

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
2				*****
3				*
4				*Testcase IEEE Compare and Compare And Signal.
5				* Exhaustively test results from the Compare and Compare And Signal
6				* instructions. The Condition Code and FPC flags are saved for each
7				* test value pair. If an IEEE trap occurs, the DXC code is saved
8				* instead of the Condition Code.
9				*
10				*
11				*****
12				** IMPORTANT! **
13				*****
14				*
15				* This test uses the Hercules Diagnose X'008' interface
16				* to display messages and thus your .tst runtest script
17				* MUST contain a "DIAG8CMD ENABLE" statement within it!
18				*
19				*
20				*****
22				*****
23				*
24				* bfp-013-comps.asm
25				*
26				* This assembly-language source file is part of the
27				* Hercules Binary Floating Point Validation Package
28				* by Stephen R. Orso
29				*
30				* Copyright 2016 by Stephen R Orso.
31				* Runtest *Compare dependency removed by Fish on 2022-08-16
32				* PADCSECT macro/usage removed by Fish on 2022-08-16
33				*
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56				* PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				57 * PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY
				58 * OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
				59 * (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
				60 * OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
				61 *
				62 *****
				64 *****
				65 *
				66 * Each possible comparison class is tested, for a total of 64 test
				67 * value pairs for each of the five instruction precisions and formats.
				68 * Each instruction precision and format is tested twice, once with
				69 * exceptions non-trappable and once with exceptions trappable.
				70 *
				71 * One list of input values is provided. Each value is tested against
				72 * every other value in the same list.
				73 *
				74 * Each result is two bytes, one for the CC and one for FPC flags. If
				75 * a trap occurs, the DXC code replaces the CC.
				76 *
				77 * Tests 5 COMPARE, 5 COMPARE AND SIGNAL
				78 * COMPARE (BFP short, RRE) CEBR
				79 * COMPARE (BFP short, RXE) CEB
				80 * COMPARE (BFP long, RRE) CDBR
				81 * COMPARE (BFP long, RXE) CDB
				82 * COMPARE (BFP extended, RRE) CXBR
				83 * COMPARE AND SIGNAL (BFP short, RRE) KEBR
				84 * COMPARE AND SIGNAL (BFP short, RXE) KEB
				85 * COMPARE AND SIGNAL (BFP long, RRE) KDBR
				86 * COMPARE AND SIGNAL (BFP long, RXE) KDB
				87 * COMPARE AND SIGNAL (BFP extended, RRE) KXBR
				88 *
				89 * Also tests the following floating point support instructions
				90 * EXTRACT FPC
				91 * LOAD (Short)
				92 * LOAD (Long)
				93 * LOAD ZERO (Long)
				94 * STORE (Short)
				95 * STORE (Long)
				96 * SET FPC
				97 *
				98 *****

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				100 *	
				101 *	Note: for compatibility with the z/CMS test rig, do not change
				102 *	or use R11, R14, or R15. Everything else is fair game.
				103 *	
	00000000	0000A383		104 BFPCOMPS	START 0
	00000000	00000001		105 STRTLABL	EQU *
	00000000	00000001		106 R0	EQU 0 Work register for cc extraction
	00000001	00000001		107 R1	EQU 1 Current Test Data Class mask
	00000002	00000001		108 R2	EQU 2 Holds count of test input values
	00000003	00000001		109 R3	EQU 3 Points to next test input value(s)
	00000004	00000001		110 R4	EQU 4 Available
	00000005	00000001		111 R5	EQU 5 Available
	00000006	00000001		112 R6	EQU 6 Available
	00000007	00000001		113 R7	EQU 7 Ptr to next Compare result
	00000008	00000001		114 R8	EQU 8 Ptr to next Compare and Signal result
	00000009	00000001		115 R9	EQU 9 Available
	0000000A	00000001		116 R10	EQU 10 Pointer to test address list
	0000000B	00000001		117 R11	EQU 11 **Reserved for z/CMS test rig
	0000000C	00000001		118 R12	EQU 12 Test value top of loop
	0000000D	00000001		119 R13	EQU 13 Mainline return address
	0000000E	00000001		120 R14	EQU 14 **Return address for z/CMS test rig
	0000000F	00000001		121 R15	EQU 15 **Base register on z/CMS or Hyperion
				122 *	
				123 *	Floating Point Register equates to keep the cross reference clean
				124 *	
	00000000	00000001		125 FPR0	EQU 0
	00000001	00000001		126 FPR1	EQU 1
	00000002	00000001		127 FPR2	EQU 2
	00000003	00000001		128 FPR3	EQU 3
	00000004	00000001		129 FPR4	EQU 4
	00000005	00000001		130 FPR5	EQU 5
	00000006	00000001		131 FPR6	EQU 6
	00000007	00000001		132 FPR7	EQU 7
	00000008	00000001		133 FPR8	EQU 8
	00000009	00000001		134 FPR9	EQU 9
	0000000A	00000001		135 FPR10	EQU 10
	0000000B	00000001		136 FPR11	EQU 11
	0000000C	00000001		137 FPR12	EQU 12
	0000000D	00000001		138 FPR13	EQU 13
	0000000E	00000001		139 FPR14	EQU 14
	0000000F	00000001		140 FPR15	EQU 15
				141 *	
00000000		00000000		142	USING *,R15
00000000		0000A000		143	USING HELPERS,R12
				144 *	
				145 *	Above works on real iron (R15=0 after sysclear)
				146 *	and in z/CMS (R15 points to start of load module)
				147 *	
				149	*****
				150 *	
				151 *	Low core definitions, Restart PSW, and Program Check Routine.
				152 *	
				153	*****

LOC	OBJECT CODE	ADDR1	ADDR2	STMT				
00000000		00000000	0000008E	155	ORG	STRTLABL+X'8E'		Program check interruption code
0000008E	0000			156	PCINTCD	DS	H	
				157	*			
		00000150	00000001	158	PCOLDPSW	EQU	STRTLABL+X'150'	z/Arch Program check old PSW
				159	*			
00000090		00000090	000001A0	160	ORG	STRTLABL+X'1A0'		z/Arch Restart PSW
000001A0	00000001 80000000			161	DC	X'0000000180000000',AD(START)		
				162	*			
000001B0		000001B0	000001D0	163	ORG	STRTLABL+X'1D0'		z/Arch Program check NEW PSW
000001D0	00000000 00000000			164	DC	X'0000000000000000',AD(PROGCHK)		
				165	*			
				166	*	Program check routine. If Data Exception, continue execution at		
				167	*	the instruction following the program check. Otherwise, hard wait.		
				168	*	No need to collect data. All interesting DXC stuff is captured		
				169	*	in the FPCR.		
				170	*			
000001E0		000001E0	00000200	171	ORG	STRTLABL+X'200'		
00000200				172	PROGCHK	DS	0H	Program check occurred...
00000200	9507 F08F		0000008F	173	CLI	PCINTCD+1,X'07'		Data Exception?
00000204	A774 0004		0000020C	174	JNE	PCNOTDTA		..no, hardwait (not sure if R15 is ok)
00000208	B2B2 F150		00000150	175	LPSWE	PCOLDPSW		..yes, resume program execution
0000020C	900F F23C		0000023C	177	PCNOTDTA	STM	R0,R15,SAVEREGS	Save registers
00000210	58C0 F27C		0000027C	178	L	R12,AHELPERS		Get address of helper subroutines
00000214	4DD0 C000		0000A000	179	BAS	R13,PGMCK		Report this unexpected program check
00000218	980F F23C		0000023C	180	LM	R0,R15,SAVEREGS		Restore registers
0000021C	12EE			182	LTR	R14,R14		Return address provided?
0000021E	077E			183	BNZR	R14		Yes, return to z/CMS test rig.
00000220	B2B2 F228		00000228	184	LPSWE	PROGPSW		Not data exception, enter disabled wait
00000228	00020000 00000000			185	PROGPSW	DC	0D'0',X'0002000000000000',XL6'00',X'DEAD'	Abnormal end
00000238	B2B2 F2C8		000002C8	186	FAIL	LPSWE	FAILPSW	Not data exception, enter disabled wait
0000023C	00000000 00000000			187	SAVEREGS	DC	16F'0'	Registers save area
0000027C	0000A000			188	AHELPERS	DC	A(HELPERS)	Address of helper subroutines

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				190	*****
				191	*
				192	* Main program. Enable Advanced Floating Point, process test cases.
				193	*
				194	*****
00000280				196	START DS 0H
00000280	B600 F2D8		000002D8	197	STCTL R0,R0,CTLR0 Store CR0 to enable AFP
00000284	9604 F2D9		000002D9	198	OI CTLR0+1,X'04' Turn on AFP bit
00000288	B700 F2D8		000002D8	199	LCTL R0,R0,CTLR0 Reload updated CR0
				200	*
0000028C	41A0 F300		00000300	201	LA R10,SHORTC Point to short BFP parameters
00000290	4DD0 F330		00000330	202	BAS R13,SBFPCOMP Perform short BFP Compare
				203	*
00000294	41A0 F310		00000310	204	LA R10,LONGC Point to long BFP parameters
00000298	4DD0 F43C		0000043C	205	BAS R13,LBFPCOMP Perform long BFP Compare
				206	*
0000029C	41A0 F320		00000320	207	LA R10,XTNDC Point to extended BFP parameters
000002A0	4DD0 F548		00000548	208	BAS R13,XBFPCOMP Perform extended BFP Compare
				209	*
				210	*****
				211	* Verify test results...
				212	*****
				213	*
000002A4	58C0 F27C		0000027C	214	L R12,AHELPERS Get address of helper subroutines
000002A8	4DD0 C0A0		0000A0A0	215	BAS R13,VERISUB Go verify results
000002AC	12EE			216	LTR R14,R14 Was return address provided?
000002AE	077E			217	BNZR R14 Yes, return to z/CMS test rig.
000002B0	B2B2 F2B8		000002B8	218	LPSWE GOODPSW Load SUCCESS PSW

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
000002B8				220	DS	0D	Ensure correct alignment for PSW
000002B8	00020000	00000000		221	GOODPSW	DC	X'0002000000000000',AD(0) Normal end - disabled wait
000002C8	00020000	00000000		222	FAILPSW	DC	X'0002000000000000',XL6'00',X'0BAD' Abnormal end
				223	*		
000002D8	00000000			224	CTLR0	DS	F
000002DC	00000000			225	FPCREGNT	DC	X'00000000' FPCR, trap all IEEE exceptions, zero flags
000002E0	F8000000			226	FPCREGTR	DC	X'F8000000' FPCR, trap no IEEE exceptions, zero flags
				227	*		
				228	*		Input values parameter list, four fullwords for each test data set
				229	*		1) Count,
				230	*		2) Address of inputs,
				231	*		3) Address to place results, and
				232	*		4) Address to place DXC/Flags/cc values.
				233	*		
000002E4		000002E4	00000300	234	ORG	STRTLABL+X'300'	Enable run-time replacement
00000300				235	SHORTC	DS	0F Inputs for short BFP Compare
00000300	00000008			236		DC	A(SBFPCT)
00000304	000005EC			237		DC	A(SBFPIN)
00000308	00001000			238		DC	A(SBFPCCC)
0000030C	00001400			239		DC	A(SBFPSCCC)
				240	*		
00000310				241	LONGC	DS	0F Inputs for long BFP Compare
00000310	00000008			242		DC	A(LBFPCT)
00000314	00000610			243		DC	A(LBFPIN)
00000318	00002000			244		DC	A(LBFPCCC)
0000031C	00002400			245		DC	A(LBFPSCCC)
				246	*		
00000320				247	XTNDC	DS	0F Inputs for extended BFP Compare
00000320	00000008			248		DC	A(XBFPCT)
00000324	00000650			249		DC	A(XBFPIN)
00000328	00003000			250		DC	A(XBFPCCC)
0000032C	00003400			251		DC	A(XBFPSCCC)

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				253	*****
				254	*
				255	* Compare short BFP inputs to each possible class of short BFP. Eight
				256	* pairs of results are generated for each input: one with all
				257	* exceptions non-trappable, and the second with all exceptions
				258	* trappable. The CC and FPC flags are stored for each result that
				259	* does not cause a trap. The DXC code and FPC flags are stored for
				260	* each result that traps.
				261	*
				262	*****
00000330				264	SBFPCOMP DS 0H Compare short BFP inputs
00000330	9823 A000		00000000	265	LM R2,R3,0(R10) Get count and address of test input values
00000334	9878 A008		00000008	266	LM R7,R8,8(R10) Get address of result area and flag area.
00000338	1222			267	LTR R2,R2 Any test cases?
0000033A	078D			268	BZR R13 ..No, return to caller
0000033C	0DC0			269	BASR R12,0 Set top of loop
				270	*
0000033E	7880 3000		00000000	271	LE FPR8,0(,R3) Get short BFP left-hand test value
00000342	9845 A000		00000000	272	LM R4,R5,0(R10) Get count and start of right-hand side
00000346	1799			273	XR R9,R9 Reference zero value for Set Program Mask
00000348	0D60			274	BASR R6,0 Set top of inner loop
				275	*
				276	* top of loop to test left-hand value against each input
				277	*
0000034A	7810 5000		00000000	278	LE FPR1,0(,R5) Get right-hand side of compare
				279	*
0000034E	B29D F2DC		000002DC	280	LFPC FPCREGNT Set exceptions non-trappable
00000352	0490			281	SPM R9 Clear condition code
00000354	B309 0081			282	CEBR FPR8,FPR1 Compare And Signal floating point nrs RRE
00000358	B29C 7000		00000000	283	STFPC 0(R7) Store FPC
0000035C	B222 0000			284	IPM R0 Get condition code and program mask
00000360	8800 001C		0000001C	285	SRL R0,28 Isolate CC in low order byte
00000364	4200 7003		00000003	286	STC R0,3(,R7) Save condition code in results table
				287	*
00000368	B29D F2E0		000002E0	288	LFPC FPCREGTR Set exceptions trappable
0000036C	0490			289	SPM R9 Clear condition code
0000036E	B309 0081			290	CEBR FPR8,FPR1 Compare And Signal floating point nrs RRE
00000372	B29C 7004		00000004	291	STFPC 4(R7) Store FPC
00000376	B222 0000			292	IPM R0 Get condition code and program mask
0000037A	8800 001C		0000001C	293	SRL R0,28 Isolate CC in low order byte
0000037E	4200 7007		00000007	294	STC R0,7(,R7) Save condition code in results table
				295	*
00000382	B29D F2DC		000002DC	296	LFPC FPCREGNT Set exceptions non-trappable
00000386	0490			297	SPM R9 Clear condition code
00000388	ED80 5000 0009		00000000	298	CEB FPR8,0(,R5) Compare And Signal floating point nrs RXE
0000038E	B29C 7008		00000008	299	STFPC 8(R7) Store FPC
00000392	B222 0000			300	IPM R0 Get condition code and program mask
00000396	8800 001C		0000001C	301	SRL R0,28 Isolate CC in low order byte
0000039A	4200 700B		0000000B	302	STC R0,11(,R7) Save condition code in results table
				303	*
0000039E	B29D F2E0		000002E0	304	LFPC FPCREGTR Set exceptions trappable
000003A2	0490			305	SPM R9 Clear condition code
000003A4	ED80 5000 0009		00000000	306	CEB FPR8,0(,R5) Compare And Signal floating point nrs RXE
000003AA	B29C 700C		0000000C	307	STFPC 12(R7) Store FPC

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
000003AE	B222 0000			308	IPM	R0	Get condition code and program mask
000003B2	8800 001C		0000001C	309	SRL	R0,28	Isolate CC in low order byte
000003B6	4200 700F		0000000F	310	STC	R0,15(,R7)	Save condition code in results table
				311 *			
000003BA	B29D F2DC		000002DC	312	LFPC	FPCREGNT	Set exceptions non-trappable
000003BE	0490			313	SPM	R9	Clear condition code
000003C0	B308 0081			314	KEBR	FPR8,FPR1	Compare And Signal floating point nrs RRE
000003C4	B29C 8000		00000000	315	STFPC	0(R8)	Store FPC
000003C8	B222 0000			316	IPM	R0	Get condition code and program mask
000003CC	8800 001C		0000001C	317	SRL	R0,28	Isolate CC in low order byte
000003D0	4200 8003		00000003	318	STC	R0,3(,R8)	Save condition code in results table
				319 *			
000003D4	B29D F2E0		000002E0	320	LFPC	FPCREGTR	Set exceptions trappable
000003D8	0490			321	SPM	R9	Clear condition code
000003DA	B308 0081			322	KEBR	FPR8,FPR1	Compare And Signal floating point nrs RRE
000003DE	B29C 8004		00000004	323	STFPC	4(R8)	Store FPC
000003E2	B222 0000			324	IPM	R0	Get condition code and program mask
000003E6	8800 001C		0000001C	325	SRL	R0,28	Isolate CC in low order byte
000003EA	4200 8007		00000007	326	STC	R0,7(,R8)	Save condition code in results table
				327 *			
000003EE	B29D F2DC		000002DC	328	LFPC	FPCREGNT	Set exceptions non-trappable
000003F2	0490			329	SPM	R9	Clear condition code
000003F4	ED80 5000 0008		00000000	330	KEB	FPR8,0(,R5)	Compare And Signal floating point nrs RXE
000003FA	B29C 8008		00000008	331	STFPC	8(R8)	Store FPC
000003FE	B222 0000			332	IPM	R0	Get condition code and program mask
00000402	8800 001C		0000001C	333	SRL	R0,28	Isolate CC in low order byte
00000406	4200 800B		0000000B	334	STC	R0,11(,R8)	Save condition code in results table
				335 *			
0000040A	B29D F2E0		000002E0	336	LFPC	FPCREGTR	Set exceptions trappable
0000040E	0490			337	SPM	R9	Clear condition code
00000410	ED80 5000 0008		00000000	338	KEB	FPR8,0(,R5)	Compare And Signal floating point nrs RXE
00000416	B29C 800C		0000000C	339	STFPC	12(R8)	Store FPC
0000041A	B222 0000			340	IPM	R0	Get condition code and program mask
0000041E	8800 001C		0000001C	341	SRL	R0,28	Isolate CC in low order byte
00000422	4200 800F		0000000F	342	STC	R0,15(,R8)	Save condition code in results table
				343 *			
00000426	4150 5004		00000004	344	LA	R5,4(,R5)	Point to next right-hand value
0000042A	4170 7010		00000010	345	LA	R7,16(,R7)	Point to next CC/DXC/FPR CEB result area
0000042E	4180 8010		00000010	346	LA	R8,16(,R8)	Point to next CC/DXC/FPR KEB result area
00000432	0646			347	BCTR	R4,R6	Loop through right-hand values
				348 *			
00000434	4130 3004		00000004	349	LA	R3,4(,R3)	Point to next left-hand value
00000438	062C			350	BCTR	R2,R12	Loop through left-hand values
				351 *			
0000043A	07FD			352	BR	R13	All converted; return.

