```
        MM        MM  AAAAAAAAAA  NN         NN  AAAAAAAAAA  SSSSSSSSSS  MM         MM
        MMM      MMM  AAAAAAAAAAAA  NNN        NN  AAAAAAAAAAAA  SSSSSSSSSSSS  MMM        MMM
        MMMM    MMMM  AA        AA  NNNN       NN  AA        AA  SS          SS  MMMM      MMMM
        MM MM  MM MM  AA        AA  NN NN      NN  AA        AA  SS              MM MM    MM MM
        MM  MMMM  MM  AA        AA  NN  NN     NN  AA        AA  SSS             MM  MMMM  MM
        MM    MM    MM  AAAAAAAAAAAA  NN   NN    NN  AAAAAAAAAAAA  SSSSSSSS        MM    MM    MM
        MM         MM  AAAAAAAAAAAA  NN    NN   NN  AAAAAAAAAAAA  SSSSSSSS        MM         MM
        MM         MM  AA        AA  NN     NN  NN  AA        AA       SSS  MM         MM
        MM         MM  AA        AA  NN      NNNN  AA        AA        SS  MM         MM
        MM         MM  AA        AA  NN       NNN  AA        AA  SS        SS  MM         MM
        MM         MM  AA        AA  NN        NN  AA        AA  SSSSSSSSSSSS  MM         MM
        MM         MM  AA        AA  NN         N  AA        AA  SSSSSSSSSS  MM         MM


        JJJJJJJJJJ      11        2222222222    9999999999                          AAAAAAAAAA
        JJJJJJJJJJ      111      222222222222  999999999999                        AAAAAAAAAAAA
              JJ      1111      22        22  99        99                        AA        AA
              JJ        11                22  99        99                        AA        AA
              JJ        11                22  99        99                        AA        AA
              JJ        11              22  999999999999                        AAAAAAAAAAAA
              JJ        11            22  999999999999                        AAAAAAAAAAAA
              JJ        11          22                99                        AA        AA
        JJ    JJ        11        22                99                        AA        AA
        JJ    JJ        11        22        99        99                        AA        AA
        JJJJJJJJ    1111111111  222222222222  999999999999                        AA        AA
         JJJJJ      1111111111  222222222222    9999999999                        AA        AA


****A  START  JOB  129  MANASM                    ROOM        1.44.48 AM 27 FEB 21  PRINTER1  SYS TK4-  JOB  129  START  A****
****A  START  JOB  129  MANASM                    ROOM        1.44.48 AM 27 FEB 21  PRINTER1  SYS TK4-  JOB  129  START  A****
****A  START  JOB  129  MANASM                    ROOM        1.44.48 AM 27 FEB 21  PRINTER1  SYS TK4-  JOB  129  START  A****
****A  START  JOB  129  MANASM                    ROOM        1.44.48 AM 27 FEB 21  PRINTER1  SYS TK4-  JOB  129  START  A****
```

```
                          J E S 2   J O B   L O G


01.44.48 JOB  129  $HASP373 MANASM   STARTED - INIT  1 - CLASS A - SYS TK4-
01.44.48 JOB  129  IEF403I MANASM - STARTED - TIME=01.44.48
01.44.48 JOB  129  IEFACTRT - Stepname  Procstep  Program   Retcode
01.44.48 JOB  129  MANASM      ASM               IFOX00    RC= 0000
01.44.48 JOB  129  +Start prtmand
01.44.48 JOB  129  +IEW1991 ERROR - USER PROGRAM HAS ABNORMALLY TERMINATED
01.44.48 JOB  129  IEF450I MANASM GO - ABEND S0C1 U0000 - TIME=01.44.48
01.44.48 JOB  129  MANASM      GO                LOADER    AB S0C1
01.44.48 JOB  129  IEF404I MANASM - ENDED - TIME=01.44.48
01.44.48 JOB  129  $HASP395 MANASM   ENDED


------ JES2 JOB STATISTICS ------


 27 FEB 21 JOB EXECUTION DATE


        253 CARDS READ


      1,327 SYSOUT PRINT RECORDS


         24 SYSOUT PUNCH RECORDS


       0.00 MINUTES EXECUTION TIME
```

```
    1     //MANASM   JOB CLASS=A,MSGCLASS=A,MSGLEVEL=(1,1),REGION=128K,        JOB  129
          //            USER=HERC01,PASSWORD=
    2     //ASM      EXEC PGM=IFOX00,PARM=OBJ,REGION=128K
    3     //SYSLIB   DD   DSN=SYS1.MACLIB,DISP=SHR
    4     //SYSUT1   DD   DSN=&&SYSUT1,UNIT=SYSDA,SPACE=(1700,(600,100)),
          //            SEP=(SYSLIB)
    5     //SYSUT2   DD   DSN=&&SYSUT2,UNIT=SYSDA,SPACE=(1700,(300,50)),
          //            SEP=(SYSLIB,SYSUT1)
    6     //SYSUT3   DD   DSN=&&SYSUT3,UNIT=SYSDA,SPACE=(1700,(300,50))
    7     //SYSPRINT DD   SYSOUT=*,DCB=BLKSIZE=1089
    8     //SYSPUNCH DD   SYSOUT=B
    9     //SYSGO    DD   DSN=&&OBJSET,UNIT=SYSDA,SPACE=(80,(200,50)),
          //            DISP=(MOD,PASS)
   10     //SYSIN    DD   *
   11     //GO       EXEC PGM=LOADER,PARM='MAP,PRINT,NOCALL,LET',
          //            COND=(8,LT,ASM)
   12     //SYSLIN   DD   DSN=&&OBJSET,DISP=(OLD,DELETE)
   13     //SYSLOUT  DD   SYSOUT=*
   14     //SYSUDUMP DD   SYSOUT=*
          //
```

```
IEF236I ALLOC. FOR MANASM ASM
IEF237I 148  ALLOCATED TO SYSLIB
IEF237I 140  ALLOCATED TO SYSUT1
IEF237I 170  ALLOCATED TO SYSUT2
IEF237I 180  ALLOCATED TO SYSUT3
IEF237I JES2 ALLOCATED TO SYSPRINT
IEF237I JES2 ALLOCATED TO SYSPUNCH
IEF237I 190  ALLOCATED TO SYSGO
IEF237I JES2 ALLOCATED TO SYSIN
IEF142I MANASM ASM - STEP WAS EXECUTED - COND CODE 0000
IEF285I   SYS1.MACLIB                            KEPT          *-------34
IEF285I   VOL SER NOS= MVSRES.
IEF285I   SYS21058.T014448.RA000.MANASM.SYSUT1      DELETED       *----1,236
IEF285I   VOL SER NOS= WORK00.
IEF285I   SYS21058.T014448.RA000.MANASM.SYSUT2      DELETED       *-------36
IEF285I   VOL SER NOS= WORK01.
IEF285I   SYS21058.T014448.RA000.MANASM.SYSUT3      DELETED       *--------8
IEF285I   VOL SER NOS= WORK02.
IEF285I   JES2.JOB00129.SO0102                    SYSOUT
IEF285I   JES2.JOB00129.SO0103                    SYSOUT
IEF285I   SYS21058.T014448.RA000.MANASM.OBJSET      PASSED        *-------24
IEF285I   VOL SER NOS= WORK03.
IEF285I   JES2.JOB00129.SI0101                    SYSIN
IEF373I STEP /ASM    / START 21058.0144
IEF374I STEP /ASM    / STOP  21058.0144 CPU    0MIN 00.23SEC SRB    0MIN 00.04SEC VIRT   128K SYS   200K
****************************************************************************************************************
*      1. Jobstep of job: MANASM      Stepname: ASM         Program name: IFOX00      Executed on 27.02.21 from 01.44.48 to 01.44.48 *
*          elapsed time  00:00:00,39                    CPU-Identifier:  TK4-         Page-in:      0               *
*             CPU time  00:00:00,27             Virtual Storage used:    128K         Page-out:     0               *
*           corr. CPU:  00:00:00,27   CPU time has been corrected by  1 / 1,0  multiplier                          *
*                                                                                                                  *
*      I/O Operation                                                                                               *
*      Number of records read via DD * or DD DATA:    231                                                          *
*      148......34 140....1236 170......36 180.......8 DMY.......0 DMY.......0 190......24 DMY.......0              *
*                                                                                                                  *
*                                     Charge for step (w/o SYSOUT):         0,45                                   *
****************************************************************************************************************
IEF236I ALLOC. FOR MANASM GO
IEF237I 190  ALLOCATED TO SYSLIN
IEF237I JES2 ALLOCATED TO SYSLOUT
IEF237I JES2 ALLOCATED TO SYSUDUMP
Start prtmand
IEW1991 ERROR - USER PROGRAM HAS ABNORMALLY TERMINATED
IEF472I MANASM GO - COMPLETION CODE - SYSTEM=0C1 USER=0000
IEF285I   SYS21058.T014448.RA000.MANASM.OBJSET      DELETED       *-------25
IEF285I   VOL SER NOS= WORK03.
IEF285I   JES2.JOB00129.SO0104                    SYSOUT
IEF285I   JES2.JOB00129.SO0105                    SYSOUT
IEF373I STEP /GO     / START 21058.0144
IEF374I STEP /GO     / STOP  21058.0144 CPU    0MIN 00.02SEC SRB    0MIN 00.00SEC VIRT   128K SYS   216K
****************************************************************************************************************
*      2. Jobstep of job: MANASM      Stepname: GO          Program name: LOADER      Executed on 27.02.21 from 01.44.48 to 01.44.48 *
*          elapsed time  00:00:00,03                    CPU-Identifier:  TK4-         Page-in:      0               *
*             CPU time  00:00:00,02             Virtual Storage used:    128K         Page-out:     0               *
*           corr. CPU:  00:00:00,02   CPU time has been corrected by  1 / 1,0  multiplier                          *
*                                                                                                                  *
*      I/O Operation                                                                                               *
*      Number of records read via DD * or DD DATA:      0                                                          *
*      190......25 DMY.......0 DMY.......0                                                                          *
*                                                                                                                  *
```

```
*                              Charge for step (w/o SYSOUT):            0,03                                                    *
**********************************************************************************************************************************
IEF375I  JOB /MANASM  / START 21058.0144
IEF376I  JOB /MANASM  / STOP  21058.0144 CPU    0MIN 00.25SEC SRB    0MIN 00.04SEC
```

