```
EEEEEEEEEEEEEEE     DDDDDDDDDDD        TTTTTTTTTTTTTTT
EEEEEEEEEEEEEEE     DDDDDDDDDDD        TTTTTTTTTTTTTTT
EEEEEEEEEEEEEEE     DDDDDDDDDDD        TTTTTTTTTTTTTTT
EEE                 DDD       DDD             TTT
EEE                 DDD       DDD             TTT
EEE                 DDD       DDD             TTT
EEE                 DDD       DDD             TTT
EEE                 DDD       DDD             TTT
EEE                 DDD       DDD             TTT
EEEEEEEEEEEE        DDD       DDD             TTT
EEEEEEEEEEEE        DDD       DDD             TTT
EEEEEEEEEEEE        DDD       DDD             TTT
EEE                 DDD       DDD             TTT
EEE                 DDD       DDD             TTT
EEE                 DDD       DDD             TTT
EEE                 DDD       DDD             TTT
EEE                 DDD       DDD             TTT
EEE                 DDD       DDD             TTT
EEEEEEEEEEEEEEE     DDDDDDDDDDD               TTT
EEEEEEEEEEEEEEE     DDDDDDDDDDD               TTT
EEEEEEEEEEEEEEE     DDDDDDDDDDD               TTT
```

```
DDDDDDDD    EEEEEEEEEE  FFFFFFFFFF  KK      KK   EEEEEEEEEE  YY        YY
DDDDDDDD    EEEEEEEEEE  FFFFFFFFFF  KK      KK   EEEEEEEEEE  YY        YY
DD      DD  EE          FF          KK      KK   EE          YY        YY
DD      DD  EE          FF          KK    KK     EE            YY    YY
DD      DD  EE          FF          KK  KK       EE            YY    YY
DD      DD  EEEEEEEE    FFFFFFFF    KKKKK         EEEEEEEE       YY
DD      DD  EEEEEEEE    FFFFFFFF    KKKKK         EEEEEEEE       YY
DD      DD  EE          FF          KK  KK        EE            YY
DD      DD  EE          FF          KK    KK      EE            YY
DD      DD  EE          FF          KK      KK    EE            YY
DD      DD  EE          FF          KK      KK    EE            YY
DDDDDDDD    EEEEEEEEEE  FF          KK      KK    EEEEEEEEEE    YY
DDDDDDDD    EEEEEEEEEE  FF          KK      KK    EEEEEEEEEE    YY

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
```

```
    1    0001  0  %TITLE 'EDT$DEFKEY - define a key'
    2    0002  0  MODULE EDT$DEFKEY (                          . Define a key
    3    0003  0                    IDENT = 'V04-000'              . File: DEFKEY.BLI Edit: JBS1005
    4    0004  0                    ) =
    5    0005  1  BEGIN
    6    0006  1
    7    0007  1  !*****************************************************************
    8    0008  1  !*                                                              *
    9    0009  1  !*    COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                   *
   10    0010  1  !*    DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.    *
   11    0011  1  !*    ALL RIGHTS RESERVED.                                      *
   12    0012  1  !*                                                              *
   13    0013  1  !*    THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED  *
   14    0014  1  !*    ONLY  IN  ACCORDANCE  WITH  THE  TERMS  OF  SUCH  LICENSE  AND WITH THE  *
   15    0015  1  !*    INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR  ANY  OTHER  *
   16    0016  1  !*    COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY  *
   17    0017  1  !*    OTHER PERSON. NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY  *
   18    0018  1  !*    TRANSFERRED.                                              *
   19    0019  1  !*                                                              *
   20    0020  1  !*    THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE  *
   21    0021  1  !*    AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT  *
   22    0022  1  !*    CORPORATION.                                              *
   23    0023  1  !*                                                              *
   24    0024  1  !*    DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS  *
   25    0025  1  !*    SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.   *
   26    0026  1  !*                                                              *
   27    0027  1  !*                                                              *
   28    0028  1  !*****************************************************************
   29    0029  1  !
   30    0030  1
   31    0031  1  !++
   32    0032  1  ! FACILITY:     EDT -- The DEC Standard Editor
   33    0033  1  !
   34    0034  1  ! ABSTRACT:
   35    0035  1  !
   36    0036  1  !         Define a key
   37    0037  1  !
   38    0038  1  ! ENVIRONMENT:  Runs at any access mode - AST reentrant
   39    0039  1  !
   40    0040  1  ! AUTHOR: Bob Kushlis, CREATION DATE: 6-AUG-1979
   41    0041  1  !
   42    0042  1  ! MODIFIED BY:
   43    0043  1  !
   44    0044  1  ! 1-001 - Original.  DJS 18-FEB-1981.  This module was created by
   45    0045  1  !         extracting routine EDT$$DEFK  from module EDTCTR.
   46    0046  1  ! 1-002 - Regularize headers.  JBS 04-Mar-1981
   47    0047  1  ! 1-003 - Implement virtual memory deallocation.  TMV 6-Aug-81
   48    0048  1  ! 1-004 - Return an error code to distinguish the types of errors.  JBS 18-May-1982
   49    0049  1  ! 1-005 - New implementation of defined keys.  JBS 13-Aug-1982
   50    0050  1  !--
   51    0051  1
```

```
53      0052   1  %SBTTL 'Declarations'
54      0053   1  !
55      0054   1  !  TABLE OF CONTENTS:
56      0055   1  !
57      0056   1
58      0057   1  REQUIRE 'EDTSRC:TRAROUNAM';
59      0496   1
60      0497   1  FORWARD ROUTINE
61      0498   1      EDT$$DEFK;
62      0499   1
63      0500   1  !
64      0501   1  !  INCLUDE FILES:
65      0502   1  !
66      0503   1
67      0504   1  REQUIRE 'EDTSRC:EDTREQ';
68      0639   1
69      0640   1  LIBRARY 'EDTSRC:KEYPADDEF';
70      0641   1
71      0642   1  !
72      0643   1  !  MACROS:
73      0644   1  !
74      0645   1  !       NONE
75      0646   1  !
76      0647   1  !  EQUATED SYMBOLS:
77      0648   1  !
78      0649   1  !       NONE
79      0650   1  !
80      0651   1  !  OWN STORAGE:
81      0652   1  !
82      0653   1  !       NONE
83      0654   1  !
84      0655   1  !  EXTERNAL REFERENCES:
85      0656   1  !
86      0657   1  !       In the routine
```

