FPC modes 1-3, 7 FPCR'
00007A70	00000001 00000002			1160 DC XL16'0000001000000200000030000007'
00007A80	C3C6C4C2 D9C1404E			1161 DC CL48'CFDBRA +1.5 M3 modes 1, 3-5 FPCR'
00007AB0	00080000 00080000			1162 DC XL16'00080000008000000800000080000'
00007AC0	C3C6C4C2 D9C1404E			1163 DC CL48'CFDBRA +1.5 M3 modes 6, 7 FPCR'
00007AF0	00080000 00080000			1164 DC XL16'00080000008000000000000000000000'
00007B00	C3C6C4C2 D9C1404E			1165 DC CL48'CFDBRA +2.5 FPC modes 1-3, 7 FPCR'
00007B30	00000001 00000002			1166 DC XL16'0000001000000200000030000007'
00007B40	C3C6C4C2 D9C1404E			1167 DC CL48'CFDBRA +2.5 M3 modes 1, 3-5 FPCR'
00007B70	00080000 00080000			1168 DC XL16'00080000008000000800000080000'
00007B80	C3C6C4C2 D9C1404E			1169 DC CL48'CFDBRA +2.5 M3 modes 6, 7 FPCR'
00007BB0	00080000 00080000			1170 DC XL16'00080000008000000000000000000000'
00007BC0	C3C6C4C2 D9C1404E			1171 DC CL48'CFDBRA +5.5 FPC modes 1-3, 7 FPCR'
00007BF0	00000001 00000002			1172 DC XL16'0000001000000200000030000007'
00007C00	C3C6C4C2 D9C1404E			1173 DC CL48'CFDBRA +5.5 M3 modes 1, 3-5 FPCR'
00007C30	00080000 00080000			1174 DC XL16'00080000008000000800000080000'
00007C40	C3C6C4C2 D9C1404E			1175 DC CL48'CFDBRA +5.5 M3 modes 6, 7 FPCR'
00007C70	00080000 00080000			1176 DC XL16'00080000008000000000000000000000'
00007C80	C3C6C4C2 D9C1404E			1177 DC CL48'CFDBRA +9.5 FPC modes 1-3, 7 FPCR'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
00007CB0	00000001 00000002			1178 DC XL16'00000001000000020000000300000007'
00007CC0	C3C6C4C2 D9C1404E			1179 DC CL48'CFDBRA +9.5 M3 modes 1, 3-5 FPCR'
00007CF0	00080000 00080000			1180 DC XL16'000800000080000008000000080000'
00007D00	C3C6C4C2 D9C1404E			1181 DC CL48'CFDBRA +9.5 M3 modes 6, 7 FCPR'
00007D30	00080000 00080000			1182 DC XL16'00080000008000000000000000000000'
00007D40	C3C6C4C2 D9C1404E			1183 DC CL48'CFDBRA +0.75 FPC modes 1-3, 7 FCPR'
00007D70	00000001 00000002			1184 DC XL16'00000001000000020000000300000007'
00007D80	C3C6C4C2 D9C1404E			1185 DC CL48'CFDBRA +0.75 M3 modes 1, 3-5 FPCR'
00007DB0	00080000 00080000			1186 DC XL16'000800000080000008000000080000'
00007DC0	C3C6C4C2 D9C1404E			1187 DC CL48'CFDBRA +0.75 M3 modes 6, 7 FCPR'
00007DF0	00080000 00080000			1188 DC XL16'00080000008000000000000000000000'
00007E00	C3C6C4C2 D9C14060			1189 DC CL48'CFDBRA -0.25 FPC modes 1-3, 7 FCPR'
00007E30	00000001 00000002			1190 DC XL16'00000001000000020000000300000007'
00007E40	C3C6C4C2 D9C14060			1191 DC CL48'CFDBRA -0.25 M3 modes 1, 3-5 FPCR'
00007E70	00080000 00080000			1192 DC XL16'000800000080000008000000080000'
00007E80	C3C6C4C2 D9C14060			1193 DC CL48'CFDBRA -0.25 M3 modes 6, 7 FCPR'
00007EB0	00080000 00080000			1194 DC XL16'00080000008000000000000000000000'
		00000024 00000001		1195 LBFPRMOF_NUM EQU (*-LBFPRMOF_GOOD)/64
				1196 *
				1197 *
		00007EC0 00000001		1198 XBFPOUT_GOOD EQU *
00007EC0	C3C6E7C2 D9409985			1199 DC CL48'CFXBR result pair 1a'
00007EF0	3FFF0000 00000000			1200 DC XL16'3FFF0000000000000000000000000000'
00007F00	C3C6E7C2 D9409985			1201 DC CL48'CFXBR result pair 1b'
00007F30	3FFF0000 00000000			1202 DC XL16'3FFF0000000000000000000000000000'
00007F40	C3C6E7C2 D9409985			1203 DC CL48'CFXBR result pair 2a'
00007F70	C0000000 00000000			1204 DC XL16'C000000000000000000000000000000'
00007F80	C3C6E7C2 D9409985			1205 DC CL48'CFXBR result pair 2b'
00007FB0	C0000000 00000000			1206 DC XL16'C000000000000000000000000000000'
00007FC0	C3C6E7C2 D9409985			1207 DC CL48'CFXBR result pair 3a'
00007FF0	40000000 00000000			1208 DC XL16'40000000000000000000000000000000'
00008000	C3C6E7C2 D9409985			1209 DC CL48'CFXBR result pair 3b'
00008030	40000000 00000000			1210 DC XL16'40000000000000000000000000000000'
00008040	C3C6E7C2 D9409985			1211 DC CL48'CFXBR result pair 4a'
00008070	7FFF8100 00000000			1212 DC XL16'7FFF8100000000000000000000000000'
00008080	C3C6E7C2 D9409985			1213 DC CL48'CFXBR result pair 4b'
000080B0	00000000 00000000			1214 DC XL16'00000000000000000000000000000000'
000080C0	C3C6E7C2 D9409985			1215 DC CL48'CFXBR result pair 5a'
000080F0	7FFF8100 00000000			1216 DC XL16'7FFF8100000000000000000000000000'
00008100	C3C6E7C2 D9409985			1217 DC CL48'CFXBR result pair 5b'
00008130	7FFF8100 00000000			1218 DC XL16'7FFF8100000000000000000000000000'
00008140	C3C6E7C2 D9409985			1219 DC CL48'CFXBR result pair 6a'
00008170	3FFF0000 00000000			1220 DC XL16'3FFF0000000000000000000000000000'
00008180	C3C6E7C2 D9409985			1221 DC CL48'CFXBR result pair 6b'
000081B0	3FFF0000 00000000			1222 DC XL16'3FFF0000000000000000000000000000'
000081C0	C3C6E7C2 D9409985			1223 DC CL48'CFXBR result pair 7a'
000081F0	80000000 00000000			1224 DC XL16'80000000000000000000000000000000'
00008200	C3C6E7C2 D9409985			1225 DC CL48'CFXBR result pair 7b'
00008230	80000000 00000000			1226 DC XL16'80000000000000000000000000000000'
		0000000E 00000001		1227 XBFPOUT_NUM EQU (*-XBFPOUT_GOOD)/64
				1228 *
				1229 *
		00008240 00000001		1230 XBFPFLGS_GOOD EQU *
00008240	C3C6E7C2 D940C6D7			1231 DC CL48'CFXBR FPC pairs 1-2'
00008270	00000000 F8000000			1232 DC XL16'0000000F80000000080000F8000C00'
00008280	C3C6E7C2 D940C6D7			1233 DC CL48'CFXBR FPC pairs 3-4'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
000082B0	00080000 F8000800			1234 DC XL16 '00080000F800080000800000F8008000'
