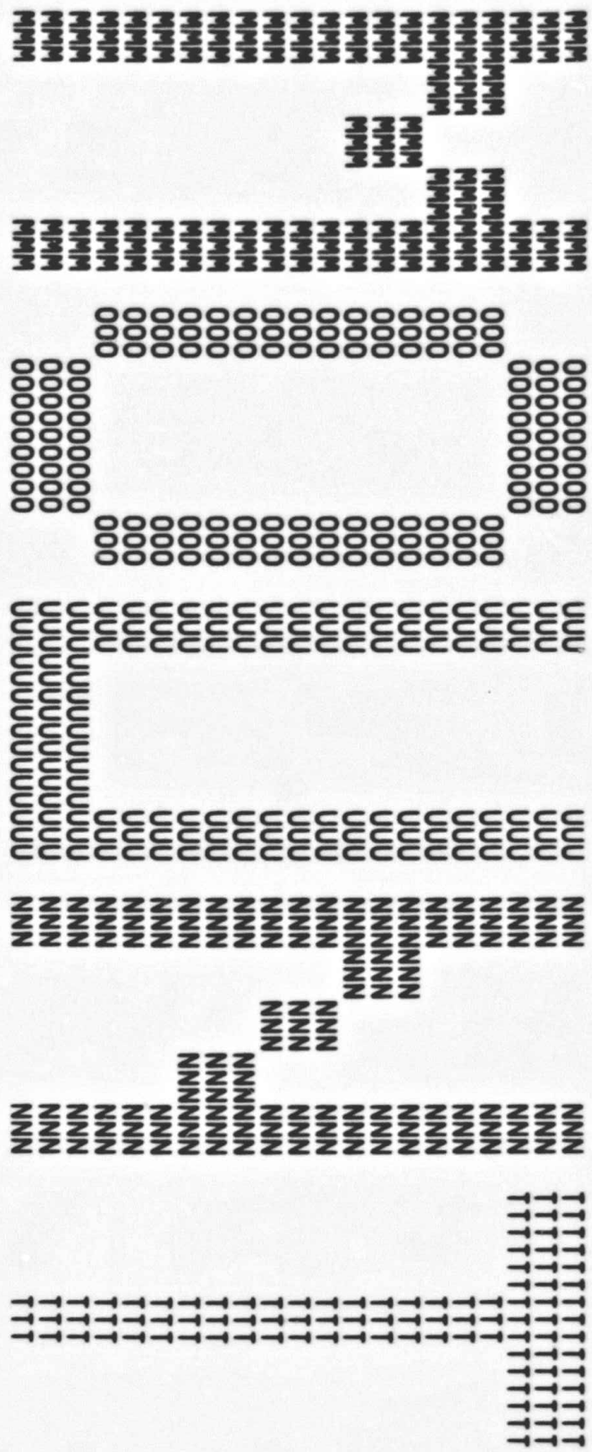

FILEID**CHKHM1

```
  CCCCCCCC  HH      HH  KK     KK  HH      HH  MM      MM     11
  CCCCCCCC  HH      HH  KK     KK  HH      HH  MM      MM     11
CC          HH      HH  KK     KK  HH      HH  MMMM  MMMM   1111
CC          HH      HH  KK     KK  HH      HH  MMMM  MMMM   1111
CC          HH      HH  KK   KK    HH      HH  MM  MM  MM     11
CC          HH      HH  KK   KK    HH      HH  MM  MM  MM     11
CC          HHHHHHHHHH  KKKKK      HHHHHHHHHH  MM      MM     11
CC          HHHHHHHHHH  KKKKK      HHHHHHHHHH  MM      MM     11
CC          HH      HH  KK   KK    HH      HH  MM      MM     11
CC          HH      HH  KK   KK    HH      HH  MM      MM     11
CC          HH      HH  KK     KK  HH      HH  MM      MM     11
CC          HH      HH  KK     KK  HH      HH  MM      MM     11
  CCCCCCCC  HH      HH  KK     KK  HH      HH  MM      MM   111111
  CCCCCCCC  HH      HH  KK     KK  HH      HH  MM      MM   111111
```

```
LL            IIIIII     SSSSSSSS
LL            IIIIII     SSSSSSSS
LL              II     SS
LL              II     SS
LL              II     SS
LL              II     SS
LL              II       SSSSSS
LL              II       SSSSSS
LL              II             SS
LL              II             SS
LL              II             SS
LL              II             SS
LLLLLLLLLL    IIIIII     SSSSSSSS
LLLLLLLLLL    IIIIII     SSSSSSSS
```

```
;     1        0001  0 MODULE CHKHM1 (
;     2        0002  0                 LANGUAGE (BLISS32),
;     3        0003  0                 IDENT = 'V04-000'
;     4        0004  0                 ) =
;     5        0005  1 BEGIN
;     6        0006  1
;     7        0007  1 !
;     8        0008  1 !**********************************************************************
;     9        0009  1 !*                                                                    *
;    10        0010  1 !*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                           *
;    11        0011  1 !*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.            *
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;    18        0018  1 !*  OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY  *
;    19        0019  1 !*  TRANSFERRED.                                                       *
;    20        0020  1 !*                                                                    *
;    21        0021  1 !*  THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE  *
;    22        0022  1 !*  AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT  *
;    23        0023  1 !*  CORPORATION.                                                       *
;    24        0024  1 !*                                                                    *
;    25        0025  1 !*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS  *
;    26        0026  1 !*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.            *
;    27        0027  1 !*                                                                    *
;    28        0028  1 !*                                                                    *
;    29        0029  1 !**********************************************************************
;    30        0030  1
;    31        0031  1 !++
