```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

                                                        2 ************************************************************************
                                                        3 *
                                                        4 *Testcase IEEE MULTIPLY (to longer precision)
                                                        5 *  Test case capability includes IEEE exceptions trappable and
                                                        6 *  otherwise. Test results, FPCR flags, the Condition code, and any
                                                        7 *  DXC are saved for all tests.
                                                        8 *
                                                        9 *  The result precision for each instruction is longer than the input
                                                       10 *  operands.  As a result, the underflow and overflow exceptions will
                                                       11 *  never occur.  Further, the results are always exact.  There is
                                                       12 *  no rounding of the result.
                                                       13 *
                                                       14 *  The fused multiply operations are not included in this test program,
                                                       15 *  nor are the standard multiply instructions.  The former are
                                                       16 *  are excluded to keep test case complexity manageable, and latter
                                                       17 *  because they require a more extensive testing profile (overflow,
                                                       18 *  underflow, rounding).
                                                       19 *
                                                       20 *
                                                       21 *                        ********************
                                                       22 *                        **   IMPORTANT!   **
                                                       23 *                        ********************
                                                       24 *
                                                       25 *        This test uses the Hercules Diagnose X'008' interface
                                                       26 *        to display messages and thus your .tst runtest script
                                                       27 *        MUST contain a "DIAG8CMD ENABLE" statement within it!
                                                       28 *
                                                       29 *
                                                       30 ************************************************************************


                                                       32 ************************************************************************
                                                       33 *
                                                       34 *                       bfp-020-multlonger.asm
                                                       35 *
                                                       36 *        This assembly-language source file is part of the
                                                       37 *        Hercules Binary Floating Point Validation Package
                                                       38 *                          by Stephen R. Orso
                                                       39 *
                                                       40 * Copyright 2016 by Stephen R Orso.
                                                       41 * Runtest *Compare dependency removed by Fish on 2022-08-16
                                                       42 * PADCSECT macro/usage removed by Fish on 2022-08-16
                                                       43 *
                                                       44 * Redistribution and use in source and binary forms, with or without
                                                       45 * modification, are permitted provided that the following conditions
                                                       46 * are met:
                                                       47 *
                                                       48 * 1. Redistributions of source code must retain the above copyright
                                                       49 *    notice, this list of conditions and the following disclaimer.
                                                       50 *
                                                       51 * 2. Redistributions in binary form must reproduce the above copyright
                                                       52 *    notice, this list of conditions and the following disclaimer in
                                                       53 *    the documentation and/or other materials provided  with the
                                                       54 *    distribution.
                                                       55 *
                                                       56 * 3. The name of the author may not be used to endorse or promote
```

```
 LOC        OBJECT CODE       ADDR1     ADDR2    STMT

                                                    57 *    products derived from this software without specific prior written
                                                    58 *    permission.
                                                    59 *
                                                    60 * DISCLAMER: THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDER "AS IS"
                                                    61 * AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO,
                                                    62 * THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A
                                                    63 * PARTICULAR PURPOSE ARE DISCLAIMED.  IN NO EVENT SHALL THE COPYRIGHT
                                                    64 * HOLDER BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL,
                                                    65 * EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO,
                                                    66 * PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR
                                                    67 * PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY
                                                    68 * OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
                                                    69 * (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
                                                    70 * OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
                                                    71 *
                                                    72 ********************************************************************************


                                                    74 ********************************************************************************
                                                    75 *
                                                    76 * Tests the following five conversion instructions
                                                    77 *   MULTIPLY (short BFP, RRE) (short to long)
                                                    78 *   MULTIPLY (long BFP, RRE) (long to extended)
                                                    79 *   MULTIPLY (short BFP, RXE) (short to long)
                                                    80 *   MULTIPLY (long BFP, RXE) (long to extended)
                                                    81 *
                                                    82 * Test data is compiled into this program.  The test script that runs
                                                    83 * this program can provide alternative test data through Hercules R
                                                    84 * commands.
                                                    85 *
                                                    86 * Test Case Order
                                                    87 * 1) Short BFP basic tests, including traps and NaN propagation
                                                    88 * 2) Long BFP basic tests, including traps and NaN propagation
                                                    89 *
                                                    90 * One input test sets are provided each for short and long BFP inputs.
                                                    91 *   Test values are the same for each precision.
                                                    92 *
                                                    93 * Also tests the following floating point support instructions
                                                    94 *   LOAD  (Short)
                                                    95 *   LOAD  (Long)
                                                    96 *   LFPC  (Load Floating Point Control Register)
                                                    97 *   STORE (Short)
                                                    98 *   STORE (Long)
                                                    99 *   STFPC (Store Floating Point Control Register)
                                                   100 *
                                                   101 ********************************************************************************
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2    STMT
                                                    103 *
                                                    104 *  Note: for compatibility with the z/CMS test rig, do not change
                                                    105 *  or use R11, R14, or R15.  Everything else is fair game.
                                                    106 *
                               00000000  0000C36B   107 BFPMUL2L START 0
                               00000000  00000001   108 STRTLABL EQU   *
                               00000000  00000001   109 R0       EQU   0                   Work register for cc extraction
                               00000001  00000001   110 R1       EQU   1
                               00000002  00000001   111 R2       EQU   2                   Holds count of test input values
                               00000003  00000001   112 R3       EQU   3                   Points to next test input value(s)
                               00000004  00000001   113 R4       EQU   4                   Rounding tests inner loop control
                               00000005  00000001   114 R5       EQU   5                   Rounding tests outer loop control
                               00000006  00000001   115 R6       EQU   6                   Rounding tests top of inner loop
                               00000007  00000001   116 R7       EQU   7                   Pointer to next result value(s)
                               00000008  00000001   117 R8       EQU   8                   Pointer to next FPCR result
                               00000009  00000001   118 R9       EQU   9                   Rounding tests top of outer loop
                               0000000A  00000001   119 R10      EQU   10                  Pointer to test address list
                               0000000B  00000001   120 R11      EQU   11                  **Reserved for z/CMS test rig
                               0000000C  00000001   121 R12      EQU   12                  Holds number of test cases in set
                               0000000D  00000001   122 R13      EQU   13                  Mainline return address
                               0000000E  00000001   123 R14      EQU   14                  **Return address for z/CMS test rig
                               0000000F  00000001   124 R15      EQU   15                  **Base register on z/CMS or Hyperion
                                                    125 *
                                                    126 * Floating Point Register equates to keep the cross reference clean
                                                    127 *
                               00000000  00000001   128 FPR0     EQU   0
                               00000001  00000001   129 FPR1     EQU   1
                               00000002  00000001   130 FPR2     EQU   2
                               00000003  00000001   131 FPR3     EQU   3
                               00000004  00000001   132 FPR4     EQU   4
                               00000005  00000001   133 FPR5     EQU   5
                               00000006  00000001   134 FPR6     EQU   6
                               00000007  00000001   135 FPR7     EQU   7
                               00000008  00000001   136 FPR8     EQU   8
                               00000009  00000001   137 FPR9     EQU   9
                               0000000A  00000001   138 FPR10    EQU   10
                               0000000B  00000001   139 FPR11    EQU   11
                               0000000C  00000001   140 FPR12    EQU   12
                               0000000D  00000001   141 FPR13    EQU   13
                               0000000E  00000001   142 FPR14    EQU   14
                               0000000F  00000001   143 FPR15    EQU   15
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

00000000                      00000000              145          USING *,R15
00000000                      0000C000              146          USING HELPERS,R12
                                                    147 *
                                                    148 * Above works on real iron (R15=0 after sysclear)
                                                    149 * and in z/CMS (R15 points to start of load module)
                                                    150 *



                                                    152 ********************************************************************************
                                                    153 *
                                                    154 * Low core definitions, Restart PSW, and Program Check Routine.
                                                    155 *
                                                    156 ********************************************************************************


00000000                      00000000  0000008E    158          ORG   STRTLABL+X'8E'      Program check interrution code
0000008E  0000                                    159 PCINTCD  DS    H
                                                    160 *
                              00000150  00000001    161 PCOLDPSW EQU   STRTLABL+X'150'     z/Arch Program check old PSW
                                                    162 *
00000090                      00000090  000001A0    163          ORG   STRTLABL+X'1A0'     z/Arch Restart PSW
000001A0  00000001 80000000                         164          DC    X'0000000180000000',AD(START)
                                                    165 *
000001B0                      000001B0  000001D0    166          ORG   STRTLABL+X'1D0'     z/Arch Program check NEW PSW
000001D0  00000000 00000000                         167          DC    X'0000000000000000',AD(PROGCHK)
                                                    168 *
                                                    169 * Program check routine.  If Data Exception, continue execution at
                                                    170 * the instruction following the program check.  Otherwise, hard wait.
                                                    171 * No need to collect data.  All interesting DXC stuff is captured
                                                    172 * in the FPCR.
                                                    173 *
000001E0                      000001E0  00000200    174          ORG   STRTLABL+X'200'
00000200                                            175 PROGCHK  DS    0H              Program check occured...
00000200  9507 F08F                   0000008F    176          CLI   PCINTCD+1,X'07'  Data Exception?
00000204  A774 0004                   0000020C    177          JNE   PCNOTDTA        ..no, hardwait (not sure if R15 is ok)
00000208  B2B2 F150                   00000150    178          LPSWE PCOLDPSW        ..yes, resume program execution

0000020C  900F F23C                   0000023C    180 PCNOTDTA STM   R0,R15,SAVEREGS  Save registers
00000210  58C0 F27C                   0000027C    181          L     R12,AHELPERS     Get address of helper subroutines
00000214  4DD0 C000                   0000C000    182          BAS   R13,PGMCK        Report this unexpected program check
00000218  980F F23C                   0000023C    183          LM    R0,R15,SAVEREGS  Restore registers

0000021C  12EE                                      185          LTR   R14,R14        Return address provided?
0000021E  077E                                      186          BNZR  R14            Yes, return to z/CMS test rig.
00000220  B2B2 F228                   00000228    187          LPSWE PROGPSW        Not data exception, enter disabled wait
00000228  00020000 00000000                         188 PROGPSW  DC    0D'0',X'0002000000000000',XL6'00',X'DEAD' Abnormal end
00000238  B2B2 F2C0                   000002C0    189 FAIL     LPSWE FAILPSW        Not data exception, enter disabled wait
0000023C  00000000 00000000                         190 SAVEREGS DC    16F'0'           Registers save area
0000027C  0000C000                                  191 AHELPERS DC    A(HELPERS)       Address of helper subroutines
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2    STMT

                                                    193 ************************************************************************
                                                    194 *
                                                    195 *  Main program.  Enable Advanced Floating Point, process test cases.
                                                    196 *
                                                    197 ************************************************************************


00000280                                            199 START    DS    0H
00000280  B600 F2D0                 000002D0        200          STCTL R0,R0,CTLR0    Store CR0 to enable AFP
00000284  9604 F2D1                 000002D1        201          OI    CTLR0+1,X'04'  Turn on AFP bit
00000288  B700 F2D0                 000002D0        202          LCTL  R0,R0,CTLR0    Reload updated CR0
                                                    203 *
0000028C  41A0 F2DC                 000002DC        204          LA    R10,SHORTNF   Point to short BFP non-finite inputs
00000290  4DD0 F2FC                 000002FC        205          BAS   R13,SBFPNF    Multiply short BFP non-finites
                                                    206 *
00000294  41A0 F2EC                 000002EC        207          LA    R10,LONGNF    Point to long BFP non-finite inputs
00000298  4DD0 F382                 00000382        208          BAS   R13,LBFPNF    Multiply long BFP non-finites
                                                    209 *
                                                    210 ************************************************************************
                                                    211 *                    Verify test results...
                                                    212 ************************************************************************
                                                    213 *
0000029C  58C0 F27C                 0000027C        214          L     R12,AHELPERS     Get address of helper subroutines
000002A0  4DD0 C0A0                 0000C0A0        215          BAS   R13,VERISUB      Go verify results
000002A4  12EE                                      216          LTR   R14,R14          Was return address provided?
000002A6  077E                                      217          BNZR  R14              Yes, return to z/CMS test rig.
000002A8  B2B2 F2B0                 000002B0        218          LPSWE GOODPSW          Load SUCCESS PSW
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

000002B0                                              220          DS    0D             Ensure correct alignment for PSW
000002B0  00020000 00000000                           221 GOODPSW  DC    X'0002000000000000',AD(0)  Normal end - disabled wait
000002C0  00020000 00000000                           222 FAILPSW  DC    X'0002000000000000',XL6'00',X'0BAD' Abnormal end
                                                      223 *
000002D0  00000000                                    224 CTLR0    DS    F
000002D4  00000000                                    225 FPCREGNT DC    X'00000000'  FPCR, trap all IEEE exceptions, zero flags
000002D8  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 *
000002DC                                              234 SHORTNF  DS    0F           Input pairs for short BFP non-finite tests
000002DC  00000008                                    235          DC    A(SBFPNFCT)
000002E0  00000418                                    236          DC    A(SBFPNFIN)
000002E4  00001000                                    237          DC    A(LBFPNFOT)
000002E8  00001800                                    238          DC    A(LBFPNFFL)
                                                      239 *
000002EC                                              240 LONGNF   DS    0F           Input pairs for long BFP non-finite testing
000002EC  00000008                                    241          DC    A(LBFPNFCT)
000002F0  00000438                                    242          DC    A(LBFPNFIN)
000002F4  00002000                                    243          DC    A(XBFPNFOT)
000002F8  00003000                                    244          DC    A(XBFPNFFL)
                                                      245 *
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2    STMT
                                                    247 ************************************************************************
                                                    248 *
                                                    249 * Perform Multiply using provided short BFP inputs.  This set of tests
                                                    250 * checks NaN propagation, operations on values that are not finite
                                                    251 * numbers, and other basic tests.  This set generates results that can
                                                    252 * be validated against Figure 19-23 on page 19-28 of SA22-7832-10.
                                                    253 * Each value in this table is tested against every other value in the
                                                    254 * table.  Eight entries means 64 result sets.
                                                    255 *
                                                    256 * Four results are generated for each input: one RRE with all
                                                    257 * exceptions non-trappable, a second RRE with all exceptions trappable,
                                                    258 * a third RXE with all exceptions non-trappable, a fourth RXE with all
                                                    259 * exceptions trappable,
                                                    260 *
                                                    261 * The difference, FPCR, and condition code are stored for each result.
                                                    262 *
                                                    263 ************************************************************************


000002FC                                            265 SBFPNF   DS    0H            BFP Short non-finite values tests
000002FC  9823 A000                 00000000    266          LM    R2,R3,0(R10)  Get count and addr of multiplicand values
00000300  9878 A008                 00000008    267          LM    R7,R8,8(R10)  Get address of result area and flag area.
00000304  1222                                  268          LTR   R2,R2         Any test cases?
00000306  078D                                  269          BZR   R13           ..No, return to caller
00000308  0DC0                                  270          BASR  R12,0         Set top of loop
                                                    271 *
0000030A  9845 A000                 00000000    272          LM    R4,R5,0(R10)  Get count and start of multiplier values
                                                    273 *                                  ..which are the same as the multiplicands
0000030E  0D60                                  274          BASR  R6,0          Set top of inner loop
                                                    275 *
00000310  7880 3000                 00000000    276          LE    FPR8,0(,R3)   Get short BFP multiplicand
00000314  7810 5000                 00000000    277          LE    FPR1,0(,R5)   Get short BFP multiplier
00000318  B29D F2D4                 000002D4    278          LFPC  FPCREGNT      Set exceptions non-trappable
0000031C  B30C 0081                             279          MDEBR FPR8,FPR1     Multiply short FPR8 by FPR1 RRE
00000320  6080 7000                 00000000    280          STD   FPR8,0(,R7)   Store long BFP product
00000324  B29C 8000                 00000000    281          STFPC 0(R8)         Store resulting FPCR flags and DXC
                                                    282 *
00000328  7880 3000                 00000000    283          LE    FPR8,0(,R3)   Get short BFP multiplicand
0000032C  7810 5000                 00000000    284          LE    FPR1,0(,R5)   Get short BFP multiplier
00000330  B29D F2D8                 000002D8    285          LFPC  FPCREGTR      Set exceptions trappable
00000334  B30C 0081                             286          MDEBR FPR8,FPR1     Multiply short FPR8 by FPR1 RRE
00000338  6080 7008                 00000008    287          STD   FPR8,8(,R7)   Store long BFP product
0000033C  B29C 8004                 00000004    288          STFPC 4(R8)         Store resulting FPCR flags and DXC
                                                    289 *
00000340  7880 3000                 00000000    290          LE    FPR8,0(,R3)   Get short BFP multiplicand
00000344  B29D F2D4                 000002D4    291          LFPC  FPCREGNT      Set exceptions non-trappable
00000348  ED80 5000 000C            00000000    292          MDEB  FPR8,0(,R5)   Multiply short FPR8 by multiplier RXE
0000034E  6080 7010                 00000010    293          STD   FPR8,16(,R7)  Store long BFP product
00000352  B29C 8008                 00000008    294          STFPC 8(R8)         Store resulting FPCR flags and DXC
                                                    295 *
00000356  7880 3000                 00000000    296          LE    FPR8,0(,R3)   Get short BFP multiplicand
0000035A  B29D F2D8                 000002D8    297          LFPC  FPCREGTR      Set exceptions trappable
0000035E  ED80 5000 000C            00000000    298          MDEB  FPR8,0(,R5)   Multiply short FPR8 by multiplier RXE
00000364  6080 7018                 00000018    299          STD   FPR8,24(,R7)  Store long BFP product
00000368  B29C 800C                 0000000C    300          STFPC 12(R8)        Store resulting FPCR flags and DXC
                                                    301 *
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2    STMT

0000036C  4150 5004                    00000004   302          LA    R5,4(,R5)     Point to next multiplier value
00000370  4170 7020                    00000020   303          LA    R7,4*8(,R7)   Point to next Multiply result area
00000374  4180 8010                    00000010   304          LA    R8,4*4(,R8)   Point to next Multiply FPCR area
00000378  0646                                    305          BCTR  R4,R6         Loop through right-hand values
                                                  306 *
0000037A  4130 3004                    00000004   307          LA    R3,4(,R3)     Point to next input multiplicand
0000037E  062C                                    308          BCTR  R2,R12        Loop through left-hand values
00000380  07FD                                    309          BR    R13           All converted; return.
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2    STMT
                                                    311 ************************************************************************
                                                    312 *
                                                    313 * Perform Multiply using provided long BFP inputs.  This set of tests
                                                    314 * checks NaN propagation, operations on values that are not finite
                                                    315 * numbers, and other basic tests.  This set generates results that can
                                                    316 * validated against Figure 19-23 on page 19-28 of SA22-7832-10.  Each
                                                    317 * value in this table is tested against every other value in the table.
                                                    318 * Eight entries means 64 result sets.
                                                    319 *
                                                    320 * Four results are generated for each input: one RRE with all
                                                    321 * exceptions non-trappable, a second RRE with all exceptions trappable,
                                                    322 * a third RXE with all exceptions non-trappable, a fourth RXE with all
                                                    323 * exceptions trappable,
                                                    324 *
                                                    325 * The difference, FPCR, and condition code are stored for each result.
                                                    326 *
                                                    327 ************************************************************************


00000382                                            329 LBFPNF   DS    0H            BFP long non-finite values tests
00000382  9823 A000                 00000000       330         LM    R2,R3,0(R10)  Get count and addr of multiplicand values
00000386  9878 A008                 00000008       331         LM    R7,R8,8(R10)  Get address of result area and flag area.
0000038A  1222                                      332         LTR   R2,R2         Any test cases?
0000038C  078D                                      333         BZR   R13           ..No, return to caller
0000038E  0DC0                                      334         BASR  R12,0         Set top of loop
                                                    335 *
00000390  9845 A000                 00000000       336         LM    R4,R5,0(R10)  Get count and start of multiplier values
                                                    337 *                           ..which are the same as the multiplicands
00000394  0D60                                      338         BASR  R6,0          Set top of inner loop
                                                    339 *
00000396  6880 3000                 00000000       340         LD    FPR8,0(,R3)   Get long BFP multiplicand
0000039A  6810 5000                 00000000       341         LD    FPR1,0(,R5)   Get long BFP multiplier
0000039E  B29D F2D4                 000002D4       342         LFPC  FPCREGNT      Set exceptions non-trappable
000003A2  B307 0081                                 343         MXDBR FPR8,FPR1     Multiply long FPR8 by FPR1 RRE