000082C0	C3C6E7C2 D940C6D7			1235 DC CL48 'CFXBR FPC pairs 5-6'
000082F0	00000000 F8000000			1236 DC XL16 '00000000F800000000080000F8000C00'
00008300	C3C6E7C2 D940C6D7			1237 DC CL48 'CFXBR FPC pair 7'
00008330	00080000 F8000800			1238 DC XL16 '00080000F8000800000000000000000000000000'
		00000004 00000001		1239 XBFPFLGS_NUM EQU (*-XBFPFLGS_GOOD)/64
				1240 *
				1241 *
		00008340 00000001		1242 XBFPRMO_GOOD EQU *
00008340	C3C6E7C2 D9C14060			1243 DC CL48 'CFXBRA -9.5 FPC mode 1'
00008370	C0022000 00000000			1244 DC XL16 'C00220000000000000000000000000000'
00008380	C3C6E7C2 D9C14060			1245 DC CL48 'CFXBRA -9.5 FPC mode 2'
000083B0	C0022000 00000000			1246 DC XL16 'C00220000000000000000000000000000'
000083C0	C3C6E7C2 D9C14060			1247 DC CL48 'CFXBRA -9.5 FPC mode 3'
000083F0	C0024000 00000000			1248 DC XL16 'C00240000000000000000000000000000'
00008400	C3C6E7C2 D9C14060			1249 DC CL48 'CFXBRA -9.5 FPC mode 7'
00008430	C0022000 00000000			1250 DC XL16 'C00220000000000000000000000000000'
00008440	C3C6E7C2 D9C14060			1251 DC CL48 'CFXBRA -9.5 M3 mode 1'
00008470	C0024000 00000000			1252 DC XL16 'C00240000000000000000000000000000'
00008480	C3C6E7C2 D9C14060			1253 DC CL48 'CFXBRA -9.5 M3 mode 3'
000084B0	C0022000 00000000			1254 DC XL16 'C00220000000000000000000000000000'
000084C0	C3C6E7C2 D9C14060			1255 DC CL48 'CFXBRA -9.5 M3 mode 4'
000084F0	C0024000 00000000			1256 DC XL16 'C00240000000000000000000000000000'
00008500	C3C6E7C2 D9C14060			1257 DC CL48 'CFXBRA -9.5 M3 mode 5'
00008530	C0022000 00000000			1258 DC XL16 'C00220000000000000000000000000000'
00008540	C3C6E7C2 D9C14060			1259 DC CL48 'CFXBRA -9.5 M3 mode 6'
00008570	C0022000 00000000			1260 DC XL16 'C00220000000000000000000000000000'
00008580	C3C6E7C2 D9C14060			1261 DC CL48 'CFXBRA -9.5 M3 mode 7'
000085B0	C0024000 00000000			1262 DC XL16 'C00240000000000000000000000000000'
000085C0	C3C6E7C2 D9C14060			1263 DC CL48 'CFXBRA -5.5 FPC mode 1'
000085F0	C0014000 00000000			1264 DC XL16 'C00140000000000000000000000000000'
00008600	C3C6E7C2 D9C14060			1265 DC CL48 'CFXBRA -5.5 FPC mode 2'
00008630	C0014000 00000000			1266 DC XL16 'C00140000000000000000000000000000'
00008640	C3C6E7C2 D9C14060			1267 DC CL48 'CFXBRA -5.5 FPC mode 3'
00008670	C0018000 00000000			1268 DC XL16 'C00180000000000000000000000000000'
00008680	C3C6E7C2 D9C14060			1269 DC CL48 'CFXBRA -5.5 FPC mode 7'
000086B0	C0014000 00000000			1270 DC XL16 'C00140000000000000000000000000000'
000086C0	C3C6E7C2 D9C14060			1271 DC CL48 'CFXBRA -5.5 M3 mode 1'
000086F0	C0018000 00000000			1272 DC XL16 'C00180000000000000000000000000000'
00008700	C3C6E7C2 D9C14060			1273 DC CL48 'CFXBRA -5.5 M3 mode 3'
00008730	C0014000 00000000			1274 DC XL16 'C00140000000000000000000000000000'
00008740	C3C6E7C2 D9C14060			1275 DC CL48 'CFXBRA -5.5 M3 mode 4'
00008770	C0018000 00000000			1276 DC XL16 'C00180000000000000000000000000000'
00008780	C3C6E7C2 D9C14060			1277 DC CL48 'CFXBRA -5.5 M3 mode 5'
000087B0	C0014000 00000000			1278 DC XL16 'C00140000000000000000000000000000'
000087C0	C3C6E7C2 D9C14060			1279 DC CL48 'CFXBRA -5.5 M3 mode 6'
000087F0	C0014000 00000000			1280 DC XL16 'C00140000000000000000000000000000'
00008800	C3C6E7C2 D9C14060			1281 DC CL48 'CFXBRA -5.5 M3 mode 7'
00008830	C0018000 00000000			1282 DC XL16 'C00180000000000000000000000000000'
00008840	C3C6E7C2 D9C14060			1283 DC CL48 'CFXBRA -2.5 FPC mode 1'
00008870	C0000000 00000000			1284 DC XL16 'C00000000000000000000000000000000'
00008880	C3C6E7C2 D9C14060			1285 DC CL48 'CFXBRA -2.5 FPC mode 2'
000088B0	C0000000 00000000			1286 DC XL16 'C00000000000000000000000000000000'
000088C0	C3C6E7C2 D9C14060			1287 DC CL48 'CFXBRA -2.5 FPC mode 3'
000088F0	C0008000 00000000			1288 DC XL16 'C00080000000000000000000000000000'
00008900	C3C6E7C2 D9C14060			1289 DC CL48 'CFXBRA -2.5 FPC mode 7'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
00008930	C0008000 00000000			1290 DC XL16 'C00080000000000000000000000000000'
00008940	C3C6E7C2 D9C14060			1291 DC CL48 'CFXBRA -2.5 M3 mode 1'
00008970	C0008000 00000000			1292 DC XL16 'C00080000000000000000000000000000'
00008980	C3C6E7C2 D9C14060			1293 DC CL48 'CFXBRA -2.5 M3 mode 3'
000089B0	C0008000 00000000			1294 DC XL16 'C00080000000000000000000000000000'
000089C0	C3C6E7C2 D9C14060			1295 DC CL48 'CFXBRA -2.5 M3 mode 4'
000089F0	C0000000 00000000			1296 DC XL16 'C00000000000000000000000000000000'
00008A00	C3C6E7C2 D9C14060			1297 DC CL48 'CFXBRA -2.5 M3 mode 5'
00008A30	C0000000 00000000			1298 DC XL16 'C00000000000000000000000000000000'
00008A40	C3C6E7C2 D9C14060			1299 DC CL48 'CFXBRA -2.5 M3 mode 6'
00008A70	C0000000 00000000			1300 DC XL16 'C00000000000000000000000000000000'
00008A80	C3C6E7C2 D9C14060			1301 DC CL48 'CFXBRA -2.5 M3 mode 7'
00008AB0	C0008000 00000000			1302 DC XL16 'C00080000000000000000000000000000'
00008AC0	C3C6E7C2 D9C14060			1303 DC CL48 'CFXBRA -1.5 FPC mode 1'
00008AF0	BFFF0000 00000000			1304 DC XL16 'BFFF0000000000000000000000000000'
00008B00	C3C6E7C2 D9C14060			1305 DC CL48 'CFXBRA -1.5 FPC mode 2'
00008B30	BFFF0000 00000000			1306 DC XL16 'BFFF0000000000000000000000000000'
00008B40	C3C6E7C2 D9C14060			1307 DC CL48 'CFXBRA -1.5 FPC mode 3'