SYMBOL   TYPE ID   ADDR LENGTH LDID   ASM 0201 01.44 02/27/21

PRTMAND   SD 0001 000000 000419

```
LOC   OBJECT CODE    ADDR1 ADDR2  STMT   SOURCE STATEMENT                        ASM 0201 01.44 02/27/21

                                     1          MACRO
                                     2 &NAME    MANONE &DMB
                                     3 .* One iteration of the mandelbrot set
                                     4 .*
                                     5 .* zn+1 = zn^2 + c
                                     6 .*
                                     7 .* input:
                                     8 .* zn[real] in register 0
                                     9 .* zn[imag] in register 2
                                    10 .* c[real] in register 4
                                    11 .* c[imag] in register 6
                                    12 .* stash is memory region of size ??
                                    13 .*
                                    14 .* output:
                                    15 .* zn+1[real] in register 0
                                    16 .* zn+1[imag] in register 2
                                    17 .*
                                    18          STD   4,&DMB      Store C
                                    19          STD   6,&DMB+8
                                    20          LDR   4,0          Copy z
                                    21          LCDR  6,2
                                    22          MDR   0,4          Real*Real
                                    23          MDR   2,6          Imag*Imag
                                    24          SDR   0,2          Real part zn
                                    25          LDR   2,4          Real copy
                                    26          MDR   2,6          Real*Imag
                                    27          LD    4,&DMB+16    2*Real*Imag
                                    28          MDR   2,4
                                    29          LD    4,&DMB      z*z + c
                                    30          LD    6,&DMB+8
                                    31          ADR   0,4
                                    32          ADR   2,6
                                    33          MEND
                                    34          MACRO
                                    35 &NAME    CLMAG &STASH
                                    36 * Calculate square of magnitude of complex number
                                    37 *
                                    38 * &STASH  : memory region capable of storing two doubles
                                    39 * 0 : real part
                                    40 * 2 : complex part
                                    41 *
                                    42 * Result is in register 0
                                    43 *
                                    44 * Registers used 0,2,4
                                    45          LDR 0,4
                                    46          MDR 0,4
                                    47          LDR 2,4
                                    48          MDR 2,4
                                    49          ADR 0,2
                                    50          MEND
                                    51          MACRO
                                    52 &NAME    MANDEL &DMM
                                    53 .* Determine if a point is in the mandelbrot set
                                    54 .*
                                    55 .* input:
```

```
              56 .* c[real] in register 0
              57 .* c[imag] in register 2
              58 .* maxiter in register 4
              59 .*
              60 .* output:
              61 .*
              62 .*
              63            S     4,&DMM+40  Store maximum iterations
              64            STD   0,&DMM
              65            STD   2,&DMM+8
              66 ITERB      LD    0,&DMM+16   Setup input and call one iteration
              67            LD    2,&DMM+24
              68            LD    4,&DMM
              69            LD    6,&DMM+8
              70            MANONE &DMM+64
              71            STD   0,&DMM+16  Store znext
              72            STD   2,&DMM+24
              73            CLMAG            Calculate magnitude
              74            CD    0,&DMM+32  Check if bounded
              75            BH    NOTIT
              76            L     0,&DMM+40
              77            S     0,&DMM+48
              78            BE    ISIT
              79            ST    0,&DMM+40
              80            B     ITERB
              81 ISIT       L     0,&DMM+48
              82            B     EXIT
              83 NOTIT      L     0,&DMM+56
              84 EXIT       C     0,=D'0'
              85            MEND
              86            MACRO
              87 &NAME      CRDINIT &BUF
              88 .* Initializes 1D coordinate mapping
              89 .*
              90 .* Input
              91 .* &BUF - 4 long float sized buffer with the
              92 .*        following in order:
              93 .*        x0 - input space coordinate 0
              94 .*        x1 - input space coordinate 1
              95 .*        y0 - output space coordinate 0
              96 .*        y1 - output space coordinate 1
              97 .*
              98 .* Output
              99 .* &BUF - initialized for input to CRDTRAN
             100 .*
             101 .* Registers
             102 .* 0,2,4,6 (long)
             103 .*
             104            WTO   'CRDINIT'
             105            LD    0,&BUF+24   y1-y0
             106            SD    0,&BUF+16
             107            LD    2,&BUF+8    x1-x0
             108            SD    2,&BUF
             109            DDR   0,2             m
             110            WTO   'Calced m'
```

```
                              111              STD    0,&BUF+8
                              112              LD     2,&BUF
                              113              MDR    0,2              m*x0
                              114              SD     0,&BUF+16            b
                              115              STD    0,&BUF
                              116              WTO    'Calced b'
                              117              MEND
                              118              MACRO
                              119 &NAME        CRDTRAN &BUF
                              120 .* Perform 1D coordinate transform
                              121 .*
                              122 .* Input
                              123 .* R0 - input coordinate
                              124 .* &BUF - space initialized by CRDINIT
                              125 .*
                              126 .* Output
                              127 .* R0 - output coordinate
                              128 .*
                              129 .* Registers
                              130 .* 0
                              131              MD     0,&BUF+8         mx
                              132              AD     0,&BUF
                              133              MEND
                              134              MACRO
                              135 &NAME     PUTC   &DEST,&CHAR,&OFFSET
                              136 * Store a character at a location in a buffer
                              137 *
                              138 * Input:
                              139 * &TO Output buffer
                              140 * &CHAR Location of character
                              141 * &OFFSET Location of offset in buffer
                              142 *
                              143 * Registers:
                              144 * 0,1,2,3
                              145 &NAME     L      1,=X'0'
                              146           L      2,=X'0'
                              147           IC     1,&CHAR
                              148           L      2,&OFFSET
                              149           LA     3,&DEST
                              150           STC    1,3(2)
                              151           MEND
                              152           MACRO
                              153 &NAME     DMO
                              154 * Data definition for MANONE macro
                              155           DS     2D      stash
                              156           DC     D'2.0' two
                              157           MEND
                              158           MACRO
                              159 &NAME     DMAND
                              160 * Data block for MANDEL
                              161 &NAME     DS     0D
                              162           DC     1D'0'   CREAL
                              163           DC     1D'0'   CIMAG 8
                              164           DC     D'0.0'  ZREAL 16
                              165           DC     D'0.0'  ZIMAG 24
```

```
 LOC   OBJECT CODE    ADDR1 ADDR2  STMT    SOURCE STATEMENT                          ASM 0201 01.44 02/27/21

                                  166             DC     D'4.0'   BOUND 32
                                  167             DS     1PL4     ITER  40
                                  168             DC     PL4'1'   ONE   48
                                  169             DC     PL4'0'   ZERO  56
                                  170             DMO
                                  171             MEND
000000                            172 PRTMAND  START
                          00000   173             USING  PRTMAND,15
                                  174             SAVE   (14,12)
000000                            175+         DS     0H                                            01650000
000000 90EC D00C     0000C        176+         STM    14,12,12(13)              SAVE REGISTERS      02950000
                                  177             WTO    'Start prtmand'
000004                            178+         CNOP   0,4                                           09800002
000004 4510 F01A     0001A        179+         BAL    1,IHB0002A                BRANCH AROUND MESSAGE 09850002
000008 0011                       180+         DC     AL2(17)          TEXT LENGTH                  13200002
00000A 0000                       181+         DC     B'0000000000000000' MCS FLAGS                 13250002
00000C E2A38199A3409799           182+         DC     C'Start prtmand'                              13350002
00001A                            183+IHB0002A DS     0H                                            15850002
00001A 0A23                       184+         SVC    35                                            15950002
                                  185             OPEN   (PRINT,(OUTPUT))
00001C                            186+         CNOP   0,4                       ALIGN LIST TO FULLWORD 01740001
00001C 4510 F024     00024        187+         BAL    1,*+8                     LOAD REG1 W/LIST ADDR. 01780000
000020 8F                         188+         DC     AL1(143)                  OPTION BYTE         01900000
000021 0003AC                     189+         DC     AL3(PRINT)                DCB ADDRESS         01920000
000024 0A13                       190+         SVC    19                        ISSUE OPEN SVC      04000000
                                  191             CRDINIT XTRAN       Initialize coordinate translation
000026 0700                       192+         CNOP   0,4                                           09800002
000028 4510 F038     00038        193+         BAL    1,IHB0005A                BRANCH AROUND MESSAGE 09850002
00002C 000B                       194+         DC     AL2(11)          TEXT LENGTH                  13200002
00002E 0000                       195+         DC     B'0000000000000000' MCS FLAGS                 13250002
000030 C3D9C4C9D5C9E3             196+         DC     C'CRDINIT'                                    13350002
000038                            197+IHB0005A DS     0H                                            15850002
000038 0A23                       198+         SVC    35                                            15950002
00003A 6800 F278     00278        199+         LD     0,XTRAN+24  y1-y0
00003E 6B00 F270     00270        200+         SD     0,XTRAN+16
000042 6820 F268     00268        201+         LD     2,XTRAN+8   x1-x0
000046 6B20 F260     00260        202+         SD     2,XTRAN
00004A 2D02                       203+         DDR    0,2           m
00004C                            204+         CNOP   0,4                                           09800002
00004C 4510 F05C     0005C        205+         BAL    1,IHB0006A                BRANCH AROUND MESSAGE 09850002
000050 000C                       206+         DC     AL2(12)          TEXT LENGTH                  13200002
000052 0000                       207+         DC     B'0000000000000000' MCS FLAGS                 13250002
000054 C381938385844094           208+         DC     C'Calced m'                                   13350002
00005C                            209+IHB0006A DS     0H                                            15850002
00005C 0A23                       210+         SVC    35                                            15950002
00005E 6000 F268     00268        211+         STD    0,XTRAN+8
000062 6820 F260     00260        212+         LD     2,XTRAN
000066 2C02                       213+         MDR    0,2           m*x0
000068 6B00 F270     00270        214+         SD     0,XTRAN+16          b
00006C 6000 F260     00260        215+         STD    0,XTRAN
000070                            216+         CNOP   0,4                                           09800002
000070 4510 F080     00080        217+         BAL    1,IHB0007A                BRANCH AROUND MESSAGE 09850002
000074 000C                       218+         DC     AL2(12)          TEXT LENGTH                  13200002
000076 0000                       219+         DC     B'0000000000000000' MCS FLAGS                 13250002
000078 C381938385844082           220+         DC     C'Calced b'                                   13350002
```

```
 LOC    OBJECT CODE     ADDR1 ADDR2  STMT    SOURCE STATEMENT                                      ASM 0201 01.44 02/27/21


000080                               221+IHB0007A DS    0H                                                      15850002
000080 0A23                          222+         SVC   35                                                      15950002
                                     223          WTO   'X Init'
000082 0700                          224+         CNOP  0,4                                                      09800002
000084 4510 F092       00092         225+         BAL   1,IHB0008A                  BRANCH AROUND MESSAGE        09850002
000088 000A                          226+         DC    AL2(10)            TEXT LENGTH                           13200002
00008A 0000                          227+         DC    B'0000000000000000' MCS FLAGS                            13250002
00008C E740C99589A3                  228+         DC    C'X Init'                                                13350002
000092                               229+IHB0008A DS    0H                                                      15850002
000092 0A23                          230+         SVC   35                                                      15950002
                                     231          CRDINIT YTRAN
000094                               232+         CNOP  0,4                                                      09800002
000094 4510 F0A4       000A4         233+         BAL   1,IHB0010A                  BRANCH AROUND MESSAGE        09850002
000098 000B                          234+         DC    AL2(11)            TEXT LENGTH                           13200002
00009A 0000                          235+         DC    B'0000000000000000' MCS FLAGS                            13250002
00009C C3D9C4C9D5C9E3                236+         DC    C'CRDINIT'                                               13350002
0000A4                               237+IHB0010A DS    0H                                                      15850002
0000A4 0A23                          238+         SVC   35                                                      15950002
0000A6 6800 F298       00298         239+         LD    0,YTRAN+24   y1-y0                                       
0000AA 6B00 F290       00290         240+         SD    0,YTRAN+16                                               
0000AE 6820 F288       00288         241+         LD    2,YTRAN+8    x1-x0                                       
0000B2 6B20 F280       00280         242+         SD    2,YTRAN                                                  
0000B6 2D02                          243+         DDR   0,2              m                                       
0000B8                               244+         CNOP  0,4                                                      09800002
0000B8 4510 F0C8       000C8         245+         BAL   1,IHB0011A                  BRANCH AROUND MESSAGE        09850002
0000BC 000C                          246+         DC    AL2(12)            TEXT LENGTH                           13200002
0000BE 0000                          247+         DC    B'0000000000000000' MCS FLAGS                            13250002
0000C0 C381938385844094              248+         DC    C'Calced m'                                              13350002
0000C8                               249+IHB0011A DS    0H                                                      15850002
0000C8 0A23                          250+         SVC   35                                                      15950002
0000CA 6000 F288       00288         251+         STD   0,YTRAN+8                                                
0000CE 6820 F280       00280         252+         LD    2,YTRAN                                                  
0000D2 2C02                          253+         MDR   0,2            m*x0                                       
0000D4 6B00 F290       00290         254+         SD    0,YTRAN+16            b                                  
0000D8 6000 F280       00280         255+         STD   0,YTRAN                                                  
0000DC                               256+         CNOP  0,4                                                      09800002
0000DC 4510 F0EC       000EC         257+         BAL   1,IHB0012A                  BRANCH AROUND MESSAGE        09850002
0000E0 000C                          258+         DC    AL2(12)            TEXT LENGTH                           13200002
0000E2 0000                          259+         DC    B'0000000000000000' MCS FLAGS                            13250002
0000E4 C381938385844082              260+         DC    C'Calced b'                                              13350002
0000EC                               261+IHB0012A DS    0H                                                      15850002
0000EC 0A23                          262+         SVC   35                                                      15950002
                                     263          WTO   'Y Init'
0000EE 0700                          264+         CNOP  0,4                                                      09800002
0000F0 4510 F0FE       000FE         265+         BAL   1,IHB0013A                  BRANCH AROUND MESSAGE        09850002
0000F4 000A                          266+         DC    AL2(10)            TEXT LENGTH                           13200002
0000F6 0000                          267+         DC    B'0000000000000000' MCS FLAGS                            13250002
0000F8 E840C99589A3                  268+         DC    C'Y Init'                                                13350002
0000FE                               269+IHB0013A DS    0H                                                      15850002
0000FE 0A23                          270+         SVC   35                                                      15950002
                                     271          WTO   'Prtmand After Open'
000100                               272+         CNOP  0,4                                                      09800002
000100 4510 F11A       0011A         273+         BAL   1,IHB0014A                  BRANCH AROUND MESSAGE        09850002
000104 0016                          274+         DC    AL2(22)            TEXT LENGTH                           13200002
000106 0000                          275+         DC    B'0000000000000000' MCS FLAGS                            13250002
```

```
  LOC   OBJECT CODE       ADDR1 ADDR2  STMT    SOURCE STATEMENT                             ASM 0201 01.44 02/27/21

000108 D799A39481958440              276+           DC    C'Prtmand After Open'                             13350002
00011A                               277+IHB0014A DS    0H                                                  15850002
00011A 0A23                          278+           SVC   35                                                15950002
00011C 6800 F2A8       002A8         279 XLOOP      LD    0,YCRNT        Coordinate translate
                                     280            CRDTRAN YTRAN
000120 6C00 F288       00288         281+           MD    0,YTRAN+8          mx
000124 6A00 F280       00280         282+           AD    0,YTRAN
000128 2840                          283            LDR   4,0
00012A 6800 F2A0       002A0         284            LD    0,XCRNT
                                     285            CRDTRAN XTRAN
00012E 6C00 F268       00268         286+           MD    0,XTRAN+8          mx
000132 6A00 F260       00260         287+           AD    0,XTRAN
000136 2824                          288            LDR   2,4    Setup inputs
000138 5840 F2CC       002CC         289            L     4,MAXITER
                                     290            MANDEL DMB            Calculate if in set
00013C 5B40 F300       00300         291+           S     4,DMB+40   Store maximum iterations
000140 6000 F2D8       002D8         292+           STD   0,DMB
000144 6020 F2E0       002E0         293+           STD   2,DMB+8
000148 6800 F2E8       002E8         294+ITERB      LD    0,DMB+16   Setup input and call one iteration
00014C 6820 F2F0       002F0         295+           LD    2,DMB+24
000150 6840 F2D8       002D8         296+           LD    4,DMB
000154 6860 F2E0       002E0         297+           LD    6,DMB+8
000158 6040 F318       00318         298+           STD   4,DMB+64    Store C
00015C 6060 F320       00320         299+           STD   6,DMB+64+8
000160 2840                          300+           LDR   4,0         Copy z
000162 2362                          301+           LCDR  6,2
000164 2C04                          302+           MDR   0,4         Real*Real
000166 2C26                          303+           MDR   2,6         Imag*Imag
000168 2B02                          304+           SDR   0,2         Real part zn
00016A 2824                          305+           LDR   2,4         Real copy
00016C 2C26                          306+           MDR   2,6         Real*Imag
00016E 6840 F328       00328         307+           LD    4,DMB+64+16  2*Real*Imag
000172 2C24                          308+           MDR   2,4
000174 6840 F318       00318         309+           LD    4,DMB+64    z*z + c
000178 6860 F320       00320         310+           LD    6,DMB+64+8
00017C 2A04                          311+           ADR   0,4
00017E 2A26                          312+           ADR   2,6
000180 6000 F2E8       002E8         313+           STD   0,DMB+16    Store znext
000184 6020 F2F0       002F0         314+           STD   2,DMB+24
                                     315+* Calculate square of magnitude of complex number
                                     316+*
                                     317+* &STASH  : memory region capable of storing two doubles
                                     318+* 0 : real part
                                     319+* 2 : complex part
                                     320+*
                                     321+* Result is in register 0
                                     322+*
                                     323+* Registers used 0,2,4
000188 2804                          324+           LDR 0,4
00018A 2C04                          325+           MDR 0,4
00018C 2824                          326+           LDR 2,4
00018E 2C24                          327+           MDR 2,4
000190 2A02                          328+           ADR 0,2
000192 6900 F2F8       002F8         329+           CD    0,DMB+32   Check if bounded
000196 4720 F1B6       001B6         330+           BH    NOTIT
```

```
LOC   OBJECT CODE    ADDR1 ADDR2  STMT    SOURCE STATEMENT                              ASM 0201 01.44 02/27/21

00019A 5800 F300     00300        331+           L     0,DMB+40
00019E 5B00 F308     00308        332+           S     0,DMB+48
0001A2 4780 F1AE      001AE       333+           BE    ISIT
0001A6 5000 F300     00300        334+           ST    0,DMB+40
0001AA 47F0 F148      00148       335+           B     ITERB
0001AE 5800 F308     00308        336+ISIT       L     0,DMB+48
0001B2 47F0 F1BA      001BA       337+           B     EXIT
0001B6 5800 F310     00310        338+NOTIT      L     0,DMB+56
0001BA 5900 F410     00410        339+EXIT       C     0,=D'0'
0001BE 4780 F1DE      001DE       340            BE    NOPRINT
                                  341            PUTC  PRTBUF,HASH,XCHAR
                                  342+* Store a character at a location in a buffer
                                  343+*
                                  344+* Input:
                                  345+* &TO Output buffer
                                  346+* &CHAR Location of character
                                  347+* &OFFSET Location of offset in buffer
                                  348+*
                                  349+* Registers:
                                  350+* 0,1,2,3
0001C2 5810 F418     00418        351+           L     1,=X'0'
0001C6 5820 F418     00418        352+           L     2,=X'0'
0001CA 4310 F2D4     002D4        353+           IC    1,HASH
0001CE 5820 F2C0     002C0        354+           L     2,XCHAR
0001D2 4130 F328     00328        355+           LA    3,PRTBUF
0001D6 4212 0003     00003        356+           STC   1,3(2)
0001DA 47F0 F1F6      001F6       357            B     CONT
                                  358 NOPRINT    PUTC  PRTBUF,SPACE,XCHAR
                                  359+* Store a character at a location in a buffer
                                  360+*
                                  361+* Input:
                                  362+* &TO Output buffer
                                  363+* &CHAR Location of character
                                  364+* &OFFSET Location of offset in buffer
                                  365+*
                                  366+* Registers:
                                  367+* 0,1,2,3
0001DE 5810 F418     00418        368+NOPRINT    L     1,=X'0'
0001E2 5820 F418     00418        369+           L     2,=X'0'
0001E6 4310 F2D0     002D0        370+           IC    1,SPACE
0001EA 5820 F2C0     002C0        371+           L     2,XCHAR
0001EE 4130 F328     00328        372+           LA    3,PRTBUF
0001F2 4212 0003     00003        373+           STC   1,3(2)
0001F6 5800 F2C0     002C0        374 CONT       L     0,XCHAR
0001FA 5A00 F2C4     002C4        375            A     0,ONE
0001FE 5000 F2C0     002C0        376            ST    0,XCHAR
000202 4740 F216      00216       377            BL    YNEXT
000206 6800 F2A0     002A0        378            LD    0,XCRNT
00020A 6A00 F2B0     002B0        379            AD    0,ONED
00020E 6000 F2A0     002A0        380            STD   0,XCRNT
000212 47F0 F11C      0011C       381            B     XLOOP
                                  382 YNEXT      PUT   PRINT,PRTBUF
000216 4110 F3AC     003AC        383+YNEXT      LA    1,PRINT            LOAD PARAMETER REG 1    01900002
00021A 4100 F328     00328        384+           LA    0,PRTBUF           LOAD PARAMETER REG 0    02500002
00021E 58F0 1030     00030        385+           L     15,48(0,1)    LOAD PUT ROUTINE ADDR      00550000
```

```
  LOC   OBJECT CODE    ADDR1 ADDR2  STMT    SOURCE STATEMENT                           ASM 0201 01.44 02/27/21

000222 05EF                         386+          BALR  14,15              LINK TO PUT ROUTINE            00600000
000224 5800 F2C8        002C8       387           L     0,ZERO
000228 5000 F2C0        002C0       388           ST    0,XCHAR
00022C 6800 F2B8        002B8       389           LD    0,ZEROD
000230 6000 F2A0        002A0       390           STD   0,XCRNT
000234 6800 F2A8        002A8       391           LD    0,YCRNT
000238 6A00 F2B0        002B0       392           AD    0,ONED
00023C 6000 F2A8        002A8       393           STD   0,YCRNT
000240 4740 F248        00248       394           BL    DONE
000244 47F0 F11C        0011C       395           B     XLOOP
                                    396 DONE      CLOSE (PRINT)
000248                              397+          CNOP  0,4                 ALIGN LIST TO FULLWORD 02420002
000248 4510 F250        00250       398+DONE      BAL   1,*+8              LOAD REG1 W/LIST ADDR  02460002
00024C 80                           399+          DC    AL1(128)           OPTION BYTE            02580000
00024D 0003AC                       400+          DC    AL3(PRINT)         DCB ADDRESS            02600000
000250 0A14                         401+          SVC   20                 ISSUE CLOSE SVC        01640000
                                    402           RETURN (14,12),RC=0
000252 98EC D00C        0000C       403+          LM    14,12,12(13)       RESTORE THE REGISTERS  00650000
000256 41F0 0000        00000       404+          LA    15,0(0,0)          LOAD RETURN CODE       01750000
00025A 07FE                         405+          BR    14                 RETURN                 02000000
00025C 00000000
000260 0000000000000000             406 XTRAN     DC    D'0',D'120',D'-2',D'2'
000280 0000000000000000             407 YTRAN     DC    D'0',D'90',D'-2',D'2'
0002A0 0000000000000000             408 XCRNT     DC    D'0.0'
0002A8 0000000000000000             409 YCRNT     DC    D'0.0'
0002B0 4110000000000000             410 ONED      DC    D'1.0'
0002B8 0000000000000000             411 ZEROD     DC    D'0.0'
0002C0                              412 XCHAR     DS    PL4'0'
0002C4 0000001C                     413 ONE       DC    PL4'1'
0002C8 0000000C                     414 ZERO      DC    PL4'0'
0002CC 0000100C                     415 MAXITER   DC    PL4'100'
0002D0 40404040                     416 SPACE     DC    C'    '
0002D4 7B7B7B7B                     417 HASH      DC    C'####'
                                    418 DMB       DMAND
                                    419+* Data block for MANDEL
0002D8                              420+DMB       DS    0D
0002D8 0000000000000000             421+          DC    1D'0'    CREAL
0002E0 0000000000000000             422+          DC    1D'0'    CIMAG 8
0002E8 0000000000000000             423+          DC    D'0.0'   ZREAL 16
0002F0 0000000000000000             424+          DC    D'0.0'   ZIMAG 24
0002F8 4140000000000000             425+          DC    D'4.0'   BOUND 32
000300                              426+          DS    1PL4     ITER  40
000304 0000001C                     427+          DC    PL4'1'   ONE   48
000308 0000000C                     428+          DC    PL4'0'   ZERO  56
                                    429+* Data definition for MANONE macro
000310                              430+          DS    2D       stash
000320 4120000000000000             431+          DC    D'2.0'   two
000328                              432 PRTBUF    DS    132C
                                    433 PRINT     DCB   DSORG=PS,MACRF=PM,DDNAME=SYSLOUT,RECFM=FM,LRECL=120

                                    435+*                      DATA CONTROL BLOCK                 22770000
                                    436+*                                                         22860000
0003AC                              437+PRINT     DC    0F'0'                 ORIGIN ON WORD BOUNDARY  22914000
```

```
  LOC   OBJECT CODE     ADDR1 ADDR2  STMT    SOURCE STATEMENT                                      ASM 0201 01.44 02/27/21

                                     439+*                          DIRECT ACCESS DEVICE INTERFACE                  27360000

0003AC 0000000000000000              441+        DC      BL16'0'                        FDAD,DVTBL                  27540000
0003BC 00000000                      442+        DC      A(0)                           KEYLE,DEVT,TRBAL           27720000

                                     444+*                          COMMON ACCESS METHOD INTERFACE                 48690000

0003C0 00                            446+        DC      AL1(0)                         BUFNO                      49050000
0003C1 000001                        447+        DC      AL3(1)                         BUFCB                      54720000
0003C4 0000                          448+        DC      AL2(0)               BUFL                                55170000
0003C6 4000                          449+        DC      BL2'0100000000000000'                          *55800000
                                       +                                              DSORG                        55890000
0003C8 00000001                      450+        DC      A(1)                           IOBAD                      56340000

                                     452+*                          FOUNDATION EXTENSION                           56610000

0003CC 00                            454+        DC      BL1'00000000'                  BFTEK,BFLN,HIARCHY         59850000
0003CD 000001                        455+        DC      AL3(1)                         EODAD                      65970000
0003D0 82                            456+        DC      BL1'10000010'                                  *66150000
                                       +                                              RECFM                        66240000
0003D1 000000                        457+        DC      AL3(0)                         EXLST                      66330000

                                     459+*                          FOUNDATION BLOCK                               66690000

0003D4 E2E8E2D3D6E4E340              461+        DC      CL8'SYSLOUT'                   DDNAME                     66870000
0003DC 02                            462+        DC      BL1'00000010'                  OFLGS                      68220000
0003DD 00                            463+        DC      BL1'00000000'                        IFLG                 68310000
0003DE 0050                          464+        DC      BL2'0000000001010000'                          *68400000
                                       +                                                              *68490000
                                       +                                              MACR                         68580000

                                     466+*                          BSAM-BPAM-QSAM INTERFACE                       74430000

0003E0 00                            468+        DC      BL1'00000000'                                  *74610000
                                       +                                                              RER1 74700000
0003E1 000001                        469+        DC      AL3(1)                         CHECK, GERR, PERR          74790000
0003E4 00000001                      470+        DC      A(1)                           SYNAD                      74880000
0003E8 0000                          471+        DC      H'0'                           CIND1, CIND2               74970000
0003EA 0000                          472+        DC      AL2(0)                         BLKSIZE                    75240000
0003EC 00000000                      473+        DC      F'0'                           WCPO, WCPL, OFFSR, OFFSW   75870000
0003F0 00000001                      474+        DC      A(1)                           IOBA                       75960000
0003F4 00                            475+        DC      AL1(0)                         NCP                        76050000
0003F5 000001                        476+        DC      AL3(1)                         EOBR, EOBAD                76140000

                                     478+*                          QSAM INTERFACE                                 81450000

0003F8 00000001                      480+        DC      A(1)                           RECAD                      81630000
0003FC 0000                          481+        DC      H'0'                           QSWS                       81810000
0003FE 0078                          482+        DC      AL2(120)             LRECL                               80730000
000400 00                            483+        DC      BL1'00000000'                  EROPT                      82530000
000401 000001                        484+        DC      AL3(1)                         CNTRL                      82620000
000404 00000000                      485+        DC      F'0'                           PRECL                      82710000
000408 00000001                      486+        DC      A(1)                           EOB                        82800000
000000                               487         END     PRTMAND
000410 0000000000000000              488                 =D'0'
```

```
000418 00                      489                 =X'0'
```

```
POS.ID   REL.ID   FLAGS    ADDRESS                        ASM 0201 01.44 02/27/21

 0001     0001      08      000021
 0001     0001      08      00024D
```

```
CONT       00004 000001F6 00374   00357
DMB        00008 000002D8 00420   00291 00292 00293 00294 00295 00296 00297 00298 00299 00307 00309 00310 00313 00314 00329
                                  00331 00332 00334 00336 00338
DONE       00004 00000248 00398   00394
EXIT       00004 000001BA 00339   00337
HASH       00004 000002D4 00417   00353
IHB0002A   00002 0000001A 00183   00179
IHB0005A   00002 00000038 00197   00193
IHB0006A   00002 0000005C 00209   00205
IHB0007A   00002 00000080 00221   00217
IHB0008A   00002 00000092 00229   00225
IHB0010A   00002 000000A4 00237   00233
IHB0011A   00002 000000C8 00249   00245
IHB0012A   00002 000000EC 00261   00257
IHB0013A   00002 000000FE 00269   00265
IHB0014A   00002 0000011A 00277   00273
ISIT       00004 000001AE 00336   00333
ITERB      00004 00000148 00294   00335
MAXITER    00004 000002CC 00415   00289
NOPRINT    00004 000001DE 00368   00340
NOTIT      00004 000001B6 00338   00330
ONE        00004 000002C4 00413   00375
ONED       00008 000002B0 00410   00379 00392
PRINT      00004 000003AC 00437   00189 00383 00400
PRTBUF     00001 00000328 00432   00355 00372 00384
PRTMAND    00001 00000000 00172   00173 00487
SPACE      00004 000002D0 00416   00370
XCHAR      00004 000002C0 00412   00354 00371 00374 00376 00388
XCRNT      00008 000002A0 00408   00284 00378 00380 00390
XLOOP      00004 0000011C 00279   00381 00395
XTRAN      00008 00000260 00406   00199 00200 00201 00202 00211 00212 00214 00215 00286 00287
YCRNT      00008 000002A8 00409   00279 00391 00393
YNEXT      00004 00000216 00383   00377
YTRAN      00008 00000280 00407   00239 00240 00241 00242 00251 00252 00254 00255 00281 00282
ZERO       00004 000002C8 00414   00387
ZEROD      00008 000002B8 00411   00389
```