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				354	*****
				355	*
				356	* Compare long BFP inputs to each possible class of long BFP. Eight
				357	* pairs of results are generated for each input: one with all
				358	* exceptions non-trappable, and the second with all exceptions
				359	* trappable. The CC and FPC flags are stored for each result that
				360	* does not cause a trap. The DXC code and FPC flags are stored for
				361	* each result that traps.
				362	*
				363	*****
0000043C				365	LBFPCOMP DS 0H Compare long BFP inputs
0000043C	9823 A000		00000000	366	LM R2,R3,0(R10) Get count and address of test input values
00000440	9878 A008		00000008	367	LM R7,R8,8(R10) Get address of result area and flag area.
00000444	1222			368	LTR R2,R2 Any test cases?
00000446	078D			369	BZR R13 ..No, return to caller
00000448	0DC0			370	BASR R12,0 Set top of loop
				371	*
0000044A	6880 3000		00000000	372	LD FPR8,0(,R3) Get long BFP left-hand test value
0000044E	9845 A000		00000000	373	LM R4,R5,0(R10) Get count and start of right-hand side
00000452	1799			374	XR R9,R9 Reference zero value for Set Program Mask
00000454	0D60			375	BASR R6,0 Set top of inner loop
				376	*
				377	* top of loop to test left-hand value against each input
				378	*
00000456	6810 5000		00000000	379	LD FPR1,0(,R5) Get right-hand side of compare
				380	*
0000045A	B29D F2DC		000002DC	381	LFPC FPCREGNT Set exceptions non-trappable
0000045E	0490			382	SPM R9 Clear condition code
00000460	B319 0081			383	CDBR FPR8,FPR1 Compare And Signal floating point nrs RRE
00000464	B29C 7000		00000000	384	STFPC 0(R7) Store FPC
00000468	B222 0000			385	IPM R0 Get condition code and program mask
0000046C	8800 001C		0000001C	386	SRL R0,28 Isolate CC in low order byte
00000470	4200 7003		00000003	387	STC R0,3(,R7) Save condition code in results table
				388	*
00000474	B29D F2E0		000002E0	389	LFPC FPCREGTR Set exceptions trappable
00000478	0490			390	SPM R9 Clear condition code
0000047A	B319 0081			391	CDBR FPR8,FPR1 Compare And Signal floating point nrs RRE
0000047E	B29C 7004		00000004	392	STFPC 4(R7) Store FPC
00000482	B222 0000			393	IPM R0 Get condition code and program mask
00000486	8800 001C		0000001C	394	SRL R0,28 Isolate CC in low order byte
0000048A	4200 7007		00000007	395	STC R0,7(,R7) Save condition code in results table
				396	*
0000048E	B29D F2DC		000002DC	397	LFPC FPCREGNT Set exceptions non-trappable
00000492	0490			398	SPM R9 Clear condition code
00000494	ED80 5000 0019		00000000	399	CDB FPR8,0(,R5) Compare And Signal floating point nrs RXE
0000049A	B29C 7008		00000008	400	STFPC 8(R7) Store FPC
0000049E	B222 0000			401	IPM R0 Get condition code and program mask
000004A2	8800 001C		0000001C	402	SRL R0,28 Isolate CC in low order byte
000004A6	4200 700B		0000000B	403	STC R0,11(,R7) Save condition code in results table
				404	*
000004AA	B29D F2E0		000002E0	405	LFPC FPCREGTR Set exceptions trappable
000004AE	0490			406	SPM R9 Clear condition code
000004B0	ED80 5000 0019		00000000	407	CDB FPR8,0(,R5) Compare And Signal floating point nrs RXE
000004B6	B29C 700C		0000000C	408	STFPC 12(R7) Store FPC

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
000004BA	B222 0000			409	IPM	R0	Get condition code and program mask
000004BE	8800 001C		0000001C	410	SRL	R0,28	Isolate CC in low order byte
000004C2	4200 700F		0000000F	411	STC	R0,15(,R7)	Save condition code in results table
				412 *			
000004C6	B29D F2DC		000002DC	413	LFPC	FPCREGNT	Set exceptions non-trappable
000004CA	0490			414	SPM	R9	Clear condition code
000004CC	B318 0081			415	KDBR	FPR8,FPR1	Compare And Signal floating point nrs RRE
000004D0	B29C 8000		00000000	416	STFPC	0(R8)	Store FPC
000004D4	B222 0000			417	IPM	R0	Get condition code and program mask
000004D8	8800 001C		0000001C	418	SRL	R0,28	Isolate CC in low order byte
000004DC	4200 8003		00000003	419	STC	R0,3(,R8)	Save condition code in results table
				420 *			
000004E0	B29D F2E0		000002E0	421	LFPC	FPCREGTR	Set exceptions trappable
000004E4	0490			422	SPM	R9	Clear condition code
000004E6	B318 0081			423	KDBR	FPR8,FPR1	Compare And Signal floating point nrs RRE
000004EA	B29C 8004		00000004	424	STFPC	4(R8)	Store FPC
000004EE	B222 0000			425	IPM	R0	Get condition code and program mask
000004F2	8800 001C		0000001C	426	SRL	R0,28	Isolate CC in low order byte
000004F6	4200 8007		00000007	427	STC	R0,7(,R8)	Save condition code in results table
				428 *			
000004FA	B29D F2DC		000002DC	429	LFPC	FPCREGNT	Set exceptions non-trappable
000004FE	0490			430	SPM	R9	Clear condition code
00000500	ED80 5000 0018		00000000	431	KDB	FPR8,0(,R5)	Compare And Signal floating point nrs RXE
00000506	B29C 8008		00000008	432	STFPC	8(R8)	Store FPC
0000050A	B222 0000			433	IPM	R0	Get condition code and program mask
0000050E	8800 001C		0000001C	434	SRL	R0,28	Isolate CC in low order byte
00000512	4200 800B		0000000B	435	STC	R0,11(,R8)	Save condition code in results table
				436 *			
00000516	B29D F2E0		000002E0	437	LFPC	FPCREGTR	Set exceptions trappable
0000051A	0490			438	SPM	R9	Clear condition code
0000051C	ED80 5000 0018		00000000	439	KDB	FPR8,0(,R5)	Compare And Signal floating point nrs RXE
00000522	B29C 800C		0000000C	440	STFPC	12(R8)	Store FPC
00000526	B222 0000			441	IPM	R0	Get condition code and program mask
0000052A	8800 001C		0000001C	442	SRL	R0,28	Isolate CC in low order byte
0000052E	4200 800F		0000000F	443	STC	R0,15(,R8)	Save condition code in results table
				444 *			
00000532	4150 5008		00000008	445	LA	R5,8(,R5)	Point to next right-hand value
00000536	4170 7010		00000010	446	LA	R7,16(,R7)	Point to next CC/DXC/FPR CDB result area
0000053A	4180 8010		00000010	447	LA	R8,16(,R8)	Point to next CC/DXC/FPR KDB result area
0000053E	0646			448	BCTR	R4,R6	Loop through right-hand values
				449 *			
00000540	4130 3008		00000008	450	LA	R3,8(,R3)	Point to next left-hand value
00000544	062C			451	BCTR	R2,R12	Loop through left-hand values
				452 *			
00000546	07FD			453	BR	R13	All converted; return.

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				455	*****
				456	*
				457	* Compare long BFP inputs to each possible class of long BFP. Eight
				458	* pairs of results are generated for each input: one with all
				459	* exceptions non-trappable, and the second with all exceptions
				460	* trappable. The CC and FPC flags are stored for each result that
				461	* does not cause a trap. The DXC code and FPC flags are stored for
				462	* each result that traps.
				463	*
				464	*****
00000548				466	XBFPCOMP DS 0H Compare long BFP inputs
00000548	9823 A000		00000000	467	LM R2,R3,0(R10) Get count and address of test input values
0000054C	9878 A008		00000008	468	LM R7,R8,8(R10) Get address of result area and flag area.
00000550	1222			469	LTR R2,R2 Any test cases?
00000552	078D			470	BZR R13 ..No, return to caller
00000554	0DC0			471	BASR R12,0 Set top of loop
				472	*
00000556	6880 3000		00000000	473	LD FPR8,0(,R3) Get long BFP left-hand test value part 1
0000055A	68A0 3008		00000008	474	LD FPR10,8(,R3) Get long BFP left-hand test value part 2
0000055E	9845 A000		00000000	475	LM R4,R5,0(R10) Get count and start of right-hand side
00000562	1799			476	XR R9,R9 Reference zero value for Set Program Mask
00000564	0D60			477	BASR R6,0 Set top of inner loop
				478	*
				479	* top of loop to test left-hand value against each input
				480	*
00000566	6810 5000		00000000	481	LD FPR1,0(,R5) Get right-hand side of compare part 1
0000056A	6830 5008		00000008	482	LD FPR3,8(,R5) Get right-hand side of compare part 2
				483	*
0000056E	B29D F2DC		000002DC	484	LFPC FPCREGNT Set exceptions non-trappable
00000572	0490			485	SPM R9 Clear condition code
00000574	B349 0081			486	CXBR FPR8,FPR1 Compare And Signal floating point nrs RRE
00000578	B29C 7000		00000000	487	STFPC 0(R7) Store FPC
0000057C	B222 0000			488	IPM R0 Get condition code and program mask
00000580	8800 001C		0000001C	489	SRL R0,28 Isolate CC in low order byte
00000584	4200 7003		00000003	490	STC R0,3(,R7) Save condition code in results table
				491	*
00000588	B29D F2E0		000002E0	492	LFPC FPCREGTR Set exceptions trappable
0000058C	0490			493	SPM R9 Clear condition code
0000058E	B349 0081			494	CXBR FPR8,FPR1 Compare And Signal floating point nrs RRE
00000592	B29C 7004		00000004	495	STFPC 4(R7) Store FPC
00000596	B222 0000			496	IPM R0 Get condition code and program mask
0000059A	8800 001C		0000001C	497	SRL R0,28 Isolate CC in low order byte
0000059E	4200 7007		00000007	498	STC R0,7(,R7) Save condition code in results table
				499	*
000005A2	B29D F2DC		000002DC	500	LFPC FPCREGNT Set exceptions non-trappable
000005A6	0490			501	SPM R9 Clear condition code
000005A8	B348 0081			502	KXBR FPR8,FPR1 Compare And Signal floating point nrs RRE
000005AC	B29C 8000		00000000	503	STFPC 0(R8) Store FPC
000005B0	B222 0000			504	IPM R0 Get condition code and program mask
000005B4	8800 001C		0000001C	505	SRL R0,28 Isolate CC in low order byte
000005B8	4200 8003		00000003	506	STC R0,3(,R8) Save condition code in results table
				507	*
000005BC	B29D F2E0		000002E0	508	LFPC FPCREGTR Set exceptions trappable
000005C0	0490			509	SPM R9 Clear condition code

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
000005C2	B348 0081			510	KXBR	FPR8,FPR1	Compare And Signal floating point nrs RRE
000005C6	B29C 8004		00000004	511	STFPC	4(R8)	Store FPC
000005CA	B222 0000			512	IPM	R0	Get condition code and program mask
000005CE	8800 001C		0000001C	513	SRL	R0,28	Isolate CC in low order byte
000005D2	4200 8007		00000007	514	STC	R0,7(,R8)	Save condition code in results table
				515 *			
000005D6	4150 5010		00000010	516	LA	R5,16(,R5)	Point to next right-hand value
000005DA	4170 7010		00000010	517	LA	R7,16(,R7)	Point to next CC/DXC/FPR CDB result area
000005DE	4180 8010		00000010	518	LA	R8,16(,R8)	Point to next CC/DXC/FPR KDB result area
000005E2	0646			519	BCTR	R4,R6	Loop through right-hand values
				520 *			
000005E4	4130 3010		00000010	521	LA	R3,16(,R3)	Point to next left-hand value
000005E8	062C			522	BCTR	R2,R12	Loop through left-hand values
				523 *			
000005EA	07FD			524	BR	R13	All converted; return.

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				526 *****
				527 *
				528 * Input test values. Each input is tested against every input in the
				529 * list, which means the eight values result in 64 tests.
				530 *
				531 *****
				533 *
				534 * Short BFP Input values
				535 *
000005EC				536 SBFPIN DS 0F Ensure fullword alignment for input table
000005EC	FF800000			537 DC X'FF800000' -infinity
000005F0	BF800000			538 DC X'BF800000' -1
000005F4	80000000			539 DC X'80000000' -0
000005F8	00000000			540 DC X'00000000' +0
000005FC	3F800000			541 DC X'3F800000' +1
00000600	7F800000			542 DC X'7F800000' +infinity
00000604	FFC00000			543 DC X'FFC00000' -QNaN
00000608	7F810000			544 DC X'7F810000' +SNaN
	00000008	00000001		545 SBFPCT EQU (*-SBFPIN)/4 Count of input values
				546 *
				547 * Long BFP Input values
				548 *
00000610				549 LBFPIN DS 0D Ensure doubleword alignment for inputs
00000610	FFF00000	00000000		550 DC X'FFF0000000000000' -infinity
00000618	BFF00000	00000000		551 DC X'BFF0000000000000' -1
00000620	80000000	00000000		552 DC X'8000000000000000' -0
00000628	00000000	00000000		553 DC X'0000000000000000' +0
00000630	3FF00000	00000000		554 DC X'3FF0000000000000' +1
00000638	7FF00000	00000000		555 DC X'7FF0000000000000' +infinity
00000640	7FF80000	00000000		556 DC X'7FF8000000000000' -QNaN
00000648	7FF01000	00000000		557 DC X'7FF0100000000000' +SNaN
	00000008	00000001		558 LBFPCT EQU (*-LBFPIN)/8 Count of input values
				559 *
				560 * Long BFP Input values
				561 *
00000650				562 XBFPIN DS 0D Ensure doubleword alignment for inputs
00000650	FFFF0000	00000000		563 DC X'FFFF0000000000000000000000000000' -infinity
00000660	BFFF0000	00000000		564 DC X'BFFF0000000000000000000000000000' -1
00000670	80000000	00000000		565 DC X'80000000000000000000000000000000' -0
00000680	00000000	00000000		566 DC X'00000000000000000000000000000000' +0
00000690	3FFF0000	00000000		567 DC X'3FFF0000000000000000000000000000' +1
000006A0	7FFF0000	00000000		568 DC X'7FFF0000000000000000000000000000' +infinity
000006B0	FFFF8000	00000000		569 DC X'FFFF8000000000000000000000000000' -QNaN
000006C0	7FFF0100	00000000		570 DC X'7FFF0100000000000000000000000000' +SNaN
	00000008	00000001		571 XBFPCT EQU (*-XBFPIN)/16 Count of input values