00008B70	C0000000 00000000			1308 DC XL16 'C00000000000000000000000000000000'
00008B80	C3C6E7C2 D9C14060			1309 DC CL48 'CFXBRA -1.5 FPC mode 7'
00008BB0	BFFF0000 00000000			1310 DC XL16 'BFFF0000000000000000000000000000'
00008BC0	C3C6E7C2 D9C14060			1311 DC CL48 'CFXBRA -1.5 M3 mode 1'
00008BF0	C0000000 00000000			1312 DC XL16 'C00000000000000000000000000000000'
00008C00	C3C6E7C2 D9C14060			1313 DC CL48 'CFXBRA -1.5 M3 mode 3'
00008C30	BFFF0000 00000000			1314 DC XL16 'BFFF0000000000000000000000000000'
00008C40	C3C6E7C2 D9C14060			1315 DC CL48 'CFXBRA -1.5 M3 mode 4'
00008C70	C0000000 00000000			1316 DC XL16 'C00000000000000000000000000000000'
00008C80	C3C6E7C2 D9C14060			1317 DC CL48 'CFXBRA -1.5 M3 mode 5'
00008CB0	BFFF0000 00000000			1318 DC XL16 'BFFF0000000000000000000000000000'
00008CC0	C3C6E7C2 D9C14060			1319 DC CL48 'CFXBRA -1.5 M3 mode 6'
00008CF0	BFFF0000 00000000			1320 DC XL16 'BFFF0000000000000000000000000000'
00008D00	C3C6E7C2 D9C14060			1321 DC CL48 'CFXBRA -1.5 M3 mode 7'
00008D30	C0000000 00000000			1322 DC XL16 'C00000000000000000000000000000000'
00008D40	C3C6E7C2 D9C14060			1323 DC CL48 'CFXBRA -0.5 FPC mode 1'
00008D70	80000000 00000000			1324 DC XL16 '80000000000000000000000000000000'
00008D80	C3C6E7C2 D9C14060			1325 DC CL48 'CFXBRA -0.5 FPC mode 2'
00008DB0	80000000 00000000			1326 DC XL16 '80000000000000000000000000000000'
00008DC0	C3C6E7C2 D9C14060			1327 DC CL48 'CFXBRA -0.5 FPC mode 3'
00008DF0	BFFF0000 00000000			1328 DC XL16 'BFFF0000000000000000000000000000'
00008E00	C3C6E7C2 D9C14060			1329 DC CL48 'CFXBRA -0.5 FPC mode 7'
00008E30	BFFF0000 00000000			1330 DC XL16 'BFFF0000000000000000000000000000'
00008E40	C3C6E7C2 D9C14060			1331 DC CL48 'CFXBRA -0.5 M3 mode 1'
00008E70	BFFF0000 00000000			1332 DC XL16 'BFFF0000000000000000000000000000'
00008E80	C3C6E7C2 D9C14060			1333 DC CL48 'CFXBRA -0.5 M3 mode 3'
00008EB0	BFFF0000 00000000			1334 DC XL16 'BFFF0000000000000000000000000000'
00008EC0	C3C6E7C2 D9C14060			1335 DC CL48 'CFXBRA -0.5 M3 mode 4'
00008EF0	80000000 00000000			1336 DC XL16 '80000000000000000000000000000000'
00008F00	C3C6E7C2 D9C14060			1337 DC CL48 'CFXBRA -0.5 M3 mode 5'
00008F30	80000000 00000000			1338 DC XL16 '80000000000000000000000000000000'
00008F40	C3C6E7C2 D9C14060			1339 DC CL48 'CFXBRA -0.5 M3 mode 6'
00008F70	80000000 00000000			1340 DC XL16 '80000000000000000000000000000000'
00008F80	C3C6E7C2 D9C14060			1341 DC CL48 'CFXBRA -0.5 M3 mode 7'
00008FB0	BFFF0000 00000000			1342 DC XL16 'BFFF0000000000000000000000000000'
00008FC0	C3C6E7C2 D9C140F0			1343 DC CL48 'CFXBRA 0.5 FPC mode 1'
00008FF0	00000000 00000000			1344 DC XL16 '00000000000000000000000000000000'
00009000	C3C6E7C2 D9C140F0			1345 DC CL48 'CFXBRA 0.5 FPC mode 2'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
00009030	3FFF0000 00000000			1346 DC XL16 '3FFF0000000000000000000000000000'
00009040	C3C6E7C2 D9C140F0			1347 DC CL48 'CFXBRA 0.5 FPC mode 3'
00009070	00000000 00000000			1348 DC XL16 '00000000000000000000000000000000'
00009080	C3C6E7C2 D9C140F0			1349 DC CL48 'CFXBRA 0.5 FPC mode 7'
000090B0	3FFF0000 00000000			1350 DC XL16 '3FFF0000000000000000000000000000'
000090C0	C3C6E7C2 D9C140F0			1351 DC CL48 'CFXBRA 0.5 M3 mode 1'
000090F0	3FFF0000 00000000			1352 DC XL16 '3FFF0000000000000000000000000000'
00009100	C3C6E7C2 D9C140F0			1353 DC CL48 'CFXBRA 0.5 M3 mode 3'
00009130	3FFF0000 00000000			1354 DC XL16 '3FFF0000000000000000000000000000'
00009140	C3C6E7C2 D9C140F0			1355 DC CL48 'CFXBRA 0.5 M3 mode 4'
00009170	00000000 00000000			1356 DC XL16 '00000000000000000000000000000000'
00009180	C3C6E7C2 D9C140F0			1357 DC CL48 'CFXBRA 0.5 M3 mode 5'
000091B0	00000000 00000000			1358 DC XL16 '00000000000000000000000000000000'
000091C0	C3C6E7C2 D9C140F0			1359 DC CL48 'CFXBRA 0.5 M3 mode 6'
000091F0	3FFF0000 00000000			1360 DC XL16 '3FFF0000000000000000000000000000'
00009200	C3C6E7C2 D9C140F0			1361 DC CL48 'CFXBRA 0.5 M3 mode 7'
00009230	00000000 00000000			1362 DC XL16 '00000000000000000000000000000000'
00009240	C3C6E7C2 D9C140F1			1363 DC CL48 'CFXBRA 1.5 FPC mode 1'
00009270	3FFF0000 00000000			1364 DC XL16 '3FFF0000000000000000000000000000'
00009280	C3C6E7C2 D9C140F1			1365 DC CL48 'CFXBRA 1.5 FPC mode 2'
000092B0	40000000 00000000			1366 DC XL16 '40000000000000000000000000000000'
000092C0	C3C6E7C2 D9C140F1			1367 DC CL48 'CFXBRA 1.5 FPC mode 3'
000092F0	3FFF0000 00000000			1368 DC XL16 '3FFF0000000000000000000000000000'
00009300	C3C6E7C2 D9C140F1			1369 DC CL48 'CFXBRA 1.5 FPC mode 7'
00009330	3FFF0000 00000000			1370 DC XL16 '3FFF0000000000000000000000000000'
00009340	C3C6E7C2 D9C140F1			1371 DC CL48 'CFXBRA 1.5 M3 mode 1'
00009370	40000000 00000000			1372 DC XL16 '40000000000000000000000000000000'
00009380	C3C6E7C2 D9C140F1			1373 DC CL48 'CFXBRA 1.5 M3 mode 3'
000093B0	3FFF0000 00000000			1374 DC XL16 '3FFF0000000000000000000000000000'
000093C0	C3C6E7C2 D9C140F1			1375 DC CL48 'CFXBRA 1.5 M3 mode 4'
000093F0	40000000 00000000			1376 DC XL16 '40000000000000000000000000000000'
00009400	C3C6E7C2 D9C140F1			1377 DC CL48 'CFXBRA 1.5 M3 mode 5'
00009430	3FFF0000 00000000			1378 DC XL16 '3FFF0000000000000000000000000000'
00009440	C3C6E7C2 D9C140F1			1379 DC CL48 'CFXBRA 1.5 M3 mode 6'
00009470	40000000 00000000			1380 DC XL16 '40000000000000000000000000000000'
