```
EEEEEEEEEEEEEEE  DDDDDDDDDDD     TTTTTTTTTTTTTTT
EEEEEEEEEEEEEEE  DDDDDDDDDDDD    TTTTTTTTTTTTTTT
EEEEEEEEEEEEEEE  DDDDDDDDDDDD    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  DDDDDDDDDDDD         TTT
EEEEEEEEEEEEEEE  DDDDDDDDDDDD         TTT
EEEEEEEEEEEEEEE  DDDDDDDDDDDD         TTT
```

```
TTTTTTTTTT    IIIIII    LL            IIIIII    NN      NN  EEEEEEEEEE
TTTTTTTTTT    IIIIII    LL            IIIIII    NN      NN  EEEEEEEEEE
    TT          II      LL              II      NN      NN  EE
    TT          II      LL              II      NN      NN  EE
    TT          II      LL              II      NNNN    NN  EE
    TT          II      LL              II      NNNN    NN  EE
    TT          II      LL              II      NN  NN  NN  EEEEEEEE
    TT          II      LL              II      NN  NN  NN  EEEEEEEE
    TT          II      LL              II      NN    NNNN  EE
    TT          II      LL              II      NN    NNNN  EE
    TT          II      LL              II      NN      NN  EE                ....
    TT          II      LL              II      NN      NN  EE                ....
    TT        IIIIII    LLLLLLLLLL    IIIIII    NN      NN  EEEEEEEEEE      ....
    TT        IIIIII    LLLLLLLLLL    IIIIII    NN      NN  EEEEEEEEEE      ....

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 %TITLE 'EDT$TILINE - read a command line'
;    2          0002  0 MODULE EDT$TILINE (                        ! Read a command line
;    3          0003  0                    IDENT = 'V04-000'                ! File: TILINE.BLI Edit: JBS1014
;    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.                                                   *
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;   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          C030  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 !       Read a command line.
;   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: June 9, 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$$TI_RDCMDLN  from module TINPUT.
;   46          0046  1 ! 1-002 - Regularize headers.  JBS 11-Mar-1981
;   47          0047  1 ! 1-003 - Add return value for end of journal file.  JBS 02-Oct-1981
;   48          0048  1 ! 1-004 - Add an alternate terminator. STS 21-Oct-1981
;   49          0049  1 ! 1-005 - Fix parameter pass to/from char. translator.  SMB 27-Oct-1981
;   50          0050  1 ! 1-006 - Set a flag if control C actually aborted something.  JBS 24-May-1982
;   51          0051  1 ! 1-007 - Remove a reference to TI_STARTECHO.  SMB 22-Jun-1982
;   52          0052  1 ! 1-008 - Allow for 8-bit keyboards.  JBS 17-Aug-1982
;   53          0053  1 ! 1-009 - Add SS3 for 8-bit terminals.  JBS 20-Aug-1982
;   54          0054  1 ! 1-010 - Add a special test for "Delete" as a terminator.  SMB 23-Aug-1982
;   55          0055  1 ! 1-011 - Don't write into a formal parameter.  JBS 24-Aug-1982
;   56          0056  1 ! 1-012 - Fix a bug in edit 1-011.  JBS 25-Aug-1982
;   57          0057  1 ! 1-013 - Don't modify EDT$$G_PRV_COL; it is being maintained.  JBS 05-Oct-1982
```

```
;   58          0058  1 ! 1-014 - Add a conditional for VT220 support.  JBS 11-Feb-1983
;   59          0059  1 !--
;   60          0060  1
```

```
;    62          0061  1 %SBTTL 'Declarations'
;    63          0062  1 !
;    64          0063  1 ! TABLE OF CONTENTS:
;    65          0064  1 !
;    66          0065  1
;    67          0066  1 REQUIRE 'EDTSRC:TRAROUNAM';
;    68          0505  1
;    69          0506  1 FORWARD ROUTINE
;    70          0507  1     EDT$$TI_RDCMDLN;
;    71          0508  1
;    72          0509  1 !
;    73          0510  1 ! INCLUDE FILES:
;    74          0511  1 !