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
				573	*****
				574	* ACTUAL results saved here
				575	*****
				576	* Locations for ACTUAL results
				577	* Locations for ACTUAL results
				578	* Locations for ACTUAL results
				579	* Locations for ACTUAL results
				580	* For each test result, four bytes are generated as follows
				581	* 1 - non-trap CC
				582	* 2 - non-trap FPC flags
				583	* 3 - trappable CC
				584	* 4 - trappable FPC flags
				585	* Only for Compare involving SNaN and Compare And Signal involving any
				586	* NaN will the trappable and non-trap results be different.
				587	* NaN will the trappable and non-trap results be different.
				588	* NaN will the trappable and non-trap results be different.
				589	* For short and long instruction precisions, the RRE format is tested
				590	* first, followed by the RXE format. Extended precision only exists in
				591	* RRE format.
				592	* RRE format.
		00001000	00000001	593	SBFPCCC EQU STRTLABL+X'1000' Integer short Compare results
				594	* ..room for 64 tests, all used
				595	* ..room for 64 tests, all used
		00001400	00000001	596	SBFPCSCC EQU STRTLABL+X'1400' Integer short Compare & Sig. results
				597	* ..room for 64 tests, all used
				598	* ..room for 64 tests, all used
		00002000	00000001	599	LBFPCCC EQU STRTLABL+X'2000' Integer long Compare results
				600	* ..room for 64 tests, all used
				601	* ..room for 64 tests, all used
		00002400	00000001	602	LBFPCSCC EQU STRTLABL+X'2400' Integer lon Compare & Sig. results
				603	* ..room for 64 tests, all used
				604	* ..room for 64 tests, all used
		00003000	00000001	605	XBFPCC EQU STRTLABL+X'3000' Integer extended Compare results
				606	* ..room for 64 tests, all used
				607	* ..room for 64 tests, all used
		00003400	00000001	608	XBFPCC EQU STRTLABL+X'3400' Integer ext'd Compare & Sig. results
				609	* ..room for 64 tests, all used
				610	* ..room for 64 tests, all used

