F11A

```
 SSSSSSSS     CCCCCCC  HH      HH  FFFFFFFFFF   CCCCCCC  BBBBBBBB
 SSSSSSSS     CCCCCCC  HH      HH  FFFFFFFFFF   CCCCCCC  BBBBBBBB
SS            CC       HH      HH  FF           CC       BB     BB
SS            CC       HH      HH  FF           CC       BB     BB
SS            CC       HH      HH  FF           CC       BB     BB
SS            CC       HH      HH  FF           CC       BB     BB
 SSSSSS       CC       HHHHHHHHHH  FFFFFFFF     CC       BBBBBBBB
 SSSSSS       CC       HHHHHHHHHH  FFFFFFF      CC       BBBBBBBB
      SS      CC       HH      HH  FF           CC       BB     BB
      SS      CC       HH      HH  FF           CC       BB     BB
      SS      CC       HH      HH  FF           CC       BB     BB    ....
      SS      CC       HH      HH  FF           CC       BB     BB    ....
SSSSSSSS      CCCCCCC  HH      HH  FF           CCCCCCC  BBBBBBBB     ....
SSSSSSSS      CCCCCCC  HH      HH  FF           CCCCCCC  BBBBBBBB     ....


LL            IIIIII      SSSSSSSS
LL            IIIIII      SSSSSSSS
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
```

SCHFCB

E 15
16-Sep-1984 01:17:40   VAX-11 Bliss-32 V4.0-742   Page   1
14-Sep-1984 12:29:51   DISK$VMSMASTER:[F11A.SRC]SCHFCB.B32;1   (1)

SM
VO

```
 1    0001  0 MODULE SCHFCB (
 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 !*                                                                *
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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:  F11ACP Structure Level 1
34    0034  1 !
35    0035  1 ! ABSTRACT:
36    0036  1 !
37    0037  1 !     This routine searches the current volume's FCB list for the
38    0038  1 !     FCB representing the desired file number.
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:  13-Dec-1976  15:41
49    0049  1 !
50    0050  1 ! MODIFIED BY:
51    0051  1 !
52    0052  1 !     A0101    ACG26369        Andrew C. Goldstein,    31-Dec-1979  17:05
53    0053  1 !             Fix multi-header file interlock bug
54    0054  1 !
55    0055  1 !     A0100    ACG00001        Andrew C. Goldstein,  10-Oct-1978  20:03
56    0056  1 !             Previous revision history moved to F11A.REV
57    0057  1 !**
```