EDT$DEFKEY   EDT$DEFKEY - define a key   D 2
                                                                 16-Sep-1984 00:16:52   VAX-11 Bliss-32 V4.0-742   Page 3
V04-000   EDT$$DEFK - define a key   14-Sep-1984 12:22:53   DISK$VMSMASTER:[EDT.SRC]DEFKEY.BLI;1   (3)

```
  88      0658  1 %SBTTL 'EDT$$DEFK  - define a key'
  89      0659  1
  90      0660  1 GLOBAL ROUTINE EDT$$DEFK (                      ! Define a key
  91      0661  1     KEY,                                        ! Key number to define
  92      0662  1     STRING,                                     ! Address of new definition
  93      0663  1     LEN                                         ! Length of that definition
  94      0664  1     ) =
  95      0665  1
  96      0666  1 !++
  97      0667  1 ! FUNCTIONAL DESCRIPTION:
  98      0668  1 !
  99      0669  1 !     Define a key.  It is entered in the table of defined keys
 100      0670  1 !     so that EDT$$FIND_KEY can find it.
 101      0671  1 !
 102      0672  1 ! FORMAL PARAMETERS:
 103      0673  1 !
 104      0674  1 !   KEY                 Key number to define
 105      0675  1 !
 106      0676  1 !   STRING              Address of new definition string
 107      0677  1 !
 108      0678  1 !   LEN                 Length of that definition
 109      0679  1 !
 110      0680  1 ! IMPLICIT INPUTS:
 111      0681  1 !
 112      0682  1 !       NONE
 113      0683  1 !
 114      0684  1 ! IMPLICIT OUTPUTS:
 115      0685  1 !
 116      0686  1 !       EDT$$A_TRN_TBL
 117      0687  1 !
 118      0688  1 ! ROUTINE VALUE:
 119      0689  1 !
 120      0690  1 !     1 = key defined
 121      0691  1 !     any even number - an error code to be printed using EDT$$OUT_MSG.
 122      0692  1 !
 123      0693  1 ! SIDE EFFECTS:
 124      0694  1 !
 125      0695  1 !     Allocates dynamic memory for the key definition
 126      0696  1 !
 127      0697  1 !--
 128      0698  1
 129      0699  2     BEGIN
 130      0700  2
 131      0701  2     EXTERNAL ROUTINE
 132      0702  2         EDT$$TST_BADK,                          ! Test for an undefinable key
 133      0703  2         EDT$$CAN_KDEF,                          ! Cancel an existing key definition, if any
 134      0704  2         EDT$$ALO_HEAP;                          ! Allocate heap storage
 135      0705  2
 136      0706  2     EXTERNAL
 137      0707  2         EDT$$A_TRN_TBL : VECTOR;                ! The keypad translation table
 138      0708  2
 139      0709  2     MESSAGES ((KEYNOTDEF, INSMEM));
 140      0710  2
 141      0711  2     LOCAL
 142      0712  2         KEY_PTR : REF BLOCK [, BYTE] FIELD (KEY_DEF_FIELD),
 143      0713  2         STATUS;
 144      0714  2
```

```
  145      0715  2          IF EDT$$TST_BADK (.KEY) THEN RETURN (EDT$_KEYNOTDEF);
  146      0716  2
  147      0717  2      !+
  148      0718  2      ! Cancel any existing definition of the key.
  149      0719  2      !-
  150      0720  2          STATUS = EDT$$CAN_KDEF (.KEY);
  151      0721
  152      0722  2          IF ( NOT .STATUS) THEN RETURN (.STATUS);
  153      0723  2
  154      0724  2      !+
  155      0725  2      ! Allocate storage to hold the key definition.
  156      0726  2      !-
  157      0727
  158      0728  2          IF ( NOT EDT$$ALO_HEAP (%REF (.LEN + KEY_DEF_OVERHEAD), KEY_PTR)) THEN RETURN (EDT$_INSMEM);
  159      0729  2
  160      0730  2      !+
  161      0731  2      ! Load up the key definition block and store in the table.
  162      0732  2      !-