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				612 *****
				613 * EXPECTED results
				614 *****
				615 *
00006D0		00006D0	00004000	616 ORG STRTLABL+X'4000' (past end of actual results)
		00004000	00000001	617 *
				618 SBFPCCC_GOOD EQU *
00004000	C3C5C2D9	61C3C5C2		619 DC CL48'CEBR/CEB -infinity / -infinity'
00004030	00000000	F8000000		620 DC XL16'00000000F800000000000000F8000000'
00004040	C3C5C2D9	61C3C5C2		621 DC CL48'CEBR/CEB -infinity / -1'
00004070	00000001	F8000001		622 DC XL16'00000001F800000100000001F8000001'
00004080	C3C5C2D9	61C3C5C2		623 DC CL48'CEBR/CEB -infinity / -0'
000040B0	00000001	F8000001		624 DC XL16'00000001F800000100000001F8000001'
000040C0	C3C5C2D9	61C3C5C2		625 DC CL48'CEBR/CEB -infinity / +0'
000040F0	00000001	F8000001		626 DC XL16'00000001F800000100000001F8000001'
00004100	C3C5C2D9	61C3C5C2		627 DC CL48'CEBR/CEB -infinity / +1'
00004130	00000001	F8000001		628 DC XL16'00000001F800000100000001F8000001'
00004140	C3C5C2D9	61C3C5C2		629 DC CL48'CEBR/CEB -infinity / +infinity'
00004170	00000001	F8000001		630 DC XL16'00000001F800000100000001F8000001'
00004180	C3C5C2D9	61C3C5C2		631 DC CL48'CEBR/CEB -infinity / -QNaN'
000041B0	00000003	F8000003		632 DC XL16'00000003F800000300000003F8000003'
000041C0	C3C5C2D9	61C3C5C2		633 DC CL48'CEBR/CEB -infinity / +SNaN'
000041F0	00800003	F8008000		634 DC XL16'00800003F800800000800003F8008000'
00004200	C3C5C2D9	61C3C5C2		635 DC CL48'CEBR/CEB -1 / -infinity'
00004230	00000002	F8000002		636 DC XL16'00000002F800000200000002F8000002'
00004240	C3C5C2D9	61C3C5C2		637 DC CL48'CEBR/CEB -1 / -1'
00004270	00000000	F8000000		638 DC XL16'00000000F800000000000000F8000000'
00004280	C3C5C2D9	61C3C5C2		639 DC CL48'CEBR/CEB -1 / -0'
000042B0	00000001	F8000001		640 DC XL16'00000001F800000100000001F8000001'
000042C0	C3C5C2D9	61C3C5C2		641 DC CL48'CEBR/CEB -1 / +0'
000042F0	00000001	F8000001		642 DC XL16'00000001F800000100000001F8000001'
00004300	C3C5C2D9	61C3C5C2		643 DC CL48'CEBR/CEB -1 / +1'
00004330	00000001	F8000001		644 DC XL16'00000001F800000100000001F8000001'
00004340	C3C5C2D9	61C3C5C2		645 DC CL48'CEBR/CEB -1 / +infinity'
00004370	00000001	F8000001		646 DC XL16'00000001F800000100000001F8000001'
00004380	C3C5C2D9	61C3C5C2		647 DC CL48'CEBR/CEB -1 / -QNaN'
000043B0	00000003	F8000003		648 DC XL16'00000003F800000300000003F8000003'
000043C0	C3C5C2D9	61C3C5C2		649 DC CL48'CEBR/CEB -1 / +SNaN'
000043F0	00800003	F8008000		650 DC XL16'00800003F800800000800003F8008000'
00004400	C3C5C2D9	61C3C5C2		651 DC CL48'CEBR/CEB -0 / -infinity'
00004430	00000002	F8000002		652 DC XL16'00000002F800000200000002F8000002'
00004440	C3C5C2D9	61C3C5C2		653 DC CL48'CEBR/CEB -0 / -1'
00004470	00000002	F8000002		654 DC XL16'00000002F800000200000002F8000002'
00004480	C3C5C2D9	61C3C5C2		655 DC CL48'CEBR/CEB -0 / -0'
000044B0	00000000	F8000000		656 DC XL16'00000000F800000000000000F8000000'
000044C0	C3C5C2D9	61C3C5C2		657 DC CL48'CEBR/CEB -0 / +0'
000044F0	00000000	F8000000		658 DC XL16'00000000F800000000000000F8000000'
00004500	C3C5C2D9	61C3C5C2		659 DC CL48'CEBR/CEB -0 / +1'
00004530	00000001	F8000001		660 DC XL16'00000001F800000100000001F8000001'
00004540	C3C5C2D9	61C3C5C2		661 DC CL48'CEBR/CEB -0 / +infinity'
00004570	00000001	F8000001		662 DC XL16'00000001F800000100000001F8000001'
00004580	C3C5C2D9	61C3C5C2		663 DC CL48'CEBR/CEB -0 / -QNaN'
000045B0	00000003	F8000003		664 DC XL16'00000003F800000300000003F8000003'
000045C0	C3C5C2D9	61C3C5C2		665 DC CL48'CEBR/CEB -0 / +SNaN'
000045F0	00800003	F8008000		666 DC XL16'00800003F800800000800003F8008000'
00004600	C3C5C2D9	61C3C5C2		667 DC CL48'CEBR/CEB +0 / -infinity'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
00004630	00000002 F8000002			668 DC XL16 '00000002F800000200000002F8000002'
00004640	C3C5C2D9 61C3C5C2			669 DC CL48 'CEBR/CEB +0 / -1'
00004670	00000002 F8000002			670 DC XL16 '00000002F800000200000002F8000002'
00004680	C3C5C2D9 61C3C5C2			671 DC CL48 'CEBR/CEB +0 / -0'
000046B0	00000000 F8000000			672 DC XL16 '00000000F800000000000000F8000000'
000046C0	C3C5C2D9 61C3C5C2			673 DC CL48 'CEBR/CEB +0 / +0'
000046F0	00000000 F8000000			674 DC XL16 '00000000F800000000000000F8000000'
00004700	C3C5C2D9 61C3C5C2			675 DC CL48 'CEBR/CEB +0 / +1'
00004730	00000001 F8000001			676 DC XL16 '00000001F800000100000001F8000001'
00004740	C3C5C2D9 61C3C5C2			677 DC CL48 'CEBR/CEB +0 / +infinity'
00004770	00000001 F8000001			678 DC XL16 '00000001F800000100000001F8000001'
00004780	C3C5C2D9 61C3C5C2			679 DC CL48 'CEBR/CEB +0 / -QNaN'
000047B0	00000003 F8000003			680 DC XL16 '00000003F800000300000003F8000003'
000047C0	C3C5C2D9 61C3C5C2			681 DC CL48 'CEBR/CEB +0 / +SNaN'
000047F0	00800003 F8008000			682 DC XL16 '00800003F800800000800003F8008000'
00004800	C3C5C2D9 61C3C5C2			683 DC CL48 'CEBR/CEB +1 / -infinity'
00004830	00000002 F8000002			684 DC XL16 '00000002F800000200000002F8000002'
00004840	C3C5C2D9 61C3C5C2			685 DC CL48 'CEBR/CEB +1 / -1'
00004870	00000002 F8000002			686 DC XL16 '00000002F800000200000002F8000002'
00004880	C3C5C2D9 61C3C5C2			687 DC CL48 'CEBR/CEB +1 / -0'
000048B0	00000002 F8000002			688 DC XL16 '00000002F800000200000002F8000002'
000048C0	C3C5C2D9 61C3C5C2			689 DC CL48 'CEBR/CEB +1 / +0'
000048F0	00000002 F8000002			690 DC XL16 '00000002F800000200000002F8000002'
00004900	C3C5C2D9 61C3C5C2			691 DC CL48 'CEBR/CEB +1 / +1'
00004930	00000000 F8000000			692 DC XL16 '00000000F800000000000000F8000000'
00004940	C3C5C2D9 61C3C5C2			693 DC CL48 'CEBR/CEB +1 / +infinity'
00004970	00000001 F8000001			694 DC XL16 '00000001F800000100000001F8000001'
00004980	C3C5C2D9 61C3C5C2			695 DC CL48 'CEBR/CEB +1 / -QNaN'
000049B0	00000003 F8000003			696 DC XL16 '00000003F800000300000003F8000003'
000049C0	C3C5C2D9 61C3C5C2			697 DC CL48 'CEBR/CEB +1 / +SNaN'
000049F0	00800003 F8008000			698 DC XL16 '00800003F800800000800003F8008000'
00004A00	C3C5C2D9 61C3C5C2			699 DC CL48 'CEBR/CEB +infinity / -infinity'
00004A30	00000002 F8000002			700 DC XL16 '00000002F800000200000002F8000002'
00004A40	C3C5C2D9 61C3C5C2			701 DC CL48 'CEBR/CEB +infinity / -1'
00004A70	00000002 F8000002			702 DC XL16 '00000002F800000200000002F8000002'
00004A80	C3C5C2D9 61C3C5C2			703 DC CL48 'CEBR/CEB +infinity / -0'
00004AB0	00000002 F8000002			704 DC XL16 '00000002F800000200000002F8000002'
00004AC0	C3C5C2D9 61C3C5C2			705 DC CL48 'CEBR/CEB +infinity / +0'
00004AF0	00000002 F8000002			706 DC XL16 '00000002F800000200000002F8000002'
00004B00	C3C5C2D9 61C3C5C2			707 DC CL48 'CEBR/CEB +infinity / +1'
00004B30	00000002 F8000002			708 DC XL16 '00000002F800000200000002F8000002'
00004B40	C3C5C2D9 61C3C5C2			709 DC CL48 'CEBR/CEB +infinity / +infinity'
00004B70	00000000 F8000000			710 DC XL16 '00000000F800000000000000F8000000'
00004B80	C3C5C2D9 61C3C5C2			711 DC CL48 'CEBR/CEB +infinity / -QNaN'
00004BB0	00000003 F8000003			712 DC XL16 '00000003F800000300000003F8000003'
00004BC0	C3C5C2D9 61C3C5C2			713 DC CL48 'CEBR/CEB +infinity / +SNaN'
00004BF0	00800003 F8008000			714 DC XL16 '00800003F800800000800003F8008000'
00004C00	C3C5C2D9 61C3C5C2			715 DC CL48 'CEBR/CEB -QNaN / -infinity'
00004C30	00000003 F8000003			716 DC XL16 '00000003F800000300000003F8000003'
00004C40	C3C5C2D9 61C3C5C2			717 DC CL48 'CEBR/CEB -QNaN / -1'
00004C70	00000003 F8000003			718 DC XL16 '00000003F800000300000003F8000003'
00004C80	C3C5C2D9 61C3C5C2			719 DC CL48 'CEBR/CEB -QNaN / -0'
00004CB0	00000003 F8000003			720 DC XL16 '00000003F800000300000003F8000003'
00004CC0	C3C5C2D9 61C3C5C2			721 DC CL48 'CEBR/CEB -QNaN / +0'
00004CF0	00000003 F8000003			722 DC XL16 '00000003F800000300000003F8000003'
00004D00	C3C5C2D9 61C3C5C2			723 DC CL48 'CEBR/CEB -QNaN / +1'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
00004D30	00000003 F8000003			724 DC XL16'00000003F800000300000003F8000003'
00004D40	C3C5C2D9 61C3C5C2			725 DC CL48'CEBR/CEB -QNaN / +infinity'
00004D70	00000003 F8000003			726 DC XL16'00000003F800000300000003F8000003'
00004D80	C3C5C2D9 61C3C5C2			727 DC CL48'CEBR/CEB -QNaN / -QNaN'
00004DB0	00000003 F8000003			728 DC XL16'00000003F800000300000003F8000003'
00004DC0	C3C5C2D9 61C3C5C2			729 DC CL48'CEBR/CEB -QNaN / +SNaN'
00004DF0	00800003 F8008000			730 DC XL16'00800003F800800000800003F8008000'
00004E00	C3C5C2D9 61C3C5C2			731 DC CL48'CEBR/CEB +SNaN / -infinity'
00004E30	00800003 F8008000			732 DC XL16'00800003F800800000800003F8008000'
00004E40	C3C5C2D9 61C3C5C2			733 DC CL48'CEBR/CEB +SNaN / -1'
00004E70	00800003 F8008000			734 DC XL16'00800003F800800000800003F8008000'
00004E80	C3C5C2D9 61C3C5C2			735 DC CL48'CEBR/CEB +SNaN / -0'
00004EB0	00800003 F8008000			736 DC XL16'00800003F800800000800003F8008000'
00004EC0	C3C5C2D9 61C3C5C2			737 DC CL48'CEBR/CEB +SNaN / +0'
00004EF0	00800003 F8008000			738 DC XL16'00800003F800800000800003F8008000'
00004F00	C3C5C2D9 61C3C5C2			739 DC CL48'CEBR/CEB +SNaN / +1'
00004F30	00800003 F8008000			740 DC XL16'00800003F800800000800003F8008000'
00004F40	C3C5C2D9 61C3C5C2			741 DC CL48'CEBR/CEB +SNaN / +infinity'
00004F70	00800003 F8008000			742 DC XL16'00800003F800800000800003F8008000'
00004F80	C3C5C2D9 61C3C5C2			743 DC CL48'CEBR/CEB +SNaN / -QNaN'
00004FB0	00800003 F8008000			744 DC XL16'00800003F800800000800003F8008000'
00004FC0	C3C5C2D9 61C3C5C2			745 DC CL48'CEBR/CEB +SNaN / +SNaN'
00004FF0	00800003 F8008000			746 DC XL16'00800003F800800000800003F8008000'
		00000040	00000001	747 SBFPCCC_NUM EQU (*-SBFPCCC_GOOD)/64
				748 *
				749 *
		00005000	00000001	750 SBFPSCC_GOOD EQU *
00005000	D2C5C2D9 61D2C5C2			751 DC CL48'KEBR/KEB -infinity / -infinity'
00005030	00000000 F8000000			752 DC XL16'00000000F800000000000000F8000000'
00005040	D2C5C2D9 61D2C5C2			753 DC CL48'KEBR/KEB -infinity / -1'
00005070	00000001 F8000001			754 DC XL16'00000001F800000100000001F8000001'
00005080	D2C5C2D9 61D2C5C2			755 DC CL48'KEBR/KEB -infinity / -0'
000050B0	00000001 F8000001			756 DC XL16'00000001F800000100000001F8000001'
000050C0	D2C5C2D9 61D2C5C2			757 DC CL48'KEBR/KEB -infinity / +0'
000050F0	00000001 F8000001			758 DC XL16'00000001F800000100000001F8000001'
00005100	D2C5C2D9 61D2C5C2			759 DC CL48'KEBR/KEB -infinity / +1'
00005130	00000001 F8000001			760 DC XL16'00000001F800000100000001F8000001'
00005140	D2C5C2D9 61D2C5C2			761 DC CL48'KEBR/KEB -infinity / +infinity'
00005170	00000001 F8000001			762 DC XL16'00000001F800000100000001F8000001'
00005180	D2C5C2D9 61D2C5C2			763 DC CL48'KEBR/KEB -infinity / -QNaN'
000051B0	00800003 F8008000			764 DC XL16'00800003F800800000800003F8008000'
000051C0	D2C5C2D9 61D2C5C2			765 DC CL48'KEBR/KEB -infinity / +SNaN'
000051F0	00800003 F8008000			766 DC XL16'00800003F800800000800003F8008000'
00005200	D2C5C2D9 61D2C5C2			767 DC CL48'KEBR/KEB -1 / -infinity'
00005230	00000002 F8000002			768 DC XL16'00000002F800000200000002F8000002'
00005240	D2C5C2D9 61D2C5C2			769 DC CL48'KEBR/KEB -1 / -1'
00005270	00000000 F8000000			770 DC XL16'00000000F800000000000000F8000000'
00005280	D2C5C2D9 61D2C5C2			771 DC CL48'KEBR/KEB -1 / -0'
000052B0	00000001 F8000001			772 DC XL16'00000001F800000100000001F8000001'
000052C0	D2C5C2D9 61D2C5C2			773 DC CL48'KEBR/KEB -1 / +0'
000052F0	00000001 F8000001			774 DC XL16'00000001F800000100000001F8000001'
00005300	D2C5C2D9 61D2C5C2			775 DC CL48'KEBR/KEB -1 / +1'
00005330	00000001 F8000001			776 DC XL16'00000001F800000100000001F8000001'
00005340	D2C5C2D9 61D2C5C2			777 DC CL48'KEBR/KEB -1 / +infinity'
00005370	00000001 F8000001			778 DC XL16'00000001F800000100000001F8000001'
00005380	D2C5C2D9 61D2C5C2			779 DC CL48'KEBR/KEB -1 / -QNaN'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
000053B0	00800003 F8008000			780	DC XL16'00800003F800800000800003F8008000'
000053C0	D2C5C2D9 61D2C5C2			781	DC CL48'KEBR/KEB -1 / +NaN'
000053F0	00800003 F8008000			782	DC XL16'00800003F800800000800003F8008000'
00005400	D2C5C2D9 61D2C5C2			783	DC CL48'KEBR/KEB -0 / -infinity'
00005430	00000002 F8000002			784	DC XL16'00000002F800000200000002F8000002'
00005440	D2C5C2D9 61D2C5C2			785	DC CL48'KEBR/KEB -0 / -1'
00005470	00000002 F8000002			786	DC XL16'00000002F800000200000002F8000002'
00005480	D2C5C2D9 61D2C5C2			787	DC CL48'KEBR/KEB -0 / -0'
000054B0	00000000 F8000000			788	DC XL16'00000000F800000000000000F8000000'
000054C0	D2C5C2D9 61D2C5C2			789	DC CL48'KEBR/KEB -0 / +0'
000054F0	00000000 F8000000			790	DC XL16'00000000F800000000000000F8000000'
00005500	D2C5C2D9 61D2C5C2			791	DC CL48'KEBR/KEB -0 / +1'
00005530	00000001 F8000001			792	DC XL16'00000001F800000100000001F8000001'
00005540	D2C5C2D9 61D2C5C2			793	DC CL48'KEBR/KEB -0 / +infinity'
00005570	00000001 F8000001			794	DC XL16'00000001F800000100000001F8000001'
00005580	D2C5C2D9 61D2C5C2			795	DC CL48'KEBR/KEB -0 / -NaN'
000055B0	00800003 F8008000			796	DC XL16'00800003F800800000800003F8008000'
000055C0	D2C5C2D9 61D2C5C2			797	DC CL48'KEBR/KEB -0 / +NaN'
000055F0	00800003 F8008000			798	DC XL16'00800003F800800000800003F8008000'
00005600	D2C5C2D9 61D2C5C2			799	DC CL48'KEBR/KEB +0 / -infinity'
00005630	00000002 F8000002			800	DC XL16'00000002F800000200000002F8000002'
00005640	D2C5C2D9 61D2C5C2			801	DC CL48'KEBR/KEB +0 / -1'
00005670	00000002 F8000002			802	DC XL16'00000002F800000200000002F8000002'
00005680	D2C5C2D9 61D2C5C2			803	DC CL48'KEBR/KEB +0 / -0'
000056B0	00000000 F8000000			804	DC XL16'00000000F800000000000000F8000000'
000056C0	D2C5C2D9 61D2C5C2			805	DC CL48'KEBR/KEB +0 / +0'
000056F0	00000000 F8000000			806	DC XL16'00000000F800000000000000F8000000'
00005700	D2C5C2D9 61D2C5C2			807	DC CL48'KEBR/KEB +0 / +1'
00005730	00000001 F8000001			808	DC XL16'00000001F800000100000001F8000001'
00005740	D2C5C2D9 61D2C5C2			809	DC CL48'KEBR/KEB +0 / +infinity'
00005770	00000001 F8000001			810	DC XL16'00000001F800000100000001F8000001'
00005780	D2C5C2D9 61D2C5C2			811	DC CL48'KEBR/KEB +0 / -NaN'
000057B0	00800003 F8008000			812	DC XL16'00800003F800800000800003F8008000'
000057C0	D2C5C2D9 61D2C5C2			813	DC CL48'KEBR/KEB +0 / +NaN'
000057F0	00800003 F8008000			814	DC XL16'00800003F800800000800003F8008000'
00005800	D2C5C2D9 61D2C5C2			815	DC CL48'KEBR/KEB +1 / -infinity'
00005830	00000002 F8000002			816	DC XL16'00000002F800000200000002F8000002'
00005840	D2C5C2D9 61D2C5C2			817	DC CL48'KEBR/KEB +1 / -1'
00005870	00000002 F8000002			818	DC XL16'00000002F800000200000002F8000002'
00005880	D2C5C2D9 61D2C5C2			819	DC CL48'KEBR/KEB +1 / -0'
000058B0	00000002 F8000002			820	DC XL16'00000002F800000200000002F8000002'
000058C0	D2C5C2D9 61D2C5C2			821	DC CL48'KEBR/KEB +1 / +0'
000058F0	00000002 F8000002			822	DC XL16'00000002F800000200000002F8000002'
00005900	D2C5C2D9 61D2C5C2			823	DC CL48'KEBR/KEB +1 / +1'
00005930	00000000 F8000000			824	DC XL16'00000000F800000000000000F8000000'
00005940	D2C5C2D9 61D2C5C2			825	DC CL48'KEBR/KEB +1 / +infinity'
00005970	00000001 F8000001			826	DC XL16'00000001F800000100000001F8000001'
00005980	D2C5C2D9 61D2C5C2			827	DC CL48'KEBR/KEB +1 / -NaN'
000059B0	00800003 F8008000			828	DC XL16'00800003F800800000800003F8008000'
000059C0	D2C5C2D9 61D2C5C2			829	DC CL48'KEBR/KEB +1 / +NaN'
000059F0	00800003 F8008000			830	DC XL16'00800003F800800000800003F8008000'
00005A00	D2C5C2D9 61D2C5C2			831	DC CL48'KEBR/KEB +infinity / -infinity'
00005A30	00000002 F8000002			832	DC XL16'00000002F800000200000002F8000002'
00005A40	D2C5C2D9 61D2C5C2			833	DC CL48'KEBR/KEB +infinity / -1'
00005A70	00000002 F8000002			834	DC XL16'00000002F800000200000002F8000002'
00005A80	D2C5C2D9 61D2C5C2			835	DC CL48'KEBR/KEB +infinity / -0'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
00005AB0	00000002 F8000002			836 DC XL16'00000002F800000200000002F8000002'
00005AC0	D2C5C2D9 61D2C5C2			837 DC CL48'KEBR/KEB +infinity / +0'
00005AF0	00000002 F8000002			838 DC XL16'00000002F800000200000002F8000002'
00005B00	D2C5C2D9 61D2C5C2			839 DC CL48'KEBR/KEB +infinity / +1'
00005B30	00000002 F8000002			840 DC XL16'00000002F800000200000002F8000002'
00005B40	D2C5C2D9 61D2C5C2			841 DC CL48'KEBR/KEB +infinity / +infinity'
00005B70	00000000 F8000000			842 DC XL16'00000000F800000000000000F8000000'
00005B80	D2C5C2D9 61D2C5C2			843 DC CL48'KEBR/KEB +infinity / -QNaN'
00005BB0	00800003 F8008000			844 DC XL16'00800003F800800000800003F8008000'
00005BC0	D2C5C2D9 61D2C5C2			845 DC CL48'KEBR/KEB +infinity / +SNaN'
00005BF0	00800003 F8008000			846 DC XL16'00800003F800800000800003F8008000'
00005C00	D2C5C2D9 61D2C5C2			847 DC CL48'KEBR/KEB -QNaN / -infinity'
00005C30	00800003 F8008000			848 DC XL16'00800003F800800000800003F8008000'
00005C40	D2C5C2D9 61D2C5C2			849 DC CL48'KEBR/KEB -QNaN / -1'
00005C70	00800003 F8008000			850 DC XL16'00800003F800800000800003F8008000'
00005C80	D2C5C2D9 61D2C5C2			851 DC CL48'KEBR/KEB -QNaN / -0'
00005CB0	00800003 F8008000			852 DC XL16'00800003F800800000800003F8008000'
00005CC0	D2C5C2D9 61D2C5C2			853 DC CL48'KEBR/KEB -QNaN / +0'
00005CF0	00800003 F8008000			854 DC XL16'00800003F800800000800003F8008000'
00005D00	D2C5C2D9 61D2C5C2			855 DC CL48'KEBR/KEB -QNaN / +1'
00005D30	00800003 F8008000			856 DC XL16'00800003F800800000800003F8008000'
00005D40	D2C5C2D9 61D2C5C2			857 DC CL48'KEBR/KEB -QNaN / +infinity'
00005D70	00800003 F8008000			858 DC XL16'00800003F800800000800003F8008000'
00005D80	D2C5C2D9 61D2C5C2			859 DC CL48'KEBR/KEB -QNaN / -QNaN'
00005DB0	00800003 F8008000			860 DC XL16'00800003F800800000800003F8008000'
00005DC0	D2C5C2D9 61D2C5C2			861 DC CL48'KEBR/KEB -QNaN / +SNaN'
00005DF0	00800003 F8008000			862 DC XL16'00800003F800800000800003F8008000'
00005E00	D2C5C2D9 61D2C5C2			863 DC CL48'KEBR/KEB +SNaN / -infinity'
00005E30	00800003 F8008000			864 DC XL16'00800003F800800000800003F8008000'
00005E40	D2C5C2D9 61D2C5C2			865 DC CL48'KEBR/KEB +SNaN / -1'
00005E70	00800003 F8008000			866 DC XL16'00800003F800800000800003F8008000'
00005E80	D2C5C2D9 61D2C5C2			867 DC CL48'KEBR/KEB +SNaN / -0'
00005EB0	00800003 F8008000			868 DC XL16'00800003F800800000800003F8008000'
00005EC0	D2C5C2D9 61D2C5C2			869 DC CL48'KEBR/KEB +SNaN / +0'
00005EF0	00800003 F8008000			870 DC XL16'00800003F800800000800003F8008000'
00005F00	D2C5C2D9 61D2C5C2			871 DC CL48'KEBR/KEB +SNaN / +1'
00005F30	00800003 F8008000			872 DC XL16'00800003F800800000800003F8008000'
00005F40	D2C5C2D9 61D2C5C2			873 DC CL48'KEBR/KEB +SNaN / +infinity'
00005F70	00800003 F8008000			874 DC XL16'00800003F800800000800003F8008000'
00005F80	D2C5C2D9 61D2C5C2			875 DC CL48'KEBR/KEB +SNaN / -QNaN'
00005FB0	00800003 F8008000			876 DC XL16'00800003F800800000800003F8008000'
00005FC0	D2C5C2D9 61D2C5C2			877 DC CL48'KEBR/KEB +SNaN / +SNaN'
00005FF0	00800003 F8008000			878 DC XL16'00800003F800800000800003F8008000'
		00000040	00000001	879 SBFPCSCC_NUM EQU (*-SBFPCSCC_GOOD)/64
				880 *
				881 *
		00006000	00000001	882 LBFPCCC_GOOD EQU *
00006000	C3C4C2D9 61C3C4C2			883 DC CL48'CDBR/CDB -infinity / -infinity'
00006030	00000000 F8000000			884 DC XL16'00000000F800000000000000F8000000'
00006040	C3C4C2D9 61C3C4C2			885 DC CL48'CDBR/CDB -infinity / -1'
00006070	00000001 F8000001			886 DC XL16'00000001F800000100000001F8000001'
00006080	C3C4C2D9 61C3C4C2			887 DC CL48'CDBR/CDB -infinity / -0'
000060B0	00000001 F8000001			888 DC XL16'00000001F800000100000001F8000001'
000060C0	C3C4C2D9 61C3C4C2			889 DC CL48'CDBR/CDB -infinity / +0'
000060F0	00000001 F8000001			890 DC XL16'00000001F800000100000001F8000001'
00006100	C3C4C2D9 61C3C4C2			891 DC CL48'CDBR/CDB -infinity / +1'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
00006130	00000001 F8000001			892 DC XL16'00000001F800000100000001F8000001'
00006140	C3C4C2D9 61C3C4C2			893 DC CL48'CDBR/CDB -infinity / +infinity'
00006170	00000001 F8000001			894 DC XL16'00000001F800000100000001F8000001'
00006180	C3C4C2D9 61C3C4C2			895 DC CL48'CDBR/CDB -infinity / -QNaN'
000061B0	00000003 F8000003			896 DC XL16'00000003F800000300000003F8000003'
000061C0	C3C4C2D9 61C3C4C2			897 DC CL48'CDBR/CDB -infinity / +SNaN'
000061F0	00800003 F8008000			898 DC XL16'00800003F800800000800003F8008000'
00006200	C3C4C2D9 61C3C4C2			899 DC CL48'CDBR/CDB -1 / -infinity'
00006230	00000002 F8000002			900 DC XL16'00000002F800000200000002F8000002'
00006240	C3C4C2D9 61C3C4C2			901 DC CL48'CDBR/CDB -1 / -1'
00006270	00000000 F8000000			902 DC XL16'00000000F800000000000000F8000000'
00006280	C3C4C2D9 61C3C4C2			903 DC CL48'CDBR/CDB -1 / -0'
000062B0	00000001 F8000001			904 DC XL16'00000001F800000100000001F8000001'
000062C0	C3C4C2D9 61C3C4C2			905 DC CL48'CDBR/CDB -1 / +0'
000062F0	00000001 F8000001			906 DC XL16'00000001F800000100000001F8000001'
00006300	C3C4C2D9 61C3C4C2			907 DC CL48'CDBR/CDB -1 / +1'
00006330	00000001 F8000001			908 DC XL16'00000001F800000100000001F8000001'
00006340	C3C4C2D9 61C3C4C2			909 DC CL48'CDBR/CDB -1 / +infinity'
00006370	00000001 F8000001			910 DC XL16'00000001F800000100000001F8000001'
00006380	C3C4C2D9 61C3C4C2			911 DC CL48'CDBR/CDB -1 / -QNaN'
000063B0	00000003 F8000003			912 DC XL16'00000003F800000300000003F8000003'
000063C0	C3C4C2D9 61C3C4C2			913 DC CL48'CDBR/CDB -1 / +SNaN'
000063F0	00800003 F8008000			914 DC XL16'00800003F800800000800003F8008000'
00006400	C3C4C2D9 61C3C4C2			915 DC CL48'CDBR/CDB -0 / -infinity'
00006430	00000002 F8000002			916 DC XL16'00000002F800000200000002F8000002'
00006440	C3C4C2D9 61C3C4C2			917 DC CL48'CDBR/CDB -0 / -1'
00006470	00000002 F8000002			918 DC XL16'00000002F800000200000002F8000002'
00006480	C3C4C2D9 61C3C4C2			919 DC CL48'CDBR/CDB -0 / -0'
000064B0	00000000 F8000000			920 DC XL16'00000000F800000000000000F8000000'
000064C0	C3C4C2D9 61C3C4C2			921 DC CL48'CDBR/CDB -0 / +0'
000064F0	00000000 F8000000			922 DC XL16'00000000F800000000000000F8000000'
00006500	C3C4C2D9 61C3C4C2			923 DC CL48'CDBR/CDB -0 / +1'
00006530	00000001 F8000001			924 DC XL16'00000001F800000100000001F8000001'
00006540	C3C4C2D9 61C3C4C2			925 DC CL48'CDBR/CDB -0 / +infinity'
00006570	00000001 F8000001			926 DC XL16'00000001F800000100000001F8000001'
00006580	C3C4C2D9 61C3C4C2			927 DC CL48'CDBR/CDB -0 / -QNaN'
000065B0	00000003 F8000003			928 DC XL16'00000003F800000300000003F8000003'
000065C0	C3C4C2D9 61C3C4C2			929 DC CL48'CDBR/CDB -0 / +SNaN'
000065F0	00800003 F8008000			930 DC XL16'00800003F800800000800003F8008000'
00006600	C3C4C2D9 61C3C4C2			931 DC CL48'CDBR/CDB +0 / -infinity'
00006630	00000002 F8000002			932 DC XL16'00000002F800000200000002F8000002'
00006640	C3C4C2D9 61C3C4C2			933 DC CL48'CDBR/CDB +0 / -1'
00006670	00000002 F8000002			934 DC XL16'00000002F800000200000002F8000002'
00006680	C3C4C2D9 61C3C4C2			935 DC CL48'CDBR/CDB +0 / -0'
000066B0	00000000 F8000000			936 DC XL16'00000000F800000000000000F8000000'
000066C0	C3C4C2D9 61C3C4C2			937 DC CL48'CDBR/CDB +0 / +0'
000066F0	00000000 F8000000			938 DC XL16'00000000F800000000000000F8000000'
00006700	C3C4C2D9 61C3C4C2			939 DC CL48'CDBR/CDB +0 / +1'
00006730	00000001 F8000001			940 DC XL16'00000001F800000100000001F8000001'
00006740	C3C4C2D9 61C3C4C2			941 DC CL48'CDBR/CDB +0 / +infinity'
00006770	00000001 F8000001			942 DC XL16'00000001F800000100000001F8000001'
00006780	C3C4C2D9 61C3C4C2			943 DC CL48'CDBR/CDB +0 / -QNaN'
000067B0	00000003 F8000003			944 DC XL16'00000003F800000300000003F8000003'
000067C0	C3C4C2D9 61C3C4C2			945 DC CL48'CDBR/CDB +0 / +SNaN'
000067F0	00800003 F8008000			946 DC XL16'00800003F800800000800003F8008000'
00006800	C3C4C2D9 61C3C4C2			947 DC CL48'CDBR/CDB +1 / -infinity'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
00006830	00000002 F8000002			948	DC XL16'00000002F800000200000002F8000002'
00006840	C3C4C2D9 61C3C4C2			949	DC CL48'CDBR/CDB +1 / -1'
00006870	00000002 F8000002			950	DC XL16'00000002F800000200000002F8000002'
00006880	C3C4C2D9 61C3C4C2			951	DC CL48'CDBR/CDB +1 / -0'
000068B0	00000002 F8000002			952	DC XL16'00000002F800000200000002F8000002'
000068C0	C3C4C2D9 61C3C4C2			953	DC CL48'CDBR/CDB +1 / +0'
000068F0	00000002 F8000002			954	DC XL16'00000002F800000200000002F8000002'
00006900	C3C4C2D9 61C3C4C2			955	DC CL48'CDBR/CDB +1 / +1'
00006930	00000000 F8000000			956	DC XL16'00000000F800000000000000F8000000'
00006940	C3C4C2D9 61C3C4C2			957	DC CL48'CDBR/CDB +1 / +infinity'
00006970	00000001 F8000001			958	DC XL16'00000001F800000100000001F8000001'
00006980	C3C4C2D9 61C3C4C2			959	DC CL48'CDBR/CDB +1 / -QNaN'
000069B0	00000003 F8000003			960	DC XL16'00000003F800000300000003F8000003'
000069C0	C3C4C2D9 61C3C4C2			961	DC CL48'CDBR/CDB +1 / +SNaN'
000069F0	00800003 F8008000			962	DC XL16'00800003F800800000800003F8008000'
00006A00	C3C4C2D9 61C3C4C2			963	DC CL48'CDBR/CDB +infinity / -infinity'
00006A30	00000002 F8000002			964	DC XL16'00000002F800000200000002F8000002'
00006A40	C3C4C2D9 61C3C4C2			965	DC CL48'CDBR/CDB +infinity / -1'
00006A70	00000002 F8000002			966	DC XL16'00000002F800000200000002F8000002'
00006A80	C3C4C2D9 61C3C4C2			967	DC CL48'CDBR/CDB +infinity / -0'
00006AB0	00000002 F8000002			968	DC XL16'00000002F800000200000002F8000002'
00006AC0	C3C4C2D9 61C3C4C2			969	DC CL48'CDBR/CDB +infinity / +0'
00006AF0	00000002 F8000002			970	DC XL16'00000002F800000200000002F8000002'
00006B00	C3C4C2D9 61C3C4C2			971	DC CL48'CDBR/CDB +infinity / +1'
00006B30	00000002 F8000002			972	DC XL16'00000002F800000200000002F8000002'
00006B40	C3C4C2D9 61C3C4C2			973	DC CL48'CDBR/CDB +infinity / +infinity'
00006B70	00000000 F8000000			974	DC XL16'00000000F800000000000000F8000000'
00006B80	C3C4C2D9 61C3C4C2			975	DC CL48'CDBR/CDB +infinity / -QNaN'
00006BB0	00000003 F8000003			976	DC XL16'00000003F800000300000003F8000003'
00006BC0	C3C4C2D9 61C3C4C2			977	DC CL48'CDBR/CDB +infinity / +SNaN'
00006BF0	00800003 F8008000			978	DC XL16'00800003F800800000800003F8008000'
00006C00	C3C4C2D9 61C3C4C2			979	DC CL48'CDBR/CDB -QNaN / -infinity'
00006C30	00000003 F8000003			980	DC XL16'00000003F800000300000003F8000003'
00006C40	C3C4C2D9 61C3C4C2			981	DC CL48'CDBR/CDB -QNaN / -1'
00006C70	00000003 F8000003			982	DC XL16'00000003F800000300000003F8000003'
00006C80	C3C4C2D9 61C3C4C2			983	DC CL48'CDBR/CDB -QNaN / -0'
00006CB0	00000003 F8000003			984	DC XL16'00000003F800000300000003F8000003'
00006CC0	C3C4C2D9 61C3C4C2			985	DC CL48'CDBR/CDB -QNaN / +0'
00006CF0	00000003 F8000003			986	DC XL16'00000003F800000300000003F8000003'
00006D00	C3C4C2D9 61C3C4C2			987	DC CL48'CDBR/CDB -QNaN / +1'
00006D30	00000003 F8000003			988	DC XL16'00000003F800000300000003F8000003'
00006D40	C3C4C2D9 61C3C4C2			989	DC CL48'CDBR/CDB -QNaN / +infinity'
00006D70	00000003 F8000003			990	DC XL16'00000003F800000300000003F8000003'
00006D80	C3C4C2D9 61C3C4C2			991	DC CL48'CDBR/CDB -QNaN / -QNaN'
00006DB0	00000003 F8000003			992	DC XL16'00000003F800000300000003F8000003'
00006DC0	C3C4C2D9 61C3C4C2			993	DC CL48'CDBR/CDB -QNaN / +SNaN'
00006DF0	00800003 F8008000			994	DC XL16'00800003F800800000800003F8008000'
00006E00	C3C4C2D9 61C3C4C2			995	DC CL48'CDBR/CDB +SNaN / -infinity'
00006E30	00800003 F8008000			996	DC XL16'00800003F800800000800003F8008000'
00006E40	C3C4C2D9 61C3C4C2			997	DC CL48'CDBR/CDB +SNaN / -1'
00006E70	00800003 F8008000			998	DC XL16'00800003F800800000800003F8008000'
00006E80	C3C4C2D9 61C3C4C2			999	DC CL48'CDBR/CDB +SNaN / -0'
00006EB0	00800003 F8008000			1000	DC XL16'00800003F800800000800003F8008000'
00006EC0	C3C4C2D9 61C3C4C2			1001	DC CL48'CDBR/CDB +SNaN / +0'
00006EF0	00800003 F8008000			1002	DC XL16'00800003F800800000800003F8008000'
00006F00	C3C4C2D9 61C3C4C2			1003	DC CL48'CDBR/CDB +SNaN / +1'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