;    75          0512  1
;    76          0513  1 REQUIRE 'EDTSRC:EDTREQ';
;    77          0648  1
;    78          0649  1 LIBRARY 'EDTSRC:SUPPORTS';
;    79          0650  1
;    80          0651  1 !
;    81          0652  1 ! MACROS:
;    82          0653  1 !
;    83          0654  1 !       NONE
;    84          0655  1 !
;    85          0656  1 ! EQUATED SYMBOLS:
;    86          0657  1 !
;    87          0658  1 !       NONE
;    88          0659  1 !
;    89          0660  1 ! OWN STORAGE:
;    90          0661  1 !
;    91          0662  1 !       NONE
;    92          0663  1 !
;    93          0664  1 ! EXTERNAL REFERENCES:
;    94          0665  1 !
;    95          0666  1 !       In the routine
```

```
;    97          0667  1 %SBTTL 'EDT$$TI_RDCMDLN  - read a command line'
;    98          0668  1
;    99          0669  1 GLOBAL ROUTINE EDT$$TI_RDCMDLN (                    ! read a command line
;   100          0670  1     C,                                              ! First character (already read)
;   101          0671  1     COM_BUF,                                        ! Command buffer
;   102          0672  1     END_COM,                                        ! Receives address of end of line
;   103          0673  1     TERM,                                           ! Character to terminate on
;   104          0674  1     RES_TERM                                        ! resultant terminator
;   105          0675  1     ) =
;   106          0676  1
;   107          0677  1 !++
;   108          0678  1 ! FUNCTIONAL DESCRIPTION:
;   109          0679  1 !
;   110          0680  1 !       Read characters up to a terminator into the command buffer.  The
;   111          0681  1 !       characters are echoed as they are read.  Delete is handled and
;   112          0682  1 !       CTRL/U aborts the operation.
;   113          0683  1 !
;   114          0684  1 ! FORMAL PARAMETERS:
;   115          0685  1 !
;   116          0686  1 !  C                    The first character to be handled (it was read previously)
;   117          0687  1 !
;   118          0688  1 !  COM_BUF              Pointer into the command buffer where the characters should
;   119          0689  1 !                       be placed.
;   120          0690  1 !
;   121          0691  1 !  END_COM              A character pointer to receive the pointer after the characters
;   122          0692  1 !                       have been read.
;   123          0693  1 !
;   124          0694  1 !  TERM                 A special terminator.  (Escape, CSI and SS3 are always terminators.)
;   125          0695  1 !
;   126          0696  1 !  RES_TERM             The actual terminator.
;   127          0697  1 !
;   128          0698  1 ! IMPLICIT INPUTS:
;   129          0699  1 !
;   130          0700  1 !       EDT$$T_CMD_BUF
;   131          0701  1 !       EDT$$G_TIN_ECHOPOS
;   132          0702  1 !
;   133          0703  1 ! IMPLICIT OUTPUTS:
;   134          0704  1 !
;   135          0705  1 !       EDT$$G_TIN_ECHOFLG
;   136          0706  1 !       EDT$$G_CC_DONE
;   137          0707  1 !
;   138          0708  1 ! ROUTINE VALUE:
;   139          0709  1 !
;   140          0710  1 !       1 = the string was read,
;   141          0711  1 !       0 = aborted by CTRL/U or CTRL/C
;   142          0712  1 !       2 = end of journal file
;   143          0713  1 !
;   144          0714  1 ! SIDE EFFECTS:
;   145          0715  1 !
;   146          0716  1 !       NONE
;   147          0717  1 !
;   148          0718  1 !--
;   149          0719  1
;   150          0720  2     BEGIN
;   151          0721  2
;   152          0722  2     EXTERNAL ROUTINE
;   153          0723  2         EDT$$ERA_MSGLN,
```

```
;  154          0724  2          EDT$$CHK_CC,
;  155          0725  2          EDT$$TRN_KPADK,
;  156          0726  2          EDT$$TI_INPCH,
;  157          0727  2          EDT$$TI_DELK : NOVALUE,
;  158          0728  2          EDT$$TI_ECHOCH : NOVALUE;
;  159          0729  2
;  160          0730  2      EXTERNAL
;  161          0731  2          EDT$$T_CMD_BUF,                         ! Command line buffer
;  162          0732  2          EDT$$G_TIN_ECHOFLG,                     ! Flag indicating character have been echoed
;  163          0733  2          EDT$$G_TIN_ECHOPOS,                     ! Position on the echo line
;  164          0734  2          EDT$$G_CC_DONE;                         ! Set to 1 if control C actually aborts something
;  165          0735  2
;  166          0736  2      LOCAL
;  167          0737  2          COM_POINT,
;  168          0738  2          CH : BYTE,
;  169          0739  2          KEY;
;  170          0740  2
;  171          0741  2      COM_POINT = .COM_BUF;
;  172          0742  2  !+
;  173          0743  2  ! Use C as the first character.