  163      0733  2          KEY_PTR [KEY_DEF_NEXT] = .EDT$$A_TRN_TBL [.KEY MOD K_KPAD_HASHSIZ];
  164      0734  2          KEY_PTR [KEY_DEF_KEY] = .KEY;
  165      0735  2          KEY_PTR [KEY_DEF_LEN] = .LEN;
  166      0736  2          EDT$$A_TRN_TBL [.KEY MOD K_KPAD_HASHSIZ] = .KEY_PTR;
  167      0737  2          EDT$$CPY_MEM (.LEN, .STRING, CH$PTR (KEY_PTR [KEY_DEF_TEXT]));
  168      0738  2          RETURN (T);
  169      0739  1      END;                                            ! of routine EDT$$DEFK


                                                   .TITLE   EDT$DEFKEY EDT$DEFKEY - define a key
                                                   .IDENT   \V04-000\

                                                   .EXTRN   EDT$$TST_BADK, EDT$$CAN_KDEF
                                                   .EXTRN   EDT$$ALO_HEAP, EDT$$A_TRN_TBL
                                                   .EXTRN   EDT$_KEYNOTDEF, EDT$_INSMEM

                                                   .PSECT   _EDT$CODE,NOWRT,  SHR,  PIC,2

                                 003C 00000        .ENTRY   EDT$$DEFK, Save R2,R3,R4,R5            ; 0660
                       5E            08 C2 00002    SUBL2    #8, SP
                                  04 AC DD 00005    PUSHL    KEY                                   ; 0715
              00000000G 00         01 FB 00008     CALLS    #1, EDT$$TST_BADK
                                08 50 E9 0000F     BLBC     R0, 1$
                       50 00000000G 8F D0 00012     MOVL     #EDT$_KEYNOTDEF, R0
                                   04 00019        RET
                                  04 AC DD 0001A 1$: PUSHL   KEY                                   ; 0720
              00000000G 00         01 FB 0001D     CALLS    #1, EDT$$CAN_KDEF
                                53 50 E9 00024     BLBC     STATUS, 3$                             ; 0722
                                  04 AE 9F 00027    PUSHAB   KEY_PTR                               ; 0728
           04   AE   0C AC         07 C1 0002A     ADDL3    #7, LEN, 4(SP)
                                  04 AE 9F 00030    PUSHAB   4(SP)
              00000000G 00         02 FB 00033     CALLS    #2, EDT$$ALO_HEAP
                                08 50 E8 0003A     BLBS     R0, 2$
                       50 00000000G 8F D0 0003D     MOVL     #EDT$_INSMEM, R0
                                   04 00044        RET
                                51 04 AE D0 00045 2$: MOVL   KEY_PTR, R1                           ; 0733
           7E          00   04 AC   01 7A 00049    EMUL     #1, KEY, #0, -(SP)
           50          50 8E 000000C7 8F 7B 0004F  EDIV     #199, (SP)+, R0, R0
                       50 00000000G0040 DE 00058   MOVAL    EDT$$A_TRN_TBL[R0], R0
```

```
                                    61          60  D0 00060          MOVL    (R0), (R1)                              ; 0734
                        04  A1      04  AC  B0 00063          MOVW    KEY, 4(R1)                              ; 0735
                        06  A1      0C  AC  90 00068          MOVB    LEN, 6(R1)                              ; 0736
                                    60          51  D0 0006D          MOVL    R1, (R0)                                ; 0737
            07  A1      08  BC  0C  AC  28 00070          MOVC3   LEN, @STRING, 7(R1)                     ; 0737
                        50          01  D0 00077          MOVL    #1, R0                                  ; 0738
                                                04 0007A 3$:          RET                                             ; 0739
```