00006F30	00800003 F8008000			1004 DC XL16'00800003F800800000800003F8008000'
00006F40	C3C4C2D9 61C3C4C2			1005 DC CL48'CDBR/CDB +SNaN / +infinity'
00006F70	00800003 F8008000			1006 DC XL16'00800003F800800000800003F8008000'
00006F80	C3C4C2D9 61C3C4C2			1007 DC CL48'CDBR/CDB +SNaN / -QNaN'
00006FB0	00800003 F8008000			1008 DC XL16'00800003F800800000800003F8008000'
00006FC0	C3C4C2D9 61C3C4C2			1009 DC CL48'CDBR/CDB +SNaN / +SNaN'
00006FF0	00800003 F8008000			1010 DC XL16'00800003F800800000800003F8008000'
		00000040	00000001	1011 LBFPCCC_NUM EQU (*-LBFPCCC_GOOD)/64
				1012 *
				1013 *
		00007000	00000001	1014 LBFPCSCC_GOOD EQU *
00007000	D2C4C2D9 61D2C4C2			1015 DC CL48'KDBR/KDB -infinity / -infinity'
00007030	00000000 F8000000			1016 DC XL16'00000000F800000000000000F8000000'
00007040	D2C4C2D9 61D2C4C2			1017 DC CL48'KDBR/KDB -infinity / -1'
00007070	00000001 F8000001			1018 DC XL16'00000001F800000100000001F8000001'
00007080	D2C4C2D9 61D2C4C2			1019 DC CL48'KDBR/KDB -infinity / -0'
000070B0	00000001 F8000001			1020 DC XL16'00000001F800000100000001F8000001'
000070C0	D2C4C2D9 61D2C4C2			1021 DC CL48'KDBR/KDB -infinity / +0'
000070F0	00000001 F8000001			1022 DC XL16'00000001F800000100000001F8000001'
00007100	D2C4C2D9 61D2C4C2			1023 DC CL48'KDBR/KDB -infinity / +1'
00007130	00000001 F8000001			1024 DC XL16'00000001F800000100000001F8000001'
00007140	D2C4C2D9 61D2C4C2			1025 DC CL48'KDBR/KDB -infinity / +infinity'
00007170	00000001 F8000001			1026 DC XL16'00000001F800000100000001F8000001'
00007180	D2C4C2D9 61D2C4C2			1027 DC CL48'KDBR/KDB -infinity / -QNaN'
000071B0	00800003 F8008000			1028 DC XL16'00800003F800800000800003F8008000'
000071C0	D2C4C2D9 61D2C4C2			1029 DC CL48'KDBR/KDB -infinity / +SNaN'
000071F0	00800003 F8008000			1030 DC XL16'00800003F800800000800003F8008000'
00007200	D2C4C2D9 61D2C4C2			1031 DC CL48'KDBR/KDB -1 / -infinity'
00007230	00000002 F8000002			1032 DC XL16'00000002F800000200000002F8000002'
00007240	D2C4C2D9 61D2C4C2			1033 DC CL48'KDBR/KDB -1 / -1'
00007270	00000000 F8000000			1034 DC XL16'00000000F800000000000000F8000000'
00007280	D2C4C2D9 61D2C4C2			1035 DC CL48'KDBR/KDB -1 / -0'
000072B0	00000001 F8000001			1036 DC XL16'00000001F800000100000001F8000001'
000072C0	D2C4C2D9 61D2C4C2			1037 DC CL48'KDBR/KDB -1 / +0'
000072F0	00000001 F8000001			1038 DC XL16'00000001F800000100000001F8000001'
00007300	D2C4C2D9 61D2C4C2			1039 DC CL48'KDBR/KDB -1 / +1'
00007330	00000001 F8000001			1040 DC XL16'00000001F800000100000001F8000001'
00007340	D2C4C2D9 61D2C4C2			1041 DC CL48'KDBR/KDB -1 / +infinity'
00007370	00000001 F8000001			1042 DC XL16'00000001F800000100000001F8000001'
00007380	D2C4C2D9 61D2C4C2			1043 DC CL48'KDBR/KDB -1 / -QNaN'
000073B0	00800003 F8008000			1044 DC XL16'00800003F800800000800003F8008000'
000073C0	D2C4C2D9 61D2C4C2			1045 DC CL48'KDBR/KDB -1 / +SNaN'
000073F0	00800003 F8008000			1046 DC XL16'00800003F800800000800003F8008000'
00007400	D2C4C2D9 61D2C4C2			1047 DC CL48'KDBR/KDB -0 / -infinity'
00007430	00000002 F8000002			1048 DC XL16'00000002F800000200000002F8000002'
00007440	D2C4C2D9 61D2C4C2			1049 DC CL48'KDBR/KDB -0 / -1'
00007470	00000002 F8000002			1050 DC XL16'00000002F800000200000002F8000002'
00007480	D2C4C2D9 61D2C4C2			1051 DC CL48'KDBR/KDB -0 / -0'
000074B0	00000000 F8000000			1052 DC XL16'00000000F800000000000000F8000000'
000074C0	D2C4C2D9 61D2C4C2			1053 DC CL48'KDBR/KDB -0 / +0'
000074F0	00000000 F8000000			1054 DC XL16'00000000F800000000000000F8000000'
00007500	D2C4C2D9 61D2C4C2			1055 DC CL48'KDBR/KDB -0 / +1'
00007530	00000001 F8000001			1056 DC XL16'00000001F800000100000001F8000001'
00007540	D2C4C2D9 61D2C4C2			1057 DC CL48'KDBR/KDB -0 / +infinity'
00007570	00000001 F8000001			1058 DC XL16'00000001F800000100000001F8000001'
00007580	D2C4C2D9 61D2C4C2			1059 DC CL48'KDBR/KDB -0 / -QNaN'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
000075B0	00800003 F8008000			1060 DC XL16'00800003F800800000800003F8008000'
000075C0	D2C4C2D9 61D2C4C2			1061 DC CL48'KDBR/KDB -0 / +NaN'
000075F0	00800003 F8008000			1062 DC XL16'00800003F800800000800003F8008000'
00007600	D2C4C2D9 61D2C4C2			1063 DC CL48'KDBR/KDB +0 / -infinity'
00007630	00000002 F8000002			1064 DC XL16'00000002F800000200000002F8000002'
00007640	D2C4C2D9 61D2C4C2			1065 DC CL48'KDBR/KDB +0 / -1'
00007670	00000002 F8000002			1066 DC XL16'00000002F800000200000002F8000002'
00007680	D2C4C2D9 61D2C4C2			1067 DC CL48'KDBR/KDB +0 / -0'
000076B0	00000000 F8000000			1068 DC XL16'00000000F800000000000000F8000000'
000076C0	D2C4C2D9 61D2C4C2			1069 DC CL48'KDBR/KDB +0 / +0'
000076F0	00000000 F8000000			1070 DC XL16'00000000F800000000000000F8000000'
00007700	D2C4C2D9 61D2C4C2			1071 DC CL48'KDBR/KDB +0 / +1'
00007730	00000001 F8000001			1072 DC XL16'00000001F800000100000001F8000001'
00007740	D2C4C2D9 61D2C4C2			1073 DC CL48'KDBR/KDB +0 / +infinity'
00007770	00000001 F8000001			1074 DC XL16'00000001F800000100000001F8000001'
00007780	D2C4C2D9 61D2C4C2			1075 DC CL48'KDBR/KDB +0 / -QNaN'
000077B0	00800003 F8008000			1076 DC XL16'00800003F800800000800003F8008000'
000077C0	D2C4C2D9 61D2C4C2			1077 DC CL48'KDBR/KDB +0 / +NaN'
000077F0	00800003 F8008000			1078 DC XL16'00800003F800800000800003F8008000'
00007800	D2C4C2D9 61D2C4C2			1079 DC CL48'KDBR/KDB +1 / -infinity'
00007830	00000002 F8000002			1080 DC XL16'00000002F800000200000002F8000002'
00007840	D2C4C2D9 61D2C4C2			1081 DC CL48'KDBR/KDB +1 / -1'
00007870	00000002 F8000002			1082 DC XL16'00000002F800000200000002F8000002'
00007880	D2C4C2D9 61D2C4C2			1083 DC CL48'KDBR/KDB +1 / -0'
000078B0	00000002 F8000002			1084 DC XL16'00000002F800000200000002F8000002'
000078C0	D2C4C2D9 61D2C4C2			1085 DC CL48'KDBR/KDB +1 / +0'
000078F0	00000002 F8000002			1086 DC XL16'00000002F800000200000002F8000002'
00007900	D2C4C2D9 61D2C4C2			1087 DC CL48'KDBR/KDB +1 / +1'
00007930	00000000 F8000000			1088 DC XL16'00000000F800000000000000F8000000'
00007940	D2C4C2D9 61D2C4C2			1089 DC CL48'KDBR/KDB +1 / +infinity'
00007970	00000001 F8000001			1090 DC XL16'00000001F800000100000001F8000001'
00007980	D2C4C2D9 61D2C4C2			1091 DC CL48'KDBR/KDB +1 / -QNaN'
000079B0	00800003 F8008000			1092 DC XL16'00800003F800800000800003F8008000'
000079C0	D2C4C2D9 61D2C4C2			1093 DC CL48'KDBR/KDB +1 / +NaN'
000079F0	00800003 F8008000			1094 DC XL16'00800003F800800000800003F8008000'
00007A00	D2C4C2D9 61D2C4C2			1095 DC CL48'KDBR/KDB +infinity / -infinity'
00007A30	00000002 F8000002			1096 DC XL16'00000002F800000200000002F8000002'
00007A40	D2C4C2D9 61D2C4C2			1097 DC CL48'KDBR/KDB +infinity / -1'
00007A70	00000002 F8000002			1098 DC XL16'00000002F800000200000002F8000002'
00007A80	D2C4C2D9 61D2C4C2			1099 DC CL48'KDBR/KDB +infinity / -0'
00007AB0	00000002 F8000002			1100 DC XL16'00000002F800000200000002F8000002'
00007AC0	D2C4C2D9 61D2C4C2			1101 DC CL48'KDBR/KDB +infinity / +0'
00007AF0	00000002 F8000002			1102 DC XL16'00000002F800000200000002F8000002'
00007B00	D2C4C2D9 61D2C4C2			1103 DC CL48'KDBR/KDB +infinity / +1'
00007B30	00000002 F8000002			1104 DC XL16'00000002F800000200000002F8000002'
00007B40	D2C4C2D9 61D2C4C2			1105 DC CL48'KDBR/KDB +infinity / +infinity'
00007B70	00000000 F8000000			1106 DC XL16'00000000F800000000000000F8000000'
00007B80	D2C4C2D9 61D2C4C2			1107 DC CL48'KDBR/KDB +infinity / -QNaN'
00007BB0	00800003 F8008000			1108 DC XL16'00800003F800800000800003F8008000'
00007BC0	D2C4C2D9 61D2C4C2			1109 DC CL48'KDBR/KDB +infinity / +NaN'
00007BF0	00800003 F8008000			1110 DC XL16'00800003F800800000800003F8008000'
00007C00	D2C4C2D9 61D2C4C2			1111 DC CL48'KDBR/KDB -QNaN / -infinity'
00007C30	00800003 F8008000			1112 DC XL16'00800003F800800000800003F8008000'
00007C40	D2C4C2D9 61D2C4C2			1113 DC CL48'KDBR/KDB -QNaN / -1'
00007C70	00800003 F8008000			1114 DC XL16'00800003F800800000800003F8008000'
00007C80	D2C4C2D9 61D2C4C2			1115 DC CL48'KDBR/KDB -QNaN / -0'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
00007CB0	00800003 F8008000			1116 DC XL16'00800003F800800000800003F8008000'
00007CC0	D2C4C2D9 61D2C4C2			1117 DC CL48'KDBR/KDB -QNaN / +0'
00007CF0	00800003 F8008000			1118 DC XL16'00800003F800800000800003F8008000'
00007D00	D2C4C2D9 61D2C4C2			1119 DC CL48'KDBR/KDB -QNaN / +1'
00007D30	00800003 F8008000			1120 DC XL16'00800003F800800000800003F8008000'
00007D40	D2C4C2D9 61D2C4C2			1121 DC CL48'KDBR/KDB -QNaN / +infinity'
00007D70	00800003 F8008000			1122 DC XL16'00800003F800800000800003F8008000'
00007D80	D2C4C2D9 61D2C4C2			1123 DC CL48'KDBR/KDB -QNaN / -QNaN'
00007DB0	00800003 F8008000			1124 DC XL16'00800003F800800000800003F8008000'
00007DC0	D2C4C2D9 61D2C4C2			1125 DC CL48'KDBR/KDB -QNaN / +SNaN'
00007DF0	00800003 F8008000			1126 DC XL16'00800003F800800000800003F8008000'
00007E00	D2C4C2D9 61D2C4C2			1127 DC CL48'KDBR/KDB +SNaN / -infinity'
00007E30	00800003 F8008000			1128 DC XL16'00800003F800800000800003F8008000'
00007E40	D2C4C2D9 61D2C4C2			1129 DC CL48'KDBR/KDB +SNaN / -1'
00007E70	00800003 F8008000			1130 DC XL16'00800003F800800000800003F8008000'
00007E80	D2C4C2D9 61D2C4C2			1131 DC CL48'KDBR/KDB +SNaN / -0'
00007EB0	00800003 F8008000			1132 DC XL16'00800003F800800000800003F8008000'
00007EC0	D2C4C2D9 61D2C4C2			1133 DC CL48'KDBR/KDB +SNaN / +0'
00007EF0	00800003 F8008000			1134 DC XL16'00800003F800800000800003F8008000'
00007F00	D2C4C2D9 61D2C4C2			1135 DC CL48'KDBR/KDB +SNaN / +1'
00007F30	00800003 F8008000			1136 DC XL16'00800003F800800000800003F8008000'
00007F40	D2C4C2D9 61D2C4C2			1137 DC CL48'KDBR/KDB +SNaN / +infinity'
00007F70	00800003 F8008000			1138 DC XL16'00800003F800800000800003F8008000'
00007F80	D2C4C2D9 61D2C4C2			1139 DC CL48'KDBR/KDB +SNaN / -QNaN'
00007FB0	00800003 F8008000			1140 DC XL16'00800003F800800000800003F8008000'
00007FC0	D2C4C2D9 61D2C4C2			1141 DC CL48'KDBR/KDB +SNaN / +SNaN'
00007FF0	00800003 F8008000			1142 DC XL16'00800003F800800000800003F8008000'
		00000040	00000001	1143 LBFPCSCC_NUM EQU (*-LBFPCSCC_GOOD)/64
				1144 *
				1145 *
		00008000	00000001	1146 XBFPCCC_GOOD EQU *
00008000	C3E7C2D9 40608995			1147 DC CL48'CXBR -infinity / -infinity'
00008030	00000000 F8000000			1148 DC XL16'00000000F80000000000000000000000'
00008040	C3E7C2D9 40608995			1149 DC CL48'CXBR -infinity / -1'
00008070	00000001 F8000001			1150 DC XL16'00000001F80000010000000000000000'
00008080	C3E7C2D9 40608995			1151 DC CL48'CXBR -infinity / -0'
000080B0	00000001 F8000001			1152 DC XL16'00000001F80000010000000000000000'
000080C0	C3E7C2D9 40608995			1153 DC CL48'CXBR -infinity / +0'
000080F0	00000001 F8000001			1154 DC XL16'00000001F80000010000000000000000'
00008100	C3E7C2D9 40608995			1155 DC CL48'CXBR -infinity / +1'
00008130	00000001 F8000001			1156 DC XL16'00000001F80000010000000000000000'
00008140	C3E7C2D9 40608995			1157 DC CL48'CXBR -infinity / +infinity'
00008170	00000001 F8000001			1158 DC XL16'00000001F80000010000000000000000'
00008180	C3E7C2D9 40608995			1159 DC CL48'CXBR -infinity / -QNaN'
000081B0	00000003 F8000003			1160 DC XL16'00000003F8000003000000000000000000'
000081C0	C3E7C2D9 40608995			1161 DC CL48'CXBR -infinity / +SNaN'
000081F0	00800003 F8008000			1162 DC XL16'00800003F8008000000000000000000000'
00008200	C3E7C2D9 4060F140			1163 DC CL48'CXBR -1 / -infinity'
00008230	00000002 F8000002			1164 DC XL16'00000002F8000002000000000000000000'
00008240	C3E7C2D9 4060F140			1165 DC CL48'CXBR -1 / -1'
00008270	00000000 F8000000			1166 DC XL16'00000000F8000000000000000000000000'
00008280	C3E7C2D9 4060F140			1167 DC CL48'CXBR -1 / -0'
000082B0	00000001 F8000001			1168 DC XL16'00000001F8000001000000000000000000'
000082C0	C3E7C2D9 4060F140			1169 DC CL48'CXBR -1 / +0'
000082F0	00000001 F8000001			1170 DC XL16'00000001F8000001000000000000000000'
00008300	C3E7C2D9 4060F140			1171 DC CL48'CXBR -1 / +1'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
00008330	00000001 F8000001			1172	DC XL16'00000001F80000010000000000000000'
00008340	C3E7C2D9 4060F140			1173	DC CL48'CXBR -1 / +infinity'
00008370	00000001 F8000001			1174	DC XL16'00000001F80000010000000000000000'
00008380	C3E7C2D9 4060F140			1175	DC CL48'CXBR -1 / -QNaN'
000083B0	00000003 F8000003			1176	DC XL16'00000003F80000030000000000000000'
000083C0	C3E7C2D9 4060F140			1177	DC CL48'CXBR -1 / +SNaN'
000083F0	00800003 F8008000			1178	DC XL16'00800003F80080000000000000000000'
00008400	C3E7C2D9 4060F040			1179	DC CL48'CXBR -0 / -infinity'
00008430	00000002 F8000002			1180	DC XL16'00000002F80000020000000000000000'
00008440	C3E7C2D9 4060F040			1181	DC CL48'CXBR -0 / -1'
00008470	00000002 F8000002			1182	DC XL16'00000002F80000020000000000000000'
00008480	C3E7C2D9 4060F040			1183	DC CL48'CXBR -0 / -0'
000084B0	00000000 F8000000			1184	DC XL16'00000000F80000000000000000000000'
000084C0	C3E7C2D9 4060F040			1185	DC CL48'CXBR -0 / +0'
000084F0	00000000 F8000000			1186	DC XL16'00000000F80000000000000000000000'
00008500	C3E7C2D9 4060F040			1187	DC CL48'CXBR -0 / +1'
00008530	00000001 F8000001			1188	DC XL16'00000001F80000010000000000000000'
00008540	C3E7C2D9 4060F040			1189	DC CL48'CXBR -0 / +infinity'
00008570	00000001 F8000001			1190	DC XL16'00000001F80000010000000000000000'
00008580	C3E7C2D9 4060F040			1191	DC CL48'CXBR -0 / -QNaN'
000085B0	00000003 F8000003			1192	DC XL16'00000003F80000030000000000000000'
000085C0	C3E7C2D9 4060F040			1193	DC CL48'CXBR -0 / +SNaN'
000085F0	00800003 F8008000			1194	DC XL16'00800003F80080000000000000000000'
00008600	C3E7C2D9 404EF040			1195	DC CL48'CXBR +0 / -infinity'
00008630	00000002 F8000002			1196	DC XL16'00000002F80000020000000000000000'
00008640	C3E7C2D9 404EF040			1197	DC CL48'CXBR +0 / -1'
00008670	00000002 F8000002			1198	DC XL16'00000002F80000020000000000000000'
00008680	C3E7C2D9 404EF040			1199	DC CL48'CXBR +0 / -0'
000086B0	00000000 F8000000			1200	DC XL16'00000000F80000000000000000000000'
000086C0	C3E7C2D9 404EF040			1201	DC CL48'CXBR +0 / +0'
000086F0	00000000 F8000000			1202	DC XL16'00000000F80000000000000000000000'
00008700	C3E7C2D9 404EF040			1203	DC CL48'CXBR +0 / +1'
00008730	00000001 F8000001			1204	DC XL16'00000001F80000010000000000000000'
00008740	C3E7C2D9 404EF040			1205	DC CL48'CXBR +0 / +infinity'
00008770	00000001 F8000001			1206	DC XL16'00000001F80000010000000000000000'
00008780	C3E7C2D9 404EF040			1207	DC CL48'CXBR +0 / -QNaN'
000087B0	00000003 F8000003			1208	DC XL16'00000003F80000030000000000000000'
000087C0	C3E7C2D9 404EF040			1209	DC CL48'CXBR +0 / +SNaN'
000087F0	00800003 F8008000			1210	DC XL16'00800003F80080000000000000000000'
00008800	C3E7C2D9 404EF140			1211	DC CL48'CXBR +1 / -infinity'
00008830	00000002 F8000002			1212	DC XL16'00000002F80000020000000000000000'
00008840	C3E7C2D9 404EF140			1213	DC CL48'CXBR +1 / -1'
00008870	00000002 F8000002			1214	DC XL16'00000002F80000020000000000000000'
00008880	C3E7C2D9 404EF140			1215	DC CL48'CXBR +1 / -0'
000088B0	00000002 F8000002			1216	DC XL16'00000002F80000020000000000000000'
000088C0	C3E7C2D9 404EF140			1217	DC CL48'CXBR +1 / +0'
000088F0	00000002 F8000002			1218	DC XL16'00000002F80000020000000000000000'
00008900	C3E7C2D9 404EF140			1219	DC CL48'CXBR +1 / +1'
00008930	00000000 F8000000			1220	DC XL16'00000000F80000000000000000000000'
00008940	C3E7C2D9 404EF140			1221	DC CL48'CXBR +1 / +infinity'
00008970	00000001 F8000001			1222	DC XL16'00000001F80000010000000000000000'
00008980	C3E7C2D9 404EF140			1223	DC CL48'CXBR +1 / -QNaN'
000089B0	00000003 F8000003			1224	DC XL16'00000003F80000030000000000000000'
000089C0	C3E7C2D9 404EF140			1225	DC CL48'CXBR +1 / +SNaN'
000089F0	00800003 F8008000			1226	DC XL16'00800003F80080000000000000000000'
00008A00	C3E7C2D9 404E8995			1227	DC CL48'CXBR +infinity / -infinity'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
00008A30	00000002 F8000002			1228 DC XL16'00000002F80000020000000000000000'
00008A40	C3E7C2D9 404E8995			1229 DC CL48'CXBR +infinity / -1'
00008A70	00000002 F8000002			1230 DC XL16'00000002F80000020000000000000000'
00008A80	C3E7C2D9 404E8995			1231 DC CL48'CXBR +infinity / -0'
00008AB0	00000002 F8000002			1232 DC XL16'00000002F80000020000000000000000'
00008AC0	C3E7C2D9 404E8995			1233 DC CL48'CXBR +infinity / +0'
00008AF0	00000002 F8000002			1234 DC XL16'00000002F80000020000000000000000'
00008B00	C3E7C2D9 404E8995			1235 DC CL48'CXBR +infinity / +1'
00008B30	00000002 F8000002			1236 DC XL16'00000002F80000020000000000000000'
00008B40	C3E7C2D9 404E8995			1237 DC CL48'CXBR +infinity / +infinity'
00008B70	00000000 F8000000			1238 DC XL16'00000000F80000000000000000000000'
00008B80	C3E7C2D9 404E8995			1239 DC CL48'CXBR +infinity / -QNaN'
00008BB0	00000003 F8000003			1240 DC XL16'00000003F80000030000000000000000'
00008BC0	C3E7C2D9 404E8995			1241 DC CL48'CXBR +infinity / +SNaN'
00008BF0	00800003 F8008000			1242 DC XL16'00800003F80080000000000000000000'
00008C00	C3E7C2D9 4060D8D5			1243 DC CL48'CXBR -QNaN / -infinity'
00008C30	00000003 F8000003			1244 DC XL16'00000003F80000030000000000000000'
00008C40	C3E7C2D9 4060D8D5			1245 DC CL48'CXBR -QNaN / -1'
00008C70	00000003 F8000003			1246 DC XL16'00000003F80000030000000000000000'
00008C80	C3E7C2D9 4060D8D5			1247 DC CL48'CXBR -QNaN / -0'
00008CB0	00000003 F8000003			1248 DC XL16'00000003F80000030000000000000000'
00008CC0	C3E7C2D9 4060D8D5			1249 DC CL48'CXBR -QNaN / +0'
00008CF0	00000003 F8000003			1250 DC XL16'00000003F80000030000000000000000'
00008D00	C3E7C2D9 4060D8D5			1251 DC CL48'CXBR -QNaN / +1'
00008D30	00000003 F8000003			1252 DC XL16'00000003F80000030000000000000000'
00008D40	C3E7C2D9 4060D8D5			1253 DC CL48'CXBR -QNaN / +infinity'
00008D70	00000003 F8000003			1254 DC XL16'00000003F80000030000000000000000'
00008D80	C3E7C2D9 4060D8D5			1255 DC CL48'CXBR -QNaN / -QNaN'
00008DB0	00000003 F8000003			1256 DC XL16'00000003F80000030000000000000000'
00008DC0	C3E7C2D9 4060D8D5			1257 DC CL48'CXBR -QNaN / +SNaN'
00008DF0	00800003 F8008000			1258 DC XL16'00800003F80080000000000000000000'
00008E00	C3E7C2D9 404EE2D5			1259 DC CL48'CXBR +SNaN / -infinity'
00008E30	00800003 F8008000			1260 DC XL16'00800003F80080000000000000000000'
00008E40	C3E7C2D9 404EE2D5			1261 DC CL48'CXBR +SNaN / -1'
00008E70	00800003 F8008000			1262 DC XL16'00800003F80080000000000000000000'
00008E80	C3E7C2D9 404EE2D5			1263 DC CL48'CXBR +SNaN / -0'
00008EB0	00800003 F8008000			1264 DC XL16'00800003F80080000000000000000000'
00008EC0	C3E7C2D9 404EE2D5			1265 DC CL48'CXBR +SNaN / +0'
00008EF0	00800003 F8008000			1266 DC XL16'00800003F80080000000000000000000'
00008F00	C3E7C2D9 404EE2D5			1267 DC CL48'CXBR +SNaN / +1'
00008F30	00800003 F8008000			1268 DC XL16'00800003F80080000000000000000000'
00008F40	C3E7C2D9 404EE2D5			1269 DC CL48'CXBR +SNaN / +infinity'
00008F70	00800003 F8008000			1270 DC XL16'00800003F80080000000000000000000'
00008F80	C3E7C2D9 404EE2D5			1271 DC CL48'CXBR +SNaN / -QNaN'
00008FB0	00800003 F8008000			1272 DC XL16'00800003F80080000000000000000000'
00008FC0	C3E7C2D9 404EE2D5			1273 DC CL48'CXBR +SNaN / +SNaN'
00008FF0	00800003 F8008000			1274 DC XL16'00800003F80080000000000000000000'
		00000040	00000001	1275 XBFPCCC_NUM EQU (*-XBFPCCC_GOOD)/64
				1276 *
				1277 *
		00009000	00000001	1278 XBFPCSCC_GOOD EQU *
00009000	D2E7C2D9 40608995			1279 DC CL48'KXBR -infinity / -infinity'
00009030	00000000 F8000000			1280 DC XL16'00000000F80000000000000000000000'
00009040	D2E7C2D9 40608995			1281 DC CL48'KXBR -infinity / -1'
00009070	00000001 F8000001			1282 DC XL16'00000001F80000010000000000000000'
00009080	D2E7C2D9 40608995			1283 DC CL48'KXBR -infinity / -0'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
000090B0	00000001 F8000001			1284	DC XL16'00000001F80000010000000000000000'
000090C0	D2E7C2D9 40608995			1285	DC CL48'KXBR -infinity / +0'
000090F0	00000001 F8000001			1286	DC XL16'00000001F80000010000000000000000'
00009100	D2E7C2D9 40608995			1287	DC CL48'KXBR -infinity / +1'
00009130	00000001 F8000001			1288	DC XL16'00000001F80000010000000000000000'
00009140	D2E7C2D9 40608995			1289	DC CL48'KXBR -infinity / +infinity'
00009170	00000001 F8000001			1290	DC XL16'00000001F80000010000000000000000'
00009180	D2E7C2D9 40608995			1291	DC CL48'KXBR -infinity / -QNaN'
000091B0	00800003 F8008000			1292	DC XL16'00800003F80080000000000000000000'
000091C0	D2E7C2D9 40608995			1293	DC CL48'KXBR -infinity / +SNaN'
000091F0	00800003 F8008000			1294	DC XL16'00800003F80080000000000000000000'
00009200	D2E7C2D9 4060F140			1295	DC CL48'KXBR -1 / -infinity'
00009230	00000002 F8000002			1296	DC XL16'00000002F80000020000000000000000'
00009240	D2E7C2D9 4060F140			1297	DC CL48'KXBR -1 / -1'
00009270	00000000 F8000000			1298	DC XL16'00000000F80000000000000000000000'
00009280	D2E7C2D9 4060F140			1299	DC CL48'KXBR -1 / -0'
000092B0	00000001 F8000001			1300	DC XL16'00000001F80000010000000000000000'
000092C0	D2E7C2D9 4060F140			1301	DC CL48'KXBR -1 / +0'
000092F0	00000001 F8000001			1302	DC XL16'00000001F80000010000000000000000'
00009300	D2E7C2D9 4060F140			1303	DC CL48'KXBR -1 / +1'
00009330	00000001 F8000001			1304	DC XL16'00000001F80000010000000000000000'
00009340	D2E7C2D9 4060F140			1305	DC CL48'KXBR -1 / +infinity'
00009370	00000001 F8000001			1306	DC XL16'00000001F80000010000000000000000'
00009380	D2E7C2D9 4060F140			1307	DC CL48'KXBR -1 / -QNaN'
000093B0	00800003 F8008000			1308	DC XL16'00800003F80080000000000000000000'
000093C0	D2E7C2D9 4060F140			1309	DC CL48'KXBR -1 / +SNaN'
000093F0	00800003 F8008000			1310	DC XL16'00800003F80080000000000000000000'
00009400	D2E7C2D9 4060F040			1311	DC CL48'KXBR -0 / -infinity'
00009430	00000002 F8000002			1312	DC XL16'00000002F80000020000000000000000'
00009440	D2E7C2D9 4060F040			1313	DC CL48'KXBR -0 / -1'
00009470	00000002 F8000002			1314	DC XL16'00000002F80000020000000000000000'
00009480	D2E7C2D9 4060F040			1315	DC CL48'KXBR -0 / -0'
000094B0	00000000 F8000000			1316	DC XL16'00000000F80000000000000000000000'
000094C0	D2E7C2D9 4060F040			1317	DC CL48'KXBR -0 / +0'
000094F0	00000000 F8000000			1318	DC XL16'00000000F80000000000000000000000'
00009500	D2E7C2D9 4060F040			1319	DC CL48'KXBR -0 / +1'
00009530	00000001 F8000001			1320	DC XL16'00000001F80000010000000000000000'
00009540	D2E7C2D9 4060F040			1321	DC CL48'KXBR -0 / +infinity'
00009570	00000001 F8000001			1322	DC XL16'00000001F80000010000000000000000'
00009580	D2E7C2D9 4060F040			1323	DC CL48'KXBR -0 / -QNaN'
000095B0	00800003 F8008000			1324	DC XL16'00800003F80080000000000000000000'
000095C0	D2E7C2D9 4060F040			1325	DC CL48'KXBR -0 / +SNaN'
000095F0	00800003 F8008000			1326	DC XL16'00800003F80080000000000000000000'
00009600	D2E7C2D9 404EF040			1327	DC CL48'KXBR +0 / -infinity'
00009630	00000002 F8000002			1328	DC XL16'00000002F80000020000000000000000'
00009640	D2E7C2D9 404EF040			1329	DC CL48'KXBR +0 / -1'
00009670	00000002 F8000002			1330	DC XL16'00000002F80000020000000000000000'
00009680	D2E7C2D9 404EF040			1331	DC CL48'KXBR +0 / -0'
000096B0	00000000 F8000000			1332	DC XL16'00000000F80000000000000000000000'
000096C0	D2E7C2D9 404EF040			1333	DC CL48'KXBR +0 / +0'
000096F0	00000000 F8000000			1334	DC XL16'00000000F80000000000000000000000'
00009700	D2E7C2D9 404EF040			1335	DC CL48'KXBR +0 / +1'
00009730	00000001 F8000001			1336	DC XL16'00000001F80000010000000000000000'
00009740	D2E7C2D9 404EF040			1337	DC CL48'KXBR +0 / +infinity'
00009770	00000001 F8000001			1338	DC XL16'00000001F80000010000000000000000'
00009780	D2E7C2D9 404EF040			1339	DC CL48'KXBR +0 / -QNaN'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
000097B0	00800003 F8008000			1340	DC XL16'00800003F80080000000000000000000'
000097C0	D2E7C2D9 404EF040			1341	DC CL48'KXBR +0 / +SNaN'
000097F0	00800003 F8008000			1342	DC XL16'00800003F80080000000000000000000'
00009800	D2E7C2D9 404EF140			1343	DC CL48'KXBR +1 / -infinity'
00009830	00000002 F8000002			1344	DC XL16'00000002F80000020000000000000000'
00009840	D2E7C2D9 404EF140			1345	DC CL48'KXBR +1 / -1'
00009870	00000002 F8000002			1346	DC XL16'00000002F80000020000000000000000'
00009880	D2E7C2D9 404EF140			1347	DC CL48'KXBR +1 / -0'
000098B0	00000002 F8000002			1348	DC XL16'00000002F80000020000000000000000'
000098C0	D2E7C2D9 404EF140			1349	DC CL48'KXBR +1 / +0'
000098F0	00000002 F8000002			1350	DC XL16'00000002F80000020000000000000000'
00009900	D2E7C2D9 404EF140			1351	DC CL48'KXBR +1 / +1'
00009930	00000000 F8000000			1352	DC XL16'00000000F80000000000000000000000'
00009940	D2E7C2D9 404EF140			1353	DC CL48'KXBR +1 / +infinity'
00009970	00000001 F8000001			1354	DC XL16'00000001F80000010000000000000000'
00009980	D2E7C2D9 404EF140			1355	DC CL48'KXBR +1 / -QNaN'
000099B0	00800003 F8008000			1356	DC XL16'00800003F80080000000000000000000'
000099C0	D2E7C2D9 404EF140			1357	DC CL48'KXBR +1 / +SNaN'
000099F0	00800003 F8008000			1358	DC XL16'00800003F80080000000000000000000'
00009A00	D2E7C2D9 404E8995			1359	DC CL48'KXBR +infinity / -infinity'
00009A30	00000002 F8000002			1360	DC XL16'00000002F80000020000000000000000'
00009A40	D2E7C2D9 404E8995			1361	DC CL48'KXBR +infinity / -1'
00009A70	00000002 F8000002			1362	DC XL16'00000002F80000020000000000000000'
00009A80	D2E7C2D9 404E8995			1363	DC CL48'KXBR +infinity / -0'
00009AB0	00000002 F8000002			1364	DC XL16'00000002F80000020000000000000000'
00009AC0	D2E7C2D9 404E8995			1365	DC CL48'KXBR +infinity / +0'
00009AF0	00000002 F8000002			1366	DC XL16'00000002F80000020000000000000000'
00009B00	D2E7C2D9 404E8995			1367	DC CL48'KXBR +infinity / +1'
00009B30	00000002 F8000002			1368	DC XL16'00000002F80000020000000000000000'
00009B40	D2E7C2D9 404E8995			1369	DC CL48'KXBR +infinity / +infinity'
00009B70	00000000 F8000000			1370	DC XL16'00000000F80000000000000000000000'
00009B80	D2E7C2D9 404E8995			1371	DC CL48'KXBR +infinity / -QNaN'
00009BB0	00800003 F8008000			1372	DC XL16'00800003F80080000000000000000000'
00009BC0	D2E7C2D9 404E8995			1373	DC CL48'KXBR +infinity / +SNaN'
00009BF0	00800003 F8008000			1374	DC XL16'00800003F80080000000000000000000'
00009C00	D2E7C2D9 4060D8D5			1375	DC CL48'KXBR -QNaN / -infinity'
00009C30	00800003 F8008000			1376	DC XL16'00800003F80080000000000000000000'
00009C40	D2E7C2D9 4060D8D5			1377	DC CL48'KXBR -QNaN / -1'
00009C70	00800003 F8008000			1378	DC XL16'00800003F80080000000000000000000'
00009C80	D2E7C2D9 4060D8D5			1379	DC CL48'KXBR -QNaN / -0'
00009CB0	00800003 F8008000			1380	DC XL16'00800003F80080000000000000000000'
00009CC0	D2E7C2D9 4060D8D5			1381	DC CL48'KXBR -QNaN / +0'
00009CF0	00800003 F8008000			1382	DC XL16'00800003F80080000000000000000000'
00009D00	D2E7C2D9 4060D8D5			1383	DC CL48'KXBR -QNaN / +1'
00009D30	00800003 F8008000			1384	DC XL16'00800003F80080000000000000000000'
00009D40	D2E7C2D9 4060D8D5			1385	DC CL48'KXBR -QNaN / +infinity'
00009D70	00800003 F8008000			1386	DC XL16'00800003F80080000000000000000000'
00009D80	D2E7C2D9 4060D8D5			1387	DC CL48'KXBR -QNaN / -QNaN'
00009DB0	00800003 F8008000			1388	DC XL16'00800003F80080000000000000000000'
00009DC0	D2E7C2D9 4060D8D5			1389	DC CL48'KXBR -QNaN / +SNaN'
00009DF0	00800003 F8008000			1390	DC XL16'00800003F80080000000000000000000'
00009E00	D2E7C2D9 404EE2D5			1391	DC CL48'KXBR +SNaN / -infinity'
00009E30	00800003 F8008000			1392	DC XL16'00800003F80080000000000000000000'
00009E40	D2E7C2D9 404EE2D5			1393	DC CL48'KXBR +SNaN / -1'
00009E70	00800003 F8008000			1394	DC XL16'00800003F80080000000000000000000'
00009E80	D2E7C2D9 404EE2D5			1395	DC CL48'KXBR +SNaN / -0'