000003A6  6080 7000                 00000000       344         STD   FPR8,0(,R7)   Store extended BFP product part 1
000003AA  60A0 7008                 00000008       345         STD   FPR10,8(,R7)  Store extended BFP product part 2
000003AE  B29C 8000                 00000000       346         STFPC 0(R8)         Store resulting FPCR flags and DXC
                                                    347 *
000003B2  6880 3000                 00000000       348         LD    FPR8,0(,R3)   Get long BFP multiplicand
000003B6  6810 5000                 00000000       349         LD    FPR1,0(,R5)   Get long BFP multiplier
000003BA  B29D F2D8                 000002D8       350         LFPC  FPCREGTR      Set exceptions trappable
000003BE  B307 0081                                 351         MXDBR FPR8,FPR1     Multiply long multiplier from FPR8 RRE
000003C2  6080 7010                 00000010       352         STD   FPR8,16(,R7)  Store extended BFP product part 1
000003C6  60A0 7018                 00000018       353         STD   FPR10,24(,R7) Store extended BFP product part 2
000003CA  B29C 8004                 00000004       354         STFPC 4(R8)         Store resulting FPCR flags and DXC
                                                    355 *
000003CE  6880 3000                 00000000       356         LD    FPR8,0(,R3)   Get long BFP multiplicand
000003D2  B29D F2D4                 000002D4       357         LFPC  FPCREGNT      Set exceptions non-trappable
000003D6  ED80 5000 0007            00000000       358         MXDB  FPR8,0(,R5)   Multiply long FPR8 by multiplier RXE
000003DC  6080 7020                 00000020       359         STD   FPR8,32(,R7)  Store extended BFP product part 1
000003E0  60A0 7028                 00000028       360         STD   FPR10,40(,R7) Store extended BFP product part 2
000003E4  B29C 8008                 00000008       361         STFPC 8(R8)         Store resulting FPCR flags and DXC
                                                    362 *
000003E8  6880 3000                 00000000       363         LD    FPR8,0(,R3)   Get long BFP multiplicand
000003EC  B29D F2D8                 000002D8       364         LFPC  FPCREGTR      Set exceptions trappable
000003F0  ED80 5000 0007            00000000       365         MXDB  FPR8,0(,R5)   Multiply long FPR8 by multiplier RXE
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

000003F6  6080 7030                     00000030   366          STD   FPR8,48(,R7)  Store extended BFP product part 1
000003FA  60A0 7038                     00000038   367          STD   FPR10,56(,R7) Store extended BFP product part 2
000003FE  B29C 800C                     0000000C   368          STFPC 12(R8)        Store resulting FPCR flags and DXC
                                                   369 *
00000402  4150 5008                     00000008   370          LA    R5,8(,R5)     Point to next multiplier value
00000406  4170 7040                     00000040   371          LA    R7,4*16(,R7)  Point to next Multiply result area
0000040A  4180 8010                     00000010   372          LA    R8,4*4(,R8)   Point to next Multiply FPCR area
0000040E  0646                                     373          BCTR  R4,R6         Loop through right-hand values
                                                   374 *
00000410  4130 3008                     00000008   375          LA    R3,8(,R3)     Point to next multiplicand value
00000414  062C                                     376          BCTR  R2,R12        Multiply until all cases tested
00000416  07FD                                     377          BR    R13           All converted; return.
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2    STMT
                                                    379 ********************************************************************
                                                    380 *
                                                    381 * Short BFP test data for Multiply to longer precision testing.
                                                    382 *
                                                    383 * The test data set is used for tests of basic functionality, NaN
                                                    384 * propagation, and results from operations involving other than finite
                                                    385 * numbers.
                                                    386 *
                                                    387 * Member values chosen to validate against Figure 19-23 on page 19-28
                                                    388 * of SA22-7832-10.  Each value in this table is tested against every
                                                    389 * other value in the table.  Eight entries means 64 result sets.
                                                    390 *
                                                    391 * Because Multiply to longer precision cannot generate overflow nor
                                                    392 * underflow exceptions and the result is always exact, there are no
                                                    393 * further tests required.  Any more extensive testing would be in
                                                    394 * effect a test of Softfloat, not of the the integration of Softfloat
                                                    395 * to Hercules.
                                                    396 *
                                                    397 ********************************************************************

00000418                                            399 SBFPNFIN DS    0F                Inputs for short BFP non-finite tests
00000418  FF800000                                 400          DC    X'FF800000'         -inf
0000041C  C0000000                                 401          DC    X'C0000000'         -2.0
00000420  80000000                                 402          DC    X'80000000'         -0
00000424  00000000                                 403          DC    X'00000000'         +0
00000428  40000000                                 404          DC    X'40000000'         +2.0
0000042C  7F800000                                 405          DC    X'7F800000'         +inf
00000430  FFCB0000                                 406          DC    X'FFCB0000'         -QNaN
00000434  7F8A0000                                 407          DC    X'7F8A0000'         +SNaN
                            00000008  00000001    408 SBFPNFCT EQU   (*-SBFPNFIN)/4    Count of short BFP in list
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2    STMT
                                                    410 ************************************************************************
                                                    411 *
                                                    412 * Long BFP test data for Multiply to longer precision testing.
                                                    413 *
                                                    414 * The test data set is used for tests of basic functionality, NaN
                                                    415 * propagation, and results from operations involving other than finite
                                                    416 * numbers.
                                                    417 *
                                                    418 * Member values chosen to validate against Figure 19-23 on page 19-28
                                                    419 * of SA22-7832-10.  Each value in this table is tested against every
                                                    420 * other value in the table.  Eight entries means 64 result sets.
                                                    421 *
                                                    422 * Because Multiply to longer precision cannot generate overflow nor
                                                    423 * underflow exceptions and the result is always exact, there are no
                                                    424 * further tests required.  Any more extensive testing would be in
                                                    425 * effect a test of Softfloat, not of the the integration of Softfloat
                                                    426 * to Hercules.
                                                    427 *
                                                    428 ************************************************************************

00000438                                            430 LBFPNFIN DS    0F                Inputs for long BFP testing
00000438  FFF00000 00000000                        431          DC    X'FFF0000000000000'         -inf
00000440  C0000000 00000000                        432          DC    X'C000000000000000'         -2.0
00000448  80000000 00000000                        433          DC    X'8000000000000000'         -0
00000450  00000000 00000000                        434          DC    X'0000000000000000'         +0
00000458  40000000 00000000                        435          DC    X'4000000000000000'         +2.0
00000460  7FF00000 00000000                        436          DC    X'7FF0000000000000'         +inf
00000468  FFF8B000 00000000                        437          DC    X'FFF8B00000000000'         -QNaN
00000470  7FF0A000 00000000                        438          DC    X'7FF0A00000000000'         +SNaN
                            00000008  00000001    439 LBFPNFCT EQU   (*-LBFPNFIN)/8     Count of long BFP in list
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

                                            441 ********************************************************************************
                                            442 *                    ACTUAL results saved here
                                            443 ********************************************************************************
                                            444 *
                                            445 *                 Locations for ACTUAL results
                                            446 *
                          00001000  00000001   447 LBFPNFOT EQU   STRTLABL+X'1000'    Short non-finite BFP results
                                            448 *                                    ..room for 64 tests, 64 used
                          00001800  00000001   449 LBFPNFFL EQU   STRTLABL+X'1800'    FPCR flags and DXC from short BFP
                                            450 *                                    ..room for 64 tests, 64 used
                                            451 *                                    ..next location starts at X'1C00'
                                            452 *
                                            453 *
                          00002000  00000001   454 XBFPNFOT EQU   STRTLABL+X'2000'    Long non-finite BFP results
                                            455 *                                    ..room for 64 tests, 64 used
                          00003000  00000001   456 XBFPNFFL EQU   STRTLABL+X'3000'    FPCR flags and DXC from long BFP
                                            457 *                                    ..room for 64 tests, 64 used
                                            458 *                                    ..next location starts at X'3400'
                                            459 *
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2    STMT

                                                   461 ********************************************************************************
                                                   462 *                       EXPECTED results
                                                   463 ********************************************************************************
                                                   464 *
00000478                      00000478  00004000   465          ORG   STRTLABL+X'4000'   (past end of actual results)
                                                   466 *
                              00004000  00000001   467 LBFPNFOT_GOOD EQU *
00004000  D4C4C5C2 D940D5C6                        468  DC CL48'MDEBR NF -inf/-inf'
00004030  7FF00000 00000000                        469  DC XL16'7FF00000000000007FF0000000000000'
00004040  D4C4C5C2 40D5C640                        470  DC CL48'MDEB NF -inf/-inf'
00004070  7FF00000 00000000                        471  DC XL16'7FF00000000000007FF0000000000000'
00004080  D4C4C5C2 D940D5C6                        472  DC CL48'MDEBR NF -inf/-2.0'
000040B0  7FF00000 00000000                        473  DC XL16'7FF00000000000007FF0000000000000'
000040C0  D4C4C5C2 40D5C640                        474  DC CL48'MDEB NF -inf/-2.0'
000040F0  7FF00000 00000000                        475  DC XL16'7FF00000000000007FF0000000000000'
00004100  D4C4C5C2 D940D5C6                        476  DC CL48'MDEBR NF -inf/-0'
00004130  7FF80000 00000000                        477  DC XL16'7FF8000000000000FF8000000000000'
00004140  D4C4C5C2 40D5C640                        478  DC CL48'MDEB NF -inf/-0'
00004170  7FF80000 00000000                        479  DC XL16'7FF8000000000000FF8000000000000'
00004180  D4C4C5C2 D940D5C6                        480  DC CL48'MDEBR NF -inf/+0'
000041B0  7FF80000 00000000                        481  DC XL16'7FF8000000000000FF8000000000000'
000041C0  D4C4C5C2 40D5C640                        482  DC CL48'MDEB NF -inf/+0'
000041F0  7FF80000 00000000                        483  DC XL16'7FF8000000000000FF8000000000000'
00004200  D4C4C5C2 D940D5C6                        484  DC CL48'MDEBR NF -inf/+2.0'
00004230  FFF00000 00000000                        485  DC XL16'FFF0000000000000FFF0000000000000'
00004240  D4C4C5C2 40D5C640                        486  DC CL48'MDEB NF -inf/+2.0'
00004270  FFF00000 00000000                        487  DC XL16'FFF0000000000000FFF0000000000000'
00004280  D4C4C5C2 D940D5C6                        488  DC CL48'MDEBR NF -inf/+inf'
000042B0  FFF00000 00000000                        489  DC XL16'FFF0000000000000FFF0000000000000'
000042C0  D4C4C5C2 40D5C640                        490  DC CL48'MDEB NF -inf/+inf'
000042F0  FFF00000 00000000                        491  DC XL16'FFF0000000000000FFF0000000000000'
00004300  D4C4C5C2 D940D5C6                        492  DC CL48'MDEBR NF -inf/-QNaN'
00004330  FFF96000 00000000                        493  DC XL16'FFF9600000000000FFF9600000000000'
00004340  D4C4C5C2 40D5C640                        494  DC CL48'MDEB NF -inf/-QNaN'
00004370  FFF96000 00000000                        495  DC XL16'FFF9600000000000FFF9600000000000'
00004380  D4C4C5C2 D940D5C6                        496  DC CL48'MDEBR NF -inf/+SNaN'
000043B0  7FF94000 00000000                        497  DC XL16'7FF9400000000000FF8000000000000'
000043C0  D4C4C5C2 40D5C640                        498  DC CL48'MDEB NF -inf/+SNaN'
000043F0  7FF94000 00000000                        499  DC XL16'7FF9400000000000FF8000000000000'
00004400  D4C4C5C2 D940D5C6                        500  DC CL48'MDEBR NF -2.0/-inf'
00004430  7FF00000 00000000                        501  DC XL16'7FF00000000000007FF0000000000000'
00004440  D4C4C5C2 40D5C640                        502  DC CL48'MDEB NF -2.0/-inf'
00004470  7FF00000 00000000                        503  DC XL16'7FF00000000000007FF0000000000000'
00004480  D4C4C5C2 D940D5C6                        504  DC CL48'MDEBR NF -2.0/-2.0'
000044B0  40100000 00000000                        505  DC XL16'4010000000000000401000000000000'
000044C0  D4C4C5C2 40D5C640                        506  DC CL48'MDEB NF -2.0/-2.0'
000044F0  40100000 00000000                        507  DC XL16'4010000000000000401000000000000'
00004500  D4C4C5C2 D940D5C6                        508  DC CL48'MDEBR NF -2.0/-0'
00004530  00000000 00000000                        509  DC XL16'00000000000000000000000000000000'
00004540  D4C4C5C2 40D5C640                        510  DC CL48'MDEB NF -2.0/-0'
00004570  00000000 00000000                        511  DC XL16'00000000000000000000000000000000'
00004580  D4C4C5C2 D940D5C6                        512  DC CL48'MDEBR NF -2.0/+0'
000045B0  80000000 00000000                        513  DC XL16'80000000000000008000000000000000'
000045C0  D4C4C5C2 40D5C640                        514  DC CL48'MDEB NF -2.0/+0'
000045F0  80000000 00000000                        515  DC XL16'80000000000000008000000000000000'
00004600  D4C4C5C2 D940D5C6                        516  DC CL48'MDEBR NF -2.0/+2.0'
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

00004630  C0100000 00000000                          517  DC XL16'C010000000000000C010000000000000'
00004640  D4C4C5C2 40D5C640                          518  DC CL48'MDEB NF -2.0/+2.0'
00004670  C0100000 00000000                          519  DC XL16'C010000000000000C010000000000000'
00004680  D4C4C5C2 D940D5C6                          520  DC CL48'MDEBR NF -2.0/+inf'
000046B0  FFF00000 00000000                          521  DC XL16'FFF0000000000000FFF0000000000000'
000046C0  D4C4C5C2 40D5C640                          522  DC CL48'MDEB NF -2.0/+inf'
000046F0  FFF00000 00000000                          523  DC XL16'FFF0000000000000FFF0000000000000'
00004700  D4C4C5C2 D940D5C6                          524  DC CL48'MDEBR NF -2.0/-QNaN'
00004730  FFF96000 00000000                          525  DC XL16'FFF9600000000000FFF9600000000000'
00004740  D4C4C5C2 40D5C640                          526  DC CL48'MDEB NF -2.0/-QNaN'
00004770  FFF96000 00000000                          527  DC XL16'FFF9600000000000FFF9600000000000'
00004780  D4C4C5C2 D940D5C6                          528  DC CL48'MDEBR NF -2.0/+SNaN'
000047B0  7FF94000 00000000                          529  DC XL16'7FF940000000000C000000000000000'
000047C0  D4C4C5C2 40D5C640                          530  DC CL48'MDEB NF -2.0/+SNaN'
000047F0  7FF94000 00000000                          531  DC XL16'7FF940000000000C000000000000000'
00004800  D4C4C5C2 D940D5C6                          532  DC CL48'MDEBR NF -0/-inf'
00004830  7FF80000 00000000                          533  DC XL16'7FF800000000000800000000000000'
00004840  D4C4C5C2 40D5C640                          534  DC CL48'MDEB NF -0/-inf'
00004870  7FF80000 00000000                          535  DC XL16'7FF800000000000800000000000000'
00004880  D4C4C5C2 D940D5C6                          536  DC CL48'MDEBR NF -0/-2.0'
000048B0  00000000 00000000                          537  DC XL16'00000000000000000000000000000000'
000048C0  D4C4C5C2 40D5C640                          538  DC CL48'MDEB NF -0/-2.0'
000048F0  00000000 00000000                          539  DC XL16'00000000000000000000000000000000'
00004900  D4C4C5C2 D940D5C6                          540  DC CL48'MDEBR NF -0/-0'
00004930  00000000 00000000                          541  DC XL16'00000000000000000000000000000000'
00004940  D4C4C5C2 40D5C640                          542  DC CL48'MDEB NF -0/-0'
00004970  00000000 00000000                          543  DC XL16'00000000000000000000000000000000'
00004980  D4C4C5C2 D940D5C6                          544  DC CL48'MDEBR NF -0/+0'
000049B0  80000000 00000000                          545  DC XL16'80000000000000000800000000000000'
000049C0  D4C4C5C2 40D5C640                          546  DC CL48'MDEB NF -0/+0'
000049F0  80000000 00000000                          547  DC XL16'80000000000000000800000000000000'
00004A00  D4C4C5C2 D940D5C6                          548  DC CL48'MDEBR NF -0/+2.0'
00004A30  80000000 00000000                          549  DC XL16'80000000000000000800000000000000'
00004A40  D4C4C5C2 40D5C640                          550  DC CL48'MDEB NF -0/+2.0'
00004A70  80000000 00000000                          551  DC XL16'80000000000000000800000000000000'
00004A80  D4C4C5C2 D940D5C6                          552  DC CL48'MDEBR NF -0/+inf'
00004AB0  7FF80000 00000000                          553  DC XL16'7FF800000000000800000000000000'
00004AC0  D4C4C5C2 40D5C640                          554  DC CL48'MDEB NF -0/+inf'
00004AF0  7FF80000 00000000                          555  DC XL16'7FF800000000000800000000000000'
00004B00  D4C4C5C2 D940D5C6                          556  DC CL48'MDEBR NF -0/-QNaN'
00004B30  FFF96000 00000000                          557  DC XL16'FFF9600000000000FFF9600000000000'
00004B40  D4C4C5C2 40D5C640                          558  DC CL48'MDEB NF -0/-QNaN'
00004B70  FFF96000 00000000                          559  DC XL16'FFF9600000000000FFF9600000000000'
00004B80  D4C4C5C2 D940D5C6                          560  DC CL48'MDEBR NF -0/+SNaN'
00004BB0  7FF94000 00000000                          561  DC XL16'7FF940000000000800000000000000'
00004BC0  D4C4C5C2 40D5C640                          562  DC CL48'MDEB NF -0/+SNaN'
00004BF0  7FF94000 00000000                          563  DC XL16'7FF940000000000800000000000000'
00004C00  D4C4C5C2 D940D5C6                          564  DC CL48'MDEBR NF +0/-inf'
00004C30  7FF80000 00000000                          565  DC XL16'7FF800000000000000000000000000'
00004C40  D4C4C5C2 40D5C640                          566  DC CL48'MDEB NF +0/-inf'
00004C70  7FF80000 00000000                          567  DC XL16'7FF800000000000000000000000000'
00004C80  D4C4C5C2 D940D5C6                          568  DC CL48'MDEBR NF +0/-2.0'
00004CB0  80000000 00000000                          569  DC XL16'80000000000000000800000000000000'
00004CC0  D4C4C5C2 40D5C640                          570  DC CL48'MDEB NF +0/-2.0'
00004CF0  80000000 00000000                          571  DC XL16'80000000000000000800000000000000'
00004D00  D4C4C5C2 D940D5C6                          572  DC CL48'MDEBR NF +0/-0'
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

00004D30  80000000 00000000                          573  DC XL16'80000000000000008000000000000000'
00004D40  D4C4C5C2 40D5C640                          574  DC CL48'MDEB NF +0/-0'
00004D70  80000000 00000000                          575  DC XL16'80000000000000008000000000000000'
00004D80  D4C4C5C2 D940D5C6                          576  DC CL48'MDEBR NF +0/+0'
00004DB0  00000000 00000000                          577  DC XL16'00000000000000000000000000000000'
00004DC0  D4C4C5C2 40D5C640                          578  DC CL48'MDEB NF +0/+0'
00004DF0  00000000 00000000                          579  DC XL16'00000000000000000000000000000000'
00004E00  D4C4C5C2 D940D5C6                          580  DC CL48'MDEBR NF +0/+2.0'
00004E30  00000000 00000000                          581  DC XL16'00000000000000000000000000000000'
00004E40  D4C4C5C2 40D5C640                          582  DC CL48'MDEB NF +0/+2.0'
00004E70  00000000 00000000                          583  DC XL16'00000000000000000000000000000000'
00004E80  D4C4C5C2 D940D5C6                          584  DC CL48'MDEBR NF +0/+inf'
00004EB0  7FF80000 00000000                          585  DC XL16'7FF80000000000000000000000000000'
00004EC0  D4C4C5C2 40D5C640                          586  DC CL48'MDEB NF +0/+inf'
00004EF0  7FF80000 00000000                          587  DC XL16'7FF80000000000000000000000000000'
00004F00  D4C4C5C2 D940D5C6                          588  DC CL48'MDEBR NF +0/-QNaN'
00004F30  FFF96000 00000000                          589  DC XL16'FFF9600000000000FFF9600000000000'
00004F40  D4C4C5C2 40D5C640                          590  DC CL48'MDEB NF +0/-QNaN'
00004F70  FFF96000 00000000                          591  DC XL16'FFF9600000000000FFF9600000000000'
00004F80  D4C4C5C2 D940D5C6                          592  DC CL48'MDEBR NF +0/+SNaN'
00004FB0  7FF94000 00000000                          593  DC XL16'7FF94000000000000000000000000000'
00004FC0  D4C4C5C2 40D5C640                          594  DC CL48'MDEB NF +0/+SNaN'
00004FF0  7FF94000 00000000                          595  DC XL16'7FF94000000000000000000000000000'
00005000  D4C4C5C2 D940D5C6                          596  DC CL48'MDEBR NF +2.0/-inf'
00005030  FFF00000 00000000                          597  DC XL16'FFF0000000000000FFF0000000000000'
00005040  D4C4C5C2 40D5C640                          598  DC CL48'MDEB NF +2.0/-inf'
00005070  FFF00000 00000000                          599  DC XL16'FFF0000000000000FFF0000000000000'
00005080  D4C4C5C2 D940D5C6                          600  DC CL48'MDEBR NF +2.0/-2.0'
000050B0  C0100000 00000000                          601  DC XL16'C010000000000000C010000000000000'
000050C0  D4C4C5C2 40D5C640                          602  DC CL48'MDEB NF +2.0/-2.0'
000050F0  C0100000 00000000                          603  DC XL16'C010000000000000C010000000000000'
00005100  D4C4C5C2 D940D5C6                          604  DC CL48'MDEBR NF +2.0/-0'
00005130  80000000 00000000                          605  DC XL16'80000000000000008000000000000000'
00005140  D4C4C5C2 40D5C640                          606  DC CL48'MDEB NF +2.0/-0'
00005170  80000000 00000000                          607  DC XL16'80000000000000008000000000000000'
00005180  D4C4C5C2 D940D5C6                          608  DC CL48'MDEBR NF +2.0/+0'
000051B0  00000000 00000000                          609  DC XL16'00000000000000000000000000000000'
000051C0  D4C4C5C2 40D5C640                          610  DC CL48'MDEB NF +2.0/+0'
000051F0  00000000 00000000                          611  DC XL16'00000000000000000000000000000000'
00005200  D4C4C5C2 D940D5C6                          612  DC CL48'MDEBR NF +2.0/+2.0'
00005230  40100000 00000000                          613  DC XL16'40100000000000004010000000000000'
00005240  D4C4C5C2 40D5C640                          614  DC CL48'MDEB NF +2.0/+2.0'
00005270  40100000 00000000                          615  DC XL16'40100000000000004010000000000000'
00005280  D4C4C5C2 D940D5C6                          616  DC CL48'MDEBR NF +2.0/+inf'
000052B0  7FF00000 00000000                          617  DC XL16'7FF00000000000007FF0000000000000'
000052C0  D4C4C5C2 40D5C640                          618  DC CL48'MDEB NF +2.0/+inf'
000052F0  7FF00000 00000000                          619  DC XL16'7FF00000000000007FF0000000000000'
00005300  D4C4C5C2 D940D5C6                          620  DC CL48'MDEBR NF +2.0/-QNaN'
00005330  FFF96000 00000000                          621  DC XL16'FFF9600000000000FFF9600000000000'
00005340  D4C4C5C2 40D5C640                          622  DC CL48'MDEB NF +2.0/-QNaN'
00005370  FFF96000 00000000                          623  DC XL16'FFF9600000000000FFF9600000000000'
00005380  D4C4C5C2 D940D5C6                          624  DC CL48'MDEBR NF +2.0/+SNaN'
000053B0  7FF94000 00000000                          625  DC XL16'7FF94000000000004000000000000000'
000053C0  D4C4C5C2 40D5C640                          626  DC CL48'MDEB NF +2.0/+SNaN'
000053F0  7FF94000 00000000                          627  DC XL16'7FF94000000000004000000000000000'
00005400  D4C4C5C2 D940D5C6                          628  DC CL48'MDEBR NF +inf/-inf'
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

00005430  FFF00000 00000000                          629  DC XL16'FFF0000000000000FFF0000000000000'
00005440  D4C4C5C2 40D5C640                          630  DC CL48'MDEB NF +inf/-inf'
00005470  FFF00000 00000000                          631  DC XL16'FFF0000000000000FFF0000000000000'
00005480  D4C4C5C2 D940D5C6                          632  DC CL48'MDEBR NF +inf/-2.0'
000054B0  FFF00000 00000000                          633  DC XL16'FFF0000000000000FFF0000000000000'
000054C0  D4C4C5C2 40D5C640                          634  DC CL48'MDEB NF +inf/-2.0'
000054F0  FFF00000 00000000                          635  DC XL16'FFF0000000000000FFF0000000000000'
00005500  D4C4C5C2 D940D5C6                          636  DC CL48'MDEBR NF +inf/-0'
00005530  7FF80000 00000000                          637  DC XL16'7FF80000000000007F80000000000000'
00005540  D4C4C5C2 40D5C640                          638  DC CL48'MDEB NF +inf/-0'
00005570  7FF80000 00000000                          639  DC XL16'7FF80000000000007F80000000000000'
00005580  D4C4C5C2 D940D5C6                          640  DC CL48'MDEBR NF +inf/+0'
000055B0  7FF80000 00000000                          641  DC XL16'7FF80000000000007F80000000000000'
000055C0  D4C4C5C2 40D5C640                          642  DC CL48'MDEB NF +inf/+0'
000055F0  7FF80000 00000000                          643  DC XL16'7FF80000000000007F80000000000000'
00005600  D4C4C5C2 D940D5C6                          644  DC CL48'MDEBR NF +inf/+2.0'
00005630  7FF00000 00000000                          645  DC XL16'7FF00000000000007FF0000000000000'
00005640  D4C4C5C2 40D5C640                          646  DC CL48'MDEB NF +inf/+2.0'
00005670  7FF00000 00000000                          647  DC XL16'7FF00000000000007FF0000000000000'
00005680  D4C4C5C2 D940D5C6                          648  DC CL48'MDEBR NF +inf/+inf'
000056B0  7FF00000 00000000                          649  DC XL16'7FF00000000000007FF0000000000000'
000056C0  D4C4C5C2 40D5C640                          650  DC CL48'MDEB NF +inf/+inf'
000056F0  7FF00000 00000000                          651  DC XL16'7FF00000000000007FF0000000000000'
00005700  D4C4C5C2 D940D5C6                          652  DC CL48'MDEBR NF +inf/-QNaN'
00005730  FFF96000 00000000                          653  DC XL16'FFF9600000000000FFF9600000000000'
00005740  D4C4C5C2 40D5C640                          654  DC CL48'MDEB NF +inf/-QNaN'
00005770  FFF96000 00000000                          655  DC XL16'FFF9600000000000FFF9600000000000'
00005780  D4C4C5C2 D940D5C6                          656  DC CL48'MDEBR NF +inf/+SNaN'
000057B0  7FF94000 00000000                          657  DC XL16'7FF94000000000007F80000000000000'
000057C0  D4C4C5C2 40D5C640                          658  DC CL48'MDEB NF +inf/+SNaN'
000057F0  7FF94000 00000000                          659  DC XL16'7FF94000000000007F80000000000000'
00005800  D4C4C5C2 D940D5C6                          660  DC CL48'MDEBR NF -QNaN/-inf'
00005830  FFF96000 00000000                          661  DC XL16'FFF9600000000000FFF9600000000000'
00005840  D4C4C5C2 40D5C640                          662  DC CL48'MDEB NF -QNaN/-inf'
00005870  FFF96000 00000000                          663  DC XL16'FFF9600000000000FFF9600000000000'
00005880  D4C4C5C2 D940D5C6                          664  DC CL48'MDEBR NF -QNaN/-2.0'
000058B0  FFF96000 00000000                          665  DC XL16'FFF9600000000000FFF9600000000000'
000058C0  D4C4C5C2 40D5C640                          666  DC CL48'MDEB NF -QNaN/-2.0'
000058F0  FFF96000 00000000                          667  DC XL16'FFF9600000000000FFF9600000000000'
00005900  D4C4C5C2 D940D5C6                          668  DC CL48'MDEBR NF -QNaN/-0'
00005930  FFF96000 00000000                          669  DC XL16'FFF9600000000000FFF9600000000000'
00005940  D4C4C5C2 40D5C640                          670  DC CL48'MDEB NF -QNaN/-0'
00005970  FFF96000 00000000                          671  DC XL16'FFF9600000000000FFF9600000000000'
00005980  D4C4C5C2 D940D5C6                          672  DC CL48'MDEBR NF -QNaN/+0'
000059B0  FFF96000 00000000                          673  DC XL16'FFF9600000000000FFF9600000000000'
000059C0  D4C4C5C2 40D5C640                          674  DC CL48'MDEB NF -QNaN/+0'
000059F0  FFF96000 00000000                          675  DC XL16'FFF9600000000000FFF9600000000000'
00005A00  D4C4C5C2 D940D5C6                          676  DC CL48'MDEBR NF -QNaN/+2.0'
00005A30  FFF96000 00000000                          677  DC XL16'FFF9600000000000FFF9600000000000'
00005A40  D4C4C5C2 40D5C640                          678  DC CL48'MDEB NF -QNaN/+2.0'
00005A70  FFF96000 00000000                          679  DC XL16'FFF9600000000000FFF9600000000000'
00005A80  D4C4C5C2 D940D5C6                          680  DC CL48'MDEBR NF -QNaN/+inf'
00005AB0  FFF96000 00000000                          681  DC XL16'FFF9600000000000FFF9600000000000'
00005AC0  D4C4C5C2 40D5C640                          682  DC CL48'MDEB NF -QNaN/+inf'
00005AF0  FFF96000 00000000                          683  DC XL16'FFF9600000000000FFF9600000000000'
00005B00  D4C4C5C2 D940D5C6                          684  DC CL48'MDEBR NF -QNaN/-QNaN'
```