; Routine Size: 123 bytes,   Routine Base: _EDT$CODE + 0000


```
;   170            0740  1
;   171            0741  1 !<BLF/PAGE>
```

EDT$DEFKEY   EDT$DEFKEY - define a key   G 2   Page 6
V04-000   EDT$$DEFK - define a key   16-Sep-1984 00:16:52   VAX-11 Bliss-32 V4.0-742   (4)
                                                            14-Sep-1984 12:22:53   DISK$VMSMASTER:[EDT.SRC]DEFKEY.BLI;1

```
: 173    0742  1 END                                    ! of module EDT$DEFKEY
: 174    0743  1
: 175    0744  0 ELUDOM
```

PSECT SUMMARY

Name	Bytes	Attributes
_EDT$CODE	123	NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

Library Statistics

File	-------- Symbols --------			Pages	Processing
	Total	Loaded	Percent	Mapped	Time
_255DUA28:[EDT.SRC]EDT.L32;1	377	1	0	40	00:00.2
_255DUA28:[EDT.SRC]PSECTS.L32;1	2	1	50	7	00:00.1
_255DUA28:[EDT.SRC]KEYPADDEF.L32;1	34	7	20	7	00:00.1

COMMAND QUALIFIERS

```
    BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACEBACK/LIS=LIS$:DEFKEY/OBJ=OBJ$:DEFKEY MSRC$:DEFKEY.BLI/UPDATE=(ENH$:DEFKEY)

Size:          123 code + 0 data bytes
Run Time:         00:11.5
Elapsed Time:     00:14.4
Lines/CPU Min:    3868
Lexemes/CPU-Min: 12306
Memory Used:   75 pages
Compilation Complete
```

EXTEND
LIS

FDEC
LIS

FILL
LIS

FINDPARA
LIS

EDT
LIS

FCRLF
LIS

EXEC
LIS

EXECNOO
LIS

FILEIO
LIS

EDTVECTOR
LIS

FINDKEY
LIS

FCOLINC
LIS

FINAL
LIS

FIOHNDLR
LIS

DEFKEY
LIS

ERRMSG
LIS

FCHAR
LIS