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
00009EB0	00800003 F8008000			1396 DC XL16'00800003F80080000000000000000000'
00009EC0	D2E7C2D9 404EE2D5			1397 DC CL48'KXBR +SNaN / +0'
00009EF0	00800003 F8008000			1398 DC XL16'00800003F80080000000000000000000'
00009F00	D2E7C2D9 404EE2D5			1399 DC CL48'KXBR +SNaN / +1'
00009F30	00800003 F8008000			1400 DC XL16'00800003F80080000000000000000000'
00009F40	D2E7C2D9 404EE2D5			1401 DC CL48'KXBR +SNaN / +infinity'
00009F70	00800003 F8008000			1402 DC XL16'00800003F80080000000000000000000'
00009F80	D2E7C2D9 404EE2D5			1403 DC CL48'KXBR +SNaN / -QNaN'
00009FB0	00800003 F8008000			1404 DC XL16'00800003F80080000000000000000000'
00009FC0	D2E7C2D9 404EE2D5			1405 DC CL48'KXBR +SNaN / +SNaN'
00009FF0	00800003 F8008000			1406 DC XL16'00800003F80080000000000000000000'
		00000040	00000001	1407 XBFPCSCC_NUM EQU (*-XBFPCSCC_GOOD)/64

LOC	OBJECT CODE	ADDR1	ADDR2	STMT				
0000A000				1409	HELPERS DS	0H		(R12 base of helper subroutines)
				1411	*****			
				1412	*			REPORT UNEXPECTED PROGRAM CHECK
				1413	*****			
0000A000				1415	PGMCK DS	0H		
0000A000	F342 C072 F08E	0000A072	0000008E	1416	UNPK			PROGCODE(L'PROGCODE+1),PCINTCD(L'PCINTCD+1)
0000A006	926B C076		0000A076	1417	MVI			PGMCOMMA,C','
0000A00A	DC03 C072 C178	0000A072	0000A178	1418	TR			PROGCODE,HEXTRTAB
0000A010	F384 C07C F150	0000A07C	00000150	1420	UNPK			PGMPSW+(0*9)(9),PCOLDPSW+(0*4)(5)
0000A016	9240 C084		0000A084	1421	MVI			PGMPSW+(0*9)+8,C' '
0000A01A	DC07 C07C C178	0000A07C	0000A178	1422	TR			PGMPSW+(0*9)(8),HEXTRTAB
0000A020	F384 C085 F154	0000A085	00000154	1424	UNPK			PGMPSW+(1*9)(9),PCOLDPSW+(1*4)(5)
0000A026	9240 C08D		0000A08D	1425	MVI			PGMPSW+(1*9)+8,C' '
0000A02A	DC07 C085 C178	0000A085	0000A178	1426	TR			PGMPSW+(1*9)(8),HEXTRTAB
0000A030	F384 C08E F158	0000A08E	00000158	1428	UNPK			PGMPSW+(2*9)(9),PCOLDPSW+(2*4)(5)
0000A036	9240 C096		0000A096	1429	MVI			PGMPSW+(2*9)+8,C' '
0000A03A	DC07 C08E C178	0000A08E	0000A178	1430	TR			PGMPSW+(2*9)(8),HEXTRTAB
0000A040	F384 C097 F15C	0000A097	0000015C	1432	UNPK			PGMPSW+(3*9)(9),PCOLDPSW+(3*4)(5)
0000A046	9240 C09F		0000A09F	1433	MVI			PGMPSW+(3*9)+8,C' '
0000A04A	DC07 C097 C178	0000A097	0000A178	1434	TR			PGMPSW+(3*9)(8),HEXTRTAB
0000A050	4100 0042		00000042	1436	LA	R0,L'PROGMSG		R0 <== length of message
0000A054	4110 C05E		0000A05E	1437	LA	R1,PROGMSG		R1 --> the message text itself
0000A058	4520 C27A		0000A27A	1438	BAL	R2,MSG		Go display this message
				1439				
0000A05C	07FD			1440	BR	R13		Return to caller
0000A05E				1442	PROGMSG DS	0CL66		
0000A05E	D7D9D6C7 D9C1D440			1443	DC			CL20'PROGRAM CHECK! CODE '
0000A072	88888888			1444	PROGCODE DC			CL4'hhhh'
0000A076	6B			1445	PGMCOMMA DC			CL1','
0000A077	40D7E2E6 40			1446	DC			CL5' PSW '
0000A07C	88888888 88888888			1447	PGMPSW DC			CL36'hhhhhhh hhhhhhhh hhhhhhhh hhhhhhhh '