00009480	C3C6E7C2 D9C140F1			1381 DC CL48 'CFXBRA 1.5 M3 mode 7'
000094B0	3FFF0000 00000000			1382 DC XL16 '3FFF0000000000000000000000000000'
000094C0	C3C6E7C2 D9C140F2			1383 DC CL48 'CFXBRA 2.5 FPC mode 1'
000094F0	40000000 00000000			1384 DC XL16 '40000000000000000000000000000000'
00009500	C3C6E7C2 D9C140F2			1385 DC CL48 'CFXBRA 2.5 FPC mode 2'
00009530	40008000 00000000			1386 DC XL16 '40008000000000000000000000000000'
00009540	C3C6E7C2 D9C140F2			1387 DC CL48 'CFXBRA 2.5 FPC mode 3'
00009570	40000000 00000000			1388 DC XL16 '40000000000000000000000000000000'
00009580	C3C6E7C2 D9C140F2			1389 DC CL48 'CFXBRA 2.5 FPC mode 7'
000095B0	40008000 00000000			1390 DC XL16 '40008000000000000000000000000000'
000095C0	C3C6E7C2 D9C140F2			1391 DC CL48 'CFXBRA 2.5 M3 mode 1'
000095F0	40008000 00000000			1392 DC XL16 '40008000000000000000000000000000'
00009600	C3C6E7C2 D9C140F2			1393 DC CL48 'CFXBRA 2.5 M3 mode 3'
00009630	40008000 00000000			1394 DC XL16 '40008000000000000000000000000000'
00009640	C3C6E7C2 D9C140F2			1395 DC CL48 'CFXBRA 2.5 M3 mode 4'
00009670	40000000 00000000			1396 DC XL16 '40000000000000000000000000000000'
00009680	C3C6E7C2 D9C140F2			1397 DC CL48 'CFXBRA 2.5 M3 mode 5'
000096B0	40000000 00000000			1398 DC XL16 '40000000000000000000000000000000'
000096C0	C3C6E7C2 D9C140F2			1399 DC CL48 'CFXBRA 2.5 M3 mode 6'
000096F0	40008000 00000000			1400 DC XL16 '40008000000000000000000000000000'
00009700	C3C6E7C2 D9C140F2			1401 DC CL48 'CFXBRA 2.5 M3 mode 7'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
00009730	40000000 00000000			1402 DC XL16 '40000000000000000000000000000000'
00009740	C3C6E7C2 D9C140F5			1403 DC CL48 'CFXBRA 5.5 FPC mode 1'
00009770	40014000 00000000			1404 DC XL16 '40014000000000000000000000000000'
00009780	C3C6E7C2 D9C140F5			1405 DC CL48 'CFXBRA 5.5 FPC mode 2'
000097B0	40018000 00000000			1406 DC XL16 '40018000000000000000000000000000'
000097C0	C3C6E7C2 D9C140F5			1407 DC CL48 'CFXBRA 5.5 FPC mode 3'
000097F0	40014000 00000000			1408 DC XL16 '40014000000000000000000000000000'
00009800	C3C6E7C2 D9C140F5			1409 DC CL48 'CFXBRA 5.5 FPC mode 7'
00009830	40014000 00000000			1410 DC XL16 '40014000000000000000000000000000'
00009840	C3C6E7C2 D9C140F5			1411 DC CL48 'CFXBRA 5.5 M3 mode 1'
00009870	40018000 00000000			1412 DC XL16 '40018000000000000000000000000000'
00009880	C3C6E7C2 D9C140F5			1413 DC CL48 'CFXBRA 5.5 M3 mode 3'
000098B0	40014000 00000000			1414 DC XL16 '40014000000000000000000000000000'
000098C0	C3C6E7C2 D9C140F5			1415 DC CL48 'CFXBRA 5.5 M3 mode 4'
000098F0	40018000 00000000			1416 DC XL16 '40018000000000000000000000000000'
00009900	C3C6E7C2 D9C140F5			1417 DC CL48 'CFXBRA 5.5 M3 mode 5'
00009930	40014000 00000000			1418 DC XL16 '40014000000000000000000000000000'
00009940	C3C6E7C2 D9C140F5			1419 DC CL48 'CFXBRA 5.5 M3 mode 6'
00009970	40018000 00000000			1420 DC XL16 '40018000000000000000000000000000'
00009980	C3C6E7C2 D9C140F5			1421 DC CL48 'CFXBRA 5.5 M3 mode 7'
000099B0	40014000 00000000			1422 DC XL16 '40014000000000000000000000000000'
000099C0	C3C6E7C2 D9C140F9			1423 DC CL48 'CFXBRA 9.5 FPC mode 1'
000099F0	40022000 00000000			1424 DC XL16 '40022000000000000000000000000000'
00009A00	C3C6E7C2 D9C140F9			1425 DC CL48 'CFXBRA 9.5 FPC mode 2'
00009A30	40024000 00000000			1426 DC XL16 '40024000000000000000000000000000'
00009A40	C3C6E7C2 D9C140F9			1427 DC CL48 'CFXBRA 9.5 FPC mode 3'
00009A70	40022000 00000000			1428 DC XL16 '40022000000000000000000000000000'
00009A80	C3C6E7C2 D9C140F9			1429 DC CL48 'CFXBRA 9.5 FPC mode 7'
00009AB0	40022000 00000000			1430 DC XL16 '40022000000000000000000000000000'
00009AC0	C3C6E7C2 D9C140F9			1431 DC CL48 'CFXBRA 9.5 M3 mode 1'
00009AF0	40024000 00000000			1432 DC XL16 '40024000000000000000000000000000'
00009B00	C3C6E7C2 D9C140F9			1433 DC CL48 'CFXBRA 9.5 M3 mode 3'
00009B30	40022000 00000000			1434 DC XL16 '40022000000000000000000000000000'
00009B40	C3C6E7C2 D9C140F9			1435 DC CL48 'CFXBRA 9.5 M3 mode 4'
00009B70	40024000 00000000			1436 DC XL16 '40024000000000000000000000000000'
00009B80	C3C6E7C2 D9C140F9			1437 DC CL48 'CFXBRA 9.5 M3 mode 5'
00009BB0	40022000 00000000			1438 DC XL16 '40022000000000000000000000000000'
00009BC0	C3C6E7C2 D9C140F9			1439 DC CL48 'CFXBRA 9.5 M3 mode 6'
00009BF0	40024000 00000000			1440 DC XL16 '40024000000000000000000000000000'
00009C00	C3C6E7C2 D9C140F9			1441 DC CL48 'CFXBRA 9.5 M3 mode 7'
00009C30	40022000 00000000			1442 DC XL16 '40022000000000000000000000000000'
00009C40	C3C6E7C2 D9C1404E			1443 DC CL48 'CFXBRA +0.75 FPC mode 1'
00009C70	00000000 00000000			1444 DC XL16 '00000000000000000000000000000000'
00009C80	C3C6E7C2 D9C1404E			1445 DC CL48 'CFXBRA +0.75 FPC mode 2'
00009CB0	3FFF0000 00000000			1446 DC XL16 '3FFF0000000000000000000000000000'
00009CC0	C3C6E7C2 D9C1404E			1447 DC CL48 'CFXBRA +0.75 FPC mode 3'
00009CF0	00000000 00000000			1448 DC XL16 '00000000000000000000000000000000'
00009D00	C3C6E7C2 D9C1404E			1449 DC CL48 'CFXBRA +0.75 FPC mode 7'
00009D30	3FFF0000 00000000			1450 DC XL16 '3FFF0000000000000000000000000000'
00009D40	C3C6E7C2 D9C1404E			1451 DC CL48 'CFXBRA +0.75 M3 mode 1'
00009D70	3FFF0000 00000000			1452 DC XL16 '3FFF0000000000000000000000000000'