SYMBOL   LEN   VALUE   DEFN   REFERENCES   ASM 0201 01.44 02/27/21

=D'0'   00008 00000410 00488   00339
=X'0'   00001 00000418 00489   00351 00352 00368 00369

NO STATEMENTS FLAGGED IN THIS ASSEMBLY
HIGHEST SEVERITY WAS   0
OPTIONS FOR THIS ASSEMBLY
  ALIGN, ALOGIC, BUFSIZE(STD), DECK, ESD, FLAG(0), LINECOUNT(55), LIST, NOMCALL, YFLAG, WORKSIZE(2097152)
  NOMLOGIC, NONUMBER, OBJECT, NORENT, RLD, NOSTMT, NOLIBMAC, NOTERMINAL, NOTEST, XREF(SHORT)
  SYSPARM()
WORK FILE BUFFER SIZE/NUMBER = 8702/ 1
TOTAL RECORDS READ FROM SYSTEM INPUT   231
TOTAL RECORDS READ FROM SYSTEM LIBRARY   3656
TOTAL RECORDS PUNCHED   24
TOTAL RECORDS PRINTED   578

```
                                    VS LOADER

 OPTIONS USED — PRINT,MAP,LET,NOCALL,NORES,NOTERM,SIZE=98304,NAME=**GO


        NAME   TYPE  ADDR        NAME  TYPE  ADDR        NAME  TYPE  ADDR        NAME  TYPE  ADDR        NAME  TYPE  ADDR

   PRTMAND    SD  AC010


   TOTAL LENGTH      420
   ENTRY ADDRESS    AC010
```

```
JOB MANASM            STEP GO              TIME 014448   DATE 21058   ID = 000    CPUID = 000006113033      PAGE 0001


COMPLETION CODE      SYSTEM = 0C1


PSW AT ENTRY TO ABEND  078D0000 00000026      ILC 2   INTC 0001


ASCB 00FF9478
        +0    ASCB  C1E2C3C2    FWDP  00000000    BWDP  00FE3530    CMSF  00000000    SVRB  009BE7A8   SYNC  000007D4
        +18   IOSP  00000000    SPL   00FF9548    CPUS  00000001    IDSQ  000A0007    IODP  00040076   STOR  0FC34C00
        +30   LDA   009BF548    RSM   00FF9388    CSCB  00FEC010    TSB   00000000    EJST  00000000   XJST  01F78840
        +48   EWST  D9556F9D    XWST  D9C93040    JSTL  0000023C    ECB   809BEE58    UBET  00000000   RESV  00000000
        +60   DUMP  009BE3A0    FW1   FFFF0000    TMCH  00000000    ASXB  009BF300    SWCT  04EE0000   SSRB  00000000
        +78   VSC   0000000E    TCBS  00000001    LOCK  00000000    LSQH  00000000    QECB  00000000   MECB  40000000
        +90   OUCB  00FF9878    OUXB  00FF9CA0    FMCT  00280000    XMPQ  00000000    IQEA  00000000   RTWA  00000000
        +A8   MCC   00000000    JBNI  00FE3110    JBNS  00FEC020    SRQ   00000000    VGTT  00000000   PCTT  00000000
        +C0   SMCT  00000007    SWTL  00000D69    SRBT  00000000    ATME  0093B9C0


TCB  99DA58
        +0    RBP   009BE6E0    PIE   00000000    DEB   00999610   TIO 0098B020   CMP   900C1000   TRN   00000000
        +18   MSS   009BC540    PK-FLG 80010000   FLG   0000FFFF   LLS 009BC9E0   JLB   00000000   JPQ   00000000
        +70   FSA   010ACFB8    TCB   00000000    TME   00000000   JST 0099DCF8   NTC   00000000   OTC   0099DCF8
        +88   LTC   00000000    IQE   00000000    ECB   000A4F4C   TSF 20000000   D-PQE 009BF548   AQE   0099D1B0
        +A0   STAB  009BCA90    TCT   809BC710    USER  00000000   SDF 00000000   MDID  00000000   JSCB  009BC85C
        +B8   RESV  00000000    IOBRC 00000000    XCPD  00000000   EXT 00000000   BITS  00000000   DAR   00000000
        +D0   EXT2  0099DB80    AECB  00000000    TIRB  00000000   BAK 0099DCF8   RTMWA 0099D660   IOTM  00000000
        +E8   TMSAV 00000000    ABCR  00000000    XSCT  80000040   FOE 00000000   SWA   009BC440   STAW  00000000
        +100  BID   E3C3C240    RTM1  00000000    ESTA  00000000   UKY 009BC570   CPVI  0000FFFF   BYT1  08000000
        +118  RPT   00000000    DBTB  00000000    SWAS  0099AF50   SCB 00000000   RESV  00000000   RESV  00000000
        EXT2  GTF   00000000    SVAB  00000000    EVNT  00000000   RES 00000000   RESV  00000000   RESV  00000000



ACTIVE RBS

PRB  99DC68  RESV  00000000    RESV 00000000   RTPSW1 078D0000     00000026  RTPSW2 00020001    00BBE000
             FLG1  00000000    WC-L-IC 00020001
             RESV  00000000    APSW    00000000   SZ-STAB 00110082       FL-CDE 0099DBA0  PSW 078D0000     00000026
             Q/TTR 00000000    WT-LNK  0099DA58
             RG 0-7   000A4F54     000A4F78    800A4F7C    000AC010    000A4FFA    FFFFFFFF    000A4F98    000000FF
             RG 8-15  00000000     000A4EC8    000A4FE0    000AC000    400A5D5C    000ACFB8    0000004E    000A4F10


SVRB 9BE5F0  RESV  00000000    RESV 00000000   RTPSW1 00000000     00000000  RTPSW2 00000000    00E08000
             FLG1  20000000    WC-L-IC 00020033
             RESV  00000000    APSW    00000000   SZ-STAB 001CD022       FL-CDE 00000000  PSW 070C1000     00E088B0
             Q/TTR 00000000    WT-LNK  0099DC68
             RG 0-7   0099C000     800AC030    800A4F7C    000AC010    000A4FFA    FFFFFFFF    000A4F98    000000FF
             RG 8-15  00000000     000A4EC8    000A4FE0    000AC000    400A5D5C    000ACFB8    00014058    00000000
             EXTSA    0099C000     800AC030    00014008    0099DA58    009BE5F0    00FF9478    0002FB8C    00000000
                      0099D660     FF0003CC    40000101    900C1000
             SCB      00000000     00000000    129BE650    039BE5F0    6400DB00    RESV     00000000
             FEPARM   00000000     80C76A6E    00000000    00000884    0002FB8C    00000000


SVRB 9BE6E0  RESV  00000000    RESV 00000000   RTPSW1 00000000     00000000  RTPSW2 00000000    00DAE000
             FLG1  02000000    WC-L-IC 0002000C
```

```
              RESV  00000000   APSW     00000000   SZ-STAB 001CD022      FL-CDE 00000000   PSW 070C1000     00DB614E
              Q/TTR 00000000   WT-LNK  009BE5F0
              RG 0-7   000001A0    0099D760    0098B048    0080E600    00014008    00E08C69    40E07C6A    0099D660
              RG 8-15  0099BE68    00000000    0098B048    00FE7F94    0099DBF0    0099D7D4    0099D760    00000000
              EXTSA    00000000    0099D230    0000042C    009BE744    20FD0000    00000000    00000000    00000000
                       00000000    00000000    00000000    00000000
              SCB      00000000    00000000    00000000    009BE6E0    0000DB00    RESV    00000000
              FEPARM   00000000    80C76A6E    80C76A8E    00000884    0002FB8C    00000000
```

LOAD LIST

```
      NE 00000000   RSP-CDE 00FE3660   CNT 00010001
```

CDE

```
      99DBA0        NCDE 009BCDF0   RBP 0099DC68 NM **GO       EPA 000AC010   XL/MJ 0099DBC0   USE 00010000   ATTR 09A0000
      FE3660        NCDE 00FE36E8   RBP 00000000 NM IGG019DK   EPA 00F99000   XL/MJ 00FE3680   USE 00010000   ATTR B122000
```

XL

			LN	ADR	LN	ADR	LN	ADR
99DBC0	SZ 00000010	NO 00000001	80000430	000AC000				
FE3680	SZ 00000010	NO 00000001	800008B0	00F99000				

TIOT 98B020   JOB MANASM   STEP GO

```
              OFFSET    LN-STA      DDNAME      TTR-ST      STB-UC
              + 0018    14010100    SYSLIN      99FB8000    90002B48
              + 002C    14010102    SYSLOUT     99F7C000    80000000
              + 0040    14010102    SYSUDUMP    99F64000    80000000
```

VSM

```
   SPQE  009BC540 NSPQE 009BC3A0  DQE 009BF100  FL/RS 8000  SPID  000  KEY  8
   SPQE  009BF100 NSPQE 00000000  DQE 009BC520  FL/RS 6000  SPID  000  KEY  8
DQE 9BC520 FQE 9BC4A0  NDQE 9BC480  BLK 000A4000  LN 00001000  FQE 9BC4A0  FQE 80000000  LN 00000EC8  AREA 000A4EC8
DQE 9BC480 FQE 9BC4D0  NDQE 000000  BLK 000AC000  LN 00001000  FQE 9BC4D0  FQE 80000000  LN 00000360  AREA 000AC790
   SPQE  009BC3A0 NSPQE 00000000  DQE 009BC4F0  FL/RS C000  SPID  078  KEY  8
   SPQE  009BC4F0 NSPQE 009BC410  DQE 00000000  FL/RS 2000  SPID  078  KEY  8
```

D-PQE 9BF548   FIRST 009BF418

```
PQE  9BF418    FFB 009BC420   LFB 009BC350   NPQ 00000000   PPQ 00000000
               TCB 009BC7B0   RSI 0091C000   RAD 000A4000   FLG 00000000
FBQE 9BC420  NFB 009BC3D0  PFB 009BF418   SZ  00006000   AREA 000A6000
FBQE 9BC3D0  NFB 009BC350  PFB 009BC420   SZ  008DE000   AREA 000AD000
FBQE 9BC350  NFB 009BF418  PFB 009BC3D0   SZ  00001000   AREA 00994000
```

```
                          ***TCB SUMMARY***
                          -----------
TCB AT 9BD148   CMP 00000000   PKF-FLG 00000080   DSP 0000FFFF   SDY 00000000   RTM 00000000   FBYT 00000000
TCB AT 9BE3A0   CMP 00000000   PKF-FLG 00000080   DSP 0000FFFF   SDY 00000000   RTM 00000000   FBYT 00040000
TCB AT 9BE150   CMP 00000000   PKF-FLG 00000080   DSP 0000FFFF   SDY 00000000   RTM 00000000   FBYT 00040000
TCB AT 9BC7B0   CMP 00000000   PKF-FLG 80000000   DSP 0000FFFF   SDY 00000000   RTM 00000000   FBYT 00040000
```

```
TCB AT 99DCF8   CMP 00000000   PKF-FLG 80000000   DSP 0000FFFF   SDY 00000000   RTM 00000000   FBYT 00040000
TCB AT 99DA58   CMP 900C1000   PKF-FLG 80010000   DSP 0000FFFF   SDY 00000000   RTM 0099D660   FBYT 08000000
```

QCB TRACE

```
MAJ FFF3F8   NMAJ 00FFF398   PMAJ 00000000   FMIN 00FFF470   LMIN 00FFF470   NM  SYSIEA01

MIN FFF470   NMIN 00000000   PMIN 00000000   FQEL 00FFF488   LQEL 00FFF488   FLID 0320000A   NM IEA
             NQEL 00000000   PQEL 00000000   TCB  0099DA58   FLID 2800000A   SVRB 009BE6E0   CNT 00010000

MAJ FFF338   NMAJ 00000000   PMAJ 00FFF398   FMIN 00FE30D0   LMIN 00FFEF08   NM  SYSDSN

MIN FE30D0   NMIN 00FE3180   PMIN 00000000   FQEL 00FFF440   LQEL 00FFF440   FLID 24800000   NM SYS21058.T014448.RA000.M
             NQEL 00000000   PQEL 00000000   TCB  009BC7B0   FLID 2800000A   SVRB 009BE5F0   CNT 00010000

MIN FE3180   NMIN 00FE3408   PMIN 00FE30D0   FQEL 00FFF3B0   LQEL 00FFF3B0   FLID 24800000   NM SYS21058.T014448.RA000.M
             NQEL 00000000   PQEL 00000000   TCB  009BC7B0   FLID 2800000A   SVRB 009BE5F0   CNT 00010000

MIN FE3408   NMIN 00FE3690   PMIN 00FE3180   FQEL 00FFF4D0   LQEL 00FFF4D0   FLID 24800000   NM SYS21058.T014448.RA000.M
             NQEL 00000000   PQEL 00000000   TCB  009BC7B0   FLID 2800000A   SVRB 009BE5F0   CNT 00010000

MIN FE3690   NMIN 00FFEF30   PMIN 00FE3408   FQEL 00FFF4E8   LQEL 00FFF4E8   FLID 24800000   NM SYS21058.T014448.RA000.M
             NQEL 00000000   PQEL 00000000   TCB  009BC7B0   FLID 2800000A   SVRB 009BE5F0   CNT 00010000
```

```
-DEB----------------------------------AT LOCATION  00999610
-----

-8      EXTNSION 00999688 LENGTH    10       AMTYPE    81       TBLOF    0001
+0      TCBADR   0099DA58 NEXTDEB 00000000 IRBADR    08998DB0 PATB     0F000900
+10     USRPG    00000000 RRQ     0099BE68 DCBADR    8F0ACE70 APPADR   00F5BA9C
+20     00001DC8 E2E2C9C2 00240000 D1C5E2F2
+30     00000000 00000000 00000000 00000000
+40     00000000 00000000 E2E2D6C2 00140010
+50     00999634 00000000 0099966C 00180000
+60     00000000 009997B4 00999610 00998DB0
+70     00000000 00000000
```