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  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

00005B30  FFF96000 00000000                          685  DC XL16'FFF9600000000000FFF9600000000000'
00005B40  D4C4C5C2 40D5C640                          686  DC CL48'MDEB NF -QNaN/-QNaN'
00005B70  FFF96000 00000000                          687  DC XL16'FFF9600000000000FFF9600000000000'
00005B80  D4C4C5C2 D940D5C6                          688  DC CL48'MDEBR NF -QNaN/+SNaN'
00005BB0  7FF94000 00000000                          689  DC XL16'7FF9400000000000FFCB000000000000'
00005BC0  D4C4C5C2 40D5C640                          690  DC CL48'MDEB NF -QNaN/+SNaN'
00005BF0  7FF94000 00000000                          691  DC XL16'7FF9400000000000FFCB000000000000'
00005C00  D4C4C5C2 D940D5C6                          692  DC CL48'MDEBR NF +SNaN/-inf'
00005C30  7FF94000 00000000                          693  DC XL16'7FF94000000000007F8A000000000000'
00005C40  D4C4C5C2 40D5C640                          694  DC CL48'MDEB NF +SNaN/-inf'
00005C70  7FF94000 00000000                          695  DC XL16'7FF94000000000007F8A000000000000'
00005C80  D4C4C5C2 D940D5C6                          696  DC CL48'MDEBR NF +SNaN/-2.0'
00005CB0  7FF94000 00000000                          697  DC XL16'7FF94000000000007F8A000000000000'
00005CC0  D4C4C5C2 40D5C640                          698  DC CL48'MDEB NF +SNaN/-2.0'
00005CF0  7FF94000 00000000                          699  DC XL16'7FF94000000000007F8A000000000000'
00005D00  D4C4C5C2 D940D5C6                          700  DC CL48'MDEBR NF +SNaN/-0'
00005D30  7FF94000 00000000                          701  DC XL16'7FF94000000000007F8A000000000000'
00005D40  D4C4C5C2 40D5C640                          702  DC CL48'MDEB NF +SNaN/-0'
00005D70  7FF94000 00000000                          703  DC XL16'7FF94000000000007F8A000000000000'
00005D80  D4C4C5C2 D940D5C6                          704  DC CL48'MDEBR NF +SNaN/+0'
00005DB0  7FF94000 00000000                          705  DC XL16'7FF94000000000007F8A000000000000'
00005DC0  D4C4C5C2 40D5C640                          706  DC CL48'MDEB NF +SNaN/+0'
00005DF0  7FF94000 00000000                          707  DC XL16'7FF94000000000007F8A000000000000'
00005E00  D4C4C5C2 D940D5C6                          708  DC CL48'MDEBR NF +SNaN/+2.0'
00005E30  7FF94000 00000000                          709  DC XL16'7FF94000000000007F8A000000000000'
00005E40  D4C4C5C2 40D5C640                          710  DC CL48'MDEB NF +SNaN/+2.0'
00005E70  7FF94000 00000000                          711  DC XL16'7FF94000000000007F8A000000000000'
00005E80  D4C4C5C2 D940D5C6                          712  DC CL48'MDEBR NF +SNaN/+inf'
00005EB0  7FF94000 00000000                          713  DC XL16'7FF94000000000007F8A000000000000'
00005EC0  D4C4C5C2 40D5C640                          714  DC CL48'MDEB NF +SNaN/+inf'
00005EF0  7FF94000 00000000                          715  DC XL16'7FF94000000000007F8A000000000000'
00005F00  D4C4C5C2 D940D5C6                          716  DC CL48'MDEBR NF +SNaN/-QNaN'
00005F30  7FF94000 00000000                          717  DC XL16'7FF94000000000007F8A000000000000'
00005F40  D4C4C5C2 D940D5C6                          718  DC CL48'MDEBR NF +SNaN/-QNaN'
00005F70  7FF94000 00000000                          719  DC XL16'7FF94000000000007F8A000000000000'
00005F80  D4C4C5C2 D940D5C6                          720  DC CL48'MDEBR NF +SNaN/+SNaN'
00005FB0  7FF94000 00000000                          721  DC XL16'7FF94000000000007F8A000000000000'
00005FC0  D4C4C5C2 40D5C640                          722  DC CL48'MDEB NF +SNaN/+SNaN'
00005FF0  7FF94000 00000000                          723  DC XL16'7FF94000000000007F8A000000000000'
                            00000080  00000001      724 LBFPNFOT_NUM EQU (*-LBFPNFOT_GOOD)/64
                                                     725 *
                                                     726 *
                            00006000  00000001      727 LBFPNFFL_GOOD EQU *
00006000  D4C4C2D9 40D5C640                          728  DC CL48'MDBR NF -inf/-inf FPCR'
00006030  00000000 F8000000                          729  DC XL16'00000000F800000000000000F8000000'
00006040  D4C4C240 D5C64060                          730  DC CL48'MDB NF -inf/-2.0 FPCR'
00006070  00000000 F8000000                          731  DC XL16'00000000F800000000000000F8000000'
00006080  D4C4C2D9 40D5C640                          732  DC CL48'MDBR NF -inf/-0 FPCR'
000060B0  00800000 F8008000                          733  DC XL16'00800000F800800000800000F8008000'
000060C0  D4C4C240 D5C64060                          734  DC CL48'MDB NF -inf/+0 FPCR'
000060F0  00800000 F8008000                          735  DC XL16'00800000F800800000800000F8008000'
00006100  D4C4C2D9 40D5C640                          736  DC CL48'MDBR NF -inf/+2.0 FPCR'
00006130  00000000 F8000000                          737  DC XL16'00000000F800000000000000F8000000'
00006140  D4C4C240 D5C64060                          738  DC CL48'MDB NF -inf/+inf FPCR'
00006170  00000000 F8000000                          739  DC XL16'00000000F800000000000000F8000000'
00006180  D4C4C2D9 40D5C640                          740  DC CL48'MDBR NF -inf/-QNaN FPCR'
```

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  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

000061B0  00000000 F8000000                          741  DC XL16'00000000F800000000000000F8000000'
000061C0  D4C4C240 D5C64060                          742  DC CL48'MDB NF -inf/+SNaN FPCR'
000061F0  00800000 F8008000                          743  DC XL16'00800000F800800000800000F8008000'
00006200  D4C4C2D9 40D5C640                          744  DC CL48'MDBR NF -2.0/-inf FPCR'
00006230  00000000 F8000000                          745  DC XL16'00000000F800000000000000F8000000'
00006240  D4C4C240 D5C64060                          746  DC CL48'MDB NF -2.0/-2.0 FPCR'
00006270  00000000 F8000000                          747  DC XL16'00000000F800000000000000F8000000'
00006280  D4C4C2D9 40D5C640                          748  DC CL48'MDBR NF -2.0/-0 FPCR'
000062B0  00000000 F8000000                          749  DC XL16'00000000F800000000000000F8000000'
000062C0  D4C4C240 D5C64060                          750  DC CL48'MDB NF -2.0/+0 FPCR'
000062F0  00000000 F8000000                          751  DC XL16'00000000F800000000000000F8000000'
00006300  D4C4C2D9 40D5C640                          752  DC CL48'MDBR NF -2.0/+2.0 FPCR'
00006330  00000000 F8000000                          753  DC XL16'00000000F800000000000000F8000000'
00006340  D4C4C240 D5C64060                          754  DC CL48'MDB NF -2.0/+inf FPCR'
00006370  00000000 F8000000                          755  DC XL16'00000000F800000000000000F8000000'
00006380  D4C4C2D9 40D5C640                          756  DC CL48'MDBR NF -2.0/-QNaN FPCR'
000063B0  00000000 F8000000                          757  DC XL16'00000000F800000000000000F8000000'
000063C0  D4C4C240 D5C64060                          758  DC CL48'MDB NF -2.0/+SNaN FPCR'
000063F0  00800000 F8008000                          759  DC XL16'00800000F800800000800000F8008000'
00006400  D4C4C2D9 40D5C640                          760  DC CL48'MDBR NF -0/-inf FPCR'
00006430  00800000 F8008000                          761  DC XL16'00800000F800800000800000F8008000'
00006440  D4C4C240 D5C64060                          762  DC CL48'MDB NF -0/-2.0 FPCR'
00006470  00000000 F8000000                          763  DC XL16'00000000F800000000000000F8000000'
00006480  D4C4C2D9 40D5C640                          764  DC CL48'MDBR NF -0/-0 FPCR'
000064B0  00000000 F8000000                          765  DC XL16'00000000F800000000000000F8000000'
000064C0  D4C4C240 D5C64060                          766  DC CL48'MDB NF -0/+0 FPCR'
000064F0  00000000 F8000000                          767  DC XL16'00000000F800000000000000F8000000'
00006500  D4C4C2D9 40D5C640                          768  DC CL48'MDBR NF -0/+2.0 FPCR'
00006530  00000000 F8000000                          769  DC XL16'00000000F800000000000000F8000000'
00006540  D4C4C240 D5C64060                          770  DC CL48'MDB NF -0/+inf FPCR'
00006570  00800000 F8008000                          771  DC XL16'00800000F800800000800000F8008000'
00006580  D4C4C2D9 40D5C640                          772  DC CL48'MDBR NF -0/-QNaN FPCR'
000065B0  00000000 F8000000                          773  DC XL16'00000000F800000000000000F8000000'
000065C0  D4C4C240 D5C64060                          774  DC CL48'MDB NF -0/+SNaN FPCR'
000065F0  00800000 F8008000                          775  DC XL16'00800000F800800000800000F8008000'
00006600  D4C4C2D9 40D5C640                          776  DC CL48'MDBR NF +0/-inf FPCR'
00006630  00800000 F8008000                          777  DC XL16'00800000F800800000800000F8008000'
00006640  D4C4C240 D5C6404E                          778  DC CL48'MDB NF +0/-2.0 FPCR'
00006670  00000000 F8000000                          779  DC XL16'00000000F800000000000000F8000000'
00006680  D4C4C2D9 40D5C640                          780  DC CL48'MDBR NF +0/-0 FPCR'
000066B0  00000000 F8000000                          781  DC XL16'00000000F800000000000000F8000000'
000066C0  D4C4C240 D5C6404E                          782  DC CL48'MDB NF +0/+0 FPCR'
000066F0  00000000 F8000000                          783  DC XL16'00000000F800000000000000F8000000'
00006700  D4C4C2D9 40D5C640                          784  DC CL48'MDBR NF +0/+2.0 FPCR'
00006730  00000000 F8000000                          785  DC XL16'00000000F800000000000000F8000000'
00006740  D4C4C240 D5C6404E                          786  DC CL48'MDB NF +0/+inf FPCR'
00006770  00800000 F8008000                          787  DC XL16'00800000F800800000800000F8008000'
00006780  D4C4C2D9 40D5C640                          788  DC CL48'MDBR NF +0/-QNaN FPCR'
000067B0  00000000 F8000000                          789  DC XL16'00000000F800000000000000F8000000'
000067C0  D4C4C240 D5C6404E                          790  DC CL48'MDB NF +0/+SNaN FPCR'
000067F0  00800000 F8008000                          791  DC XL16'00800000F800800000800000F8008000'
00006800  D4C4C2D9 40D5C640                          792  DC CL48'MDBR NF +2.0/-inf FPCR'
00006830  00000000 F8000000                          793  DC XL16'00000000F800000000000000F8000000'
00006840  D4C4C240 D5C6404E                          794  DC CL48'MDB NF +2.0/-2.0 FPCR'
00006870  00000000 F8000000                          795  DC XL16'00000000F800000000000000F8000000'
00006880  D4C4C2D9 40D5C640                          796  DC CL48'MDBR NF +2.0/-0 FPCR'
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  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

000068B0  00000000 F8000000                          797  DC XL16'00000000F800000000000000F8000000'
000068C0  D4C4C240 D5C6404E                          798  DC CL48'MDB NF +2.0/+0 FPCR'
000068F0  00000000 F8000000                          799  DC XL16'00000000F800000000000000F8000000'
00006900  D4C4C2D9 40D5C640                          800  DC CL48'MDBR NF +2.0/+2.0 FPCR'
00006930  00000000 F8000000                          801  DC XL16'00000000F800000000000000F8000000'
00006940  D4C4C240 D5C6404E                          802  DC CL48'MDB NF +2.0/+inf FPCR'
00006970  00000000 F8000000                          803  DC XL16'00000000F800000000000000F8000000'
00006980  D4C4C2D9 40D5C640                          804  DC CL48'MDBR NF +2.0/-QNaN FPCR'
000069B0  00000000 F8000000                          805  DC XL16'00000000F800000000000000F8000000'
000069C0  D4C4C240 D5C6404E                          806  DC CL48'MDB NF +2.0/+SNaN FPCR'
000069F0  00800000 F8008000                          807  DC XL16'00800000F800800000800000F8008000'
00006A00  D4C4C2D9 40D5C640                          808  DC CL48'MDBR NF +inf/-inf FPCR'
00006A30  00000000 F8000000                          809  DC XL16'00000000F800000000000000F8000000'
00006A40  D4C4C240 D5C6404E                          810  DC CL48'MDB NF +inf/-2.0 FPCR'
00006A70  00000000 F8000000                          811  DC XL16'00000000F800000000000000F8000000'
00006A80  D4C4C2D9 40D5C640                          812  DC CL48'MDBR NF +inf/-0 FPCR'
00006AB0  00800000 F8008000                          813  DC XL16'00800000F800800000800000F8008000'
00006AC0  D4C4C240 D5C6404E                          814  DC CL48'MDB NF +inf/+0 FPCR'
00006AF0  00800000 F8008000                          815  DC XL16'00800000F800800000800000F8008000'
00006B00  D4C4C2D9 40D5C640                          816  DC CL48'MDBR NF +inf/+2.0 FPCR'
00006B30  00000000 F8000000                          817  DC XL16'00000000F800000000000000F8000000'
00006B40  D4C4C240 D5C6404E                          818  DC CL48'MDB NF +inf/+inf FPCR'
00006B70  00000000 F8000000                          819  DC XL16'00000000F800000000000000F8000000'
00006B80  D4C4C2D9 40D5C640                          820  DC CL48'MDBR NF +inf/-QNaN FPCR'
00006BB0  00000000 F8000000                          821  DC XL16'00000000F800000000000000F8000000'
00006BC0  D4C4C240 D5C6404E                          822  DC CL48'MDB NF +inf/+SNaN FPCR'
00006BF0  00800000 F8008000                          823  DC XL16'00800000F800800000800000F8008000'
00006C00  D4C4C2D9 40D5C640                          824  DC CL48'MDBR NF -QNaN/-inf FPCR'
00006C30  00000000 F8000000                          825  DC XL16'00000000F800000000000000F8000000'
00006C40  D4C4C240 D5C64060                          826  DC CL48'MDB NF -QNaN/-2.0 FPCR'
00006C70  00000000 F8000000                          827  DC XL16'00000000F800000000000000F8000000'
00006C80  D4C4C2D9 40D5C640                          828  DC CL48'MDBR NF -QNaN/-0 FPCR'
00006CB0  00000000 F8000000                          829  DC XL16'00000000F800000000000000F8000000'
00006CC0  D4C4C240 D5C64060                          830  DC CL48'MDB NF -QNaN/+0 FPCR'
00006CF0  00000000 F8000000                          831  DC XL16'00000000F800000000000000F8000000'
00006D00  D4C4C2D9 40D5C640                          832  DC CL48'MDBR NF -QNaN/+2.0 FPCR'
00006D30  00000000 F8000000                          833  DC XL16'00000000F800000000000000F8000000'
00006D40  D4C4C240 D5C64060                          834  DC CL48'MDB NF -QNaN/+inf FPCR'
00006D70  00000000 F8000000                          835  DC XL16'00000000F800000000000000F8000000'
00006D80  D4C4C2D9 40D5C640                          836  DC CL48'MDBR NF -QNaN/-QNaN FPCR'
00006DB0  00000000 F8000000                          837  DC XL16'00000000F800000000000000F8000000'
00006DC0  D4C4C240 D5C64060                          838  DC CL48'MDB NF -QNaN/+SNaN FPCR'
00006DF0  00800000 F8008000                          839  DC XL16'00800000F800800000800000F8008000'
00006E00  D4C4C2D9 40D5C640                          840  DC CL48'MDBR NF +SNaN/-inf FPCR'
00006E30  00800000 F8008000                          841  DC XL16'00800000F800800000800000F8008000'
00006E40  D4C4C240 D5C6404E                          842  DC CL48'MDB NF +SNaN/-2.0 FPCR'
00006E70  00800000 F8008000                          843  DC XL16'00800000F800800000800000F8008000'
00006E80  D4C4C2D9 40D5C640                          844  DC CL48'MDBR NF +SNaN/-0 FPCR'
00006EB0  00800000 F8008000                          845  DC XL16'00800000F800800000800000F8008000'
00006EC0  D4C4C240 D5C6404E                          846  DC CL48'MDB NF +SNaN/+0 FPCR'
00006EF0  00800000 F8008000                          847  DC XL16'00800000F800800000800000F8008000'
00006F00  D4C4C2D9 40D5C640                          848  DC CL48'MDBR NF +SNaN/+2.0 FPCR'
00006F30  00800000 F8008000                          849  DC XL16'00800000F800800000800000F8008000'
00006F40  D4C4C240 D5C6404E                          850  DC CL48'MDB NF +SNaN/+inf FPCR'
00006F70  00800000 F8008000                          851  DC XL16'00800000F800800000800000F8008000'
00006F80  D4C4C2D9 40D5C640                          852  DC CL48'MDBR NF +SNaN/-QNaN FPCR'
```