SCHFCB
V04-000

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14-Sep-1984 12:29:51   DISK$VMSMASTER:[F11A.SRC]SCHFCB.B32;1 (1)

```
  58        0058 1
  59        0059 1
  60        0060 1 LIBRARY 'SYS$LIBRARY:LIB.L32';
  61        0061 1 REQUIRE 'SRC$:FCPDEF.B32';
```

```
 63   0376  1  GLOBAL ROUTINE SEARCH_FCB (FILE_ID) =
 64   0377  1
 65   0378  1  !++
 66   0379  1  !
 67   0380  1  !  FUNCTIONAL DESCRIPTION:
 68   0381  1  !
 69   0382  1  !       This routine searches the current volume's FCB list for the
 70   0383  1  !       FCB representing the desired file number.
 71   0384  1  !
 72   0385  1  !
 73   0386  1  !  CALLING SEQUENCE:
 74   0387  1  !       SEARCH_FCB (ARG1)
 75   0388  1  !
 76   0389  1  !  INPUT PARAMETERS:
 77   0390  1  !       ARG1: address of desired file ID
 78   0391  1  !
 79   0392  1  !  IMPLICIT INPUTS:
 80   0393  1  !       CURRENT_VCB: VCB address of volume
 81   0394  1  !
 82   0395  1  !  OUTPUT PARAMETERS:
 83   0396  1  !       NONE
 84   0397  1  !
 85   0398  1  !  IMPLICIT OUTPUTS:
 86   0399  1  !       NONE
 87   0400  1  !
 88   0401  1  !  ROUTINE VALUE:
 89   0402  1  !       FCB address if found
 90   0403  1  !       zero if not
 91   0404  1  !
 92   0405  1  !  SIDE EFFECTS:
 93   0406  1  !       NONE
 94   0407  1  !
 95   0408  1  !--
 96   0409  1
 97   0410  2  BEGIN
 98   0411  2
 99   0412  2  MAP
100   0413  2          FILE_ID          : REF BBLOCK;    ! file ID arg
101   0414  2
102   0415  2  LOCAL
103   0416  2          FCB              : REF BBLOCK,    ! current FCB being looked at
104   0417  2          PREV_FCB         : REF BBLOCK;    ! previous FCB in list
105   0418  2
106   0419  2  EXTERNAL
107   0420  2          CURRENT_VCB      : REF BBLOCK;    ! VCB of volume in process
108   0421  2
109   0422  2  ! Init the pointers and start scanning the FCB list, which is a double
110   0423  2  ! linked list. Check for consistency of pointers and the block ID for each
111   0424  2  ! FCB. We win when the FCB containing the desired file number is found;
112   0425  2  ! we lose at end of list (pointing back to the VCB).
113   0426  2  !
114   0427  2
115   0428  2  PREV_FCB = .CURRENT_VCB;
116   0429  2  FCB = .CURRENT_VCB[VCB$L_FCBFL];
117   0430  2
118   0431  2  IF
119   0432  3      BEGIN
```

```
;  120      0433  3        UNTIL .FCB EQL .CURRENT_VCB DO
;  121      0434  4            BEGIN
;  122      0435  4            IF .FCB[FCB$B_TYPE] EQL DYN$C_FCB
;  123      0436  4            AND .FCB[FCB$C_FCBBL] EQL .PREV_FCB
;  124      0437  4            THEN
;  125      0438  5                BEGIN
;  126      0439  5                IF  .FILE_ID[FID$W_NUM] EQL .FCB[FCB$W_FID_NUM]
;  127      0440  5                THEN EXIT[OOP .FCB;
;  128      0441  5
;  129      0442  5                PREV_FCB = .FCB;            ! link to next FCB
;  130      0443  5                FCB = .FCB[FCB$L_FCBFL];
;  131      0444  5                END
;  132      0445  4            ELSE
;  133      0446  4                BUG_CHECK (NOTFCBFCB, FATAL, 'FCB linkage broken');
;  134      0447  4            END                            ! end of loop
;  135      0448  3        END
;  136      0449  3
;  137      0450  2        EQL -1
;  138      0451  2 THEN 0                                    ! return 0 if loop failed
;  139      0452  2 ELSE .FCB                                 ! else FCB address
;  140      0453  2
;  141      0454  1 END;                                      ! end of routine SEARCH_FCB


                                              .TITLE   SCHFCB
                                              .IDENT   \V04-000\

                                              .EXTRN   CURRENT_VCB, BUG$_NOTFCBFCB

                                              .PSECT   $CODE$,NOWRT,2

                         0000 00000           .ENTRY   SEARCH_FCB, Save nothing        ; 0376
                51   0000G CF  D0 00002        MOVL     CURRENT_VCB, PREV_FCB           ; 0428
                50   0000G DF  D0 00007        MOVL     @CURRENT_VCB, FCB               ; 0429
          0000G CF       50  D1 0000C 1$:      CMPL     FCB, CURRENT_VCB               ; 0433
                         26  13 00011          BEQL     4$
                07   0A  A0  91 00013          CMPB     10(FCB), #7                    ; 0435
                         1A  12 00017          BNEQ     3$
                51   04  A0  D1 00019          CMPL     4(FCB), PREV_FCB               ; 0436
                         14  12 0001D          BNEQ     3$
          24  A0   04  BC  B1 0001F          CMPW     @FILE_ID, 36(FCB)              ; 0439
                         05  12 00024          BNEQ     2$
                51       50  D0 00026          MOVL     FCB, R1                        ; 0440
                         11  11 00029          BRB      5$
                51       50  D0 0002B 2$:      MOVL     FCB, PREV_FCB                  ; 0442
                50       60  D0 0002E          MOVL     (FCB), FCB                     ; 0443
                         D9  11 00031          BRB      1$                            ; 0435
                    FEFF      00033 3$:        BUGW                                   ; 0446
                    0000*     00035            .WORD    <BUG$_NOTFCBFCB!4>
                         D3  11 00037          BRB      1$                            ; 0433
                51       01  CE 00039 4$:      MNEGL    #1, R1
          FFFFFFFF 8F   51  D1 0003C 5$:      CMPL     R1, #-1                        ; 0450
                         02  12 00043          BNEQ     6$
                         50  D4 00045          CLRL     R0                            ; 0431
                         04 00047 6$:          RET                                    ; 0454
```

; Routine Size: 72 bytes,   Routine Base: $CODE$ + 0000

SCHFCB
V04-000

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```
; 142        0455 1
; 143        0456 1 END
; 144        0457 0 ELUDOM
```

```
;
;                      PSECT SUMMARY
;
;       Name                  Bytes                       Attributes
;
; $CODE$                         72  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      8         0        1000       00:01.9
```

```
;
;                      COMMAND QUALIFIERS
;
;       BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS$:SCHFCB/OBJ=OBJ$:SCHFCB MSRC$:SCHFCB/UPDATE=(ENH$:SCHFCB)
;
; Size:          72 code + 0 data bytes
; Run Time:          00:06.0
; Elapsed Time:      00:18.2
; Lines/CPU Min:      4600
; Lexemes/CPU-Min: 12110
; Memory Used:  68 pages
; Compilation Complete
```

REQUEU
LIS

RWATTR
LIS

MODIFY
LIS

SCHFCB
LIS

MAKACC
LIS

MPWIND
LIS

MARVBN
LIS

PMS
LIS

RDHEDR
LIS

RWVB
LIS

RETDIR
LIS

RDBLOK
LIS

SMALOC
LIS

MOUNT
LIS

MAKNMB
LIS

MAKSTR
LIS

NXTHDR
LIS