00009D80	C3C6E7C2 D9C1404E			1453 DC CL48 'CFXBRA +0.75 M3 mode 3'
00009DB0	3FFF0000 00000000			1454 DC XL16 '3FFF0000000000000000000000000000'
00009DC0	C3C6E7C2 D9C1404E			1455 DC CL48 'CFXBRA +0.75 M3 mode 4'
00009DF0	3FFF0000 00000000			1456 DC XL16 '3FFF0000000000000000000000000000'
00009E00	C3C6E7C2 D9C1404E			1457 DC CL48 'CFXBRA +0.75 M3 mode 5'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
00009E30	00000000 00000000			1458 DC XL16 '00000000000000000000000000000000'
00009E40	C3C6E7C2 D9C1404E			1459 DC CL48 'CFXBRA +0.75 M3 mode 6'
00009E70	3FFF0000 00000000			1460 DC XL16 '3FFF0000000000000000000000000000'
00009E80	C3C6E7C2 D9C1404E			1461 DC CL48 'CFXBRA +0.75 M3 mode 7'
00009EB0	00000000 00000000			1462 DC XL16 '00000000000000000000000000000000'
00009EC0	C3C6E7C2 D9C14060			1463 DC CL48 'CFXBRA -0.25 FPC mode 1'
00009EF0	80000000 00000000			1464 DC XL16 '80000000000000000000000000000000'
00009F00	C3C6E7C2 D9C14060			1465 DC CL48 'CFXBRA -0.25 FPC mode 2'
00009F30	80000000 00000000			1466 DC XL16 '80000000000000000000000000000000'
00009F40	C3C6E7C2 D9C14060			1467 DC CL48 'CFXBRA -0.25 FPC mode 3'
00009F70	BFFF0000 00000000			1468 DC XL16 'BFFF0000000000000000000000000000'
00009F80	C3C6E7C2 D9C14060			1469 DC CL48 'CFXBRA -0.25 FPC mode 7'
00009FB0	BFFF0000 00000000			1470 DC XL16 'BFFF0000000000000000000000000000'
00009FC0	C3C6E7C2 D9C14060			1471 DC CL48 'CFXBRA -0.25 M3 mode 1'
00009FF0	80000000 00000000			1472 DC XL16 '80000000000000000000000000000000'
0000AA00	C3C6E7C2 D9C14060			1473 DC CL48 'CFXBRA -0.25 M3 mode 3'
0000AA30	BFFF0000 00000000			1474 DC XL16 'BFFF0000000000000000000000000000'
0000AA40	C3C6E7C2 D9C14060			1475 DC CL48 'CFXBRA -0.25 M3 mode 4'
0000AA70	80000000 00000000			1476 DC XL16 '80000000000000000000000000000000'
0000AA80	C3C6E7C2 D9C14060			1477 DC CL48 'CFXBRA -0.25 M3 mode 5'
0000AA80	80000000 00000000			1478 DC XL16 '80000000000000000000000000000000'
0000AA90	C3C6E7C2 D9C14060			1479 DC CL48 'CFXBRA -0.25 M3 mode 6'
0000AA90	80000000 00000000			1480 DC XL16 '80000000000000000000000000000000'
0000AA90	C3C6E7C2 D9C14060			1481 DC CL48 'CFXBRA -0.25 M3 mode 7'
0000AA90	BFFF0000 00000000			1482 DC XL16 'BFFF0000000000000000000000000000'
		00000078 00000001		1483 XBFPRMO_NUM EQU (*-XBFPRMO_GOOD)/64
				1484 *
				1485 *
		0000A140 00000001		1486 XBFPRMOF_GOOD EQU *
0000A140	C3C6E7C2 D9C14060			1487 DC CL48 'CFXBRA -9.5 FPC mode 1-3, 7 FCPR'
0000A170	00000001 00000002			1488 DC XL16 '0000001000000200000030000007'
0000A180	C3C6E7C2 D9C14060			1489 DC CL48 'CFXBRA -9.5 M3 mode 1, 3-5 FPCR'
0000A1B0	00080000 00080000			1490 DC XL16 '0008000000800000800000080000'
0000A1C0	C3C6E7C2 D9C14060			1491 DC CL48 'CFXBRA -9.5 M3 mode 6, 7 FCPR'
0000A1F0	00080000 00080000			1492 DC XL16 '00080000008000000000000000000000'
0000A200	C3C6E7C2 D9C14060			1493 DC CL48 'CFXBRA -5.5 FPC mode 1-3, 7 FCPR'
0000A230	00000001 00000002			1494 DC XL16 '0000001000000200000030000007'
0000A240	C3C6E7C2 D9C14060			1495 DC CL48 'CFXBRA -5.5 M3 mode 1, 3-5 FPCR'
0000A270	00080000 00080000			1496 DC XL16 '0008000000800000800000080000'
0000A280	C3C6E7C2 D9C14060			1497 DC CL48 'CFXBRA -5.5 M3 mode 6, 7 FCPR'
0000A2B0	00080000 00080000			1498 DC XL16 '00080000008000000000000000000000'
0000A2C0	C3C6E7C2 D9C14060			1499 DC CL48 'CFXBRA -2.5 FPC mode 1-3, 7 FCPR'
0000A2F0	00000001 00000002			1500 DC XL16 '0000001000000200000030000007'
0000A300	C3C6E7C2 D9C14060			1501 DC CL48 'CFXBRA -2.5 M3 mode 1, 3-5 FPCR'
0000A330	00080000 00080000			1502 DC XL16 '00080000008000000800000080000'
0000A340	C3C6E7C2 D9C14060			1503 DC CL48 'CFXBRA -2.5 M3 mode 6, 7 FCPR'
0000A370	00080000 00080000			1504 DC XL16 '00080000008000000000000000000000'
0000A380	C3C6E7C2 D9C14060			1505 DC CL48 'CFXBRA -1.5 FPC mode 1-3, 7 FCPR'
0000A3B0	00000001 00000002			1506 DC XL16 '0000001000000200000030000007'
0000A3C0	C3C6E7C2 D9C14060			1507 DC CL48 'CFXBRA -1.5 M3 mode 1, 3-5 FPCR'
0000A3F0	00080000 00080000			1508 DC XL16 '00080000008000000800000080000'
0000A400	C3C6E7C2 D9C14060			1509 DC CL48 'CFXBRA -1.5 M3 mode 6, 7 FCPR'
0000A430	00080000 00080000			1510 DC XL16 '00080000008000000000000000000000'
0000A440	C3C6E7C2 D9C14060			1511 DC CL48 'CFXBRA -0.5 FPC mode 1-3, 7 FCPR'
0000A470	00000001 00000002			1512 DC XL16 '0000001000000200000030000007'
0000A480	C3C6E7C2 D9C14060			1513 DC CL48 'CFXBRA -0.5 M3 mode 1, 3-5 FPCR'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT				
0000AA40				1561 HELPERS DS 0H	(R12 base of helper subroutines)			
				1563 ****	*****	*****	*****	*****
				1564 *	REPORT UNEXPECTED PROGRAM CHECK			
				1565 ****	*****	*****	*****	*****
0000AA40				1567 PGMCK DS 0H				
0000AA40	F342 C072 F08E	0000AAB2	0000008E	1568 UNPK PROGCODE(L'PROGCODE+1),PCINTCD(L'PCINTCD+1)				
0000AA46	926B C076	0000AAB6	1569	MVI PGMCOMMA,C,'				
0000AA4A	DC03 C072 C178	0000AAB2	0000ABB8	1570 TR PROGCODE,HEXRTTAB				
0000AA50	F384 C07C F150	0000AABC	00000150	1572 UNPK PGMPSW+(0*9)(9),PCOLDPSW+(0*4)(5)				
0000AA56	9240 C084	0000AAC4	1573	MVI PGMPSW+(0*9)+8,C'				
0000AA5A	DC07 C07C C178	0000AABC	0000ABB8	1574 TR PGMPSW+(0*9)(8),HEXRTTAB				
0000AA60	F384 C085 F154	0000AAC5	00000154	1576 UNPK PGMPSW+(1*9)(9),PCOLDPSW+(1*4)(5)				
0000AA66	9240 C08D	0000AACD	1577	MVI PGMPSW+(1*9)+8,C'				