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  LOC         OBJECT CODE       ADDR1     ADDR2    STMT

00006FB0  00800000 F8008000                          853  DC XL16'00800000F800800000800000F8008000'
00006FC0  D4C4C240 D5C6404E                          854  DC CL48'MDB NF +SNaN/+SNaN FPCR'
00006FF0  00800000 F8008000                          855  DC XL16'00800000F800800000800000F8008000'
                             00000040  00000001      856 LBFPNFFL_NUM EQU (*-LBFPNFFL_GOOD)/64
                                                      857 *
                                                      858 *
                             00007000  00000001      859 XBFPNFOT_GOOD EQU *
00007000  D4E7C4C2 D940D5C6                          860  DC CL48'MXDBR NF -inf/-inf NT'
00007030  7FFF0000 00000000                          861  DC XL16'7FFF0000000000000000000000000000'
00007040  D4E7C4C2 D940D5C6                          862  DC CL48'MXDBR NF -inf/-inf Tr'
00007070  7FFF0000 00000000                          863  DC XL16'7FFF0000000000000000000000000000'
00007080  D4E7C4C2 40D5C640                          864  DC CL48'MXDB NF -inf/-inf NT'
000070B0  7FFF0000 00000000                          865  DC XL16'7FFF0000000000000000000000000000'
000070C0  D4E7C4C2 40D5C640                          866  DC CL48'MXDB NF -inf/-inf Tr'
000070F0  7FFF0000 00000000                          867  DC XL16'7FFF0000000000000000000000000000'
00007100  D4E7C4C2 D940D5C6                          868  DC CL48'MXDBR NF -inf/-2.0 NT'
00007130  7FFF0000 00000000                          869  DC XL16'7FFF0000000000000000000000000000'
00007140  D4E7C4C2 D940D5C6                          870  DC CL48'MXDBR NF -inf/-2.0 Tr'
00007170  7FFF0000 00000000                          871  DC XL16'7FFF0000000000000000000000000000'
00007180  D4E7C4C2 40D5C640                          872  DC CL48'MXDB NF -inf/-2.0 NT'
000071B0  7FFF0000 00000000                          873  DC XL16'7FFF0000000000000000000000000000'
000071C0  D4E7C4C2 40D5C640                          874  DC CL48'MXDB NF -inf/-2.0 Tr'
000071F0  7FFF0000 00000000                          875  DC XL16'7FFF0000000000000000000000000000'
00007200  D4E7C4C2 D940D5C6                          876  DC CL48'MXDBR NF -inf/-0 NT'
00007230  7FFF8000 00000000                          877  DC XL16'7FFF8000000000000000000000000000'
00007240  D4E7C4C2 D940D5C6                          878  DC CL48'MXDBR NF -inf/-0 Tr'
00007270  FFF00000 00000000                          879  DC XL16'FFF0000000000000000000000000000'
00007280  D4E7C4C2 40D5C640                          880  DC CL48'MXDB NF -inf/-0 NT'
000072B0  7FFF8000 00000000                          881  DC XL16'7FFF8000000000000000000000000000'
000072C0  D4E7C4C2 40D5C640                          882  DC CL48'MXDB NF -inf/-0 Tr'
000072F0  FFF00000 00000000                          883  DC XL16'FFF0000000000000000000000000000'
00007300  D4E7C4C2 D940D5C6                          884  DC CL48'MXDBR NF -inf/+0 NT'
00007330  7FFF8000 00000000                          885  DC XL16'7FFF8000000000000000000000000000'
00007340  D4E7C4C2 D940D5C6                          886  DC CL48'MXDBR NF -inf/+0 Tr'
00007370  FFF00000 00000000                          887  DC XL16'FFF0000000000000000000000000000'
00007380  D4E7C4C2 40D5C640                          888  DC CL48'MXDB NF -inf/+0 NT'
000073B0  7FFF8000 00000000                          889  DC XL16'7FFF8000000000000000000000000000'
000073C0  D4E7C4C2 40D5C640                          890  DC CL48'MXDB NF -inf/+0 Tr'
000073F0  FFF00000 00000000                          891  DC XL16'FFF0000000000000000000000000000'
00007400  D4E7C4C2 D940D5C6                          892  DC CL48'MXDBR NF -inf/+2.0 NT'
00007430  FFFF0000 00000000                          893  DC XL16'FFFF0000000000000000000000000000'
00007440  D4E7C4C2 D940D5C6                          894  DC CL48'MXDBR NF -inf/+2.0 Tr'
00007470  FFFF0000 00000000                          895  DC XL16'FFFF0000000000000000000000000000'
00007480  D4E7C4C2 40D5C640                          896  DC CL48'MXDB NF -inf/+2.0 NT'
000074B0  FFFF0000 00000000                          897  DC XL16'FFFF0000000000000000000000000000'
000074C0  D4E7C4C2 40D5C640                          898  DC CL48'MXDB NF -inf/+2.0 Tr'
000074F0  FFFF0000 00000000                          899  DC XL16'FFFF0000000000000000000000000000'
00007500  D4E7C4C2 D940D5C6                          900  DC CL48'MXDBR NF -inf/+inf NT'
00007530  FFFF0000 00000000                          901  DC XL16'FFFF0000000000000000000000000000'
00007540  D4E7C4C2 D940D5C6                          902  DC CL48'MXDBR NF -inf/+inf Tr'
00007570  FFFF0000 00000000                          903  DC XL16'FFFF0000000000000000000000000000'
00007580  D4E7C4C2 40D5C640                          904  DC CL48'MXDB NF -inf/+inf NT'
000075B0  FFFF0000 00000000                          905  DC XL16'FFFF0000000000000000000000000000'
000075C0  D4E7C4C2 40D5C640                          906  DC CL48'MXDB NF -inf/+inf Tr'
000075F0  FFFF0000 00000000                          907  DC XL16'FFFF0000000000000000000000000000'
00007600  D4E7C4C2 D940D5C6                          908  DC CL48'MXDBR NF -inf/-QNaN NT'
```

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  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

00007630  FFFF8B00 00000000                          909  DC XL16'FFFF8B0000000000000000000000000000'
00007640  D4E7C4C2 D940D5C6                          910  DC CL48'MXDBR NF -inf/-QNaN Tr'
00007670  FFFF8B00 00000000                          911  DC XL16'FFFF8B0000000000000000000000000000'
00007680  D4E7C4C2 40D5C640                          912  DC CL48'MXDB NF -inf/-QNaN NT'
000076B0  FFFF8B00 00000000                          913  DC XL16'FFFF8B0000000000000000000000000000'
000076C0  D4E7C4C2 40D5C640                          914  DC CL48'MXDB NF -inf/-QNaN Tr'
000076F0  FFFF8B00 00000000                          915  DC XL16'FFFF8B0000000000000000000000000000'
00007700  D4E7C4C2 D940D5C6                          916  DC CL48'MXDBR NF -inf/+SNaN NT'
00007730  7FFF8A00 00000000                          917  DC XL16'7FFF8A0000000000000000000000000000'
00007740  D4E7C4C2 D940D5C6                          918  DC CL48'MXDBR NF -inf/+SNaN Tr'
00007770  FFF00000 00000000                          919  DC XL16'FFF0000000000000000000000000000000'
00007780  D4E7C4C2 40D5C640                          920  DC CL48'MXDB NF -inf/+SNaN NT'
000077B0  7FFF8A00 00000000                          921  DC XL16'7FFF8A0000000000000000000000000000'
000077C0  D4E7C4C2 40D5C640                          922  DC CL48'MXDB NF -inf/+SNaN Tr'
000077F0  FFF00000 00000000                          923  DC XL16'FFF0000000000000000000000000000000'
00007800  D4E7C4C2 D940D5C6                          924  DC CL48'MXDBR NF -2.0/-inf NT'
00007830  7FFF0000 00000000                          925  DC XL16'7FFF0000000000000000000000000000'
00007840  D4E7C4C2 D940D5C6                          926  DC CL48'MXDBR NF -2.0/-inf Tr'
00007870  7FFF0000 00000000                          927  DC XL16'7FFF0000000000000000000000000000'
00007880  D4E7C4C2 40D5C640                          928  DC CL48'MXDB NF -2.0/-inf NT'
000078B0  7FFF0000 00000000                          929  DC XL16'7FFF0000000000000000000000000000'
000078C0  D4E7C4C2 40D5C640                          930  DC CL48'MXDB NF -2.0/-inf Tr'
000078F0  7FFF0000 00000000                          931  DC XL16'7FFF0000000000000000000000000000'
00007900  D4E7C4C2 D940D5C6                          932  DC CL48'MXDBR NF -2.0/-2.0 NT'
00007930  40010000 00000000                          933  DC XL16'4001000000000000000000000000000000'
00007940  D4E7C4C2 D940D5C6                          934  DC CL48'MXDBR NF -2.0/-2.0 Tr'
00007970  40010000 00000000                          935  DC XL16'4001000000000000000000000000000000'
00007980  D4E7C4C2 40D5C640                          936  DC CL48'MXDB NF -2.0/-2.0 NT'
000079B0  40010000 00000000                          937  DC XL16'4001000000000000000000000000000000'
000079C0  D4E7C4C2 40D5C640                          938  DC CL48'MXDB NF -2.0/-2.0 Tr'
000079F0  40010000 00000000                          939  DC XL16'4001000000000000000000000000000000'
00007A00  D4E7C4C2 D940D5C6                          940  DC CL48'MXDBR NF -2.0/-0 NT'
00007A30  00000000 00000000                          941  DC XL16'0000000000000000000000000000000000'
00007A40  D4E7C4C2 D940D5C6                          942  DC CL48'MXDBR NF -2.0/-0 Tr'
00007A70  00000000 00000000                          943  DC XL16'0000000000000000000000000000000000'
00007A80  D4E7C4C2 40D5C640                          944  DC CL48'MXDB NF -2.0/-0 NT'
00007AB0  00000000 00000000                          945  DC XL16'0000000000000000000000000000000000'
00007AC0  D4E7C4C2 40D5C640                          946  DC CL48'MXDB NF -2.0/-0 Tr'
00007AF0  00000000 00000000                          947  DC XL16'0000000000000000000000000000000000'
00007B00  D4E7C4C2 D940D5C6                          948  DC CL48'MXDBR NF -2.0/+0 NT'
00007B30  80000000 00000000                          949  DC XL16'8000000000000000000000000000000000'
00007B40  D4E7C4C2 D940D5C6                          950  DC CL48'MXDBR NF -2.0/+0 Tr'
00007B70  80000000 00000000                          951  DC XL16'8000000000000000000000000000000000'
00007B80  D4E7C4C2 40D5C640                          952  DC CL48'MXDB NF -2.0/+0 NT'
00007BB0  80000000 00000000                          953  DC XL16'8000000000000000000000000000000000'
00007BC0  D4E7C4C2 40D5C640                          954  DC CL48'MXDB NF -2.0/+0 Tr'
00007BF0  80000000 00000000                          955  DC XL16'8000000000000000000000000000000000'
00007C00  D4E7C4C2 D940D5C6                          956  DC CL48'MXDBR NF -2.0/+2.0 NT'
00007C30  C0010000 00000000                          957  DC XL16'C001000000000000000000000000000000'
00007C40  D4E7C4C2 D940D5C6                          958  DC CL48'MXDBR NF -2.0/+2.0 Tr'
00007C70  C0010000 00000000                          959  DC XL16'C001000000000000000000000000000000'
00007C80  D4E7C4C2 40D5C640                          960  DC CL48'MXDB NF -2.0/+2.0 NT'
00007CB0  C0010000 00000000                          961  DC XL16'C001000000000000000000000000000000'
00007CC0  D4E7C4C2 40D5C640                          962  DC CL48'MXDB NF -2.0/+2.0 Tr'
00007CF0  C0010000 00000000                          963  DC XL16'C001000000000000000000000000000000'
00007D00  D4E7C4C2 D940D5C6                          964  DC CL48'MXDBR NF -2.0/+inf NT'
```

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  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