LOC	OBJECT CODE	ADDR1	ADDR2	STMT				
				1449	*****			
				1450	*	VERIFICATION ROUTINE		
				1451	*****			
0000A0A0				1453	VERISUB	DS	0H	
				1454	*			
				1455	**	Loop through the VERIFY TABLE...		
				1456	*			
0000A0A0	4110 C32C		0000A32C	1458	LA	R1,VERIFTAB	R1 --> Verify table	
0000A0A4	4120 0006		00000006	1459	LA	R2,VERIFLEN	R2 <= Number of entries	
0000A0A8	0D30			1460	BASR	R3,0	Set top of loop	
0000A0AA	9846 1000		00000000	1462	LM	R4,R6,0(R1)	Load verify table values	
0000A0AE	4D70 C0C2		0000A0C2	1463	BAS	R7,VERIFY	Verify results	
0000A0B2	4110 100C		0000000C	1464	LA	R1,12(,R1)	Next verify table entry	
0000A0B6	0623			1465	BCTR	R2,R3	Loop through verify table	
0000A0B8	9500 C278		0000A278	1467	CLI	FAILFLAG,X'00'	Did all tests verify okay?	
0000A0BC	078D			1468	BER	R13	Yes, return to caller	
0000A0BE	47F0 F238		00000238	1469	B	FAIL	No, load FAILURE disabled wait PSW	
				1471	*			
				1472	**	Loop through the ACTUAL / EXPECTED results...		
				1473	*			
0000A0C2	0D80			1475	VERIFY	BASR	R8,0	
							Set top of loop	
0000A0C4	D50F 4000 5030	00000000	00000030	1477	CLC	0(16,R4),48(R5)	Actual results == Expected results?	
0000A0CA	4770 C0DA		0000A0DA	1478	BNE	VERIFAIL	No, show failure	
0000A0CE	4140 4010		00000010	1479	VERINEXT	LA	R4,16(,R4)	
							Next actual result	
0000A0D2	4150 5040		00000040	1480	LA	R5,64(,R5)	Next expected result	
0000A0D6	0668			1481	BCTR	R6,R8	Loop through results	
0000A0D8	07F7			1483	BR	R7	Return to caller	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				1485 *****
				1486 * Report the failure...
				1487 *****
0000A0DA	9005 C250		0000A250	1489 VERIFAIL STM R0,R5,SAVER0R5 Save registers
0000A0DE	92FF C278		0000A278	1490 MVI FAILFLAG,X'FF' Remember verification failure
				1491 *
				1492 ** First, show them the description...
				1493 *
0000A0E2	D22F C1E0 5000	0000A1E0	00000000	1494 MVC FAILDESC,0(R5) Save results/test description
0000A0E8	4100 0044		00000044	1495 LA R0,L'FAILMSG1 R0 <== length of message
0000A0EC	4110 C1CC		0000A1CC	1496 LA R1,FAILMSG1 R1 --> the message text itself
0000A0F0	4520 C27A		0000A27A	1497 BAL R2,MSG Go display this message
				1498 *
				1499 ** Save address of actual and expected results
				1500 *
0000A0F4	5040 C24C		0000A24C	1501 ST R4,AACTUAL Save A(actual results)
0000A0F8	4150 5030		00000030	1502 LA R5,48(,R5) R5 ==> expected results
0000A0FC	5050 C248		0000A248	1503 ST R5,AEXPECT Save A(expected results)
				1504 *
				1505 ** Format and show them the EXPECTED ("Want") results...
				1506 *
0000A100	D205 C210 C378	0000A210	0000A378	1507 MVC WANTGOT,=CL6'Want: '
0000A106	F384 C216 C248	0000A216	0000A248	1508 UNPK FAILADR(L'FAILADR+1),AEXPECT(L'AEXPECT+1)
0000A10C	9240 C21E		0000A21E	1509 MVI BLANKEQ,C' '
0000A110	DC07 C216 C178	0000A216	0000A178	1510 TR FAILADR,HEXTRTAB
0000A116	F384 C221 5000	0000A221	00000000	1512 UNPK FAILVALS+(0*9)(9),(0*4)(5,R5)
0000A11C	9240 C229		0000A229	1513 MVI FAILVALS+(0*9)+8,C' '
0000A120	DC07 C221 C178	0000A221	0000A178	1514 TR FAILVALS+(0*9)(8),HEXTRTAB
0000A126	F384 C22A 5004	0000A22A	00000004	1516 UNPK FAILVALS+(1*9)(9),(1*4)(5,R5)
0000A12C	9240 C232		0000A232	1517 MVI FAILVALS+(1*9)+8,C' '
0000A130	DC07 C22A C178	0000A22A	0000A178	1518 TR FAILVALS+(1*9)(8),HEXTRTAB
0000A136	F384 C233 5008	0000A233	00000008	1520 UNPK FAILVALS+(2*9)(9),(2*4)(5,R5)
0000A13C	9240 C23B		0000A23B	1521 MVI FAILVALS+(2*9)+8,C' '
0000A140	DC07 C233 C178	0000A233	0000A178	1522 TR FAILVALS+(2*9)(8),HEXTRTAB
0000A146	F384 C23C 500C	0000A23C	0000000C	1524 UNPK FAILVALS+(3*9)(9),(3*4)(5,R5)
0000A14C	9240 C244		0000A244	1525 MVI FAILVALS+(3*9)+8,C' '
0000A150	DC07 C23C C178	0000A23C	0000A178	1526 TR FAILVALS+(3*9)(8),HEXTRTAB
0000A156	4100 0035		00000035	1528 LA R0,L'FAILMSG2 R0 <== length of message
0000A15A	4110 C210		0000A210	1529 LA R1,FAILMSG2 R1 --> the message text itself
0000A15E	4520 C27A		0000A27A	1530 BAL R2,MSG Go display this message