;    32        0032  1 !
;    33        0033  1 ! FACILITY:  MOUNT Utility Structure Level 1
;    34        0034  1 !
;    35        0035  1 ! ABSTRACT:
;    36        0036  1 !
;    37        0037  1 !       This routine verifies whether a given block is Files-11 Structure
;    38        0038  1 !       Level 1 home block.
;    39        0039  1 !
;    40        0040  1 ! ENVIRONMENT:
;    41        0041  1 !
;    42        0042  1 !       STARLET operating system, including privileged system services
;    43        0043  1 !       and internal exec routines.
;    44        0044  1 !
;    45        0045  1 !--
;    46        0046  1 !
;    47        0047  1 !
;    48        0048  1 ! AUTHOR:  Andrew C. Goldstein,  CREATION DATE:  21-Nov-1977  19:23
;    49        0049  1 !
;    50        0050  1 ! MODIFIED BY:
;    51        0051  1 !
;    52        0052  1 !       V03-002 HH0041          Hai Huang                   24-Jul-1984
;    53        0053  1 !               Remove REQUIRE 'LIBD$:[VMSLIB.OBJ]MOUNTMSG.B32'.
;    54        0054  1 !
;    55        0055  1 !       V03-001 LMP0021         L. Mark Pilant,              5-Apr-1982  15:10
;    56        0056  1 !               Add support for ODS-1 structure version 2.
;    57        0057  1 !
```

```
;    58          0058  1 !       V02-000 ACG0167         Andrew C. Goldstein,    18-Apr-1980  13:37
;    59          0059  1 !                 Previous revision history moved to MOUNT.REV
;    60          0060  1 !**
;    61          0061  1
;    62          0062  1
;    63          0063  1 LIBRARY 'SYS$LIBRARY:LIB.L32';
;    64          0064  1 REQUIRE 'SRC$:MOUDEF.B32';
```

```
;    66          0596  1 GLOBAL ROUTINE CHECK_HOMEBLK1 (HOME_BLOCK, LBN, VOLUME_LABEL) =
;    67          0597  1
;    68          0598  1 !++
;    69          0599  1 !
;    70          0600  1 ! FUNCTIONAL DESCRIPTION:
;    71          0601  1 !
;    72          0602  1 !       This routine verifies whether the given block is a Files-11 Structure
;    73          0603  1 !       Level 1 home block.
;    74          0604  1 !
;    75          0605  1 !
;    76          0606  1 ! CALLING SEQUENCE:
;    77          0607  1 !       CHECK_HOMEBLK1 (ARG1, ARG2, ARG3)
;    78          0608  1 !
;    79          0609  1 ! INPUT PARAMETERS:
;    80          0610  1 !       ARG1: address of buffer containing block
;    81          0611  1 !       ARG2: LBN of block
;    82          0612  1 !       ARG3: string descriptor of user specified volume label
;    83          0613  1 !
;    84          0614  1 ! IMPLICIT INPUTS:
;    85          0615  1 !       NONE
;    86          0616  1 !
;    87          0617  1 ! OUTPUT PARAMETERS:
;    88          0618  1 !       NONE
;    89          0619  1 !
;    90          0620  1 ! IMPLICIT OUTPUTS:
;    91          0621  1 !       NONE
;    92          0622  1 !
;    93          0623  1 ! ROUTINE VALUE:
;    94          0624  1 !       1 if valid and correct
;    95          0625  1 !       0 if not
;    96          0626  1 !       SS$_INCVOLLABEL if valid but volume label is wrong
;    97          0627  1 !
;    98          0628  1 ! SIDE EFFECTS:
;    99          0629  1 !       NONE
;   100          0630  1 !
;   101          0631  1 !--
;   102          0632  1
;   103          0633  2 BEGIN