0000AA6A	DC07 C085 C178	0000AAC5	0000ABB8	1578 TR PGMPSW+(1*9)(8),HEXRTTAB				
0000AA70	F384 C08E F158	0000AACE	00000158	1580 UNPK PGMPSW+(2*9)(9),PCOLDPSW+(2*4)(5)				
0000AA76	9240 C096	0000AAD6	1581	MVI PGMPSW+(2*9)+8,C'				
0000AA7A	DC07 C08E C178	0000AACE	0000ABB8	1582 TR PGMPSW+(2*9)(8),HEXRTTAB				
0000AA80	F384 C097 F15C	0000AAD7	0000015C	1584 UNPK PGMPSW+(3*9)(9),PCOLDPSW+(3*4)(5)				
0000AA86	9240 C09F	0000AADF	1585	MVI PGMPSW+(3*9)+8,C'				
0000AA8A	DC07 C097 C178	0000AAD7	0000ABB8	1586 TR PGMPSW+(3*9)(8),HEXRTTAB				
0000AA90	4100 0042		00000042	1588 LA R0,L'PROGMSG	R0 <= length of message			
0000AA94	4110 C05E		0000AA9E	1589 LA R1,PROGMSG	R1 --> the message text itself			
0000AA98	4520 C27A		0000ACBA	1590 BAL R2,MSG	Go display this message			
0000AA9C	07FD			1591 1592 BR R13	Return to caller			
0000AA9E				1594 PROGMSG DS 0CL66				
0000AA9E	D7D9D6C7 D9C1D440			1595 DC CL20'PROGRAM CHECK! CODE '				
0000AAB2	88888888			1596 PROGCODE DC CL4'hhhh'				
0000AAB6	6B			1597 PGMCOMMA DC CL1','				
0000AAB7	40D7E2E6 40			1598 DC CL5' PSW '				
0000AABC	88888888 88888888			1599 PGMPSW DC CL36'hhhhhhhh hhhhhh hh hh hh hh hh hh hh '				

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				1601 **** 1602 * VERIFICATION ROUTINE 1603 ****	
0000AAE0				1605 VERISUB DS 0H 1606 * 1607 ** Loop through the VERIFY TABLE... 1608 *	
0000AAE0	4110 C32C	0000AD6C	1610	LA R1,VERIFTAB	R1 --> Verify table
0000AAE4	4120 000C	0000000C	1611	LA R2,VERIFLEN	R2 <= Number of entries
0000AAE8	0D30		1612	BASR R3,0	Set top of loop
0000AAEA	9846 1000	00000000	1614	LM R4,R6,0(R1)	Load verify table values
0000AAEE	4D70 C0C2	0000AB02	1615	BAS R7,VERIFY	Verify results
0000AAF2	4110 100C	0000000C	1616	LA R1,12(,R1)	Next verify table entry
0000AAF6	0623		1617	BCTR R2,R3	Loop through verify table
0000AAF8	9500 C278	0000ACB8	1619	CLI FAILFLAG,X'00'	Did all tests verify okay?
0000AAFC	078D		1620	BER R13	Yes, return to caller
0000AAFE	47F0 F238	00000238	1621	B FAIL	No, load FAILURE disabled wait PSW
				1623 * 1624 ** Loop through the ACTUAL / EXPECTED results... 1625 *	
0000AB02	0D80		1627 VERIFY	BASR R8,0	Set top of loop
0000AB04	D50F 4000 5030	00000000	00000030	CLC 0(16,R4),48(R5)	Actual results == Expected results?
0000AB0A	4770 C0DA		0000AB1A	BNE VERIFAIL	No, show failure
0000AB0E	4140 4010		00000010	1631 VERINEXT LA R4,16(,R4)	Next actual result
0000AB12	4150 5040		00000040	1632 LA R5,64(,R5)	Next expected result
0000AB16	0668		1633	BCTR R6,R8	Loop through results
0000AB18	07F7		1635	BR R7	Return to caller

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
				1637 ****	*****	*****	*****
				1638 *	Report the failure...		
				1639 *****	*****	*****	*****
0000AB1A	9005 C250		0000AC90	1641 VERIFAIL STM R0,R5,SAVER0R5	Save registers		
0000AB1E	92FF C278		0000ACB8	1642 MVI FAILFLAG,X'FF'	Remember verification failure		
				1643 *			
				1644 **	First, show them the description...		
				1645 *			
0000AB22	D22F C1E0 5000	0000AC20	00000000	1646 MVC FAILDESC,0(R5)	Save results/test description		
0000AB28	4100 0044		00000044	1647 LA R0,L'FAILMSG1	R0 <= length of message		
0000AB2C	4110 C1CC		0000AC0C	1648 LA R1,FAILMSG1	R1 --> the message text itself		
0000AB30	4520 C27A		0000ACBA	1649 BAL R2,MSG	Go display this message		
				1650 *			
				1651 **	Save address of actual and expected results		
				1652 *			
0000AB34	5040 C24C		0000AC8C	1653 ST R4,AActual	Save A(actual results)		
0000AB38	4150 5030		00000030	1654 LA R5,48(,R5)	R5 ==> expected results		
0000AB3C	5050 C248		0000AC88	1655 ST R5,AExpect	Save A(expected results)		
				1656 *			
				1657 **	Format and show them the EXPECTED ("Want") results...		
				1658 *			
0000AB40	D205 C210 C3C0	0000AC50	0000AE00	1659 MVC WANTGOT,=CL6'Want: '			
0000AB46	F384 C216 C248	0000AC56	0000AC88	1660 UNPK FAILADR(L'FAILADR+1),AEXPECT(L'AEXPECT+1)			
0000AB4C	9240 C21E		0000AC5E	1661 MVI BLANKEQ,C'			
0000AB50	DC07 C216 C178	0000AC56	0000ABB8	1662 TR FAILADR,HEXRTAB			
0000AB56	F384 C221 5000	0000AC61	00000000	1664 UNPK FAILVALS+(0*9)(9),(0*4)(5,R5)			
0000AB5C	9240 C229		0000AC69	1665 MVI FAILVALS+(0*9)+8,C'			
0000AB60	DC07 C221 C178	0000AC61	0000ABB8	1666 TR FAILVALS+(0*9)(8),HEXRTAB			
0000AB66	F384 C22A 5004	0000AC6A	00000004	1668 UNPK FAILVALS+(1*9)(9),(1*4)(5,R5)			
0000AB6C	9240 C232		0000AC72	1669 MVI FAILVALS+(1*9)+8,C'			
0000AB70	DC07 C22A C178	0000AC6A	0000ABB8	1670 TR FAILVALS+(1*9)(8),HEXRTAB			
0000AB76	F384 C233 5008	0000AC73	00000008	1672 UNPK FAILVALS+(2*9)(9),(2*4)(5,R5)			
0000AB7C	9240 C23B		0000AC7B	1673 MVI FAILVALS+(2*9)+8,C'			
0000AB80	DC07 C233 C178	0000AC73	0000ABB8	1674 TR FAILVALS+(2*9)(8),HEXRTAB			
0000AB86	F384 C23C 500C	0000AC7C	0000000C	1676 UNPK FAILVALS+(3*9)(9),(3*4)(5,R5)			
0000AB8C	9240 C244		0000AC84	1677 MVI FAILVALS+(3*9)+8,C'			
0000AB90	DC07 C23C C178	0000AC7C	0000ABB8	1678 TR FAILVALS+(3*9)(8),HEXRTAB			
0000AB96	4100 0035		00000035	1680 LA R0,L'FAILMSG2	R0 <= length of message		
0000AB9A	4110 C210		0000AC50	1681 LA R1,FAILMSG2	R1 --> the message text itself		
0000AB9E	4520 C27A		0000ACBA	1682 BAL R2,MSG	Go display this message		

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
				1684 *			
				1685 **	Format and show them the ACTUAL ("Got") results...		