*** FOR THIS DEB THERE IS NO DCB, THE CONTROL BLOCK POINTED TO BY THE DEB IS AN ACB ***

```
-RTM2WA-------------------------------AT LOCATION  0099D660
 ------

+0      D9E3D4F2 0099D660 FF0003CC 00014008 0099DA58 009BE5F0 00FF9478 800C1000
+20     00000000 00000000 00000000 00000000 0099DA58 009BE5F0 00FE7EA8

-EED TYPE1 REGS AND PSW
+3C     0099C000 800AC030 800A4F7C 000AC010 000A4FFA FFFFFFFF 000A4F98 000000FF
+5C     00000000 000A4EC8 000A4FE0 000AC000 400A5D5C 000ACFB8 00014058 00000000
+7C     078D0000 00000026 00020001 00BBE000
-----
```

```
+8C      00000000 00000000 00000000


-EED TYPE3 MACHINE CHECK
+98      00000000 00000000 00000000 00000000 00000000 00000000 00000000
-----

+B4      40040001 00000000 00000000 00000000 00000000 00000001 00000000 00000000
+D4      00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
+F4      00000000 00000000 0099D760


-SNPPARMS
+100     006C0000 0F40BE00 0099BE68 0099DA58 00000000


-DUMP STORAGE RANGES
+114     00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
-----

+134     E2E8E2E4 C4E4D4D7 00000000 0099DA58 0099D7B4 0099D7B8 0099D7BC 0099D7C0
+154     00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000


-SUBFUNCTION REGISTER SAVE AREA
+174     00000000 00000000 00000000 40E0A3CE 00E07C48 0000C872 0099D660 00FE7EA8
+194     00E0AB7B 0099DA58 009BE5F0 40E09B7C 00000000 0099D660 0099DA58 00000000
+1B4     00000000 0099DA58
-----

+1BC     00000000 00FA0000 00000000 00000000 00080000 00000000 00000000 E0100000
+1DC     00000000 00E08E72 00E0A3FA 00E0AF36 00E04DEA 00000800


-RECURSION REGISTERS
+1F4     000001A0 00999E60 0098B048 0080E600 0099DA58 00E08C69 40E07C6A 0099D660
+214     0099BE68 00000000 0098B048 0099BEC0 0099DBF0 0099D7D4 00000000 00000000


-SAVE AREA FOR VTRT2
+234     00000000 00000000 00000000 40E04B62 00E09B60 0000C872 0099D9C8 00FE7EA8
+254     00014008 0099DA58 009BE5F0 40E04020 009BE650 0099D660 00FF9478 00000000
+274     0099D9C8 00000000


-SAVE AREA FOR TAS2/TAS3
+27C     00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
+29C     00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
+2BC     00000000 00000000
-----

+2C4     0099D928


-RMPL
+2C8     8000000A 00FF9478 0099DA58 00000000 0099D940 00000000


-WORK AREA FOR RESOURCE MANAGER
+2E0     FF030100 0099D94C 0099D954 E2E8E2C9 C5C1F0F1 C9C5C100 00039960 00000C5C
+300     00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000


-SAVE AREA FOR RESOURCE MANAGER
+320     00000000 0099D7D4 0099AF58 50E07FB0 00E97B70 00000198 0099BEC4 0098B048
```

```
+340    0080E600 0099DA58 00E08C69 40E07C6A 0099D660 0099BE68 00000000 0098B048
+360    0099BEC4 0099DBF0

+368    C8720000 000A0000 F5A10000 00000000 00000000 00000000 00000000 00000000
+388    00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
+3A8    00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
+3C8    00000000
```

                              RTM2WA SUMMARY

+1C   COMPLETION CODE   800C1000
+8C   ABENDING PROGRAM NAME   N/A
+94   ABENDING PROGRAM ADDR   00000000

+3C   REGS AT TIME OF ERROR   0099C000 800AC030 800A4F7C 000AC010 000A4FFA FFFFFFFF 000A4F98 000000FF   (0-7)
+5C   00000000 000A4EC8 000A4FE0 000AC000 400A5D5C 000ACFB8 00014058 00000000   (8-F)
+7C   EC PSW AT TIME OF ERROR 078D0000 00000026 00020001 00BBE000
+DC   SDWACOMP   00000000

+E8   RETURN CODE FROM RECOVERY ROUTINE-00,CONTINUE WITH TERMINATION-IMPLIES PERCOLATION
+E0   RETRY ADDR RETURNED FROM RECOVERY EXIT 00000000
+E4   RB ADDR FOR RETRY   00000000

+C   CVT ADDR   00014008
+38   RTCT ADDR   00FE7EA8
+C8   SCB ADDR   00000001
+D4   SDWA ADDR   00000000
+14   SVRB ADDR   009BE5F0
+16C   PREV RTM2WA FOR THE TASK   00000000
+170   PREV RTM2WA FOR RECURSION   00000000

+B8   ASID OF ERROR IF CROSS MEMORY ABTERM   0000
+36C   ERROR ASID   000A

+37C   CURRENT TRACE ENTRY FOR SAVED TRACE TABLE 00000000
+380   FIRST TRACE ENTRY FOR SAVED TRACE TABLE   00000000
+384   LAST TRACE ENTRY FOR SAVED TRACE TABLE   00000000

                         RTM2WA BIT FLAG SUMMARY

+2C8   TASK TERMINATION
        ABNORMAL TERMINATION
+B4   PROGRAM CHECK
+B5   ENABLED RB IN CONTROL AT ERROR
+B7   ERROR ID INFORMATION AVAILABLE

              ESA BIT FLAG SUMMARY (RTM1 RELATED INFORMATION) FROM SVRB AT 009BE5F0

+88   RTM2 ENTERED VIA ABTERM
+8A   RTM1 ENTERED FOR PROGRAM CHECK
+8B   SYSTEM STATE: TASK MODE

-STAE CONTROL BLOCK------------------------AT LOCATION 009BCA90

+0   NEXTSCB 00000000 USEREXIT 00DB1090 PARMLIST 1699D384 TCB/RB 039BE6E0 SCBDATA 4000DB00

                            SCB BIT FLAG SUMMARY

+8   ALLOW ASYNCHRONOUS INTERRUPTS
        BYPASS I/O INTERVENTION
        ESTAE INDICATOR ON
+C   USER IN KEY 0-7
        USER IN SUPERVISOR STATE

-STAE CONTROL BLOCK------------------------AT LOCATION 009BE2E0

+0   NEXTSCB 009BCA90 USEREXIT 000AE002 PARMLIST 169969C8 TCB/RB 039BE6E0 SCBDATA 0000DB00

                            SCB BIT FLAG SUMMARY

+8   ALLOW ASYNCHRONOUS INTERRUPTS
        BYPASS I/O INTERVENTION
        ESTAE INDICATOR ON
+C   USER IN KEY 0-7
        USER IN SUPERVISOR STATE