00007D30  FFFF0000 00000000                          965  DC XL16'FFFF0000000000000000000000000000'
00007D40  D4E7C4C2 D940D5C6                          966  DC CL48'MXDBR NF -2.0/+inf Tr'
00007D70  FFFF0000 00000000                          967  DC XL16'FFFF0000000000000000000000000000'
00007D80  D4E7C4C2 40D5C640                          968  DC CL48'MXDB NF -2.0/+inf NT'
00007DB0  FFFF0000 00000000                          969  DC XL16'FFFF0000000000000000000000000000'
00007DC0  D4E7C4C2 40D5C640                          970  DC CL48'MXDB NF -2.0/+inf Tr'
00007DF0  FFFF0000 00000000                          971  DC XL16'FFFF0000000000000000000000000000'
00007E00  D4E7C4C2 D940D5C6                          972  DC CL48'MXDBR NF -2.0/-QNaN NT'
00007E30  FFFF8B00 00000000                          973  DC XL16'FFFF8B000000000000000000000000'
00007E40  D4E7C4C2 D940D5C6                          974  DC CL48'MXDBR NF -2.0/-QNaN Tr'
00007E70  FFFF8B00 00000000                          975  DC XL16'FFFF8B000000000000000000000000'
00007E80  D4E7C4C2 40D5C640                          976  DC CL48'MXDB NF -2.0/-QNaN NT'
00007EB0  FFFF8B00 00000000                          977  DC XL16'FFFF8B000000000000000000000000'
00007EC0  D4E7C4C2 40D5C640                          978  DC CL48'MXDB NF -2.0/-QNaN Tr'
00007EF0  FFFF8B00 00000000                          979  DC XL16'FFFF8B000000000000000000000000'
00007F00  D4E7C4C2 D940D5C6                          980  DC CL48'MXDBR NF -2.0/+SNaN NT'
00007F30  7FFF8A00 00000000                          981  DC XL16'7FFF8A000000000000000000000000'
00007F40  D4E7C4C2 D940D5C6                          982  DC CL48'MXDBR NF -2.0/+SNaN Tr'
00007F70  C0000000 00000000                          983  DC XL16'C0000000000000000000000000000000'
00007F80  D4E7C4C2 40D5C640                          984  DC CL48'MXDB NF -2.0/+SNaN NT'
00007FB0  7FFF8A00 00000000                          985  DC XL16'7FFF8A000000000000000000000000'
00007FC0  D4E7C4C2 40D5C640                          986  DC CL48'MXDB NF -2.0/+SNaN Tr'
00007FF0  C0000000 00000000                          987  DC XL16'C0000000000000000000000000000000'
00008000  D4E7C4C2 D940D5C6                          988  DC CL48'MXDBR NF -0/-inf NT'
00008030  7FFF8000 00000000                          989  DC XL16'7FFF8000000000000000000000000000'
00008040  D4E7C4C2 D940D5C6                          990  DC CL48'MXDBR NF -0/-inf Tr'
00008070  80000000 00000000                          991  DC XL16'80000000000000000000000000000000'
00008080  D4E7C4C2 40D5C640                          992  DC CL48'MXDB NF -0/-inf NT'
000080B0  7FFF8000 00000000                          993  DC XL16'7FFF8000000000000000000000000000'
000080C0  D4E7C4C2 40D5C640                          994  DC CL48'MXDB NF -0/-inf Tr'
000080F0  80000000 00000000                          995  DC XL16'80000000000000000000000000000000'
00008100  D4E7C4C2 D940D5C6                          996  DC CL48'MXDBR NF -0/-2.0 NT'
00008130  00000000 00000000                          997  DC XL16'00000000000000000000000000000000'
00008140  D4E7C4C2 D940D5C6                          998  DC CL48'MXDBR NF -0/-2.0 Tr'
00008170  00000000 00000000                          999  DC XL16'00000000000000000000000000000000'
00008180  D4E7C4C2 40D5C640                         1000  DC CL48'MXDB NF -0/-2.0 NT'
000081B0  00000000 00000000                         1001  DC XL16'00000000000000000000000000000000'
000081C0  D4E7C4C2 40D5C640                         1002  DC CL48'MXDB NF -0/-2.0 Tr'
000081F0  00000000 00000000                         1003  DC XL16'00000000000000000000000000000000'
00008200  D4E7C4C2 D940D5C6                         1004  DC CL48'MXDBR NF -0/-0 NT'
00008230  00000000 00000000                         1005  DC XL16'00000000000000000000000000000000'
00008240  D4E7C4C2 D940D5C6                         1006  DC CL48'MXDBR NF -0/-0 Tr'
00008270  00000000 00000000                         1007  DC XL16'00000000000000000000000000000000'
00008280  D4E7C4C2 40D5C640                         1008  DC CL48'MXDB NF -0/-0 NT'
000082B0  00000000 00000000                         1009  DC XL16'00000000000000000000000000000000'
000082C0  D4E7C4C2 40D5C640                         1010  DC CL48'MXDB NF -0/-0 Tr'
000082F0  00000000 00000000                         1011  DC XL16'00000000000000000000000000000000'
00008300  D4E7C4C2 D940D5C6                         1012  DC CL48'MXDBR NF -0/+0 NT'
00008330  80000000 00000000                         1013  DC XL16'80000000000000000000000000000000'
00008340  D4E7C4C2 D940D5C6                         1014  DC CL48'MXDBR NF -0/+0 Tr'
00008370  80000000 00000000                         1015  DC XL16'80000000000000000000000000000000'
00008380  D4E7C4C2 40D5C640                         1016  DC CL48'MXDB NF -0/+0 NT'
000083B0  80000000 00000000                         1017  DC XL16'80000000000000000000000000000000'
000083C0  D4E7C4C2 40D5C640                         1018  DC CL48'MXDB NF -0/+0 Tr'
000083F0  80000000 00000000                         1019  DC XL16'80000000000000000000000000000000'
00008400  D4E7C4C2 D940D5C6                         1020  DC CL48'MXDBR NF -0/+2.0 NT'
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  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

00008430  80000000 00000000                         1021  DC XL16'80000000000000000000000000000000'
00008440  D4E7C4C2 D940D5C6                         1022  DC CL48'MXDBR NF -0/+2.0 Tr'
00008470  80000000 00000000                         1023  DC XL16'80000000000000000000000000000000'
00008480  D4E7C4C2 40D5C640                         1024  DC CL48'MXDB NF -0/+2.0 NT'
000084B0  80000000 00000000                         1025  DC XL16'80000000000000000000000000000000'
000084C0  D4E7C4C2 40D5C640                         1026  DC CL48'MXDB NF -0/+2.0 Tr'
000084F0  80000000 00000000                         1027  DC XL16'80000000000000000000000000000000'
00008500  D4E7C4C2 D940D5C6                         1028  DC CL48'MXDBR NF -0/+inf NT'
00008530  7FFF8000 00000000                         1029  DC XL16'7FFF8000000000000000000000000000'
00008540  D4E7C4C2 D940D5C6                         1030  DC CL48'MXDBR NF -0/+inf Tr'
00008570  80000000 00000000                         1031  DC XL16'80000000000000000000000000000000'
00008580  D4E7C4C2 40D5C640                         1032  DC CL48'MXDB NF -0/+inf NT'
000085B0  7FFF8000 00000000                         1033  DC XL16'7FFF8000000000000000000000000000'
000085C0  D4E7C4C2 40D5C640                         1034  DC CL48'MXDB NF -0/+inf Tr'
000085F0  80000000 00000000                         1035  DC XL16'80000000000000000000000000000000'
00008600  D4E7C4C2 D940D5C6                         1036  DC CL48'MXDBR NF -0/-QNaN NT'
00008630  FFFF8B00 00000000                         1037  DC XL16'FFFF8B000000000000000000000000'
00008640  D4E7C4C2 D940D5C6                         1038  DC CL48'MXDBR NF -0/-QNaN Tr'
00008670  FFFF8B00 00000000                         1039  DC XL16'FFFF8B000000000000000000000000'
00008680  D4E7C4C2 40D5C640                         1040  DC CL48'MXDB NF -0/-QNaN NT'
000086B0  FFFF8B00 00000000                         1041  DC XL16'FFFF8B000000000000000000000000'
000086C0  D4E7C4C2 40D5C640                         1042  DC CL48'MXDB NF -0/-QNaN Tr'
000086F0  FFFF8B00 00000000                         1043  DC XL16'FFFF8B000000000000000000000000'
00008700  D4E7C4C2 D940D5C6                         1044  DC CL48'MXDBR NF -0/+SNaN NT'
00008730  7FFF8A00 00000000                         1045  DC XL16'7FFF8A000000000000000000000000'
00008740  D4E7C4C2 D940D5C6                         1046  DC CL48'MXDBR NF -0/+SNaN Tr'
00008770  80000000 00000000                         1047  DC XL16'80000000000000000000000000000000'
00008780  D4E7C4C2 40D5C640                         1048  DC CL48'MXDB NF -0/+SNaN NT'
000087B0  7FFF8A00 00000000                         1049  DC XL16'7FFF8A000000000000000000000000'
000087C0  D4E7C4C2 40D5C640                         1050  DC CL48'MXDB NF -0/+SNaN Tr'
000087F0  80000000 00000000                         1051  DC XL16'80000000000000000000000000000000'
00008800  D4E7C4C2 D940D5C6                         1052  DC CL48'MXDBR NF +0/-inf NT'
00008830  7FFF8000 00000000                         1053  DC XL16'7FFF8000000000000000000000000000'
00008840  D4E7C4C2 D940D5C6                         1054  DC CL48'MXDBR NF +0/-inf Tr'
00008870  00000000 00000000                         1055  DC XL16'00000000000000000000000000000000'
00008880  D4E7C4C2 40D5C640                         1056  DC CL48'MXDB NF +0/-inf NT'
000088B0  7FFF8000 00000000                         1057  DC XL16'7FFF8000000000000000000000000000'
000088C0  D4E7C4C2 40D5C640                         1058  DC CL48'MXDB NF +0/-inf Tr'
000088F0  00000000 00000000                         1059  DC XL16'00000000000000000000000000000000'
00008900  D4E7C4C2 D940D5C6                         1060  DC CL48'MXDBR NF +0/-2.0 NT'
00008930  80000000 00000000                         1061  DC XL16'80000000000000000000000000000000'
00008940  D4E7C4C2 D940D5C6                         1062  DC CL48'MXDBR NF +0/-2.0 Tr'
00008970  80000000 00000000                         1063  DC XL16'80000000000000000000000000000000'
00008980  D4E7C4C2 40D5C640                         1064  DC CL48'MXDB NF +0/-2.0 NT'
000089B0  80000000 00000000                         1065  DC XL16'80000000000000000000000000000000'
000089C0  D4E7C4C2 40D5C640                         1066  DC CL48'MXDB NF +0/-2.0 Tr'
000089F0  80000000 00000000                         1067  DC XL16'80000000000000000000000000000000'
00008A00  D4E7C4C2 D940D5C6                         1068  DC CL48'MXDBR NF +0/-0 NT'
00008A30  80000000 00000000                         1069  DC XL16'80000000000000000000000000000000'
00008A40  D4E7C4C2 D940D5C6                         1070  DC CL48'MXDBR NF +0/-0 Tr'
00008A70  80000000 00000000                         1071  DC XL16'80000000000000000000000000000000'
00008A80  D4E7C4C2 40D5C640                         1072  DC CL48'MXDB NF +0/-0 NT'
00008AB0  80000000 00000000                         1073  DC XL16'80000000000000000000000000000000'
00008AC0  D4E7C4C2 40D5C640                         1074  DC CL48'MXDB NF +0/-0 Tr'
00008AF0  80000000 00000000                         1075  DC XL16'80000000000000000000000000000000'
00008B00  D4E7C4C2 D940D5C6                         1076  DC CL48'MXDBR NF +0/+0 NT'
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  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

00008B30  00000000 00000000                         1077  DC XL16'00000000000000000000000000000000'
00008B40  D4E7C4C2 D940D5C6                         1078  DC CL48'MXDBR NF +0/+0 Tr'
00008B70  00000000 00000000                         1079  DC XL16'00000000000000000000000000000000'
00008B80  D4E7C4C2 40D5C640                         1080  DC CL48'MXDB NF +0/+0 NT'
00008BB0  00000000 00000000                         1081  DC XL16'00000000000000000000000000000000'
00008BC0  D4E7C4C2 40D5C640                         1082  DC CL48'MXDB NF +0/+0 Tr'
00008BF0  00000000 00000000                         1083  DC XL16'00000000000000000000000000000000'
00008C00  D4E7C4C2 D940D5C6                         1084  DC CL48'MXDBR NF +0/+2.0 NT'
00008C30  00000000 00000000                         1085  DC XL16'00000000000000000000000000000000'
00008C40  D4E7C4C2 D940D5C6                         1086  DC CL48'MXDBR NF +0/+2.0 Tr'
00008C70  00000000 00000000                         1087  DC XL16'00000000000000000000000000000000'
00008C80  D4E7C4C2 40D5C640                         1088  DC CL48'MXDB NF +0/+2.0 NT'
00008CB0  00000000 00000000                         1089  DC XL16'00000000000000000000000000000000'
00008CC0  D4E7C4C2 40D5C640                         1090  DC CL48'MXDB NF +0/+2.0 Tr'
00008CF0  00000000 00000000                         1091  DC XL16'00000000000000000000000000000000'
00008D00  D4E7C4C2 D940D5C6                         1092  DC CL48'MXDBR NF +0/+inf NT'
00008D30  7FFF8000 00000000                         1093  DC XL16'7FFF8000000000000000000000000000'
00008D40  D4E7C4C2 D940D5C6                         1094  DC CL48'MXDBR NF +0/+inf Tr'
00008D70  00000000 00000000                         1095  DC XL16'00000000000000000000000000000000'
00008D80  D4E7C4C2 40D5C640                         1096  DC CL48'MXDB NF +0/+inf NT'
00008DB0  7FFF8000 00000000                         1097  DC XL16'7FFF8000000000000000000000000000'
00008DC0  D4E7C4C2 40D5C640                         1098  DC CL48'MXDB NF +0/+inf Tr'
00008DF0  00000000 00000000                         1099  DC XL16'00000000000000000000000000000000'
00008E00  D4E7C4C2 D940D5C6                         1100  DC CL48'MXDBR NF +0/-QNaN NT'
00008E30  FFFF8B00 00000000                         1101  DC XL16'FFFF8B000000000000000000000000'
00008E40  D4E7C4C2 D940D5C6                         1102  DC CL48'MXDBR NF +0/-QNaN Tr'
00008E70  FFFF8B00 00000000                         1103  DC XL16'FFFF8B000000000000000000000000'
00008E80  D4E7C4C2 40D5C640                         1104  DC CL48'MXDB NF +0/-QNaN NT'
00008EB0  FFFF8B00 00000000                         1105  DC XL16'FFFF8B000000000000000000000000'
00008EC0  D4E7C4C2 40D5C640                         1106  DC CL48'MXDB NF +0/-QNaN Tr'
00008EF0  FFFF8B00 00000000                         1107  DC XL16'FFFF8B000000000000000000000000'
00008F00  D4E7C4C2 D940D5C6                         1108  DC CL48'MXDBR NF +0/+SNaN NT'
00008F30  7FFF8A00 00000000                         1109  DC XL16'7FFF8A000000000000000000000000'
00008F40  D4E7C4C2 D940D5C6                         1110  DC CL48'MXDBR NF +0/+SNaN Tr'
00008F70  00000000 00000000                         1111  DC XL16'00000000000000000000000000000000'
00008F80  D4E7C4C2 40D5C640                         1112  DC CL48'MXDB NF +0/+SNaN NT'
00008FB0  7FFF8A00 00000000                         1113  DC XL16'7FFF8A000000000000000000000000'
00008FC0  D4E7C4C2 40D5C640                         1114  DC CL48'MXDB NF +0/+SNaN Tr'
00008FF0  00000000 00000000                         1115  DC XL16'00000000000000000000000000000000'
00009000  D4E7C4C2 D940D5C6                         1116  DC CL48'MXDBR NF +2.0/-inf NT'
00009030  FFFF0000 00000000                         1117  DC XL16'FFFF0000000000000000000000000000'
00009040  D4E7C4C2 D940D5C6                         1118  DC CL48'MXDBR NF +2.0/-inf Tr'
00009070  FFFF0000 00000000                         1119  DC XL16'FFFF0000000000000000000000000000'
00009080  D4E7C4C2 40D5C640                         1120  DC CL48'MXDB NF +2.0/-inf NT'
000090B0  FFFF0000 00000000                         1121  DC XL16'FFFF0000000000000000000000000000'
000090C0  D4E7C4C2 40D5C640                         1122  DC CL48'MXDB NF +2.0/-inf Tr'
000090F0  FFFF0000 00000000                         1123  DC XL16'FFFF0000000000000000000000000000'
00009100  D4E7C4C2 D940D5C6                         1124  DC CL48'MXDBR NF +2.0/-2.0 NT'
00009130  C0010000 00000000                         1125  DC XL16'C0010000000000000000000000000000'
00009140  D4E7C4C2 D940D5C6                         1126  DC CL48'MXDBR NF +2.0/-2.0 Tr'
00009170  C0010000 00000000                         1127  DC XL16'C0010000000000000000000000000000'
00009180  D4E7C4C2 40D5C640                         1128  DC CL48'MXDB NF +2.0/-2.0 NT'
000091B0  C0010000 00000000                         1129  DC XL16'C0010000000000000000000000000000'
000091C0  D4E7C4C2 40D5C640                         1130  DC CL48'MXDB NF +2.0/-2.0 Tr'
000091F0  C0010000 00000000                         1131  DC XL16'C0010000000000000000000000000000'
00009200  D4E7C4C2 D940D5C6                         1132  DC CL48'MXDBR NF +2.0/-0 NT'
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  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

00009230  80000000 00000000                         1133  DC XL16'80000000000000000000000000000000'
00009240  D4E7C4C2 D940D5C6                         1134  DC CL48'MXDBR NF +2.0/-0 Tr'
00009270  80000000 00000000                         1135  DC XL16'80000000000000000000000000000000'
00009280  D4E7C4C2 40D5C640                         1136  DC CL48'MXDB NF +2.0/-0 NT'
000092B0  80000000 00000000                         1137  DC XL16'80000000000000000000000000000000'
000092C0  D4E7C4C2 40D5C640                         1138  DC CL48'MXDB NF +2.0/-0 Tr'
000092F0  80000000 00000000                         1139  DC XL16'80000000000000000000000000000000'
00009300  D4E7C4C2 D940D5C6                         1140  DC CL48'MXDBR NF +2.0/+0 NT'
00009330  00000000 00000000                         1141  DC XL16'00000000000000000000000000000000'
00009340  D4E7C4C2 D940D5C6                         1142  DC CL48'MXDBR NF +2.0/+0 Tr'
00009370  00000000 00000000                         1143  DC XL16'00000000000000000000000000000000'
00009380  D4E7C4C2 40D5C640                         1144  DC CL48'MXDB NF +2.0/+0 NT'
000093B0  00000000 00000000                         1145  DC XL16'00000000000000000000000000000000'
000093C0  D4E7C4C2 40D5C640                         1146  DC CL48'MXDB NF +2.0/+0 Tr'
000093F0  00000000 00000000                         1147  DC XL16'00000000000000000000000000000000'
00009400  D4E7C4C2 D940D5C6                         1148  DC CL48'MXDBR NF +2.0/+2.0 NT'
00009430  40010000 00000000                         1149  DC XL16'40010000000000000000000000000000'
00009440  D4E7C4C2 D940D5C6                         1150  DC CL48'MXDBR NF +2.0/+2.0 Tr'
00009470  40010000 00000000                         1151  DC XL16'40010000000000000000000000000000'
00009480  D4E7C4C2 40D5C640                         1152  DC CL48'MXDB NF +2.0/+2.0 NT'
000094B0  40010000 00000000                         1153  DC XL16'40010000000000000000000000000000'
000094C0  D4E7C4C2 40D5C640                         1154  DC CL48'MXDB NF +2.0/+2.0 Tr'
000094F0  40010000 00000000                         1155  DC XL16'40010000000000000000000000000000'
00009500  D4E7C4C2 D940D5C6                         1156  DC CL48'MXDBR NF +2.0/+inf NT'
00009530  7FFF0000 00000000                         1157  DC XL16'7FFF0000000000000000000000000000'
00009540  D4E7C4C2 D940D5C6                         1158  DC CL48'MXDBR NF +2.0/+inf Tr'
00009570  7FFF0000 00000000                         1159  DC XL16'7FFF0000000000000000000000000000'
00009580  D4E7C4C2 40D5C640                         1160  DC CL48'MXDB NF +2.0/+inf NT'
000095B0  7FFF0000 00000000                         1161  DC XL16'7FFF0000000000000000000000000000'
000095C0  D4E7C4C2 40D5C640                         1162  DC CL48'MXDB NF +2.0/+inf Tr'
000095F0  7FFF0000 00000000                         1163  DC XL16'7FFF0000000000000000000000000000'
00009600  D4E7C4C2 D940D5C6                         1164  DC CL48'MXDBR NF +2.0/-QNaN NT'
00009630  FFFF8B00 00000000                         1165  DC XL16'FFFF8B000000000000000000000000'
00009640  D4E7C4C2 D940D5C6                         1166  DC CL48'MXDBR NF +2.0/-QNaN Tr'
00009670  FFFF8B00 00000000                         1167  DC XL16'FFFF8B000000000000000000000000'
00009680  D4E7C4C2 40D5C640                         1168  DC CL48'MXDB NF +2.0/-QNaN NT'
000096B0  FFFF8B00 00000000                         1169  DC XL16'FFFF8B000000000000000000000000'
000096C0  D4E7C4C2 40D5C640                         1170  DC CL48'MXDB NF +2.0/-QNaN Tr'
000096F0  FFFF8B00 00000000                         1171  DC XL16'FFFF8B000000000000000000000000'
00009700  D4E7C4C2 D940D5C6                         1172  DC CL48'MXDBR NF +2.0/+SNaN NT'
00009730  7FFF8A00 00000000                         1173  DC XL16'7FFF8A000000000000000000000000'
00009740  D4E7C4C2 D940D5C6                         1174  DC CL48'MXDBR NF +2.0/+SNaN Tr'
00009770  40000000 00000000                         1175  DC XL16'40000000000000000000000000000000'
00009780  D4E7C4C2 40D5C640                         1176  DC CL48'MXDB NF +2.0/+SNaN NT'
000097B0  7FFF8A00 00000000                         1177  DC XL16'7FFF8A000000000000000000000000'
000097C0  D4E7C4C2 40D5C640                         1178  DC CL48'MXDB NF +2.0/+SNaN Tr'
000097F0  40000000 00000000                         1179  DC XL16'40000000000000000000000000000000'
00009800  D4E7C4C2 D940D5C6                         1180  DC CL48'MXDBR NF +inf/-inf NT'
00009830  FFFF0000 00000000                         1181  DC XL16'FFFF0000000000000000000000000000'
00009840  D4E7C4C2 D940D5C6                         1182  DC CL48'MXDBR NF +inf/-inf Tr'
00009870  FFFF0000 00000000                         1183  DC XL16'FFFF0000000000000000000000000000'
00009880  D4E7C4C2 40D5C640                         1184  DC CL48'MXDB NF +inf/-inf NT'
000098B0  FFFF0000 00000000                         1185  DC XL16'FFFF0000000000000000000000000000'
000098C0  D4E7C4C2 40D5C640                         1186  DC CL48'MXDB NF +inf/-inf Tr'
000098F0  FFFF0000 00000000                         1187  DC XL16'FFFF0000000000000000000000000000'
00009900  D4E7C4C2 D940D5C6                         1188  DC CL48'MXDBR NF +inf/-2.0 NT'
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