;  174          0744  2  !-
;  175          0745  2      CH = .C;
;  176          0746  2  !+
;  177          0747  2  ! If the terminator can be any character, then return immediately
;  178          0748  2  ! upon seeing the delete character.
;  179          0749  2  !-
;  180          0750  2
;  181          0751  2      IF (.TERM EQL ASC_K_DEL) THEN RETURN (1);
;  182          0752  2
;  183          0753  2      WHILE 1 DO
;  184          0754  3          BEGIN
;  185          0755  3
;  186          0756  3          SELECTONE .CH OF
;  187          0757  3              SET
;  188          0758  3
;  189          0759  3              [ASC_K_DEL] :
;  190          0760  3  !+
;  191          0761  3  ! Delete character, delete the previous character if there is one.
;  192          0762  3  !-
;  193          0763  3
;  194          0764  4                  IF (.COM_POINT NEQ .COM_BUF)
;  195          0765  3                  THEN
;  196          0766  4                      BEGIN
;  197          0767  4                      COM_POINT = CH$PLUS (.COM_POINT, -1);
;  198          0768  4                      EDT$$TI_DELK (CH$RCHAR (.COM_POINT));
;  199          0769  3                      END;
;  200          0770  3
;  201          0771  3              [ASC_K_ESC
;  202          0772  3
;  203        L 0773  3  %IF SUPPORT_VT220
;  204          0774  3  %THEN
;  205          0775  3              , ASC_K_CSI, ASC_K_SS3
;  206          0776  3  %FI
;  207          0777  3
;  208          0778  3              ] :
;  209          0779  3  !+
;  210          0780  3  ! Escape, CSI or SS3, terminate the read and gobble up the rest of the escape
```

```
;  211          0781  3 ! or control sequence.
;  212          0782  3 !-
;  213          0783  4                     BEGIN
;  214          0784  4
;  215          0785  4                     IF (EDT$$TRN_KPADK (KEY) EQL 0) THEN RETURN (2);
;  216          0786  4
;  217          0787  4                     .RES_TERM = .KEY;
;  218          0788  4                     EXITLOOP;
;  219          0789  3                     END;
;  220          0790  3
;  221          0791  3                 [.TERM] :
;  222          0792  3 !+
;  223          0793  3 ! The special terminator, end the read.
;  224          0794  3 !-
;  225          0795  4                     BEGIN
;  226          0796  4                     .RES_TERM = .TERM;
;  227          0797  4                     EXITLOOP;
;  228          0798  3                     END;
;  229          0799  3
;  230          0800  3                 [ASC_K_CTRL_U] :
;  231          0801  3 !+
;  232          0802  3 ! Abort the read operation, erasing the echo line.
;  233          0803  3 !-
;  234          0804  4                     BEGIN
;  235          0805  4                     EDT$$G_TIN_ECHOFLG = 1;
;  236          0806  4                     .END_COM = .COM_BUF;
;  237          0807  4                     EDT$$ERA_MSGLN ();
;  238          0808  4                     RETURN (0);
;  239          0809  3                     END;
;  240          0810  3
;  241          0811  3                 [OTHERWISE] :
;  242          0812  3 !+
;  243          0813  3 ! Place the character in the buffer.
;  244          0814  3 !-
;  245          0815  3
;  246          0816  4                     IF CH$PTR_NEQ (.COM_POINT, CH$PLUS (EDT$$T_CMD_BUF, 256))
;  247          0817  3                     THEN
;  248          0818  4                         BEGIN
;  249          0819  4                         CH$WCHAR_A (.CH, COM_POINT);
;  250          0820  4                         EDT$$TI_ECHOCH (.CH);
;  251          0821  3                         END;
;  252          0822  3
;  253          0823  3                 TES;
;  254          0824  3
;  255          0825  3 !+
;  256          0826  3 ! Check for a control C as abort the read.