SAVE AREA TRACE

INTERRUPT AT 000026
NO ACDEB AND ASSOCIATED RDT AND FMCBS

ADDRESS FOR CRA   NOT AVAILABLE

VSAM JSCBSHR 9BC920 000004

9BC920   00000000   *....   *

NO VSAM VGTT CHAIN PRESENT FOR THIS ASCB

END OF VSAM DATA

REGS AT ENTRY TO ABEND

```
       FLTR 0-6      0000000000000000      0000000000000000          0000000000000000      0000000000000000

       REGS 0-7      0099C000    800AC030    800A4F7C    000AC010        000A4FFA    FFFFFFFF    000A4F98    000000FF
       REGS 8-15     00000000    000A4EC8    000A4FE0    000AC000        400A5D5C    000ACFB8    00014058    00000000

ACTIVE LOAD MODULES

LPA/JPA MODULE      **GO
0AC000    5C5CC7D6 40404040 00000000 00000000    90ECD00C 4510F01A 00110000 E2A38199    ***GO      ..........}...0.....Star*
0AC020    A3409799 A3948195 84000A23 4510F024    8F0AC3BC 0A130700 4510F038 000B0000    *t prtmand.....0...C........0.....*
0AC040    C3D9C4C9 D5C9E300 0A236800 F2786B00    F2706820 F2686B20 F2602D02 4510F05C    *CRDINIT.....2.,.2...2.,.2-....0**
0AC060    000C0000 C3819383 85844094 0A236000    F2686820 F2602C02 6B00F270 6000F260    *....Calced m..-.2-..,.2-.2-*
0AC080    4510F080 000C0000 C3819383 85844082    0A230700 4510F092 000A0000 E740C995    *..0.....Calced b......0k...X In*
0AC0A0    89A30A23 4510F0A4 000B0000 C3D9C4C9    D5C9E300 0A236800 F2986B00 F2906820    *it....0u...CRDINIT.....2q,.2...*
0AC0C0    F2886B20 F2802D02 4510F0C8 000C0000    C3819383 85844094 0A236000 F2886820    *2h,.2.....0H....Calced m..-.2h..*
0AC0E0    F2802C02 6B00F290 6000F280 4510F0EC    000C0000 C3819383 85844082 0A230700    *2...,.2.-.2...0.....Calced b....*
0AC100    4510F0FE 000A0000 E840C995 89A30A23    4510F11A 00160000 D799A394 81958440    *..0.....Y Init....1.....Prtmand *
0AC120    C186A385 9940D697 85950A23 6800F2A8    6C00F288 6A00F280 28406800 F2A06C00    *After Open....2y%.2|.2.. ..2.%.0
0AC140    F2686A00 F2602824 5840F2CC 5B40F300    6000F2D8 6020F2E0 6800F2E8 6820F2F0    *2.|.2-... 2.$ 3.-.2Q-.2\..2Y..20*
0AC160    6840F2D8 6860F2E0 6040F318 6060F320    28402362 2C042C26 2B022824 2C266840    *. 2Q.-2\- 3.--3.......... *
0AC180    F3282C24 6840F318 6860F320 2A042A26    6000F2E8 6020F2F0 28042C04 28242C24    *3.... 3..-3.....-.2Y-.20........*
0AC1A0    2A026900 F2F84720 F1B65800 F3005B00    F3084780 F1AE5000 F30047F0 F1485800    *....28..1...3.$.3...1.&.3..01...*
0AC1C0    F30847F0 F1BA5800 F3105900 F4104780    F1DE5810 F4185820 F4184310 F2D45820    *3..01...3...4...1...4...4...2M..*
0AC1E0    F2C04130 F3284212 000347F0 F1F65810    F4185820 F4184310 F2D05820 F2C04130    *2{..3......016..4...4...2}..2{..*
0AC200    F3284212 00035800 F2C05A00 F2C45000    F2C04740 F2166800 F2A06A00 F2B06000    *3.......2{!.2D&.2{. 2...2.|.2.-.*
0AC220    F2A047F0 F11C4110 F3AC4100 F32858F0    103005EF 5800F2C8 5000F2C0 6800F2B8    *2..01...3...3..0......2H&.2{..2.*
0AC240    6000F2A0 6800F2A8 6A00F2B0 6000F2A8    4740F248 47F0F11C 4510F250 800AC3BC    *-.2...2y|.2.-.2y. 2..01...2&..C.*
0AC260    0A1498EC D00C41F0 000007FE 00000000    00000000 00000000 42780000 00000000    *..q.}..0....................*
0AC280    C1200000 00000000 41200000 00000000    00000000 00000000 425A0000 00000000    *A.......................!.....*
0AC2A0    C1200000 00000000 41200000 00000000    00000000 00000000 00000000 00000000    *A.............................*
0AC2C0    41100000 00000000 00000000 00000000    00000000 0000001C 0000000C 0000100C    *.............................*
0AC2E0    40404040 7B7B7B7B 00000000 00000000    00000000 00000000 00000000 00000000    *    ####......................*
0AC300    00000000 00000000 41400000 00000000    00000000 0000001C 0000000C 00000000    *.............................*
0AC320    00000000 00000000 41200000 00000000    41200000 00000000 00000000 00000000    *.............................*
0AC340    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *.............................*
          LINES 0AC360-0AC3A0 SAME AS ABOVE
0AC3C0    00000000 00000000 00000000 00000000    00000001 00004000 00000001 00000001    *.............................*
0AC3E0    82000000 E2E8E2D3 D6E4E340 02000050    00000001 00000001 00000000 00000000    *b...SYSLOUT ...&...............*
0AC400    00000001 00000001 00000001 00000078    00000001 00000000 00000001 00000000    *.............................*
0AC420    00000000 00000000 00000000 00000000                                           *...............       *

LPA/JPA MODULE      IGG019DK
F99000    00F99018 00F99028 00F9903A 00F9904C    00F9906C 00F9905A 90ECD00C 18715880    *.9...9...9...9.<.9.%.9.!..}.....*
F99020    70081F66 47F0F05E 90ECD00C 18715880    70084160 000447F0 F04E90EC D00C1871    *.....00;..}.........-...00+..}...*
F99040    58807008 41600008 47F0F03C 90ECD00C    18814160 000C47F0 F02A47F0 F01290EC    *.....-...00...}..a.-...00..00...*
F99060    D00C1881 41600014 47F0F01C 90ECD00C    18814160 001005B0 58408044 50D04078    *}..a.-...00...}..a.-...... ..&} .*
F99080    41D04074 412040C0 41C0B694 1E6C5860    600007F6 50702054 910240DE 4770B032    *.} ... {.{.m.%.0--..6&...j. ......*
F990A0    1FCC50C0 700047F0 B03CD203 7000B6BC    47F0B5FE 58C0700C 50C02020 91408024    *..&{..0..K......0...{..&{..j ..*
F990C0    47E0B060 91808024 4770B060 4AC0B6B0    50C02020 47F0B0AA 91108024 47E0B084    *.\.-j.......-Ö{..&{...0..j....\.d*
F990E0    1FFFBFF3 803E1FEE 1FCCBFC3 80521DEC    50F04134 50F04148 47F0B0B0 91C08024    *...3.......C....&0..&0....0..j{..*
F99100    47E0B0AA 91807004 47E0B0A2 1FCCBFC3    803E50C0 203447F0 B0AA48C0 700650C0    *.\..j....\.s...C..&{...0...{..&{*
F99120    2034D203 4134B6B4 18124100 000058F1    001858FF 000805EF 12FF4770 B0F69180    *..K...............1...........6j.*
F99140    802447E0 B0EE9140 80244770 B0EED503    20302034 4780B0EE 9208200D D200200F    *...\..j ......N..........k...K...*
F99160    B6DE47F0 B0F6927F 700047F0 B10C9508    200D4770 B5D4D500 200FB6D4 4780B660    *...0.6k"...0..n......MN....M...-*
F99180    47F0B5D4 91408024 47E0B15A 91808024    4770B15A 58C02020 41A00004 58902030    *.0.Mj ...\.!j......!.{..........*
```

```
F991A0    18691E6A 185C5E50 B6B84060 50001F55    06C006C0 4050C000 58C0700C 1E6A4060    *....|.*;&.. -&.....{.{ &{..{...| -*
F991C0    C0004050 C0024A90 B6B05090 203047F0    B19658C0 413406C0 50C04134 12CC4780    *{. &{.Ö...&.....0.o.{...{&{......*
F991E0    B196BFC3 80524770 B1841FCC BFC3803E    5EC02020 50C02020 47F0B0B0 1FCCBFC3    *.o.C.....d...C..;{..&{...0.....C*
F99200    80525EC0 202050C0 202047F0 B0B09180    802447E0 B1B69140 80244770 B1B69110    *..;{..&{...0..j....\..j ......j.*
F99220    802447E0 B1B69501 80484720 B2129180    802447E0 B1DE9140 80244770 B1DE9110    *...\...n........j....\..j ......j.*
F99240    802447E0 B1DE58F0 20305CE0 413440F0    700247F0 B1EC1FCC BFC3803E 5FC02030    *..\...0..*\.. 0...0....C..^{..*
F99260    40C07002 D5017002 B7CB47B0 B1FCD201    7002B7CB 1FCCBFC3 700250C0 401441C0    * {..N........K........C..&{ ..{*
F99280    400850C0 701047F0 B5FE58F0 20305CE0    413440F0 700258C0 401458C0 C00050C0    * .&{..0...0..*\.. 0...{ ..{{.&{*
F992A0    401450F0 C01441C0 C00850C0 701047F0    B5FE1FCC 50C07000 D2032020 700C5070    * .&0{..{{.&{...0....&{..K......&.*
F992C0    205491C0 802447E0 B2749180 700447E0    B2681FCC BFC3803E 50C02030 47F0B460    *..j{...\..j....\......C..&{...0.-*
F992E0    48C07006 50C02030 47F0B460 91808024    47E0B2AE 91408024 4770B2AE 1FCCBFC3    *.{..&{...0.-j....\..j .........C*
F99300    803E50C0 20309110 802447E0 B4601FAA    BFA38052 50A02030 18FC1FEE 1DEA50F0    *..&{..j....\.-...t..&........&0*
F99320    413447F0 B4669140 802447E0 B4049180    80244770 B4049108 802447E0 B40458C0    *...0..j ...\..j........j.....\...{*
F99340    700C1FAA BFA3803E 49A0C000 4740B608    41C00008 5EC02020 50C02020 911040BE    *.....t..{.. ..{...;{..&{..j. .*
F99360    4770B2F2 D2034140 413C94EF 40BE58C0    20204BC0 B6B050C0 413858C0 20205EC0    *...2K.. ..m. ..{...{..&{...{..;{*
F99380    B6B848C0 C0004BC0 B6AE50C0 413458A0    41405890 413C5E90 413019A9 4780B364    *...{{..{..&{.....;....z....*
F993A0    1ECA180C 190947D0 B3381F9A 50904134    58E02020 180B58F0 413418BF 58A04140    *.......}....&....\......0...... *
F993C0    0EAE18B0 180058C0 413458A0 41401EAC    50A04140 5EC02030 50C02030 58C02020    *.......{..... ..&.. ;{..&{...{..*
F993E0    18AC5EA0 B6B84800 A0001E0C 58A0700C    48A0A000 5EA04138 4AA0B6AE 190A4770    *..;................;...Ö......*
F99400    B3B818AC 06A006A0 9500A000 4780B3A4    06C006C0 9502C000 4770B3AC 960840BE    *........n......u.{.{n.{.....o. .*
F99420    47F0B3E4 961040BE 927F7000 47F0B5FE    58C02020 18AC5EA0 B6B848A0 A0001EAC    *.0.Uo. .k"..0...{....;.......*
F99440    180A58C0 700C48C0 C0005EC0 41384AC0    B6AE190C 4720B608 50A04140 D2032020    *...{...{{.;{..Ö{.......&.. K...*
F99460    413C47F0 B466D203 20204140 1FCC50C0    2030D203 4140413C 47F0B302 91408024    *...0..K.... ..&{..K. ...0..j ..*
F99480    47E0B456 91808024 4770B456 58C0700C    48C0C000 1FAABFA3 803E19CA 4720B608    *.\..j.........{...{{....t.......*
F994A0    41A00008 5EA02020 50A02020 41900004    5EA0B6B8 48A0A000 186A1F69 50602030    *.....;..&.......;.......|..&-..*
F994C0    50A04134 1FC950C0 414447F0 B4661FCC    BFC3803E 50C02030 D2034134 B6B49104    *&....I&{...0.....C..&{..K.....j.*
F994E0    802447E0 B4769102 80244780 B4869102    802447E0 B4A09104 80244770 B4A058C0    *...\..j.....fj....\..j........{*
F99500    202050C0 20145EC0 B6B450C0 202058C0    203006C0 50C02030 18124100 000158F1    *..&{..;{..&{...{...{&{.........1*
F99520    001858FF 000805EF 12FF4780 B4C49241    7000D200 7001B6CA 47F0B5FE 927F7000    *............Dk...K......0..k"..*
F99540    91408024 47E0B4F6 91808024 4770B4F6    91088024 47E0B4F6 1FCC50C0 20309108    *j ...\.6j......6j....\.6..&{..j.*
F99560    40BE47E0 B3EE94F7 40BE47F0 B5FE9140    802447E0 B5429180 80244770 B54258C0    * ..\..m7 ..0..j ...\..j........{*
F99580    41445FC0 413450C0 414412CC 47D0B5FE    41C00004 58A02020 5EA02030 1EAC50A0    *..^{..&{.....}...{......;.....&.*
F995A0    20205EA0 B6B848A0 A00013CC 1ECA50C0    203050A0 413447F0 B46658C0 413406C0    *..;..........&{..&....0...{...{*
F995C0    50C04134 12CC4780 B5B4BFC3 80524770    B56C1FCC BFC3803E 5EC02020 50C02020    *&{........C..%.0..C..;{..&{..*
F995E0    47F0B57A 1FCCBFC3 80525EC0 202050C0    20209104 802447E0 B58A9102 80244780    *.0.:..C..;{..&{..j....\..j.....*
F99600    B59A9102 802447E0 B4669104 80244770    B46658C0 202006C0 50C02020 41C00001    *..j.....\..j.........{..{&{...{..*
F99620    5EC02030 50C02030 47F0B466 47F0B5FE    957F7000 4780B5FE 4100406C 1B110A08    *;{..&{...0...0..n"........ %.0...*
F99640    18F01812 05EF4100 406C0A09 92417000    9508200D 4770B5F4 D500200F B6DE4770    *.0...... %.0.k...n......4N.......*
F99660    B5F4D200 7001B6C8 47F0B196 D2007001    B6C947F0 B19658D0 407898EC D00C07FE    *.4K....H.0.oK....I.0.o.} .q.}...*
F99680    41180000 410000CC 11110A37 47F0B5FE    58C04078 D203C018 204047F0 B5FE9160    *............0...{ .K.{.. .0..j-*
F996A0    802B4780 B6369602 40BE47F0 B5FE5000    20241850 D2032040 500041C0 203C50C0    *....o. .0..&...&K.. &..{..&{*
F996C0    202412FF 4780B658 960240BE 47F0B5FE    94FD40BE 47F0B5FE 91808024 47E0B68A    *.......o. .0..m. .0..j....\..*