;   104          0634  2
;   105          0635  2 MAP
;   106          0636  2         HOME_BLOCK      : REF BBLOCK,   ! home block buffer
;   107          0637  2         VOLUME_LABEL    : REF VECTOR;   ! volume label descriptor
;   108          0638  2
;   109          0639  2 EXTERNAL ROUTINE
;   110          0640  2         CHECKSUM2;                      ! compute home block checksums
;   111          0641  2
;   112          0642  2
;   113          0643  2 ! Check the required non-zero fields and compute the checksums.
;   114          0644  2 !
;   115          0645  2
;   116          0646  3 IF NOT (
;   117          0647  3         .HOME_BLOCK[HM1$W_IBMAPSIZE] NEQ 0
;   118          0648  3     AND .HOME_BLOCK[HM1$L_IBMAPLBN] NEQ 0
;   119          0649  3     AND .HOME_BLOCK[HM1$W_MAXFILES] NEQ 0
;   120          0650  3     AND .HOME_BLOCK[HM1$W_CLUSTER] NEQ 0
;   121          0651  3     AND CHECKSUM2 (.HOME_BLOCK, $BYTEOFFSET (HM1$W_CHECKSUM1))
;   122          0652  3     AND CHECKSUM2 (.HOME_BLOCK, $BYTEOFFSET (HM1$W_CHECKSUM2))
```

```
;  123        0653  3         )
;  124        0654  2  THEN RETURN 0;
;  125        0655  2
;  126        0656  2  IF .HOME_BLOCK[HM1$W_STRUCLEV] NEQ HM1$C_LEVEL1
;  127        0657  2  AND .HOME_BLOCK[HM1$W_STRUCLEV] NEQ HM1$C_LEVEL2
;  128        0658  2  THEN ERR_EXIT (SS$_FILESTRUCT);
;  129        0659  2
;  130        0660  2  IF CH$NEQ (.VOLUME_LABEL[0], .VOLUME_LABEL[1],
;  131        0661  2            HM1$S_VOLNAME, HOME_BLOCK[HM1$T_VOLNAME], 0)
;  132        0662  2  THEN RETURN (SS$_INCVOLLABEL);
;  133        0663  2
;  134        0664  2  RETURN 1;
;  135        0665  2
;  136        0666  1  END;                                  ! end of routine CHECK_HOMEBLK1


                                                               .TITLE  CHKHM1
                                                               .IDENT  \V04-000\

                                                               .EXTRN  CHECKSUM2

                                                               .PSECT  $CODE$,NOWRT,2

                                         000C 00000            .ENTRY  CHECK_HOMEBLK1, Save R2,R3              ; 0596
                  52         04       AC   D0 00002            MOVL    HOME_BLOCK, R2                          ; 0647
                                      62   B5 00006            TSTW    (R2)
                                      5E   13 00008            BEQL    3$
                             02       A2   D5 0000A            TSTL    2(R2)                                   ; 0648
                                      59   13 0000D            BEQL    3$
                             06       A2   B5 0000F            TSTW    6(R2)                                   ; 0649
                                      54   13 00012            BEQL    3$
                             08       A2   B5 00014            TSTW    8(R2)                                   ; 0650
                                      4F   13 00017            BEQL    3$
                                      3A   DD 00019            PUSHL   #58                                     ; 0651
                                      52   DD 0001B            PUSHL   R2
               0000G   CF             02   FB 0001D            CALLS   #2, CHECKSUM2