;  257          0827  3 !-
;  258          0828  3
;  259          0829  3             IF EDT$$CHK_CC ()
;  260          0830  3             THEN
;  261          0831  4                 BEGIN
;  262          0832  4                 .END_COM = .COM_BUF;
;  263          0833  4                 EDT$$G_CC_DONE = 1;
;  264          0834  4                 RETURN (0);
;  265          0835  3                 END;
;  266          0836  3
;  267          0837  3             IF (EDT$$TI_INPCH (CH) EQL 0) THEN RETURN (2);
```

```
;  268          0838  3
;  269          0839  2          END;
;  270          0840  2
;  271          0841  2 !+
;  272          0842  2 ! Return a pointer one character beyond the last one read.
;  273          0843  2 !-
;  274          0844  2      .END_COM = .COM_POINT;
;  275          0845  2      RETURN (1);
;  276          0846  1      END;                                    ! of routine EDT$$TI_RDCMDLN


                                                                     .TITLE  EDT$TILINE EDT$TILINE - read a command line
                                                                     .IDENT  \V04-000\

                                                                     .EXTRN  EDT$$ERA_MSGLN, EDT$$CHK_CC
                                                                     .EXTRN  EDT$$TRN_KPADK, EDT$$TI_INPCH
                                                                     .EXTRN  EDT$$TI_DELK, EDT$$TI_ECHOCH
                                                                     .EXTRN  EDT$$T_CMD_BUF, EDT$$G_TIN_ECHOFLG
                                                                     .EXTRN  EDT$$G_TIN_ECHOPOS
                                                                     .EXTRN  EDT$$G_CC_DONE

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

                                    000C 00000                       .ENTRY  EDT$$TI_RDCMDLN, Save R2,R3                     ; 0669
                              5E        08  C2 00002                 SUBL2   #8, SP                                          ;
                              53    08  AC  D0 00005                 MOVL    COM_BUF, COM_POINT                              ; 0741
                           04 AE    04  AC  90 00009                 MOVB    C, CH                                           ; 0745
                  0000007F 8F       10  AC  D1 0000E                 CMPL    TERM, #127                                      ; 0751
                                        03  12 00016                 BNEQ    1$                                              ;
                                    00B0  31 00018                 BRW     11$                                             ;
                              52    04  AE  9A 0001B 1$:             MOVZBL  CH, R2                                          ; 0756
                           7F 8F            52  91 0001F            CMPB    R2, #127                                        ; 0759
                                            12  12 00023            BNEQ    2$                                              ;
                           08 AC            53  D1 00025            CMPL    COM_POINT, COM_BUF                              ; 0764
                                            6F  13 00029            BEQL    7$                                              ;
                              7E            73  9A 0002B            MOVZBL  -(COM_POINT), -(SP)                             ; 0768
                  00000000G 00              01  FB 0002E            CALLS   #1, EDT$$TI_DELK                                ;
                                            63  11 00035            BRB     7$                                              ; 0764
                              1B            52  91 00037 2$:         CMPB    R2, #27                                         ; 0771
                                            0C  13 0003A            BEQL    3$                                              ;
                           8F 8F            52  91 0003C            CMPB    R2, #143                                        ;
                                            06  13 00040            BEQL    3$                                              ;
                           9B 8F            52  91 00042            CMPB    R2, #155                                        ;
                                            13  12 00046            BNEQ    4$                                              ;
                                            5E  DD 00048 3$:         PUSHL   SP                                              ; 0785
                  00000000G 00              01  FB 0004A            CALLS   #1, EDT$$TRN_KPADK                              ;
                                            50  D5 00051            TSTL    R0                                              ;
                                            6E  13 00053            BEQL    9$                                              ;
                           14 BC            6E  D0 00055            MOVL    KEY, @RES_TERM                                  ; 0787
                                            6C  11 00059            BRB     10$                                             ; 0783
                           10 AC            52  D1 0005B 4$:         CMPL    R2, TERM                                        ; 0791