F996E0    91408024 4770B68A 91108024 47E0B68A    D5034148 41344780 B68A927F 700047F0    *j ......j....\..N........k"...0*
F99700    B1969242 700047F0 B1960000 00F99094    00F992B2 00F99630 00F99676 00F99690    *.ok....0.o...9.m.9k..9o..9o..9o.*
F99720    00F9969E 07FE0004 000847F0 00000001    FFFFFFFC 41200000 00000008 4770C746    *.9o........0.......G.*
F99740    01020304 080C1014 1C202428 04080C10    14181C20 24282C30 34404448 4C505458    *.......................<&..*
F99760    5C606468 6C707478 84888C90 94989CA4    A8ACB0B4 B8BCC0C4 C8CCD001 02030405    **-..%.0..dh..mq.uy.....{DH.}.....*
F99780    06070809 0A0B0C0D 0E0F1011 12131415    16171819 1A1B1C1D 1E1F2021 22232425    *.............................*
F997A0    26272829 2A2B2C2D 2E2F3031 32333435    36373839 3A3B3C3D 3E3F4041 42434445    *.............................*
F997C0    46474849 4A4B4C4D 4E4F5051 52535455    56575859 5A5B5C5D 5E5F6061 62636465    *....Ö.<(+×&..........!$*);^-/....*
F997E0    66676869 6A6B6C6D 6E6F7071 72737475    76777879 7A7B7C7D 7E7F8081 82838485    *....|.,%_>?.........`.#@'=".abcde*
F99800    86878889 8A8B8C8D 8E8F9091 92939495    96979899 9A9B9C9D 9E9FA0A1 A2A3A4A5    *fghi.......jklmnopqr.......˜stuv*
F99820    A6A7A8A9 DAEEEFF0 F1F2F3F4 F5F6F7F8    F9FAFBFC FDFEFF04 080C1014 18000102    *wxyz...0123456789...............*
F99840    03040500 00404040 40404040 40404040    40404040 40404040 40404040 40404040    *.....                           *
F99860    40404040 40404040 40404040 40404040    40404040 40404040 40404040 40404040    *                                *
          LINE F99880 SAME AS ABOVE
```

```
F998A0    40404040 40404040 40000000 00000000                                           *          .......                 *

SP 000


0A4EC0                      00000000 000A4F98    000C3DE8 FF0A5DEC 000A7750 000A7AA8    *          ......×q...Y..)....&..:y*
0A4EE0    FF0A4FE0 800A4FE6 009B0634 000A4FFA    00000000 000A4F98 00000014 00014008    *..×\..×\......×......×q...... .*
0A4F00    000A4EC8 000A4FE0 009BCE38 400A5D5C    000AC000 00000000 080A4F4C 00000000    *..+H..×\.... .)*..{.......×<....*
0A4F20    0000004E 20000000 00000000 00000000    00000000 00000000 00000000 00000000    *...+............................*
0A4F40    00000000 0000003C 00000000 809BC048    0099DA58 C8C5E6D3 D6C1C440 00000014    *...........<...{...r..HEWLOAD ...*
0A4F60    00000000 00000000 00000000 00000000    000000CA 00000000 800A4F7C 00000000    *.....................×@....*
0A4F80    00000000 00000000 00000000 00000000    00000000 00000000 00000000 00000000    *................................*
0A4FA0    000A4EC8 00014058 000A5D48 009BCBE0    000A4FE0 00000040 009B0634 009B0610    *..+H.. ...)....\..×\... ........*
0A4FC0    009BC7B0 0098B018 FD000000 009BC9F8    809BC710 00000000 009BCE38 40E94B9A    *..G..q.......I8..G......... Z..*
0A4FE0    800A4FE6 00000014 D4C1D76B D7D9C9D5    E36BD5D6 C3C1D3D3 6BD3C5E3 00000000    *..×W....MAP,PRINT,NOCALL,LET....*


0AC780                              065D4040 007D0000 40F0C1F4 C6C3F040                  *                  .)   .'.. 0A4FC0 *
0AC7A0    4040F0F0 F9C2C3F7 C2F040F0 F0F9F8C2    F0F1F840 C6C4F0F0 F0F0F0F0 40F0F0F9    *  009BC7B0 0098B018 FD000000 009*
0AC7C0    C2C3F9C6 F8404040 40F8F0F9 C2C3F7F1    F040F0F0 F0F0F0F0 F0F040F0 F0F9C2C3    *BC9F8    809BC710 00000000 009BC*
0AC7E0    C5F3F840 F4F0C5F9 F4C2F9C1 4040405C    4B4BC74B 4B984B4B 4B4B4B4B 4B4BC9F8    *E38 40E94B9A  *..G..q........I8*
0AC800    4B4BC74B 4B4B4B4B 4B4B4B4B 40E94B4B    5C007D00 0040F0C1 F4C6C5F0 404040F8    *..G....... Z..*.'.. 0A4FE0    8*
0AC820    F0F0C1F4 C6C5F640 F0F0F0F0 F0F0F1F4    40C4F4C3 F1C4F7F6 C240C4F7 C4F9C3F9    *00A4FE6 00000014 D4C1D76B D7D9C9*
0AC840    C4F54040 4040C5F3 F6C2C4F5 C4F640C3    F3C3F1C4 F3C4F340 F6C2C4F3 C3F5C5F3    *D5    E36BD5D6 C3C1D3D3 6BD3C5E3*
0AC860    40F0F0F0 F0F0F0F0 F0404040 5C4B4B4F    E64B4B4B 4BD4C1D7 6BD7D9C9 D5E36BD5    * 00000000    *..×W....MAP,PRINT,N*
0AC880    D6C3C1D3 D36BD3C5 E34B4B4B 4B5C007D    0000F0F0 C1C3F7F8 F0404040 40404040    *OCALL,LET....*.'..00AC780        *
0AC8A0    40404040 40404040 40404040 40404040    40404040 40404040 40404040 40404040    *                                *
0AC8C0    404040F0 F6F5C4F4 F0F4F040 F0F0F7C4    F0F0F0F0 40F4F0C6 F0C3F1C6 F440C3F6    *   065D4040 007D0000 40F0C1F4 C6*
0AC8E0    C3F3C6F0 F4F04040 405C4040 40404040    40404040 40404040 40404B5D 40404B7D    *C3F040    *           .)   .'*
0AC900    4B4B40F0 C1F4C6C3 F0405C00 7D000040    F0C1C3F7 C1F04040 40F4F0F4 F0C6F0C6    *.. 0A4FC0 *.'.. 0AC7A0    4040F0F*
0AC920    F040C6F9 C3F2C3F3 C6F740C3 F2C6F0F4    F0C6F040 C6F0C6F9 C6F8C3F2 40404040    *0 F9C2C3F7 C2F040F0 F0F9F8C2    *
0AC940    C6F0C6F1 C6F8F4F0 40C3F6C3 F4C6F0C6    F040C6F0 C6F0C6F0 C6F040F4 F0C6F0C6    *F0F1F840 C6C4F0F0 F0F0F0F0 40F0F*
0AC960    F0C3F640 40405CC6 F0C6F1C6 F8F4F040    C3F6C3F4 C6F0C6F0 40C6F0C6 F0C6F0C6    *0C6   *F0F1F840 C6C4F0F0 F0F0F0F*
0AC980    F040F4F0 C6F0C65C 007D0000 40F0C1C3    F9F6F040 4040C6F0 C3F3C6F6 F4F040F4    *0 40F0F*.'.. 0AC960   F0C3F640 4*
0AC9A0    F0F4F0F5 C3C3F640 C6F0C3F6 C6F1C3F6    40C6F8C6 F4C6F0F4 F0404040 40C3F6C3F6    *0405CC6 F0C6F1C6 F8F4F040    C3F*
0AC9C0    F6C3F3C6 F440C3F6 C6F0C3F6 C6F040F4    F0C3F6C6 F0C3F640 C6F0C3F6 C6F0C6F0    *6C3F4 C6F0C6F0 40C6F0C6 F0C6F0C6*
0AC9E0    4040405C F0C3F640 40405CC6 F0C6F1C6    F8F4F040 C3F6C3F4 C6F0C6F0 40C6F0C6    *   *0C6   *F0F1F840 C6C4F0F0 F0F*
0ACA00    F0C6F0C6 5C007D00 0040F0C1 C3F9F8F0    404040C6 F0F4F0C6 F4C6F040 C3F6C6F0    *0F0F*.'.. 0AC980   F040F4F0 C6F0*
0ACA20    C3F6F5C3 40F0F0F7 C4F0F0F0 F040F4F0    C6F0C3F1 C3F34040 4040C6F9 C6F6C6F0    *C65C 007D0000 40F0C1C3    F9F6F0*
0ACA40    F4F040F4 F0F4F0C3 F6C6F040 C3F3C6F3    C3F6C6F6 40C6F4C6 F0F4F0C6 F4404040    *40 4040C6F0 C3F3C6F6 F4F040F4  *
0ACA60    5CF040F4 F0C6F0C6 5C4B7D4B 4B40F0C1    C3F9F6F0 404040C6 F0C3F3C6 F6F4F040    **0 40F0F*.'.. 0AC960   F0C3F640 *
0ACA80    F45C007D 000040F0 C1C3F9C1 F0404040    C6F0C6F4 C6F0C6F5 40C3F3C3 F3C6F6F4    *4*.'.. 0AC9A0   F0F4F0F5 C3C3F64*
0ACAA0    F040C3F6 C6F0C3F3 C6F640C3 F6C6F1C3    F3C6F640 404040F4 F0C3F6F6 F8C3F640    *0 C6F0C3F6 40C6F0C6F0 F8C3F6C6 *
0ACAC0    C6F4C3F6 C6F0C6F4 40C6F0F4 F0F4F0F4    F040F4F0 C3F3C6F3 C3F64040 405CF0F4    *F4C6F0F4 F0404040 40C3F3C6    *04*
0ACAE0    F0F5C3C3 F640C6F0 C3F6C6F1 C3F640C6    F8C6F4C6 F0F4F040 404040C3 F3C65C00    *05CC6 F0C6F1C6 F8F4F040    C3F*.*
0ACB00    7D000040 F0C1C3F9 C3F04040 40C6F6C3    F3C6F3C3 F640C6F4 F4F0C3F3 C6F640C3    *'.. 0AC9C0   F6C3F3C6 F440C3F6 C*
0ACB20    F6C6F0C3 F3C6F640 C3F6C6F0 F4F0C6F4    40404040 C6F0C3F3 C6F6C3F6 40C6F0C3    *6F0C3F6 C6F040F4    F0C3F6C6 F0C*
0ACB40    F3C6F6F4 F040C3F6 C6F0C3F3 C6F640C3    F6C6F0C3 F3C6F640 40405CF6 C3F3C6F4    *3F640 C6F0C3F6 C6F0C3F6   *6C3F4*
0ACB60    40C3F6C6 F0C3F6C6 F040F4F0 C3F6C6F0    C3F640C6 F0C3F6C6 F0C3F65C 007D0000    * C6F0C6F0 40C6F0C6 F0C6F0C6*.'..*
0ACB80    40F0C1C3 F9C5F040 4040F4F0 F4F0F4F0    F5C340C6 F0C3F3C6 F6F4F040 F4F0F4F0    *.. 0AC9E0   4040405C F0C3F640 4040*
0ACBA0    C6F4C6F0 40C6F4C6 F0C6F4C6 F0404040    40C6F5C3 F3F4F0C3 F640C6F0 C3F3C6F3    *F4F0 F4F0F4F0    F5C340C6 F0C3F3*
0ACBC0    C3F640C6 F6C6F4C6 F0F4F040 C6F4C6F0    C6F4C6F0 4040405C 40F0C1C3 F9C5F040    *C6 F6F4F040 F4F0F4F0    * 0AC9E0 *
0ACBE0    4040F4F0 F4F0F4F0 F5C340C6 F0C3F3C6    F6F4F040 F4F0F4F0 5C007D00 0040F0C1    *   4040405C F0C3F640 4040*.'.. 0A*
0ACC00    C3C2C1F0 404040C3 F6C6F4C3 F6C6F040    F4F0C3F6 C6F4C3F6 40C6F0C3 F6C6F4C3    *CBA0   C6F4C6F0 40C6F4C6 F0C6F4C*
0ACC20    F640C6F0 F4F0F4F0 F4F04040 4040F4F0    C3F6C6F5 C3F340C6 F3C6F4C6 F0C3F340    *6 F0404040    40C6F5C3 F3F4F0C3 *
0ACC40    C6F6F4F0 C3F6C6F0 40C3F3C6 F3C3F6C6    F3404040 5CC6F4C6 F040C6F4 C6F0C6F4    *F640C6F0 C3F3C6F3   *F4F0 F4F0F4*
0ACC60    C6F04040 4040C6F5 C3F3F4F0 C3F640C6    F0C3F3C6 F35C007D 000040F0 C1C3C2C3    *F0    F5C340C6 F0C3F3*.'.. 0ACBC*
0ACC80    F0404040 C3F3C6F6 F4F0C3F6 40C6F6C3    F6C6F4C3 F640C6F0 C6F4C6F0 F4F040C3    *0   C3F640C6 F6C6F4C6 F0F4F040 C*
```

```
0ACCA0   F6C6F4C3 F6C6F040 404040C3 F6C6F4C3   F6C6F040 F4F0F4F0 F4F0F5C3 40F4F0C6   *6F4C6F0    C6F4C6F0 4040405C 40F*
0ACCC0   F0C3F1C3 F340C6F9 C3F5C6F0 F4F04040   405CC3F6 40C6F6C6 F4C6F0F4 F040C6F4   *0C1C3 F9C5F040   *C6 F6F4F040 F4*
0ACCE0   C6F0C6F4 C6F04040 405C40F0 C1C3F9C5   F0405C00 7D000040 F0C1C3C2 C5F04040   *F0F4F0   * 0AC9E0 *.’.. 0ACBE0  *
0ACD00   40F4F0F4 F0C6F4C6 F040C6F4 C6F0C6F4   C6F040C6 F5C3F3F4 F0C3F640 C6F0C3F3   * 4040F4F0 F4F0F4F0 F5C340C6 F0C3*
0ACD20   C6F3C3F6 40404040 C6F6C6F4 C6F0F4F0   40C6F4C6 F0C6F4C6 F040F5C3 F0F0F7C4   *F3C6     F6F4F040 F4F0F4F0 5C007D*
0ACD40   F0F040F0 F0F4F0C6 F0C3F140 40405C40   40F4F0F4 F0F4F0F5 C340C6F0 C3F3C6F6   *00 0040F0C1  * 4040405C F0C3F6*
0ACD60   F4F0F4F0 F4F0F5C3 40C6F0C3 F3C6F65C   007D0000 40F0C1C3 C3F0F040 4040C3F3   *4040405C F0C3F6*.’.. 0ACC00   C3*
0ACD80   C6F0C6F4 C6F040C6 F4C6F0C6 F5C3F340   F4F0C3F6 C6F0C3F3 40C6F3C3 F6C6F6F5   *F0F4F0 F4F0F5C3 40C6F0C3 F3C6F65*
0ACDA0   C3404040 40F0F0F7 C4F0F0F0 F040F4F0   C6F0C3F1 C3F340C3 F3C6F0C6 F0F4F040   *C      007D0000 40F0C1C3 C3F0F040 *
0ACDC0   F4F0F4F0 C3F3C6F3 4040405C F4F0F4F0   F4F0F5C3 40C6F0C3 F3C6F65C 4B7D4B4B   *4040C3F3    *4040405C F0C3F6*.’..*
0ACDE0   40F0C1C3 C3F0F040 4040C3F3 5C003A00   7F000000 00200000 0099BE68 000AC790   * 0ACC00   C3*..."........r....G.*
0ACE00   00000000 007D0000 00000000 0099DE48   00004040 40DB61D8 00F9903A 00000020   *.....’.......r....   ./Q.9......*
0ACE20   000ACDF0 000ACE08 000AC790 000AC794   000ACDF0 00DB6C36 0099D230 00000020   *...0......G...Gm...0..%.0.rK.....*
0ACE40   000ACDF0 00014058 0099D351 50DB6024   000ACE50 40000000 00000000 000ACE54   *...0.. ..rL.&.—....& ...........*
0ACE60   00000000 00000000 00000000 0099BE68   A000004C 00000000 00F5BA9C 52000000   *.............r.....<.....5......*
0ACE80   00000000 00000000 2A540008 00000000   00000000 00000000 00400041 00999610   *........................... ...ro.*
0ACEA0   92000000 000ACD9C 00000000 0660007D   00000000 00000000 00000000 C9C7C7F0   *k............—.’...........IGG0*
0ACEC0   F1F9C1C8 00000000 000ACE08 00000000   50F99528 00000000 00000001 000ACF10   *19AH............&9n.............*
0ACEE0   000ACF10 000AC790 000ACE50 000ACDF0   00000079 000ACDF0 0099BE68 00000004   *......G....&...0...`...0.r......*
0ACF00   0000007D 40F99078 00000078 00000000   0000014C 00000000 40000000 00000200   *...’ 9.............<.... .......*
0ACF20   00000000 000ACD74 000ACE70 00000000   000ACD75 00000000 20000000 00000000   *.......r...r.. ...........*
0ACF40   00000078 00000079 00000000 000000A8   03000004 00000000 000ACF6C 000ACE50   *.......`.......y............%.0..&*
0ACF60   00000000 000ACDF0 00000000 00000000   00000000 00000000 00000000 00000000   *.......0........................*
0ACF80   00000000 0000007D 00000000 00000000   00000000 00000000 00000000 000ACE70   *......’.......................*
0ACFA0   08000000 00000000 04000000 00000000   00000000 00000000 00000000 00000000   *................................*
0ACFC0   00000000 00014058 000AC010 000A4F54   000A4F78 800A4F7C 000AC010 000A4FFA   *...... ...{...×...×...×@..{...×.*
0ACFE0   FFFFFFFF 000A4F98 000000FF 00000000   000A4EC8 000A4FE0 000AC000 400A5D5C   *......×q..........+H..×\..{. .)**
```