                       43             50   E9 00022            BLBC    R0, 3$
                       7E    01FE     8F   3C 00025            MOVZWL  #510, -(SP)                             ; 0652
                                      52   DD 0002A            PUSHL   R2
               0000G   CF             02   FB 0002C            CALLS   #2, CHECKSUM2
                       34             50   E9 00031            BLBC    R0, 3$
                0101   8F      0C     A2   B1 00034            CMPW    12(R2), #257                            ; 0656
                                      14   13 0003A            BEQL    1$
                0102   8F      0C     A2   B1 0003C            CMPW    12(R2), #258                            ; 0657
                                      0C   13 00042            BEQL    1$
                       7E    08C0     8F   3C 00044            MOVZWL  #2240, -(SP)                            ; 0658
           00000000G   00             01   FB 00049            CALLS   #1, LIB$STOP
                       50      0C     AC   D0 00050  1$:       MOVL    VOLUME_LABEL, R0                        ; 0660
      0C          00           04     B0   60 2D 00054         CMPC5   (R0), @4(R0), #0, #12, 14(R2)          ; 0661
                               0E     A2      0005A
                                      06   13 0005C            BEQL    2$
                  50         010C     8F   3C 0005E            MOVZWL  #268, R0                                ; 0662
                                           04 00063            RET
                  50                  01   D0 00064  2$:       MOVL    #1, R0                                  ; 0664
                                           04 00067            RET
                                      50   D4 00068  3$:       CLRL    R0                                      ; 0666
                                           04 0006A            RET
```

```
; Routine Size:  107 bytes,    Routine Base:  $CODE$ + 0000

;  137          0667  1
;  138          0668  1 END
;  139          0669  0 ELUDOM

                                                   .EXTRN  LIB$STOP

;                                 PSECT SUMMARY
;
;       Name                      Bytes                         Attributes
;
;   $CODE$                               107  NOVEC,NOWRT,  RD ,  EXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)


;                          Library Statistics
;
;                                        -------- Symbols --------        Pages        Processing
;       File                             Total    Loaded   Percent        Mapped       Time
;
;   _$255$DUA28:[SYSLIB]LIB.L32;1        18619        22         0        1000           00:01.9


;                                 COMMAND QUALIFIERS

;       BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS$:CHKHM1/OBJ=OBJ$:CHKHM1 MSRC$:CHKHM1/UPDATE=(ENH$:CHKHM1)

; Size:           107 code + 0 data bytes
; Run Time:          00:10.5
; Elapsed Time:      00:24.3
; Lines/CPU Min:       3819
; Lexemes/CPU-Min:  35777
; Memory Used:   91 pages
; Compilation Complete
```

CHKHM2
LIS

CHNUCB
LIS

GETUIC
LIS

ERASE
LIS

LEFTONE
LIS

MOUDK2
LIS

CHKHM1
LIS

CHKSM2
LIS

CLUSTRMNT
LIS

INIFC2
LIS

MOUDK1
LIS

MAKRVT
LIS

MAKLOG
LIS