				1686 *			
0000ABA2	D205 C210 C3C6	0000AC50	0000AE06	1687	MVC WANTGOT,=CL6'Got: '		
0000ABA8	F384 C216 C24C	0000AC56	0000AC8C	1688	UNPK FAILADR(L'FAILADR+1),AACTUAL(L'AACTUAL+1)		
0000ABAE	9240 C21E		0000AC5E	1689	MVI BLANKEQ,C'		
0000ABB2	DC07 C216 C178	0000AC56	0000ABB8	1690	TR FAILADR,HEXRTAB		
0000ABB8	F384 C221 4000	0000AC61	00000000	1692	UNPK FAILVALS+(0*9)(9),(0*4)(5,R4)		
0000ABBE	9240 C229		0000AC69	1693	MVI FAILVALS+(0*9)+8,C'		
0000ABC2	DC07 C221 C178	0000AC61	0000ABB8	1694	TR FAILVALS+(0*9)(8),HEXRTAB		
0000ABC8	F384 C22A 4004	0000AC6A	00000004	1696	UNPK FAILVALS+(1*9)(9),(1*4)(5,R4)		
0000ABCE	9240 C232		0000AC72	1697	MVI FAILVALS+(1*9)+8,C'		
0000ABD2	DC07 C22A C178	0000AC6A	0000ABB8	1698	TR FAILVALS+(1*9)(8),HEXRTAB		
0000ABD8	F384 C233 4008	0000AC73	00000008	1700	UNPK FAILVALS+(2*9)(9),(2*4)(5,R4)		
0000ABDE	9240 C23B		0000AC7B	1701	MVI FAILVALS+(2*9)+8,C'		
0000ABE2	DC07 C233 C178	0000AC73	0000ABB8	1702	TR FAILVALS+(2*9)(8),HEXRTAB		
0000ABE8	F384 C23C 400C	0000AC7C	0000000C	1704	UNPK FAILVALS+(3*9)(9),(3*4)(5,R4)		
0000ABEE	9240 C244		0000AC84	1705	MVI FAILVALS+(3*9)+8,C'		
0000ABF2	DC07 C23C C178	0000AC7C	0000ABB8	1706	TR FAILVALS+(3*9)(8),HEXRTAB		
0000ABF8	4100 0035		00000035	1708	LA R0,L'FAILMSG2	R0 <= length of message	
0000ABFC	4110 C210		0000AC50	1709	LA R1,FAILMSG2	R1 --> the message text itself	
0000AC00	4520 C27A		0000ACBA	1710	BAL R2,MSG	Go display this message	
0000AC04	9805 C250		0000AC90	1712	LM R0,R5,SAVER0R5	Restore registers	
0000AC08	47F0 C0CE		0000AB0E	1713	B VERINEXT	Continue with verification...	
0000AC0C				1715 FAILMSG1 DS	0CL68		
0000AC0C	C3D6D4D7 C1D9C9E2			1716 DC	CL20'COMPARISON FAILURE! '		
0000AC20	4D8485A2 83998997			1717 FAILDESC DC	CL48'(description)'		
0000AC50				1719 FAILMSG2 DS	0CL53		
0000AC50	40404040 4040			1720 WANTGOT DC	CL6' '	'Want: ' -or- 'Got: '	
0000AC56	C1C1C1C1 C1C1C1C1			1721 FAILADR DC	CL8'AAAAAAA'		
0000AC5E	407E40			1722 BLANKEQ DC	CL3' = '		
0000AC61	88888888 88888888			1723 FAILVALS DC	CL36'hhhhhhhh hhhhhhhh hhhhhhhh hhhhhhhh '		
0000AC88	00000000			1725 AEXPECT DC	F'0'	==> Expected ("Want") results	
0000AC8C	00000000			1726 AACTUAL DC	F'0'	==> Actual ("Got") results	
0000AC90	00000000 00000000			1727 SAVER0R5 DC	6F'0'	Registers R0 - R5 save area	
0000ACA8	F0F1F2F3 F4F5F6F7	0000ABB8	00000010	1728 CHARHEX DC	CL16'0123456789ABCDEF'		
0000ACB8	00			1729 HEXRTAB EQU	CHARHEX-X'F0'	Hexadecimal translation table	
				1730 FAILFLAG DC	X'00'	FF = Fail, 00 = Success	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT		
				1732 **** 1733 * Issue HERCULES MESSAGE pointed to by R1, length in R0 1734 ****		
0000ACBA	4900 C3BC		0000ADFC	1736 MSG CH R0,=H'0'	Do we even HAVE a message?	
0000ACBE	07D2			1737 BNHR R2	No, ignore	
0000ACC0	9002 C2B0		0000ACF0	1739 STM R0,R2,MSGSAVE	Save registers	
0000ACC4	4900 C3BE		0000ADFE	1741 CH R0,=AL2(L'MSGMSG)	Message length within limits?	