DUMP INDEX

END OF DUMP

COMPLETION CODE   USER = 0000

PSW AT ENTRY TO ABEND 078D0000 00000026   ILC 2   INTC 0001

ASCB 00FF9478
```
        +0    ASCB   C1E2C3C2    FWDP   00000000    BWDP   00FE3530    CMSF   00000000    SVRB   009BE7A8    SYNC   00000884
        +18   IOSP   00000000    SPL    00FF9548    CPUS   00000001    IDSQ   000A0007    IODP   000E0076    STOR   0FC34C00
        +30   LDA    009BF548    RSM    00FF9388    CSCB   00FEC010    TSB    00000000    EJST   00000000    XJST   03B90B00
        +48   EWST   D9556F9D    XWST   DC841040    JSTL   0000023C    ECB    809BEE58    UBET   00000000    RESV   00000000
        +60   DUMP   009BE3A0    FW1    FFFF0000    TMCH   00000000    ASXB   009BF300    SWCT   04F90000    SSRB   00000000
        +78   VSC    0000000E    TCBS   00000001    LOCK   00000000    LSQH   00000000    QECB   00000000    MECB   40000000
        +90   OUCB   00FF9878    OUXB   00FF9CA0    FMCT   00290000    XMPQ   00000000    IQEA   00000000    RTWA   00000000
        +A8   MCC    00000000    JBNI   00FE3110    JBNS   00FEC020    SRQ    00000000    VGTT   00000000    PCTT   00000000
        +C0   SMCT   00000007    SWTL   00000D69    SRBT   00000000    ATME   00CD9480
```