                                            07  12 0005F            BNEQ    5$                                              ;
                           14 BC    10 AC   D0  00061               MOVL    TERM, @RES_TERM                                 ; 0796
                                            5F  11 00066            BRB     10$                                             ; 0795
                              15            52  91 00068 5$:         CMPB    R2, #21                                         ; 0800
                                            15  12 0006B            BNEQ    6$                                              ;
                  00000000G 00              01  D0 0006D            MOVL    #1, EDT$$G_TIN_ECHOFLG                          ; 0805
```

```
                          0C   BC        08   AC   D0 00074          MOVL    COM_BUF, @END_COM                       ; 0806
                00000000G  00                  00   FB 00079          CALLS   #0, EDT$$ERA_MSGLN                      ; 0807
                                               4D   11 00080          BRB     12$                                     ; 0808
                           50 00000000G        00   9E 00082 6$:      MOVAB   EDT$$T_CMD_BUF+256, R0                  ; 0816
                           50                  53   D1 00089          CMPL    COM_POINT, R0                           ;
                                               0C   13 0008C          BEQL    7$                                      ;
                           83                  52   90 0008E          MOVB    R2, (COM_POINT)+                        ; 0819
                                               52   DD 00091          PUSHL   R2                                      ; 0820
                00000000G  00                  01   FB 00093          CALLS   #1, EDT$$TI_ECHOCH                      ;
                00000000G  00                  00   FB 0009A 7$:      CALLS   #0, EDT$$CHR_CC                         ; 0829
                           0E                  50   E9 000A1          BLBC    R0, 8$                                  ;
                          0C   BC        08   AC   D0 000A4          MOVL    COM_BUF, @END_COM                       ; 0832
                00000000G  00                  01   D0 000A9          MOVL    #1, EDT$$G_CC_DONE                      ; 0833
                                               1D   11 000B0          BRB     12$                                     ; 0834
                                         04    AE   9F 000B2 8$:      PUSHAB  CH                                      ; 0837
                00000000G  00                  01   FB 000B5          CALLS   #1, EDT$$TI_INPCH                       ;
                                               50   D5 000BC          TSTL    R0                                      ;
                                               03   13 000BE          BEQL    9$                                      ;
                                            FF58    31 000C0          BRW     1$                                      ;
                           50                  02   D0 000C3 9$:      MOVL    #2, R0                                  ;
                                               04   000C6            RET                                             ;
                          0C   BC              53   D0 000C7 10$:     MOVL    COM_POINT, @END_COM                     ; 0844
                           50                  01   D0 000CB 11$:     MOVL    #1, R0                                  ; 0845
                                               04   000CE            RET                                             ;
                                               50   D4 000CF 12$:     CLRL    R0                                      ; 0846
                                               04   000D1            RET                                             ;

; Routine Size:  210 bytes,    Routine Base:  _EDT$CODE + 0000

;  277          0847  1
;  278          0848  1 !<BLF/PAGE>
```

```
;  280          0849  1 END                                   ! of module EDT$TILINE
;  281          0850  1
;  282          0851  0 ELUDOM
```

```
;                                   PSECT SUMMARY
;
;       Name                    Bytes                           Attributes
;
;  _EDT$CODE                        210  NOVEC,NOWRT,  RD ,  EXE,  SHR,  LCL,  REL,  CON,  PIC,ALIGN(2)
```

```
;                                 Library Statistics
;
;                                          --------  Symbols  --------      Pages       Processing
;       File                               Total     Loaded   Percent       Mapped      Time
;
;  _$255$DUA28:[EDT.SRC]EDT.L32;1            377          6         1           40        00:00.3
;  _$255$DUA28:[EDT.SRC]PSECTS.L32;1           2          1        50            7        00:00.1
;  _$255$DUA28:[EDT.SRC]SUPPORTS.L32;1         2          1        50            5        00:00.1
```

```
;                                      COMMAND QUALIFIERS

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

; Size:          210 code + 0 data bytes
; Run Time:          00:14.9
; Elapsed Time:      00:18.2
; Lines/CPU Min:      3438
; Lexemes/CPU-Min:    9357
; Memory Used:   94 pages
; Compilation Complete
```