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
				1532 *			
				1533 **	Format and show them the ACTUAL ("Got") results...		
				1534 *			
0000A162	D205 C210 C37E	0000A210	0000A37E	1535	MVC	WANTGOT,=CL6'Got: '	
0000A168	F384 C216 C24C	0000A216	0000A24C	1536	UNPK	FAILADR(L'FAILADR+1),AACTUAL(L'AACTUAL+1)	
0000A16E	9240 C21E		0000A21E	1537	MVI	BLANKEQ,C' '	
0000A172	DC07 C216 C178	0000A216	0000A178	1538	TR	FAILADR,HEXTRTAB	
0000A178	F384 C221 4000	0000A221	00000000	1540	UNPK	FAILVALS+(0*9)(9),(0*4)(5,R4)	
0000A17E	9240 C229		0000A229	1541	MVI	FAILVALS+(0*9)+8,C' '	
0000A182	DC07 C221 C178	0000A221	0000A178	1542	TR	FAILVALS+(0*9)(8),HEXTRTAB	
0000A188	F384 C22A 4004	0000A22A	00000004	1544	UNPK	FAILVALS+(1*9)(9),(1*4)(5,R4)	
0000A18E	9240 C232		0000A232	1545	MVI	FAILVALS+(1*9)+8,C' '	
0000A192	DC07 C22A C178	0000A22A	0000A178	1546	TR	FAILVALS+(1*9)(8),HEXTRTAB	
0000A198	F384 C233 4008	0000A233	00000008	1548	UNPK	FAILVALS+(2*9)(9),(2*4)(5,R4)	
0000A19E	9240 C23B		0000A23B	1549	MVI	FAILVALS+(2*9)+8,C' '	
0000A1A2	DC07 C233 C178	0000A233	0000A178	1550	TR	FAILVALS+(2*9)(8),HEXTRTAB	
0000A1A8	F384 C23C 400C	0000A23C	0000000C	1552	UNPK	FAILVALS+(3*9)(9),(3*4)(5,R4)	
0000A1AE	9240 C244		0000A244	1553	MVI	FAILVALS+(3*9)+8,C' '	
0000A1B2	DC07 C23C C178	0000A23C	0000A178	1554	TR	FAILVALS+(3*9)(8),HEXTRTAB	
0000A1B8	4100 0035		00000035	1556	LA	R0,L'FAILMSG2 R0 <== length of message	
0000A1BC	4110 C210		0000A210	1557	LA	R1,FAILMSG2 R1 --> the message text itself	
0000A1C0	4520 C27A		0000A27A	1558	BAL	R2,MSG Go display this message	
0000A1C4	9805 C250		0000A250	1560	LM	R0,R5,SAVER0R5 Restore registers	
0000A1C8	47F0 C0CE		0000A0CE	1561	B	VERINEXT Continue with verification...	
0000A1CC				1563	FAILMSG1 DS	0CL68	
0000A1CC	C3D6D4D7 C1D9C9E2			1564	DC	CL20'COMPARISON FAILURE! '	
0000A1E0	4D8485A2 83998997			1565	FAILDESC DC	CL48'(description)'	
0000A210				1567	FAILMSG2 DS	0CL53	
0000A210	40404040 4040			1568	WANTGOT DC	CL6' ' 'Want: ' -or- 'Got: '	
0000A216	C1C1C1C1 C1C1C1C1			1569	FAILADR DC	CL8'AAAAAAA'	
0000A21E	407E40			1570	BLANKEQ DC	CL3' = '	
0000A221	88888888 88888888			1571	FAILVALS DC	CL36'hhhhhhh hhhhhh hhhhhh hhhhhh '	
0000A248	00000000			1573	AEXPECT DC	F'0' ==> Expected ("Want") results	
0000A24C	00000000			1574	AACTUAL DC	F'0' ==> Actual ("Got") results	
0000A250	00000000 00000000			1575	SAVER0R5 DC	6F'0' Registers R0 - R5 save area	
0000A268	F0F1F2F3 F4F5F6F7			1576	CHARHEX DC	CL16'0123456789ABCDEF'	
		0000A178	00000010	1577	HEXTRTAB EQU	CHARHEX-X'F0' Hexadecimal translation table	
0000A278	00			1578	FAILFLAG DC	X'00' FF = Fail, 00 = Success	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT						
				1580	*****					
				1581	*	Issue HERCULES MESSAGE pointed to by R1, length in R0				
				1582	*****					
0000A27A	4900 C374		0000A374	1584	MSG	CH	R0,=H'0'		Do we even HAVE a message?	
0000A27E	07D2			1585		BNHR	R2		No, ignore	
0000A280	9002 C2B0		0000A2B0	1587		STM	R0,R2,MSGSAVE		Save registers	
0000A284	4900 C376		0000A376	1589		CH	R0,=AL2(L'MSGMSG)		Message length within limits?	
0000A288	47D0 C290		0000A290	1590		BNH	MSGOK		Yes, continue	
0000A28C	4100 005F		0000005F	1591		LA	R0,L'MSGMSG		No, set to maximum	
0000A290	1820			1593	MSGOK	LR	R2,R0		Copy length to work register	
0000A292	0620			1594		BCTR	R2,0		Minus-1 for execute	
0000A294	4420 C2BC		0000A2BC	1595		EX	R2,MSGMVC		Copy message to O/P buffer	
0000A298	4120 200A		0000000A	1597		LA	R2,1+L'MSGCMD(,R2)		Calculate true command length	
0000A29C	4110 C2C2		0000A2C2	1598		LA	R1,MSGCMD		Point to true command	
0000A2A0	83120008			1600		DC	X'83',X'12',X'0008'		Issue Hercules Diagnose X'008'	
0000A2A4	4780 C2AA		0000A2AA	1601		BZ	MSGRET		Return if successful	
0000A2A8	0000			1602		DC	H'0'		CRASH for debugging purposes	
0000A2AA	9802 C2B0		0000A2B0	1604	MSGRET	LM	R0,R2,MSGSAVE		Restore registers	
0000A2AE	07F2			1605		BR	R2		Return to caller	
0000A2B0	00000000 00000000			1607	MSGSAVE	DC	3F'0'		Registers save area	
0000A2BC	D200 C2CB 1000	0000A2CB	00000000	1608	MSGMVC	MVC	MSGMSG(0),0(R1)		Executed instruction	
0000A2C2	D4E2C7D5 D6C8405C			1610	MSGCMD	DC	C'MSGNOH * '		*** HERCULES MESSAGE COMMAND ***	
0000A2CB	40404040 40404040			1611	MSGMSG	DC	CL95' '		The message text to be displayed	

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
				1613 *****
				1614 * VERIFY TABLE
				1615 *****
				1616 *
				1617 * A(actual results), A(expected results), A(#of results)
				1618 *
				1619 *****
0000A32C				1621 VERIFTAB DC 0F'0'
0000A32C	00001000			1622 DC A(SBFPCCC)
0000A330	00004000			1623 DC A(SBFPCCC_GOOD)
0000A334	00000040			1624 DC A(SBFPCCC_NUM)
				1625 *
0000A338	00001400			1626 DC A(SBFPCCSCC)
0000A33C	00005000			1627 DC A(SBFPCCSCC_GOOD)
0000A340	00000040			1628 DC A(SBFPCCSCC_NUM)
				1629 *
0000A344	00002000			1630 DC A(LBFPCCC)
0000A348	00006000			1631 DC A(LBFPCCC_GOOD)
0000A34C	00000040			1632 DC A(LBFPCCC_NUM)
				1633 *
0000A350	00002400			1634 DC A(LBFPCCSCC)
0000A354	00007000			1635 DC A(LBFPCCSCC_GOOD)
0000A358	00000040			1636 DC A(LBFPCCSCC_NUM)
				1637 *
0000A35C	00003000			1638 DC A(XBFPCCC)
0000A360	00008000			1639 DC A(XBFPCCC_GOOD)
0000A364	00000040			1640 DC A(XBFPCCC_NUM)
				1641 *
0000A368	00003400			1642 DC A(XBFPCCSCC)
0000A36C	00009000			1643 DC A(XBFPCCSCC_GOOD)
0000A370	00000040			1644 DC A(XBFPCCSCC_NUM)
				1645 *
	00000006	00000001		1646 VERIFLEN EQU (*-VERIFTAB)/12 #of entries in verify table

LOC	OBJECT CODE	ADDR1	ADDR2	STMT	
0000A374				1648	END
0000A374	0000			1649	=H'0'
0000A376	005F			1650	=AL2(L'MSGMSG)
0000A378	E68195A3 7A40			1651	=CL6'Want: '
0000A37E	C796A37A 4040			1652	=CL6'Got: '

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
VERIFY	I	00A0C2	2	1475	1463
VERINEXT	I	00A0CE	4	1479	1561
VERISUB	H	00A0A0	2	1453	215
WANTGOT	C	00A210	6	1568	1507 1535
XBFPCCC	U	003000	1	605	250 1638
XBFPCCC_GOOD	U	008000	1	1146	1275 1639
XBFPCCC_NUM	U	000040	1	1275	1640
XBFPCOMP	H	000548	2	466	208
XBFPCSCC	U	003400	1	608	251 1642
XBFPCSCC_GOOD	U	009000	1	1278	1407 1643
XBFPCSCC_NUM	U	000040	1	1407	1644
XBFPCT	U	000008	1	571	248
XBFPIN	D	000650	8	562	571 249
XTNDC	F	000320	4	247	207
=AL2(L'MSGMSG)	R	00A376	2	1650	1589
=CL6'Got: '	C	00A37E	6	1652	1535
=CL6'Want: '	C	00A378	6	1651	1507
=H'0'	H	00A374	2	1649	1584

MACRO DEFN REFERENCES

No defined macros

DESC	SYMBOL	SIZE	POS	ADDR
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Entry: 0

Image	IMAGE	41860	0000-A383	0000-A383
Region		41860	0000-A383	0000-A383
CSECT	BFPCOMPS	41860	0000-A383	0000-A383

STMT

FILE NAME

1 c:\Users\Fish\Documents\Visual Studio 2008\Projects\MyProjects\ASMA-0\bfp-013-comps\bfp-013-comps.asm

** NO ERRORS FOUND **