TCB 99DCF8
```
        +0    RBP    009BC048    PIE    00000000    DEB    00000000    TIO 0098B020    CMP    00000000    TRN    00000000
        +18   MSS    009BC4F0    PK-FLG 80000000    FLG    8000FFFF    LLS    00000000    JLB    00000000    JPQ    0099DBA0
              RG 0-7    00000001    000A4F4C    800A4F7C    000AC010    000A4FFA    FFFFFFFF    000A4F98    000000FF
              RG 8-15   00000000    000A4EC8    000A4FE0    000AC000    400A5D5C    000A4EC8    0000004E    60017A40
        +70   FSA    000A4F98    TCB    0099DA58    TME    00000000    JST 0099DCF8    NTC    00000000    OTC 009BC7B0
        +88   LTC    0099DA58    IQE    00000000    ECB    009BCA1C    TSF    00000000    D-PQE 009BF548    AQE 0099DA30
        +A0   STAB   00000000    TCT    809BC710    USER   00000000    SDF    00000000    MDID   00000000    JSCB 009BC85C
        +B8   RESV   00000000    IOBRC  00000000    XCPD   00000000    EXT    00000000    BITS   00000000    DAR    00000000
        +D0   EXT2   0099DE20    AECB   00000000    TIRB   00000000    BAK 009BC7B0    RTMWA  00000000    IOTM 00000000
        +E8   TMSAV  00000000    ABCR   00000000    XSCT   00000040    FOE    00000000    SWA    009BC340    STAW   00000000
        +100  BID    E3C3C240    RTM1   00000000    ESTA   00000000    UKY 009BC450    CPVI   0000FFFF    BYT1 00040000
        +118  RPT    00000000    DBTB   00000000    SWAS 009B9F50    SCB    00000000    RESV   00000000    RESV 00000000
        EXT2  GTF    00000000    SVAB   00000000    EVNT   00000000    RES    00000000    RESV   00000000    RESV 00000000
```


ACTIVE RBS

PRB 9BC048 RESV 00000000   RESV 00000000   RTPSW1 00000000   00000000   RTPSW2 00000000   00000000
```
             FLG1  40000000   WC-L-IC 00020001
             RESV  00000000   APSW    00000000   SZ-STAB 00110082        FL-CDE 009BCDF0  PSW 078D1000   000A5ED8
             Q/TTR 00000000   WT-LNK  0199DCF8
             RG 0-7   009BCBE0    000A4FE0    00000040    009B0634    009B0610    009BC7B0    0098B018    FD000000
             RG 8-15  009BC9F8    809BC710    00000000    009BCE38    40E94B9A    000A4F98    40E94F36    009BCA28
```


CDE

    9BCDF0   NCDE 00000000   RBP 009BC048 NM LOADER   EPA 000A5D48   XL/MJ 009BE4F8   USE 00010000   ATTR 0B22000

XL   LN   ADR   LN   ADR   LN   ADR

    9BE4F8   SZ 00000010   NO 00000001   800002B8   000A5D48

TIOT 98B020   JOB MANASM   STEP   GO

```
        OFFSET    LN-STA      DDNAME      TTR-ST      STB-UC
        + 0018    14010100    SYSLIN      99FB8000    90002B48
        + 002C    14010102    SYSLOUT     99F7C000    80000000
        + 0040    14010102    SYSUDUMP    99F64000    80000000


VSM
   SPQE  009BC4F0 NSPQE 009BC410  DQE 00000000  FL/RS 2000  SPID  078  KEY 8

   SPQE  009BC410 NSPQE 009BC400  DQE 00000000  FL/RS 0000  SPID  252  KEY 0

   SPQE  009BC400 NSPQE 009BF060  DQE 009BF438  FL/RS 0000  SPID  251  KEY 8
DQE 9BF438 FQE 9BC510  NDQE 000000  BLK 000A5000  LN 00001000  FQE 9BC510  FQE 80000000  LN 00000D48  AREA 000A5D48
   SPQE  009BF060 NSPQE 00000000  DQE 009BF100  FL/RS C000  SPID  000  KEY 8
   SPQE  009BF100 NSPQE 00000000  DQE 009BC520  FL/RS 6000  SPID  000  KEY 8
DQE 9BC520 FQE 9BC4A0  NDQE 9BC480  BLK 000A4000  LN 00001000  FQE 9BC4A0  FQE 80000000  LN 00000EC8  AREA 000A4EC8
DQE 9BC480 FQE 9BC4D0  NDQE 000000  BLK 000AC000  LN 00001000  FQE 9BC4D0  FQE 80000000  LN 00000360  AREA 000AC790


D-PQE  9BF548      FIRST 009BF418

PQE  9BF418   FFB 009BC420  LFB 009BC350  NPQ 00000000   PPQ 00000000
              TCB 009BC7B0  RSI 0091C000  RAD 000A4000   FLG 00000000
FBQE 9BC420   NFB 009BC3D0  PFB 009BF418  SZ  00006000   AREA 000A6000
FBQE 9BC3D0   NFB 009BC350  PFB 009BC420  SZ  008DE000   AREA 000AD000
FBQE 9BC350   NFB 009BF418  PFB 009BC3D0  SZ  00001000   AREA 00994000
                        ***TCB SUMMARY***
                        -----------
TCB AT 9BD148   CMP 00000000   PKF-FLG 00000080   DSP 0000FFFF   SDY 00000000   RTM 00000000   FBYT 00000000
TCB AT 9BE3A0   CMP 00000000   PKF-FLG 00000080   DSP 0000FFFF   SDY 00000000   RTM 00000000   FBYT 00040000
TCB AT 9BE150   CMP 00000000   PKF-FLG 00000080   DSP 0000FFFF   SDY 00000000   RTM 00000000   FBYT 00040000
TCB AT 9BC7B0   CMP 00000000   PKF-FLG 80000000   DSP 0000FFFF   SDY 00000000   RTM 00000000   FBYT 00040000
TCB AT 99DCF8   CMP 00000000   PKF-FLG 80000000   DSP 8000FFFF   SDY 00000000   RTM 00000000   FBYT 00040000
TCB AT 99DA58   CMP 900C1000   PKF-FLG 80030000   DSP 0000FFFF   SDY 00000000   RTM 0099D660   FBYT 08000000

QCB TRACE

MAJ FFF3F8   NMAJ 00FFF398  PMAJ 00000000  FMIN 00FFF470   LMIN 00FFF470   NM  SYSIEA01

MIN FFF470   NMIN 00000000  PMIN 00000000  FQEL 00FFF488   LQEL 00FFF488   FLID 0320000A   NM IEA
             NQEL 00000000  PQEL 00000000  TCB  0099DA58   FLID 2800000A   SVRB 009BE6E0   CNT 00010000

MAJ FFF338   NMAJ 00000000  PMAJ 00FFF398  FMIN 00FE30D0   LMIN 00FFEF08   NM  SYSDSN

MIN FE30D0   NMIN 00FE3180  PMIN 00000000  FQEL 00FFF440   LQEL 00FFF440   FLID 24800000   NM SYS21058.T014448.RA000.M
             NQEL 00000000  PQEL 00000000  TCB  009BC7B0   FLID 2800000A   SVRB 009BE5F0   CNT 00010000

MIN FE3180   NMIN 00FE3408  PMIN 00FE30D0  FQEL 00FFF3B0   LQEL 00FFF3B0   FLID 24800000   NM SYS21058.T014448.RA000.M
             NQEL 00000000  PQEL 00000000  TCB  009BC7B0   FLID 2800000A   SVRB 009BE5F0   CNT 00010000

MIN FE3408   NMIN 00FE3690  PMIN 00FE3180  FQEL 00FFF4D0   LQEL 00FFF4D0   FLID 24800000   NM SYS21058.T014448.RA000.M
             NQEL 00000000  PQEL 00000000  TCB  009BC7B0   FLID 2800000A   SVRB 009BE5F0   CNT 00010000

MIN FE3690   NMIN 00FFEF30  PMIN 00FE3408  FQEL 00FFF4E8   LQEL 00FFF4E8   FLID 24800000   NM SYS21058.T014448.RA000.M
             NQEL 00000000  PQEL 00000000  TCB  009BC7B0   FLID 2800000A   SVRB 009BE5F0   CNT 00010000
```

SAVE AREA TRACE

LOADER   WAS ENTERED VIA LINK   AT EP HEWLCTRL

SA   0A4F98 WD1 00000000   HSA 00000000   LSA 000A4EC8   RET 00014058   EPA 000A5D48   R0   009BCBE0
              R1 000A4FE0   R2 00000040   R3 009B0634   R4 009B0610   R5 009BC7B0   R6 0098B018
              R7 FD000000   R8 009BC9F8   R9 809BC710   R10 00000000   R11 009BCE38   R12 40E94B9A

SA   0A4EC8 WD1 00000000   HSA 000A4F98   LSA 000C3DE8   RET FF0A5DEC   EPA 000A7750   R0   000A7AA8
              R1 FF0A4FE0   R2 800A4FE6   R3 009B0634   R4 000A4FFA   R5 00000000   R6 000A4F98
              R7 00000014   R8 00014008   R9 000A4EC8   R10 000A4FE0   R11 009BCE38   R12 400A5D5C

INTERRUPT AT 0A5ED8
NO ACDEB AND ASSOCIATED RDT AND FMCBS

ADDRESS FOR CRA   NOT AVAILABLE

VSAM JSCBSHR 9BC920 000004

9BC920   00000000   *....   *

NO VSAM VGTT CHAIN PRESENT FOR THIS ASCB

END OF VSAM DATA

REGS AT ENTRY TO SNAP

     FLTR 0-6   0000000000000000   0000000000000000   0000000000000000   0000000000000000

     REGS 0-7   00000001   000A4F4C   800A4F7C   000AC010   000A4FFA   FFFFFFFF   000A4F98   000000FF
     REGS 8-15   00000000   000A4EC8   000A4FE0   000AC000   400A5D5C   000A4EC8   0000004E   60017A40

                        DUMP INDEX

        DATA AREAS   PAGE NUMBER
        ----------   -----------

        DEBS.................................... 0002
        RTM CONTROL BLOCKS..................... 0003
        SAVE AREAS............................. 0003
        INSTALLATION/SUBSYSTEM AREAS........... 0003
        REGISTERS.............................. 0003

END OF DUMP

```
        MM        MM  AAAAAAAAAA  NN          NN  AAAAAAAAAA  SSSSSSSSSS  MM          MM
        MMM      MMM  AAAAAAAAAAAA  NNN        NN  AAAAAAAAAAAA  SSSSSSSSSSSS  MMM        MMM
        MMMM    MMMM  AA        AA  NNNN      NN  AA        AA  SS            MMMM      MMMM
        MM MM  MM MM  AA        AA  NN NN    NN  AA        AA  SS            MM MM    MM MM
        MM  MMMM  MM  AA        AA  NN  NN    NN  AA        AA  SSS          MM  MMMM  MM
        MM    MM    MM  AAAAAAAAAAAA  NN    NN  NN  AAAAAAAAAAAA  SSSSSSSSS    MM    MM    MM
        MM        MM  AAAAAAAAAAAA  NN    NN NN  AAAAAAAAAAAA  SSSSSSSSS    MM        MM
        MM        MM  AA        AA  NN    NN NN  AA        AA          SSS  MM        MM
        MM        MM  AA        AA  NN    NNNN  AA        AA          SS  MM        MM
        MM        MM  AA        AA  NN      NNN  AA        AA  SS        SS  MM        MM
        MM        MM  AA        AA  NN      NN  AA        AA  SSSSSSSSSSSS  MM        MM
        MM        MM  AA        AA  NN        N  AA        AA  SSSSSSSSSS  MM        MM


        JJJJJJJJJJ      11        2222222222    9999999999                              AAAAAAAAAA
        JJJJJJJJJJ      111      222222222222  999999999999                            AAAAAAAAAAAA
                JJ      1111    22        22  99          99                            AA        AA
                JJ      11              22  99          99                            AA        AA
                JJ      11              22  99          99                            AA        AA
                JJ      11            22  999999999999                                AAAAAAAAAAAA
                JJ      11          22  999999999999                                  AAAAAAAAAAAA
                JJ      11        22                  99                              AA        AA
        JJ    JJ      11        22                  99                              AA        AA
        JJ    JJ      11      22          99          99                            AA        AA
        JJJJJJJJ      1111111111  222222222222  999999999999                          AA        AA
        JJJJJJJ      1111111111  222222222222    9999999999                          AA        AA


****A    END    JOB   129   MANASM                              ROOM            1.44.48 AM 27 FEB 21   PRINTER1  SYS TK4-   JOB   129    END    A****
****A    END    JOB   129   MANASM                              ROOM            1.44.48 AM 27 FEB 21   PRINTER1  SYS TK4-   JOB   129    END    A****
****A    END    JOB   129   MANASM                              ROOM            1.44.48 AM 27 FEB 21   PRINTER1  SYS TK4-   JOB   129    END    A****
****A    END    JOB   129   MANASM                              ROOM            1.44.48 AM 27 FEB 21   PRINTER1  SYS TK4-   JOB   129    END    A****
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