0000ACC8	47D0 C290		0000ACD0	1742 BNH MSGOK	Yes, continue	
0000ACCC	4100 005F		0000005F	1743 LA R0,L'MSGMSG	No, set to maximum	
0000ACD0	1820			1745 MSGOK LR R2,R0	Copy length to work register	
0000ACD2	0620			1746 BCTR R2,0	Minus-1 for execute	
0000ACD4	4420 C2BC		0000ACFC	1747 EX R2,MSGMVC	Copy message to O/P buffer	
0000ACD8	4120 200A		0000000A	1749 LA R2,1+L'MSGCMD(,R2)	Calculate true command length	
0000ACDC	4110 C2C2		0000AD02	1750 LA R1,MSGCMD	Point to true command	
0000ACE0	83120008			1752 DC X'83',X'12',X'0008'	Issue Hercules Diagnose X'008'	
0000ACE4	4780 C2AA		0000ACEA	1753 BZ MSGRET	Return if successful	
0000ACE8	0000			1754 DC H'0'	CRASH for debugging purposes	
0000ACEA	9802 C2B0		0000ACF0	1756 MSGRET LM R0,R2,MSGSAVE	Restore registers	
0000ACEE	07F2			1757 BR R2	Return to caller	
0000ACF0	00000000 00000000			1759 MSGSAVE DC 3F'0'	Registers save area	
0000ACFC	D200 C2CB 1000	0000AD0B	00000000	1760 MSGMVC MVC MSGMSG(0),0(R1)	Executed instruction	
0000AD02	D4E2C7D5 D6C8405C			1762 MSGCMD DC C'MSGNOH * '	*** HERCULES MESSAGE COMMAND ***	
0000AD0B	40404040 40404040			1763 MSGMSG DC CL95' '	The message text to be displayed	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				1765 **** 1766 * VERIFY TABLE 1767 **** 1768 * 1769 * A(actual results), A(expected results), A(#of results) 1770 * 1771 ****
0000AD6C				1773 VERIFTAB DC 0F'0' 1774 DC A(SBFPOUT) 1775 DC A(SBFPOUT_GOOD) 1776 DC A(SBFPOUT_NUM)
0000AD6C	00001000			1777 *
0000AD70	00005000			1778 DC A(SBFPFLGS) 1779 DC A(SBFPFLGS_GOOD) 1780 DC A(SBFPFLGS_NUM)
0000AD74	00000004			1781 *
0000AD78	00001080			1782 DC A(SBFPRMO) 1783 DC A(SBFPRMO_GOOD) 1784 DC A(SBFPRMO_NUM)
0000AD7C	00005100			1785 *
0000AD80	00000004			1786 DC A(SBFPRMOF) 1787 DC A(SBFPRMOF_GOOD) 1788 DC A(SBFPRMOF_NUM)
0000AD84	00001100			1789 *
0000AD88	00005200			1790 DC A(LBFPOUT) 1791 DC A(LBFPOUT_GOOD) 1792 DC A(LBFPOUT_NUM)
0000AD8C	00000024			1793 *
0000AD90	00001400			1794 DC A(LBFPFLGS) 1795 DC A(LBFPFLGS_GOOD) 1796 DC A(LBFPFLGS_NUM)
0000AD94	00005B00			1797 *
0000AD98	00000024			1798 DC A(LBFPRMO) 1799 DC A(LBFPRMO_GOOD) 1800 DC A(LBFPRMO_NUM)
0000AD9C	00002000			1801 *
0000ADA0	00006400			1802 DC A(LBFPRMOF) 1803 DC A(LBFPRMOF_GOOD) 1804 DC A(LBFPRMOF_NUM)
0000ADA4	00000007			1805 *
0000ADA8	00002100			1806 DC A(XBFPOUT) 1807 DC A(XBFPOUT_GOOD) 1808 DC A(XBFPOUT_NUM)
0000ADAC	000065C0			1809 *
0000ADB0	00000004			1810 DC A(XBFPFLGS) 1811 DC A(XBFPFLGS_GOOD) 1812 DC A(XBFPFLGS_NUM)
0000ADB4	00002200			1813 *
0000ADB8	000066C0			1814 DC A(XBFPRMO) 1815 DC A(XBFPRMO_GOOD) 1816 DC A(XBFPRMO_NUM)
0000ADBC	0000003C			1817 *
0000ADC0	00002800			1818 DC A(XBFPRMOF) 1819 DC A(XBFPRMOF_GOOD) 1820 DC A(XBFPRMOF_NUM)
0000ADC4	000075C0			
0000ADC8	00000024			
0000ADCC	00003000			
0000ADD0	00007EC0			
0000ADD4	0000000E			
0000ADD8	00003200			
0000ADDC	00008240			
0000ADE0	00000004			
0000ADE4	00003300			
0000ADE8	00008340			
0000ADEC	00000078			
0000ADF0	00003F00			
0000ADF4	0000A140			
0000ADF8	00000024			

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				1821 *
	0000000C	00000001	1822	VERIFLEN EQU (*-VERIFTAB)/12 #of entries in verify table

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
0000ADFC			1824	
0000ADFC	0000		1825	END
0000ADFE	005F		1826	=H'0'
0000AE00	E68195A3 7A40		1827	=AL2(L'MSGMSG)
0000AE06	C796A37A 4040		1828	=CL6'Want: '
				=CL6'Got: '

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
LBFPCT	U	000038	1	710	254
LBFPFLGS	U	002100	0	770	257 1794
LBFPFLGS_GOOD	U	0065C0	1	986	995 1795
LBFPFLGS_NUM	U	000004	1	995	1796
LBFPIN	F	000728	4	702	710 255
LBFPINRM	F	000760	4	712	725 273
LBFPOUT	U	002000	0	768	256 1790
LBFPOUT_GOOD	U	006400	1	968	983 1791
LBFPOUT_NUM	U	000007	1	983	1792
LBFPRMCT	U	000060	1	725	272
LBFPRMO	U	002200	0	772	274 1798
LBFPRMOF	U	002800	0	774	275 1802
LBFPRMOF_GOOD	U	0075C0	1	1122	1195 1803
LBFPRMOF_NUM	U	000024	1	1195	1804
LBFPRMO_GOOD	U	0066C0	1	998	1119 1799
LBFPRMO_NUM	U	00003C	1	1119	1800
LONGS	F	00030C	4	253	213
MSG	I	00ACBA	4	1736	1590 1649 1682 1710
MSGCMD	C	00AD02	9	1762	1749 1750
MSGMSG	C	00AD0B	95	1763	1743 1760 1741
MSGMVC	I	00ACFC	6	1760	1747
MSGOK	I	00ACD0	2	1745	1742
MSGRET	I	00ACEA	4	1756	1753
MSGSAVE	F	00ACF0	4	1759	1739 1756
PCINTCD	H	00008E	2	163	180 1568
PCNOTDTA	I	00020C	4	184	181
PCOLDPSW	U	000150	0	165	182 1572 1576 1580 1584
PGMCK	H	00AA40	2	1567	186
PGMCOMMA	C	00AAB6	1	1597	1569
PGMPSW	C	00AABC	36	1599	1572 1573 1574 1576 1577 1578 1580 1581 1582 1584 1585 1586
PROGCHK	H	000200	2	179	171
PROGCODE	C	00AAB2	4	1596	1568 1570
PROGMSG	C	00AA9E	66	1594	1588 1589
PROGPSW	D	000228	8	192	191
R0	U	000000	1	113	184 187 204 206 1588 1641 1647 1680 1708 1712 1736 1739 1741 1743
R1	U	000001	1	114	1745 1756 426 1589 1610 1614 1616 1648 1681 1709 1750 1760
R10	U	00000A	1	123	208 210 213 215 218 220 293 294 336 337 417 418 460 461
R11	U	00000B	1	124	541 542 587 588
R12	U	00000C	1	125	150 185 227 297 314 340 405 421 438 464 529 545 565 591
R13	U	00000D	1	126	667 186 209 211 214 216 219 221 228 296 315 339 406 420 439
R14	U	00000E	1	127	463 530 544 566 590 668 1592 1620
R15	U	00000F	1	128	149 184 187
R2	U	000002	1	115	293 295 314 336 338 405 417 419 438 460 462 466 462 529 541 543
R3	U	000003	1	116	565 587 589 667 1590 1611 1617 1649 1682 1710 1737 1739 1745 1746
R4	U	000004	1	117	1614 1629 1631 1653 1692 1696 1700 1704
R5	U	000005	1	118	1629 1632 1641 1646 1654 1655 1664 1668 1672 1676 1712
R6	U	000006	1	119	1614 1633
R7	U	000007	1	120	294 302 308 312 337 349 355 361 367 374 379 384 389 394
				399 403 418 426 432 436 461 473 479 485 491 498 503 508	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
=CL6'Want: '	C	00AE00	6	1827	1659
=H'0'	H	00ADFC	2	1825	1736

MACRO DEFN REFERENCES

No defined macros

DESC	SYMBOL	SIZE	POS	ADDR
Entry: 0				
Image	IMAGE	44556	0000-AE0B	0000-AE0B
Region		44556	0000-AE0B	0000-AE0B
CSECT	BFPLDFPI	44556	0000-AE0B	0000-AE0B

STMT	FILE NAME
1	c:\Users\Fish\Documents\Visual Studio 2008\Projects\MyProjects\ASMA-0\bfp-003-loadfpi\bfp-003-loadfpi.asm
** NO ERRORS FOUND **	