```
MMM       MMM    000000000      UUU          UUU  NNN        NNN  TTTTTTTTTTTTTTT
MMM       MMM    000000000      UUU          UUU  NNN        NNN  TTTTTTTTTTTTTTT
MMM       MMM    000000000      UUU          UUU  NNN        NNN  TTTTTTTTTTTTTTT
MMMMMM   MMMMMM  000      000   UUU          UUU  NNN        NNN       TTT
MMMMMM   MMMMMM  000      000   UUU          UUU  NNN        NNN       TTT
MMMMMM   MMMMMM  000      000   UUU          UUU  NNN        NNN       TTT
MMM  MMM   MMM   000      000   UUU          UUU  NNNNNN     NNN       TTT
MMM   MMM  MMM   000      000   UUU          UUU  NNNNNN     NNN       TTT
MMM   MMM  MMM   000      000   UUU          UUU  NNNNNN     NNN       TTT
MMM       MMM    000      000   UUU          UUU  NNN   NNN  NNN       TTT
MMM       MMM    000      000   UUU          UUU  NNN   NNN  NNN       TTT
MMM       MMM    000      000   UUU          UUU  NNN   NNN  NNN       TTT
MMM       MMM    000      000   UUU          UUU  NNN     NNNNNN       TTT
MMM       MMM    000      000   UUU          UUU  NNN     NNNNNN       TTT
MMM       MMM    000      000   UUU          UUU  NNN     NNNNNN       TTT
MMM       MMM    000      000   UUU          UUU  NNN        NNN       TTT
MMM       MMM    000      000   UUU          UUU  NNN        NNN       TTT
MMM       MMM    000      000   UUU          UUU  NNN        NNN       TTT
MMM       MMM    000000000      UUUUUUUUUUUUUUUU  NNN        NNN       TTT
MMM       MMM    000000000      UUUUUUUUUUUUUUUU  NNN        NNN       TTT
MMM       MMM    000000000      UUUUUUUUUUUUUUUU  NNN        NNN       TTT
```

```
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
```

CHKHM1
K 2
16-Sep-1984 01:11:38   VAX-11 Bliss-32 V4.0-742   Page 1
14-Sep-1984 12:45:16   DISK$VMSMASTER:[MOUNT.SRC]CHKHM1.B32;1   (1)

CH

```
   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.      *
  12    0012   1 !*   ALL RIGHTS RESERVED.                                        *
  13    0013   1 !*                                                               *
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  17    0017   1 !*   COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY  *
  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 !
```

CHKHM1   L 2
V04-000   16-Sep-1984 01:11:38   VAX-11 Bliss-32 V4.0-742   Page   2
                                         14-Sep-1984 12:45:16   DISK$VMSMASTER:[MOUNT.SRC]CHKHM1.B32;1 (1)

                                                                                                                CH
                                                                                                                VO

```
   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';
```

CHKHM1
V04-000

M 2
16-Sep-1984 01:11:38   VAX-11 Bliss-32 V4.0-742   Page 3
14-Sep-1984 12:45:16   DISK$VMSMASTER:[MOUNT.SRC]CHKHM1.B32;1   (2)

CH
VO

```
 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))
```

CHKHM1
V04-000

N 2
16-Sep-1984 01:11:38   VAX-11 Bliss-32 V4.0-742   Page   4
14-Sep-1984 12:45:16   DISK$VMSMASTER:[MOUNT.SRC]CHKHM1.B32;1 (2)

```
  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$Q_STRUCLEV] NEQ HM1$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

File	Symbols Total	Loaded	Percent	Pages Mapped	Processing Time
_255DUA28:[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

MAKRUT
LIS

MAKLOG
LIS