00009930  FFFF0000 00000000                         1189  DC XL16'FFFF0000000000000000000000000000'
00009940  D4E7C4C2 D940D5C6                         1190  DC CL48'MXDBR NF +inf/-2.0 Tr'
00009970  FFFF0000 00000000                         1191  DC XL16'FFFF0000000000000000000000000000'
00009980  D4E7C4C2 40D5C640                         1192  DC CL48'MXDB NF +inf/-2.0 NT'
000099B0  FFFF0000 00000000                         1193  DC XL16'FFFF0000000000000000000000000000'
000099C0  D4E7C4C2 40D5C640                         1194  DC CL48'MXDB NF +inf/-2.0 Tr'
000099F0  FFFF0000 00000000                         1195  DC XL16'FFFF0000000000000000000000000000'
00009A00  D4E7C4C2 D940D5C6                         1196  DC CL48'MXDBR NF +inf/-0 NT'
00009A30  7FFF8000 00000000                         1197  DC XL16'7FFF8000000000000000000000000000'
00009A40  D4E7C4C2 D940D5C6                         1198  DC CL48'MXDBR NF +inf/-0 Tr'
00009A70  7FF00000 00000000                         1199  DC XL16'7FF0000000000000000000000000000'
00009A80  D4E7C4C2 40D5C640                         1200  DC CL48'MXDB NF +inf/-0 NT'
00009AB0  7FFF8000 00000000                         1201  DC XL16'7FFF8000000000000000000000000000'
00009AC0  D4E7C4C2 40D5C640                         1202  DC CL48'MXDB NF +inf/-0 Tr'
00009AF0  7FF00000 00000000                         1203  DC XL16'7FF0000000000000000000000000000'
00009B00  D4E7C4C2 D940D5C6                         1204  DC CL48'MXDBR NF +inf/+0 NT'
00009B30  7FFF8000 00000000                         1205  DC XL16'7FFF8000000000000000000000000000'
00009B40  D4E7C4C2 D940D5C6                         1206  DC CL48'MXDBR NF +inf/+0 Tr'
00009B70  7FF00000 00000000                         1207  DC XL16'7FF0000000000000000000000000000'
00009B80  D4E7C4C2 40D5C640                         1208  DC CL48'MXDB NF +inf/+0 NT'
00009BB0  7FFF8000 00000000                         1209  DC XL16'7FFF8000000000000000000000000000'
00009BC0  D4E7C4C2 40D5C640                         1210  DC CL48'MXDB NF +inf/+0 Tr'
00009BF0  7FF00000 00000000                         1211  DC XL16'7FF0000000000000000000000000000'
00009C00  D4E7C4C2 D940D5C6                         1212  DC CL48'MXDBR NF +inf/+2.0 NT'
00009C30  7FFF0000 00000000                         1213  DC XL16'7FFF0000000000000000000000000000'
00009C40  D4E7C4C2 D940D5C6                         1214  DC CL48'MXDBR NF +inf/+2.0 Tr'
00009C70  7FFF0000 00000000                         1215  DC XL16'7FFF0000000000000000000000000000'
00009C80  D4E7C4C2 40D5C640                         1216  DC CL48'MXDB NF +inf/+2.0 NT'
00009CB0  7FFF0000 00000000                         1217  DC XL16'7FFF0000000000000000000000000000'
00009CC0  D4E7C4C2 40D5C640                         1218  DC CL48'MXDB NF +inf/+2.0 Tr'
00009CF0  7FFF0000 00000000                         1219  DC XL16'7FFF0000000000000000000000000000'
00009D00  D4E7C4C2 D940D5C6                         1220  DC CL48'MXDBR NF +inf/+inf NT'
00009D30  7FFF0000 00000000                         1221  DC XL16'7FFF0000000000000000000000000000'
00009D40  D4E7C4C2 D940D5C6                         1222  DC CL48'MXDBR NF +inf/+inf Tr'
00009D70  7FFF0000 00000000                         1223  DC XL16'7FFF0000000000000000000000000000'
00009D80  D4E7C4C2 40D5C640                         1224  DC CL48'MXDB NF +inf/+inf NT'
00009DB0  7FFF0000 00000000                         1225  DC XL16'7FFF0000000000000000000000000000'
00009DC0  D4E7C4C2 40D5C640                         1226  DC CL48'MXDB NF +inf/+inf Tr'
00009DF0  7FFF0000 00000000                         1227  DC XL16'7FFF0000000000000000000000000000'
00009E00  D4E7C4C2 D940D5C6                         1228  DC CL48'MXDBR NF +inf/-QNaN NT'
00009E30  FFFF8B00 00000000                         1229  DC XL16'FFFF8B000000000000000000000000'
00009E40  D4E7C4C2 D940D5C6                         1230  DC CL48'MXDBR NF +inf/-QNaN Tr'
00009E70  FFFF8B00 00000000                         1231  DC XL16'FFFF8B000000000000000000000000'
00009E80  D4E7C4C2 40D5C640                         1232  DC CL48'MXDB NF +inf/-QNaN NT'
00009EB0  FFFF8B00 00000000                         1233  DC XL16'FFFF8B000000000000000000000000'
00009EC0  D4E7C4C2 40D5C640                         1234  DC CL48'MXDB NF +inf/-QNaN Tr'
00009EF0  FFFF8B00 00000000                         1235  DC XL16'FFFF8B000000000000000000000000'
00009F00  D4E7C4C2 D940D5C6                         1236  DC CL48'MXDBR NF +inf/+SNaN NT'
00009F30  7FFF8A00 00000000                         1237  DC XL16'7FFF8A000000000000000000000000'
00009F40  D4E7C4C2 D940D5C6                         1238  DC CL48'MXDBR NF +inf/+SNaN Tr'
00009F70  7FF00000 00000000                         1239  DC XL16'7FF0000000000000000000000000000'
00009F80  D4E7C4C2 40D5C640                         1240  DC CL48'MXDB NF +inf/+SNaN NT'
00009FB0  7FFF8A00 00000000                         1241  DC XL16'7FFF8A000000000000000000000000'
00009FC0  D4E7C4C2 40D5C640                         1242  DC CL48'MXDB NF +inf/+SNaN Tr'
00009FF0  7FF00000 00000000                         1243  DC XL16'7FF0000000000000000000000000000'
0000A000  D4E7C4C2 D940D5C6                         1244  DC CL48'MXDBR NF -QNaN/-inf NT'
```

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  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

0000A030  FFFF8B00 00000000                         1245  DC XL16'FFFF8B0000000000000000000000000'
0000A040  D4E7C4C2 D940D5C6                         1246  DC CL48'MXDBR NF -QNaN/-inf Tr'
0000A070  FFFF8B00 00000000                         1247  DC XL16'FFFF8B0000000000000000000000000'
0000A080  D4E7C4C2 40D5C640                         1248  DC CL48'MXDB NF -QNaN/-inf NT'
0000A0B0  FFFF8B00 00000000                         1249  DC XL16'FFFF8B0000000000000000000000000'
0000A0C0  D4E7C4C2 40D5C640                         1250  DC CL48'MXDB NF -QNaN/-inf Tr'
0000A0F0  FFFF8B00 00000000                         1251  DC XL16'FFFF8B0000000000000000000000000'
0000A100  D4E7C4C2 D940D5C6                         1252  DC CL48'MXDBR NF -QNaN/-2.0 NT'
0000A130  FFFF8B00 00000000                         1253  DC XL16'FFFF8B0000000000000000000000000'
0000A140  D4E7C4C2 D940D5C6                         1254  DC CL48'MXDBR NF -QNaN/-2.0 Tr'
0000A170  FFFF8B00 00000000                         1255  DC XL16'FFFF8B0000000000000000000000000'
0000A180  D4E7C4C2 40D5C640                         1256  DC CL48'MXDB NF -QNaN/-2.0 NT'
0000A1B0  FFFF8B00 00000000                         1257  DC XL16'FFFF8B0000000000000000000000000'
0000A1C0  D4E7C4C2 40D5C640                         1258  DC CL48'MXDB NF -QNaN/-2.0 Tr'
0000A1F0  FFFF8B00 00000000                         1259  DC XL16'FFFF8B0000000000000000000000000'
0000A200  D4E7C4C2 D940D5C6                         1260  DC CL48'MXDBR NF -QNaN/-0 NT'
0000A230  FFFF8B00 00000000                         1261  DC XL16'FFFF8B0000000000000000000000000'
0000A240  D4E7C4C2 D940D5C6                         1262  DC CL48'MXDBR NF -QNaN/-0 Tr'
0000A270  FFFF8B00 00000000                         1263  DC XL16'FFFF8B0000000000000000000000000'
0000A280  D4E7C4C2 40D5C640                         1264  DC CL48'MXDB NF -QNaN/-0 NT'
0000A2B0  FFFF8B00 00000000                         1265  DC XL16'FFFF8B0000000000000000000000000'
0000A2C0  D4E7C4C2 40D5C640                         1266  DC CL48'MXDB NF -QNaN/-0 Tr'
0000A2F0  FFFF8B00 00000000                         1267  DC XL16'FFFF8B0000000000000000000000000'
0000A300  D4E7C4C2 D940D5C6                         1268  DC CL48'MXDBR NF -QNaN/+0 NT'
0000A330  FFFF8B00 00000000                         1269  DC XL16'FFFF8B0000000000000000000000000'
0000A340  D4E7C4C2 D940D5C6                         1270  DC CL48'MXDBR NF -QNaN/+0 Tr'
0000A370  FFFF8B00 00000000                         1271  DC XL16'FFFF8B0000000000000000000000000'
0000A380  D4E7C4C2 40D5C640                         1272  DC CL48'MXDB NF -QNaN/+0 NT'
0000A3B0  FFFF8B00 00000000                         1273  DC XL16'FFFF8B0000000000000000000000000'
0000A3C0  D4E7C4C2 40D5C640                         1274  DC CL48'MXDB NF -QNaN/+0 Tr'
0000A3F0  FFFF8B00 00000000                         1275  DC XL16'FFFF8B0000000000000000000000000'
0000A400  D4E7C4C2 D940D5C6                         1276  DC CL48'MXDBR NF -QNaN/+2.0 NT'
0000A430  FFFF8B00 00000000                         1277  DC XL16'FFFF8B0000000000000000000000000'
0000A440  D4E7C4C2 D940D5C6                         1278  DC CL48'MXDBR NF -QNaN/+2.0 Tr'
0000A470  FFFF8B00 00000000                         1279  DC XL16'FFFF8B0000000000000000000000000'
0000A480  D4E7C4C2 40D5C640                         1280  DC CL48'MXDB NF -QNaN/+2.0 NT'
0000A4B0  FFFF8B00 00000000                         1281  DC XL16'FFFF8B0000000000000000000000000'
0000A4C0  D4E7C4C2 40D5C640                         1282  DC CL48'MXDB NF -QNaN/+2.0 Tr'
0000A4F0  FFFF8B00 00000000                         1283  DC XL16'FFFF8B0000000000000000000000000'
0000A500  D4E7C4C2 D940D5C6                         1284  DC CL48'MXDBR NF -QNaN/+inf NT'
0000A530  FFFF8B00 00000000                         1285  DC XL16'FFFF8B0000000000000000000000000'
0000A540  D4E7C4C2 D940D5C6                         1286  DC CL48'MXDBR NF -QNaN/+inf Tr'
0000A570  FFFF8B00 00000000                         1287  DC XL16'FFFF8B0000000000000000000000000'
0000A580  D4E7C4C2 40D5C640                         1288  DC CL48'MXDB NF -QNaN/+inf NT'
0000A5B0  FFFF8B00 00000000                         1289  DC XL16'FFFF8B0000000000000000000000000'
0000A5C0  D4E7C4C2 40D5C640                         1290  DC CL48'MXDB NF -QNaN/+inf Tr'
0000A5F0  FFFF8B00 00000000                         1291  DC XL16'FFFF8B0000000000000000000000000'
0000A600  D4E7C4C2 D940D5C6                         1292  DC CL48'MXDBR NF -QNaN/-QNaN NT'
0000A630  FFFF8B00 00000000                         1293  DC XL16'FFFF8B0000000000000000000000000'
0000A640  D4E7C4C2 D940D5C6                         1294  DC CL48'MXDBR NF -QNaN/-QNaN Tr'
0000A670  FFFF8B00 00000000                         1295  DC XL16'FFFF8B0000000000000000000000000'
0000A680  D4E7C4C2 40D5C640                         1296  DC CL48'MXDB NF -QNaN/-QNaN NT'
0000A6B0  FFFF8B00 00000000                         1297  DC XL16'FFFF8B0000000000000000000000000'
0000A6C0  D4E7C4C2 40D5C640                         1298  DC CL48'MXDB NF -QNaN/-QNaN Tr'
0000A6F0  FFFF8B00 00000000                         1299  DC XL16'FFFF8B0000000000000000000000000'
0000A700  D4E7C4C2 D940D5C6                         1300  DC CL48'MXDBR NF -QNaN/+SNaN NT'
```

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  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

0000A730  7FFF8A00 00000000                         1301  DC XL16'7FFF8A0000000000000000000000000000'
0000A740  D4E7C4C2 D940D5C6                         1302  DC CL48'MXDBR NF -QNaN/+SNaN Tr'
0000A770  FFF8B000 00000000                         1303  DC XL16'FFF8B0000000000000000000000000000'
0000A780  D4E7C4C2 40D5C640                         1304  DC CL48'MXDB NF -QNaN/+SNaN NT'
0000A7B0  7FFF8A00 00000000                         1305  DC XL16'7FFF8A0000000000000000000000000000'
0000A7C0  D4E7C4C2 40D5C640                         1306  DC CL48'MXDB NF -QNaN/+SNaN Tr'
0000A7F0  FFF8B000 00000000                         1307  DC XL16'FFF8B0000000000000000000000000000'
0000A800  D4E7C4C2 D940D5C6                         1308  DC CL48'MXDBR NF +SNaN/-inf NT'
0000A830  7FFF8A00 00000000                         1309  DC XL16'7FFF8A0000000000000000000000000000'
0000A840  D4E7C4C2 D940D5C6                         1310  DC CL48'MXDBR NF +SNaN/-inf Tr'
0000A870  7FF0A000 00000000                         1311  DC XL16'7FF0A0000000000000000000000000000'
0000A880  D4E7C4C2 40D5C640                         1312  DC CL48'MXDB NF +SNaN/-inf NT'
0000A8B0  7FFF8A00 00000000                         1313  DC XL16'7FFF8A0000000000000000000000000000'
0000A8C0  D4E7C4C2 40D5C640                         1314  DC CL48'MXDB NF +SNaN/-inf Tr'
0000A8F0  7FF0A000 00000000                         1315  DC XL16'7FF0A0000000000000000000000000000'
0000A900  D4E7C4C2 D940D5C6                         1316  DC CL48'MXDBR NF +SNaN/-2.0 NT'
0000A930  7FFF8A00 00000000                         1317  DC XL16'7FFF8A0000000000000000000000000000'
0000A940  D4E7C4C2 D940D5C6                         1318  DC CL48'MXDBR NF +SNaN/-2.0 Tr'
0000A970  7FF0A000 00000000                         1319  DC XL16'7FF0A0000000000000000000000000000'
0000A980  D4E7C4C2 40D5C640                         1320  DC CL48'MXDB NF +SNaN/-2.0 NT'
0000A9B0  7FFF8A00 00000000                         1321  DC XL16'7FFF8A0000000000000000000000000000'
0000A9C0  D4E7C4C2 40D5C640                         1322  DC CL48'MXDB NF +SNaN/-2.0 Tr'
0000A9F0  7FF0A000 00000000                         1323  DC XL16'7FF0A0000000000000000000000000000'
0000AA00  D4E7C4C2 D940D5C6                         1324  DC CL48'MXDBR NF +SNaN/-0 NT'
0000AA30  7FFF8A00 00000000                         1325  DC XL16'7FFF8A0000000000000000000000000000'
0000AA40  D4E7C4C2 D940D5C6                         1326  DC CL48'MXDBR NF +SNaN/-0 Tr'
0000AA70  7FF0A000 00000000                         1327  DC XL16'7FF0A0000000000000000000000000000'
0000AA80  D4E7C4C2 40D5C640                         1328  DC CL48'MXDB NF +SNaN/-0 NT'
0000AAB0  7FFF8A00 00000000                         1329  DC XL16'7FFF8A0000000000000000000000000000'
0000AAC0  D4E7C4C2 40D5C640                         1330  DC CL48'MXDB NF +SNaN/-0 Tr'
0000AAF0  7FF0A000 00000000                         1331  DC XL16'7FF0A0000000000000000000000000000'
0000AB00  D4E7C4C2 D940D5C6                         1332  DC CL48'MXDBR NF +SNaN/+0 NT'
0000AB30  7FFF8A00 00000000                         1333  DC XL16'7FFF8A0000000000000000000000000000'
0000AB40  D4E7C4C2 D940D5C6                         1334  DC CL48'MXDBR NF +SNaN/+0 Tr'
0000AB70  7FF0A000 00000000                         1335  DC XL16'7FF0A0000000000000000000000000000'
0000AB80  D4E7C4C2 40D5C640                         1336  DC CL48'MXDB NF +SNaN/+0 NT'
0000ABB0  7FFF8A00 00000000                         1337  DC XL16'7FFF8A0000000000000000000000000000'
0000ABC0  D4E7C4C2 40D5C640                         1338  DC CL48'MXDB NF +SNaN/+0 Tr'
0000ABF0  7FF0A000 00000000                         1339  DC XL16'7FF0A0000000000000000000000000000'
0000AC00  D4E7C4C2 D940D5C6                         1340  DC CL48'MXDBR NF +SNaN/+2.0 NT'
0000AC30  7FFF8A00 00000000                         1341  DC XL16'7FFF8A0000000000000000000000000000'
0000AC40  D4E7C4C2 D940D5C6                         1342  DC CL48'MXDBR NF +SNaN/+2.0 Tr'
0000AC70  7FF0A000 00000000                         1343  DC XL16'7FF0A0000000000000000000000000000'
0000AC80  D4E7C4C2 40D5C640                         1344  DC CL48'MXDB NF +SNaN/+2.0 NT'
0000ACB0  7FFF8A00 00000000                         1345  DC XL16'7FFF8A0000000000000000000000000000'
0000ACC0  D4E7C4C2 40D5C640                         1346  DC CL48'MXDB NF +SNaN/+2.0 Tr'
0000ACF0  7FF0A000 00000000                         1347  DC XL16'7FF0A0000000000000000000000000000'
0000AD00  D4E7C4C2 D940D5C6                         1348  DC CL48'MXDBR NF +SNaN/+inf NT'
0000AD30  7FFF8A00 00000000                         1349  DC XL16'7FFF8A0000000000000000000000000000'
0000AD40  D4E7C4C2 D940D5C6                         1350  DC CL48'MXDBR NF +SNaN/+inf Tr'
0000AD70  7FF0A000 00000000                         1351  DC XL16'7FF0A0000000000000000000000000000'
0000AD80  D4E7C4C2 40D5C640                         1352  DC CL48'MXDB NF +SNaN/+inf NT'
0000ADB0  7FFF8A00 00000000                         1353  DC XL16'7FFF8A0000000000000000000000000000'
0000ADC0  D4E7C4C2 40D5C640                         1354  DC CL48'MXDB NF +SNaN/+inf Tr'
0000ADF0  7FF0A000 00000000                         1355  DC XL16'7FF0A0000000000000000000000000000'
0000AE00  D4E7C4C2 D940D5C6                         1356  DC CL48'MXDBR NF +SNaN/-QNaN NT'
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  LOC         OBJECT CODE       ADDR1     ADDR2    STMT

0000AE30  7FFF8A00 00000000                        1357  DC XL16'7FFF8A000000000000000000000000'
0000AE40  D4E7C4C2 D940D5C6                        1358  DC CL48'MXDBR NF +SNaN/-QNaN Tr'
0000AE70  7FF0A000 00000000                        1359  DC XL16'7FF0A000000000000000000000000000'
0000AE80  D4E7C4C2 40D5C640                        1360  DC CL48'MXDB NF +SNaN/-QNaN NT'
0000AEB0  7FFF8A00 00000000                        1361  DC XL16'7FFF8A000000000000000000000000'
0000AEC0  D4E7C4C2 40D5C640                        1362  DC CL48'MXDB NF +SNaN/-QNaN Tr'
0000AEF0  7FF0A000 00000000                        1363  DC XL16'7FF0A000000000000000000000000000'
0000AF00  D4E7C4C2 D940D5C6                        1364  DC CL48'MXDBR NF +SNaN/+SNaN NT'
0000AF30  7FFF8A00 00000000                        1365  DC XL16'7FFF8A000000000000000000000000'
0000AF40  D4E7C4C2 D940D5C6                        1366  DC CL48'MXDBR NF +SNaN/+SNaN Tr'
0000AF70  7FF0A000 00000000                        1367  DC XL16'7FF0A000000000000000000000000000'
0000AF80  D4E7C4C2 40D5C640                        1368  DC CL48'MXDB NF +SNaN/+SNaN NT'
0000AFB0  7FFF8A00 00000000                        1369  DC XL16'7FFF8A000000000000000000000000'
0000AFC0  D4E7C4C2 40D5C640                        1370  DC CL48'MXDB NF +SNaN/+SNaN Tr'
0000AFF0  7FF0A000 00000000                        1371  DC XL16'7FF0A000000000000000000000000000'
                            00000100  00000001   1372 XBFPNFOT_NUM EQU (*-XBFPNFOT_GOOD)/64
                                                 1373 *
                                                 1374 *
                            0000B000  00000001   1375 XBFPNFFL_GOOD EQU *
0000B000  D4E7C2D9 40D5C640                        1376  DC CL48'MXBR NF -inf/-inf FPCR'
0000B030  00000000 F8000000                        1377  DC XL16'00000000F800000000000000F8000000'
0000B040  D4E7C2D9 40D5C640                        1378  DC CL48'MXBR NF -inf/-2.0 FPCR'
0000B070  00000000 F8000000                        1379  DC XL16'00000000F800000000000000F8000000'
0000B080  D4E7C2D9 40D5C640                        1380  DC CL48'MXBR NF -inf/-0 FPCR'
0000B0B0  00800000 F8008000                        1381  DC XL16'00800000F800800000800000F8008000'
0000B0C0  D4E7C2D9 40D5C640                        1382  DC CL48'MXBR NF -inf/+0 FPCR'
0000B0F0  00800000 F8008000                        1383  DC XL16'00800000F800800000800000F8008000'
0000B100  D4E7C2D9 40D5C640                        1384  DC CL48'MXBR NF -inf/+2.0 FPCR'
0000B130  00000000 F8000000                        1385  DC XL16'00000000F800000000000000F8000000'
0000B140  D4E7C2D9 40D5C640                        1386  DC CL48'MXBR NF -inf/+inf FPCR'
0000B170  00000000 F8000000                        1387  DC XL16'00000000F800000000000000F8000000'
0000B180  D4E7C2D9 40D5C640                        1388  DC CL48'MXBR NF -inf/-QNaN FPCR'
0000B1B0  00000000 F8000000                        1389  DC XL16'00000000F800000000000000F8000000'
0000B1C0  D4E7C2D9 40D5C640                        1390  DC CL48'MXBR NF -inf/+SNaN FPCR'
0000B1F0  00800000 F8008000                        1391  DC XL16'00800000F800800000800000F8008000'
0000B200  D4E7C2D9 40D5C640                        1392  DC CL48'MXBR NF -2.0/-inf FPCR'
0000B230  00000000 F8000000                        1393  DC XL16'00000000F800000000000000F8000000'
0000B240  D4E7C2D9 40D5C640                        1394  DC CL48'MXBR NF -2.0/-2.0 FPCR'
0000B270  00000000 F8000000                        1395  DC XL16'00000000F800000000000000F8000000'
0000B280  D4E7C2D9 40D5C640                        1396  DC CL48'MXBR NF -2.0/-0 FPCR'
0000B2B0  00000000 F8000000                        1397  DC XL16'00000000F800000000000000F8000000'
0000B2C0  D4E7C2D9 40D5C640                        1398  DC CL48'MXBR NF -2.0/+0 FPCR'
0000B2F0  00000000 F8000000                        1399  DC XL16'00000000F800000000000000F8000000'
0000B300  D4E7C2D9 40D5C640                        1400  DC CL48'MXBR NF -2.0/+2.0 FPCR'
0000B330  00000000 F8000000                        1401  DC XL16'00000000F800000000000000F8000000'
0000B340  D4E7C2D9 40D5C640                        1402  DC CL48'MXBR NF -2.0/+inf FPCR'
0000B370  00000000 F8000000                        1403  DC XL16'00000000F800000000000000F8000000'
0000B380  D4E7C2D9 40D5C640                        1404  DC CL48'MXBR NF -2.0/-QNaN FPCR'
0000B3B0  00000000 F8000000                        1405  DC XL16'00000000F800000000000000F8000000'
0000B3C0  D4E7C2D9 40D5C640                        1406  DC CL48'MXBR NF -2.0/+SNaN FPCR'
0000B3F0  00800000 F8008000                        1407  DC XL16'00800000F800800000800000F8008000'
0000B400  D4E7C2D9 40D5C640                        1408  DC CL48'MXBR NF -0/-inf FPCR'
0000B430  00800000 F8008000                        1409  DC XL16'00800000F800800000800000F8008000'
0000B440  D4E7C2D9 40D5C640                        1410  DC CL48'MXBR NF -0/-2.0 FPCR'
0000B470  00000000 F8000000                        1411  DC XL16'00000000F800000000000000F8000000'
0000B480  D4E7C2D9 40D5C640                        1412  DC CL48'MXBR NF -0/-0 FPCR'
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  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

0000B4B0  00000000 F8000000                         1413  DC XL16'00000000F800000000000000F8000000'
0000B4C0  D4E7C2D9 40D5C640                         1414  DC CL48'MXBR NF -0/+0 FPCR'
0000B4F0  00000000 F8000000                         1415  DC XL16'00000000F800000000000000F8000000'
0000B500  D4E7C2D9 40D5C640                         1416  DC CL48'MXBR NF -0/+2.0 FPCR'
0000B530  00000000 F8000000                         1417  DC XL16'00000000F800000000000000F8000000'
0000B540  D4E7C2D9 40D5C640                         1418  DC CL48'MXBR NF -0/+inf FPCR'
0000B570  00800000 F8008000                         1419  DC XL16'00800000F800800000800000F8008000'
0000B580  D4E7C2D9 40D5C640                         1420  DC CL48'MXBR NF -0/-QNaN FPCR'
0000B5B0  00000000 F8000000                         1421  DC XL16'00000000F800000000000000F8000000'
0000B5C0  D4E7C2D9 40D5C640                         1422  DC CL48'MXBR NF -0/+SNaN FPCR'
0000B5F0  00800000 F8008000                         1423  DC XL16'00800000F800800000800000F8008000'
0000B600  D4E7C2D9 40D5C640                         1424  DC CL48'MXBR NF +0/-inf FPCR'
0000B630  00800000 F8008000                         1425  DC XL16'00800000F800800000800000F8008000'
0000B640  D4E7C2D9 40D5C640                         1426  DC CL48'MXBR NF +0/-2.0 FPCR'
0000B670  00000000 F8000000                         1427  DC XL16'00000000F800000000000000F8000000'
0000B680  D4E7C2D9 40D5C640                         1428  DC CL48'MXBR NF +0/-0 FPCR'
0000B6B0  00000000 F8000000                         1429  DC XL16'00000000F800000000000000F8000000'
0000B6C0  D4E7C2D9 40D5C640                         1430  DC CL48'MXBR NF +0/+0 FPCR'
0000B6F0  00000000 F8000000                         1431  DC XL16'00000000F800000000000000F8000000'
0000B700  D4E7C2D9 40D5C640                         1432  DC CL48'MXBR NF +0/+2.0 FPCR'
0000B730  00000000 F8000000                         1433  DC XL16'00000000F800000000000000F8000000'
0000B740  D4E7C2D9 40D5C640                         1434  DC CL48'MXBR NF +0/+inf FPCR'
0000B770  00800000 F8008000                         1435  DC XL16'00800000F800800000800000F8008000'
0000B780  D4E7C2D9 40D5C640                         1436  DC CL48'MXBR NF +0/-QNaN FPCR'
0000B7B0  00000000 F8000000                         1437  DC XL16'00000000F800000000000000F8000000'
0000B7C0  D4E7C2D9 40D5C640                         1438  DC CL48'MXBR NF +0/+SNaN FPCR'
0000B7F0  00800000 F8008000                         1439  DC XL16'00800000F800800000800000F8008000'
0000B800  D4E7C2D9 40D5C640                         1440  DC CL48'MXBR NF +2.0/-inf FPCR'
0000B830  00000000 F8000000                         1441  DC XL16'00000000F800000000000000F8000000'
0000B840  D4E7C2D9 40D5C640                         1442  DC CL48'MXBR NF +2.0/-2.0 FPCR'
0000B870  00000000 F8000000                         1443  DC XL16'00000000F800000000000000F8000000'
0000B880  D4E7C2D9 40D5C640                         1444  DC CL48'MXBR NF +2.0/-0 FPCR'
0000B8B0  00000000 F8000000                         1445  DC XL16'00000000F800000000000000F8000000'
0000B8C0  D4E7C2D9 40D5C640                         1446  DC CL48'MXBR NF +2.0/+0 FPCR'
0000B8F0  00000000 F8000000                         1447  DC XL16'00000000F800000000000000F8000000'
0000B900  D4E7C2D9 40D5C640                         1448  DC CL48'MXBR NF +2.0/+2.0 FPCR'
0000B930  00000000 F8000000                         1449  DC XL16'00000000F800000000000000F8000000'
0000B940  D4E7C2D9 40D5C640                         1450  DC CL48'MXBR NF +2.0/+inf FPCR'
0000B970  00000000 F8000000                         1451  DC XL16'00000000F800000000000000F8000000'
0000B980  D4E7C2D9 40D5C640                         1452  DC CL48'MXBR NF +2.0/-QNaN FPCR'
0000B9B0  00000000 F8000000                         1453  DC XL16'00000000F800000000000000F8000000'
0000B9C0  D4E7C2D9 40D5C640                         1454  DC CL48'MXBR NF +2.0/+SNaN FPCR'
0000B9F0  00800000 F8008000                         1455  DC XL16'00800000F800800000800000F8008000'
0000BA00  D4E7C2D9 40D5C640                         1456  DC CL48'MXBR NF +inf/-inf FPCR'
0000BA30  00000000 F8000000                         1457  DC XL16'00000000F800000000000000F8000000'
0000BA40  D4E7C2D9 40D5C640                         1458  DC CL48'MXBR NF +inf/-2.0 FPCR'
0000BA70  00000000 F8000000                         1459  DC XL16'00000000F800000000000000F8000000'
0000BA80  D4E7C2D9 40D5C640                         1460  DC CL48'MXBR NF +inf/-0 FPCR'
0000BAB0  00800000 F8008000                         1461  DC XL16'00800000F800800000800000F8008000'
0000BAC0  D4E7C2D9 40D5C640                         1462  DC CL48'MXBR NF +inf/+0 FPCR'
0000BAF0  00800000 F8008000                         1463  DC XL16'00800000F800800000800000F8008000'
0000BB00  D4E7C2D9 40D5C640                         1464  DC CL48'MXBR NF +inf/+2.0 FPCR'
0000BB30  00000000 F8000000                         1465  DC XL16'00000000F800000000000000F8000000'
0000BB40  D4E7C2D9 40D5C640                         1466  DC CL48'MXBR NF +inf/+inf FPCR'
0000BB70  00000000 F8000000                         1467  DC XL16'00000000F800000000000000F8000000'
0000BB80  D4E7C2D9 40D5C640                         1468  DC CL48'MXBR NF +inf/-QNaN FPCR'
```

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  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

0000BBB0  00000000 F8000000                         1469  DC XL16'00000000F800000000000000F8000000'
0000BBC0  D4E7C2D9 40D5C640                         1470  DC CL48'MXBR NF +inf/+SNaN FPCR'
0000BBF0  00800000 F8008000                         1471  DC XL16'00800000F800800000800000F8008000'
0000BC00  D4E7C2D9 40D5C640                         1472  DC CL48'MXBR NF -QNaN/-inf FPCR'
0000BC30  00000000 F8000000                         1473  DC XL16'00000000F800000000000000F8000000'
0000BC40  D4E7C2D9 40D5C640                         1474  DC CL48'MXBR NF -QNaN/-2.0 FPCR'
0000BC70  00000000 F8000000                         1475  DC XL16'00000000F800000000000000F8000000'
0000BC80  D4E7C2D9 40D5C640                         1476  DC CL48'MXBR NF -QNaN/-0 FPCR'
0000BCB0  00000000 F8000000                         1477  DC XL16'00000000F800000000000000F8000000'
0000BCC0  D4E7C2D9 40D5C640                         1478  DC CL48'MXBR NF -QNaN/+0 FPCR'
0000BCF0  00000000 F8000000                         1479  DC XL16'00000000F800000000000000F8000000'
0000BD00  D4E7C2D9 40D5C640                         1480  DC CL48'MXBR NF -QNaN/+2.0 FPCR'
0000BD30  00000000 F8000000                         1481  DC XL16'00000000F800000000000000F8000000'
0000BD40  D4E7C2D9 40D5C640                         1482  DC CL48'MXBR NF -QNaN/+inf FPCR'
0000BD70  00000000 F8000000                         1483  DC XL16'00000000F800000000000000F8000000'
0000BD80  D4E7C2D9 40D5C640                         1484  DC CL48'MXBR NF -QNaN/-QNaN FPCR'
0000BDB0  00000000 F8000000                         1485  DC XL16'00000000F800000000000000F8000000'
0000BDC0  D4E7C2D9 40D5C640                         1486  DC CL48'MXBR NF -QNaN/+SNaN FPCR'
0000BDF0  00800000 F8008000                         1487  DC XL16'00800000F800800000800000F8008000'
0000BE00  D4E7C2D9 40D5C640                         1488  DC CL48'MXBR NF +SNaN/-inf FPCR'
0000BE30  00800000 F8008000                         1489  DC XL16'00800000F800800000800000F8008000'
0000BE40  D4E7C2D9 40D5C640                         1490  DC CL48'MXBR NF +SNaN/-2.0 FPCR'
0000BE70  00800000 F8008000                         1491  DC XL16'00800000F800800000800000F8008000'
0000BE80  D4E7C2D9 40D5C640                         1492  DC CL48'MXBR NF +SNaN/-0 FPCR'
0000BEB0  00800000 F8008000                         1493  DC XL16'00800000F800800000800000F8008000'
0000BEC0  D4E7C2D9 40D5C640                         1494  DC CL48'MXBR NF +SNaN/+0 FPCR'
0000BEF0  00800000 F8008000                         1495  DC XL16'00800000F800800000800000F8008000'
0000BF00  D4E7C2D9 40D5C640                         1496  DC CL48'MXBR NF +SNaN/+2.0 FPCR'
0000BF30  00800000 F8008000                         1497  DC XL16'00800000F800800000800000F8008000'
0000BF40  D4E7C2D9 40D5C640                         1498  DC CL48'MXBR NF +SNaN/+inf FPCR'
0000BF70  00800000 F8008000                         1499  DC XL16'00800000F800800000800000F8008000'
0000BF80  D4E7C2D9 40D5C640                         1500  DC CL48'MXBR NF +SNaN/-QNaN FPCR'
0000BFB0  00800000 F8008000                         1501  DC XL16'00800000F800800000800000F8008000'
0000BFC0  D4E7C2D9 40D5C640                         1502  DC CL48'MXBR NF +SNaN/+SNaN FPCR'
0000BFF0  00800000 F8008000                         1503  DC XL16'00800000F800800000800000F8008000'
                            00000040  00000001     1504 XBFPNFFL_NUM EQU (*-XBFPNFFL_GOOD)/64
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

0000C000                                            1506 HELPERS  DS    0H       (R12 base of helper subroutines)

                                                    1508 ************************************************************
                                                    1509 *                 REPORT UNEXPECTED PROGRAM CHECK
                                                    1510 ************************************************************

0000C000                                            1512 PGMCK    DS    0H
0000C000  F342 C072 F08E      0000C072  0000008E    1513          UNPK  PROGCODE(L'PROGCODE+1),PCINTCD(L'PCINTCD+1)
0000C006  926B C076                     0000C076    1514          MVI   PGMCOMMA,C','
0000C00A  DC03 C072 C178      0000C072  0000C178    1515          TR    PROGCODE,HEXTRTAB

0000C010  F384 C07C F150      0000C07C  00000150    1517          UNPK  PGMPSW+(0*9)(9),PCOLDPSW+(0*4)(5)
0000C016  9240 C084                     0000C084    1518          MVI   PGMPSW+(0*9)+8,C' '
0000C01A  DC07 C07C C178      0000C07C  0000C178    1519          TR    PGMPSW+(0*9)(8),HEXTRTAB

0000C020  F384 C085 F154      0000C085  00000154    1521          UNPK  PGMPSW+(1*9)(9),PCOLDPSW+(1*4)(5)
0000C026  9240 C08D                     0000C08D    1522          MVI   PGMPSW+(1*9)+8,C' '
0000C02A  DC07 C085 C178      0000C085  0000C178    1523          TR    PGMPSW+(1*9)(8),HEXTRTAB

0000C030  F384 C08E F158      0000C08E  00000158    1525          UNPK  PGMPSW+(2*9)(9),PCOLDPSW+(2*4)(5)
0000C036  9240 C096                     0000C096    1526          MVI   PGMPSW+(2*9)+8,C' '
0000C03A  DC07 C08E C178      0000C08E  0000C178    1527          TR    PGMPSW+(2*9)(8),HEXTRTAB

0000C040  F384 C097 F15C      0000C097  0000015C    1529          UNPK  PGMPSW+(3*9)(9),PCOLDPSW+(3*4)(5)
0000C046  9240 C09F                     0000C09F    1530          MVI   PGMPSW+(3*9)+8,C' '
0000C04A  DC07 C097 C178      0000C097  0000C178    1531          TR    PGMPSW+(3*9)(8),HEXTRTAB

0000C050  4100 0042                     00000042    1533          LA    R0,L'PROGMSG     R0 <== length of message
0000C054  4110 C05E                     0000C05E    1534          LA    R1,PROGMSG       R1 --> the message text itself
0000C058  4520 C27A                     0000C27A    1535          BAL   R2,MSG           Go display this message
                                                    1536
0000C05C  07FD                                      1537          BR    R13              Return to caller

0000C05E                                            1539 PROGMSG  DS   0CL66
0000C05E  D7D9D6C7 D9C1D440                         1540          DC    CL20'PROGRAM CHECK! CODE '
0000C072  88888888                                  1541 PROGCODE DC    CL4'hhhh'
0000C076  6B                                        1542 PGMCOMMA DC    CL1','
0000C077  40D7E2E6 40                               1543          DC    CL5' PSW '
0000C07C  88888888 88888888                         1544 PGMPSW   DC    CL36'hhhhhhhh hhhhhhhh hhhhhhhh hhhhhhhh '
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

                                                     1546 ************************************************************************
                                                     1547 *                      VERIFICATION ROUTINE
                                                     1548 ************************************************************************

0000C0A0                                             1550 VERISUB  DS    0H
                                                     1551 *
                                                     1552 **       Loop through the VERIFY TABLE...
                                                     1553 *

0000C0A0  4110 C32C                  0000C32C  1555          LA    R1,VERIFTAB      R1 --> Verify table
0000C0A4  4120 0004                  00000004  1556          LA    R2,VERIFLEN      R2 <== Number of entries
0000C0A8  0D30                                 1557          BASR  R3,0             Set top of loop

0000C0AA  9846 1000                  00000000  1559          LM    R4,R6,0(R1)      Load verify table values
0000C0AE  4D70 C0C2                  0000C0C2  1560          BAS   R7,VERIFY        Verify results
0000C0B2  4110 100C                  0000000C  1561          LA    R1,12(,R1)       Next verify table entry
0000C0B6  0623                                 1562          BCTR  R2,R3            Loop through verify table

0000C0B8  9500 C278                  0000C278  1564          CLI   FAILFLAG,X'00'   Did all tests verify okay?
0000C0BC  078D                                 1565          BER   R13              Yes, return to caller
0000C0BE  47F0 F238                  00000238  1566          B     FAIL             No, load FAILURE disabled wait PSW



                                                     1568 *
                                                     1569 **       Loop through the ACTUAL / EXPECTED results...
                                                     1570 *

0000C0C2  0D80                                       1572 VERIFY   BASR  R8,0             Set top of loop

0000C0C4  D50F 4000 5030      00000000  00000030  1574          CLC   0(16,R4),48(R5)  Actual results == Expected results?
0000C0CA  4770 C0DA                    0000C0DA  1575          BNE   VERIFAIL         No, show failure
0000C0CE  4140 4010                    00000010  1576 VERINEXT LA    R4,16(,R4)       Next actual result
0000C0D2  4150 5040                    00000040  1577          LA    R5,64(,R5)       Next expected result
0000C0D6  0668                                   1578          BCTR  R6,R8            Loop through results

0000C0D8  07F7                                   1580          BR    R7               Return to caller
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2    STMT

                                          1582 ********************************************************************
                                          1583 *                      Report the failure...
                                          1584 ********************************************************************

0000C0DA  9005 C250                 0000C250  1586 VERIFAIL STM   R0,R5,SAVER0R5   Save registers
0000C0DE  92FF C278                 0000C278  1587          MVI   FAILFLAG,X'FF'   Remember verification failure
                                          1588 *
                                          1589 **       First, show them the description...
                                          1590 *
0000C0E2  D22F C1E0 5000      0000C1E0  00000000  1591          MVC   FAILDESC,0(R5)   Save results/test description
0000C0E8  4100 0044                 00000044  1592          LA    R0,L'FAILMSG1    R0 <== length of message
0000C0EC  4110 C1CC                 0000C1CC  1593          LA    R1,FAILMSG1      R1 --> the message text itself
0000C0F0  4520 C27A                 0000C27A  1594          BAL   R2,MSG           Go display this message
                                          1595 *
                                          1596 **       Save address of actual and expected results
                                          1597 *
0000C0F4  5040 C24C                 0000C24C  1598          ST    R4,AACTUAL       Save A(actual results)
0000C0F8  4150 5030                 00000030  1599          LA    R5,48(,R5)       R5 ==> expected results
0000C0FC  5050 C248                 0000C248  1600          ST    R5,AEXPECT       Save A(expected results)
                                          1601 *
                                          1602 **       Format and show them the EXPECTED ("Want") results...
                                          1603 *
0000C100  D205 C210 C360      0000C210  0000C360  1604          MVC   WANTGOT,=CL6'Want: '
0000C106  F384 C216 C248      0000C216  0000C248  1605          UNPK  FAILADR(L'FAILADR+1),AEXPECT(L'AEXPECT+1)
0000C10C  9240 C21E                 0000C21E  1606          MVI   BLANKEQ,C' '
0000C110  DC07 C216 C178      0000C216  0000C178  1607          TR    FAILADR,HEXTRTAB

0000C116  F384 C221 5000      0000C221  00000000  1609          UNPK  FAILVALS+(0*9)(9),(0*4)(5,R5)
0000C11C  9240 C229                 0000C229  1610          MVI   FAILVALS+(0*9)+8,C' '
0000C120  DC07 C221 C178      0000C221  0000C178  1611          TR    FAILVALS+(0*9)(8),HEXTRTAB

0000C126  F384 C22A 5004      0000C22A  00000004  1613          UNPK  FAILVALS+(1*9)(9),(1*4)(5,R5)
0000C12C  9240 C232                 0000C232  1614          MVI   FAILVALS+(1*9)+8,C' '
0000C130  DC07 C22A C178      0000C22A  0000C178  1615          TR    FAILVALS+(1*9)(8),HEXTRTAB

0000C136  F384 C233 5008      0000C233  00000008  1617          UNPK  FAILVALS+(2*9)(9),(2*4)(5,R5)
0000C13C  9240 C23B                 0000C23B  1618          MVI   FAILVALS+(2*9)+8,C' '
0000C140  DC07 C233 C178      0000C233  0000C178  1619          TR    FAILVALS+(2*9)(8),HEXTRTAB

0000C146  F384 C23C 500C      0000C23C  0000000C  1621          UNPK  FAILVALS+(3*9)(9),(3*4)(5,R5)
0000C14C  9240 C244                 0000C244  1622          MVI   FAILVALS+(3*9)+8,C' '
0000C150  DC07 C23C C178      0000C23C  0000C178  1623          TR    FAILVALS+(3*9)(8),HEXTRTAB

0000C156  4100 0035                 00000035  1625          LA    R0,L'FAILMSG2    R0 <== length of message
0000C15A  4110 C210                 0000C210  1626          LA    R1,FAILMSG2      R1 --> the message text itself
0000C15E  4520 C27A                 0000C27A  1627          BAL   R2,MSG           Go display this message
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2    STMT

                                          1629 *
                                          1630 **       Format and show them the ACTUAL ("Got") results...
                                          1631 *
0000C162  D205 C210 C366      0000C210  0000C366  1632          MVC   WANTGOT,=CL6'Got:  '
0000C168  F384 C216 C24C      0000C216  0000C24C  1633          UNPK  FAILADR(L'FAILADR+1),AACTUAL(L'AACTUAL+1)
0000C16E  9240 C21E                     0000C21E  1634          MVI   BLANKEQ,C' '
0000C172  DC07 C216 C178      0000C216  0000C178  1635          TR    FAILADR,HEXTRTAB

0000C178  F384 C221 4000      0000C221  00000000  1637          UNPK  FAILVALS+(0*9)(9),(0*4)(5,R4)
0000C17E  9240 C229                     0000C229  1638          MVI   FAILVALS+(0*9)+8,C' '
0000C182  DC07 C221 C178      0000C221  0000C178  1639          TR    FAILVALS+(0*9)(8),HEXTRTAB

0000C188  F384 C22A 4004      0000C22A  00000004  1641          UNPK  FAILVALS+(1*9)(9),(1*4)(5,R4)
0000C18E  9240 C232                     0000C232  1642          MVI   FAILVALS+(1*9)+8,C' '
0000C192  DC07 C22A C178      0000C22A  0000C178  1643          TR    FAILVALS+(1*9)(8),HEXTRTAB

0000C198  F384 C233 4008      0000C233  00000008  1645          UNPK  FAILVALS+(2*9)(9),(2*4)(5,R4)
0000C19E  9240 C23B                     0000C23B  1646          MVI   FAILVALS+(2*9)+8,C' '
0000C1A2  DC07 C233 C178      0000C233  0000C178  1647          TR    FAILVALS+(2*9)(8),HEXTRTAB

0000C1A8  F384 C23C 400C      0000C23C  0000000C  1649          UNPK  FAILVALS+(3*9)(9),(3*4)(5,R4)
0000C1AE  9240 C244                     0000C244  1650          MVI   FAILVALS+(3*9)+8,C' '
0000C1B2  DC07 C23C C178      0000C23C  0000C178  1651          TR    FAILVALS+(3*9)(8),HEXTRTAB

0000C1B8  4100 0035                     00000035  1653          LA    R0,L'FAILMSG2    R0 <== length of message
0000C1BC  4110 C210                     0000C210  1654          LA    R1,FAILMSG2      R1 --> the message text itself
0000C1C0  4520 C27A                     0000C27A  1655          BAL   R2,MSG           Go display this message

0000C1C4  9805 C250                     0000C250  1657          LM    R0,R5,SAVER0R5   Restore registers
0000C1C8  47F0 C0CE                     0000C0CE  1658          B     VERINEXT         Continue with verification...



0000C1CC                                          1660 FAILMSG1 DS    0CL68
0000C1CC  C3D6D4D7 C1D9C9E2                       1661          DC    CL20'COMPARISON FAILURE! '
0000C1E0  4D8485A2 83998997                       1662 FAILDESC DC    CL48'(description)'


0000C210                                          1664 FAILMSG2 DS    0CL53
0000C210  40404040 4040                           1665 WANTGOT  DC    CL6' '           'Want: ' -or- 'Got:  '
0000C216  C1C1C1C1 C1C1C1C1                       1666 FAILADR  DC    CL8'AAAAAAAA'
0000C21E  407E40                                  1667 BLANKEQ  DC    CL3' = '
0000C221  88888888 88888888                       1668 FAILVALS DC    CL36'hhhhhhhh hhhhhhhh hhhhhhhh hhhhhhhh '

0000C248  00000000                                1670 AEXPECT  DC    F'0'             ==> Expected ("Want") results
0000C24C  00000000                                1671 AACTUAL  DC    F'0'             ==> Actual ("Got") results
0000C250  00000000 00000000                       1672 SAVER0R5 DC    6F'0'            Registers R0 - R5 save area
0000C268  F0F1F2F3 F4F5F6F7                       1673 CHARHEX  DC    CL16'0123456789ABCDEF'
                            0000C178  00000010  1674 HEXTRTAB EQU   CHARHEX-X'F0'    Hexadecimal translation table
0000C278  00                                      1675 FAILFLAG DC    X'00'            FF = Fail, 00 = Success
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2    STMT

                                          1677 ********************************************************************************
                                          1678 *        Issue HERCULES MESSAGE pointed to by R1, length in R0
                                          1679 ********************************************************************************

0000C27A  4900 C35C                 0000C35C  1681 MSG      CH    R0,=H'0'                Do we even HAVE a message?
0000C27E  07D2                              1682           BNHR  R2                      No, ignore

0000C280  9002 C2B0                 0000C2B0  1684           STM   R0,R2,MSGSAVE           Save registers

0000C284  4900 C35E                 0000C35E  1686           CH    R0,=AL2(L'MSGMSG)       Message length within limits?
0000C288  47D0 C290                 0000C290  1687           BNH   MSGOK                   Yes, continue
0000C28C  4100 005F                 0000005F  1688           LA    R0,L'MSGMSG             No, set to maximum

0000C290  1820                              1690 MSGOK    LR    R2,R0                   Copy length to work register
0000C292  0620                              1691           BCTR  R2,0                    Minus-1 for execute
0000C294  4420 C2BC                 0000C2BC  1692           EX    R2,MSGMVC               Copy message to O/P buffer

0000C298  4120 200A                 0000000A  1694           LA    R2,1+L'MSGCMD(,R2)      Calculate true command length
0000C29C  4110 C2C2                 0000C2C2  1695           LA    R1,MSGCMD               Point to true command

0000C2A0  83120008                          1697           DC    X'83',X'12',X'0008'     Issue Hercules Diagnose X'008'
0000C2A4  4780 C2AA                 0000C2AA  1698           BZ    MSGRET                  Return if successful
0000C2A8  0000                              1699           DC    H'0'                    CRASH for debugging purposes

0000C2AA  9802 C2B0                 0000C2B0  1701 MSGRET   LM    R0,R2,MSGSAVE           Restore registers
0000C2AE  07F2                              1702           BR    R2                      Return to caller

0000C2B0  00000000 00000000                 1704 MSGSAVE  DC    3F'0'                   Registers save area
0000C2BC  D200 C2CB 1000      0000C2CB  00000000  1705 MSGMVC   MVC   MSGMSG(0),0(R1)        Executed instruction

0000C2C2  D4E2C7D5 D6C8405C                 1707 MSGCMD   DC    C'MSGNOH * '            *** HERCULES MESSAGE COMMAND ***
0000C2CB  40404040 40404040                 1708 MSGMSG   DC    CL95' '                 The message text to be displayed
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

                                                     1710 ********************************************************************************
                                                     1711 *                              VERIFY TABLE
                                                     1712 ********************************************************************************
                                                     1713 *
                                                     1714 *        A(actual results), A(expected results), A(#of results)
                                                     1715 *
                                                     1716 ********************************************************************************

0000C32C                                             1718 VERIFTAB DC    0F'0'
0000C32C  00001000                                   1719          DC    A(LBFPNFOT)
0000C330  00004000                                   1720          DC    A(LBFPNFOT_GOOD)
0000C334  00000080                                   1721          DC    A(LBFPNFOT_NUM)
                                                     1722 *
0000C338  00001800                                   1723          DC    A(LBFPNFFL)
0000C33C  00006000                                   1724          DC    A(LBFPNFFL_GOOD)
0000C340  00000040                                   1725          DC    A(LBFPNFFL_NUM)
                                                     1726 *
0000C344  00002000                                   1727          DC    A(XBFPNFOT)
0000C348  00007000                                   1728          DC    A(XBFPNFOT_GOOD)
0000C34C  00000100                                   1729          DC    A(XBFPNFOT_NUM)
                                                     1730 *
0000C350  00003000                                   1731          DC    A(XBFPNFFL)
0000C354  0000B000                                   1732          DC    A(XBFPNFFL_GOOD)
0000C358  00000040                                   1733          DC    A(XBFPNFFL_NUM)
                                                     1734 *
                            00000004  00000001       1735 VERIFLEN EQU   (*-VERIFTAB)/12    #of entries in verify table
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

0000C35C                                            1737           END
0000C35C  0000                                      1738                 =H'0'
0000C35E  005F                                      1739                 =AL2(L'MSGMSG)
0000C360  E68195A3 7A40                             1740                 =CL6'Want: '
0000C366  C796A37A 4040                             1741                 =CL6'Got:  '
```

```
     SYMBOL         TYPE  VALUE   LENGTH  DEFN  REFERENCES

AACTUAL              F    00C24C       4  1671  1598  1633
AEXPECT              F    00C248       4  1670  1600  1605
AHELPERS             A    00027C       4   191   181   214
BFPMUL2L             J    000000   50028   107
BLANKEQ              C    00C21E       3  1667  1606  1634
CHARHEX              C    00C268      16  1673  1674
CTLR0                F    0002D0       4   224   200   201   202
FAIL                 I    000238       4   189  1566
FAILADR              C    00C216       8  1666  1605  1607  1633  1635
FAILDESC             C    00C1E0      48  1662  1591
FAILFLAG             X    00C278       1  1675  1564  1587
FAILMSG1             C    00C1CC      68  1660  1592  1593
FAILMSG2             C    00C210      53  1664  1625  1626  1653  1654
FAILPSW              X    0002C0       8   222   189
FAILVALS             C    00C221      36  1668  1609  1610  1611  1613  1614  1615  1617  1618  1619  1621  1622  1623  1637  1638
                                              1639  1641  1642  1643  1645  1646  1647  1649  1650  1651
FPCREGNT             X    0002D4       4   225   278   291   342   357
FPCREGTR             X    0002D8       4   226   285   297   350   364
FPR0                 U    000000       1   128
FPR1                 U    000001       1   129   277   279   284   286   341   343   349   351
FPR10                U    00000A       1   138   345   353   360   367
FPR11                U    00000B       1   139
FPR12                U    00000C       1   140
FPR13                U    00000D       1   141
FPR14                U    00000E       1   142
FPR15                U    00000F       1   143
FPR2                 U    000002       1   130
FPR3                 U    000003       1   131
FPR4                 U    000004       1   132
FPR5                 U    000005       1   133
FPR6                 U    000006       1   134
FPR7                 U    000007       1   135
FPR8                 U    000008       1   136   276   279   280   283   286   287   290   292   293   296   298   299   340   343
                                              344   348   351   352   356   358   359   363   365   366
FPR9                 U    000009       1   137
GOODPSW              X    0002B0       8   221   218
HELPERS              H    00C000       2  1506   146   191
HEXTRTAB             U    00C178      16  1674  1515  1519  1523  1527  1531  1607  1611  1615  1619  1623  1635  1639  1643  1647
                                              1651
IMAGE                1    000000   50028     0
LBFPNF               H    000382       2   329   208
LBFPNFCT             U    000008       1   439   241
LBFPNFFL             U    001800       1   449   238  1723
LBFPNFFL_GOOD        U    006000       1   727   856  1724
LBFPNFFL_NUM         U    000040       1   856  1725
LBFPNFIN             F    000438       4   430   439   242
LBFPNFOT             U    001000       1   447   237  1719
LBFPNFOT_GOOD        U    004000       1   467   724  1720
LBFPNFOT_NUM         U    000080       1   724  1721
LONGNF               F    0002EC       4   240   207
MSG                  I    00C27A       4  1681  1535  1594  1627  1655
MSGCMD               C    00C2C2       9  1707  1694  1695
MSGMSG               C    00C2CB      95  1708  1688  1705  1686
MSGMVC               I    00C2BC       6  1705  1692
MSGOK                I    00C290       2  1690  1687
MSGRET               I    00C2AA       4  1701  1698
```

```
     SYMBOL         TYPE  VALUE   LENGTH  DEFN  REFERENCES

MSGSAVE              F    00C2B0       4  1704  1684  1701
PCINTCD              H    00008E       2   159   176  1513
PCNOTDTA             I    00020C       4   180   177
PCOLDPSW             U    000150       1   161   178  1517  1521  1525  1529
PGMCK                H    00C000       2  1512   182
PGMCOMMA             C    00C076       1  1542  1514
PGMPSW               C    00C07C      36  1544  1517  1518  1519  1521  1522  1523  1525  1526  1527  1529  1530  1531
PROGCHK              H    000200       2   175   167
PROGCODE             C    00C072       4  1541  1513  1515
PROGMSG              C    00C05E      66  1539  1533  1534
PROGPSW              D    000228       8   188   187
R0                   U    000000       1   109   180   183   200   202  1533  1586  1592  1625  1653  1657  1681  1684  1686  1688
                                                1690  1701
R1                   U    000001       1   110  1534  1555  1559  1561  1593  1626  1654  1695  1705
R10                  U    00000A       1   119   204   207   266   267   272   330   331   336
R11                  U    00000B       1   120
R12                  U    00000C       1   121   146   181   214   270   308   334   376
R13                  U    00000D       1   122   182   205   208   215   269   309   333   377  1537  1565
R14                  U    00000E       1   123   185   186   216   217
R15                  U    00000F       1   124   145   180   183
R2                   U    000002       1   111   266   268   308   330   332   376  1535  1556  1562  1594  1627  1655  1682  1684
                                                1690  1691  1692  1694  1701  1702
R3                   U    000003       1   112   266   276   283   290   296   307   330   340   348   356   363   375  1557  1562
R4                   U    000004       1   113   272   305   336   373  1559  1574  1576  1598  1637  1641  1645  1649
R5                   U    000005       1   114   272   277   284   292   298   302   336   341   349   358   365   370  1574  1577
                                                1586  1591  1599  1600  1609  1613  1617  1621  1657
R6                   U    000006       1   115   274   305   338   373  1559  1578
R7                   U    000007       1   116   267   280   287   293   299   303   331   344   345   352   353   359   360   366
                                                367   371  1560  1580
R8                   U    000008       1   117   267   281   288   294   300   304   331   346   354   361   368   372  1572  1578
R9                   U    000009       1   118
SAVER0R5             F    00C250       4  1672  1586  1657
SAVEREGS             F    00023C       4   190   180   183
SBFPNF               H    0002FC       2   265   205
SBFPNFCT             U    000008       1   408   235
SBFPNFIN             F    000418       4   399   408   236
SHORTNF              F    0002DC       4   234   204
START                H    000280       2   199   164
STRTLABL             U    000000       1   108   158   161   163   166   174   447   449   454   456   465
VERIFAIL             I    00C0DA       4  1586  1575
VERIFLEN             U    000004       1  1735  1556
VERIFTAB             F    00C32C       4  1718  1735  1555
VERIFY               I    00C0C2       2  1572  1560
VERINEXT             I    00C0CE       4  1576  1658
VERISUB              H    00C0A0       2  1550   215
WANTGOT              C    00C210       6  1665  1604  1632
XBFPNFFL             U    003000       1   456   244  1731
XBFPNFFL_GOOD        U    00B000       1  1375  1504  1732
XBFPNFFL_NUM         U    000040       1  1504  1733
XBFPNFOT             U    002000       1   454   243  1727
XBFPNFOT_GOOD        U    007000       1   859  1372  1728
XBFPNFOT_NUM         U    000100       1  1372  1729
=AL2(L'MSGMSG)       R    00C35E       2  1739  1686
=CL6'Got:  '         C    00C366       6  1741  1632
=CL6'Want: '         C    00C360       6  1740  1604
=H'0'                H    00C35C       2  1738  1681
```

MACRO DEFN REFERENCES

No defined macros

```
   DESC      SYMBOL     SIZE      POS         ADDR

Entry: 0

Image       IMAGE      50028  0000-C36B  0000-C36B
  Region               50028  0000-C36B  0000-C36B
    CSECT   BFPMUL2L   50028  0000-C36B  0000-C36B
```

```
   STMT                                                    FILE NAME
1     c:\Users\Fish\Documents\Visual Studio 2008\Projects\MyProjects\ASMA-0\bfp-020-multlonger\bfp-020-multlonger.asm

** NO ERRORS FOUND **
```