


```
FFFFFFFF  DDDDDDD  EEEEEEEEE  CCCCCCCC  
FFFFFFFF  DDDDDDD  EEEEEEEEE  CCCCCCCC  
FF        DD      DD  EE          CC  
FF        DD      DD  EE          CC  
FF        DD      DD  EE          CC  
FF        DD      DD  EE          CC  
FFFFFFFF  DD      DD  EEEEEEEE  CC  
FFFFFFFF  DD      DD  EEEEEEEE  CC  
FF        DD      DD  EE          CC  
FF        DD      DD  EE          CC  
FF        DD      DD  EE          CC  
FF        DD      DD  EE          CC  
FF        DD      DD  EE          CC  
FF        DDDDDDD  EEEEEEEEE  CCCCCCCC  
FF        DDDDDDD  EEEEEEEEE  CCCCCCCC
```

```
LL        IIIII  SSSSSSS  
LL        IIIII  SSSSSSS  
LL        II     SS  
LL        II     SS  
LL        II     SS  
LL        II     SS  
LL        II     SSSSS  
LL        II     SSSSS  
LL        II     SS  
LL        II     SS  
LL        II     SS  
LL        II     SS  
LLLLLLLLL IIIII  SSSSSSS  
LLLLLLLLL IIIII  SSSSSSS
```

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....  
....  
....  
....
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.....

```

1 0001 0 %TITLE 'EDT$FDEC - format a decimal number'
2 0002 0 MODULE EDT$FDEC ( ! Format a decimal number
3 0003 0 IDENT = 'V04-000' ! File: FDEC.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 *
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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 Format a decimal number.
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: March 18, 1979
41 0041 1
42 0042 1 MODIFIED BY:
43 0043 1
44 0044 1 1-001 - Original. DJS 19-FEB-1981. This module was created by
45 0045 1 extracting routine EDT$FMT DCML from module FORMAT.
46 0046 1 1-002 - Regularize headers. JBS 05-Mar-1981
47 0047 1 1-003 - Rewrite to use recursion. This saves 17 words over version 1-002
48 0048 1 on the PDP-11. JBS 05-Mar-1981
49 0049 1 1-004 - Correct infinite recursion. JBS 02-Apr-1981
50 0050 1 1-005 - Improve the appearance of the listing. JBS 14-Jun-1983
51 0051 1 --
52 0052 1

```

```

: 54 0053 1 %SBTTL 'Declarations'
: 55 0054 1 |
: 56 0055 1 | TABLE OF CONTENTS:
: 57 0056 1 |
: 58 0057 1 |
: 59 0058 1 REQUIRE 'EDT$SRC:TRAROUNAM';
: 60 0497 1 |
: 61 0498 1 FORWARD ROUTINE
: 62 0499 1 EDT$$FMT_DCML : NOVALUE;
: 63 0500 1 |
: 64 0501 1 |
: 65 0502 1 | INCLUDE FILES:
: 66 0503 1 |
: 67 0504 1 |
: 68 0505 1 REQUIRE 'EDT$SRC:EDTREQ';
: 69 0640 1 |
: 70 0641 1 |
: 71 0642 1 | MACROS:
: 72 0643 1 |
: 73 0644 1 | NONE
: 74 0645 1 |
: 75 0646 1 | EQUATED SYMBOLS:
: 76 0647 1 |
: 77 0648 1 | NONE
: 78 0649 1 |
: 79 0650 1 | OWN STORAGE:
: 80 0651 1 |
: 81 0652 1 | NONE
: 82 0653 1 |
: 83 0654 1 | EXTERNAL REFERENCES:
: 84 0655 1 |
: 85 0656 1 | In the routine
```

```

: 87 0657 1 %SBTTL 'EDT$$FMT_DCML - format a decimal number'
: 88 0658 1
: 89 0659 1 GLOBAL ROUTINE EDT$$FMT_DCML (           ! Format a decimal number
: 90 0660 1     N                                     ! The number to format
: 91 0661 1     ) : NOVALUE =
: 92 0662 1
: 93 0663 1 !++
: 94 0664 1 ! FUNCTIONAL DESCRIPTION:
: 95 0665 1
: 96 0666 1     Convert a decimal number to displayable ASCII in the format buffer.
: 97 0667 1     The number is written with a leading minus and leading zeros suppressed.
: 98 0668 1
: 99 0669 1 ! FORMAL PARAMETERS:
:100 0670 1
:101 0671 1     N           The number to write out.
:102 0672 1
:103 0673 1 ! IMPLICIT INPUTS:
:104 0674 1
:105 0675 1     NONE
:106 0676 1
:107 0677 1 ! IMPLICIT OUTPUTS:
:108 0678 1
:109 0679 1     NONE
:110 0680 1
:111 0681 1 ! ROUTINE VALUE:
:112 0682 1
:113 0683 1     NONE
:114 0684 1
:115 0685 1 ! SIDE EFFECTS:
:116 0686 1
:117 0687 1     Calls itself for large numbers.
:118 0688 1
:119 0689 1 !--
:120 0690 1
:121 0691 2     BEGIN
:122 0692 2
:123 0693 2     EXTERNAL ROUTINE
:124 0694 2         EDT$$FMT_CH : NOVALUE;
:125 0695 2
:126 0696 2     LOCAL
:127 0697 2         POSITIVE_N;
:128 0698 2
:129 0699 2 !+
:130 0700 2 ! See if we should put out a minus.
:131 0701 2 !-
:132 0702 2
:133 0703 2     IF (.N LSS 0)
:134 0704 2     THEN
:135 0705 2         BEGIN
:136 0706 2             EDT$$FMT_CH (XC'-' );
:137 0707 2             POSITIVE_N = -.N;
:138 0708 2             END
:139 0709 2     ELSE
:140 0710 2         POSITIVE_N = .N;
:141 0711 2
:142 0712 2 !+
:143 0713 2 ! If the number is greater than or equal to 10, print
```

```

: 144      0714 2 ! the leading digits first.
: 145      0715 2 !-
: 146      0716 2 ~~~~~
: 147      0717 2     IF (.POSITIVE_N GEQ 10) THEN EDT$$FMT_DCML (.POSITIVE_N/10);
: 148      0718 2 ~~~~~
: 149      0719 2 !+
: 150      0720 2 ! Now print the low-order (last) digit.
: 151      0721 2 !-
: 152      0722 2     EDT$$FMT_CH ((.POSITIVE_N MOD 10) + '0');
: 153      0723 1     END;

```

! of routine EDT\$\$FMT_DCML

.TITLE EDT\$FDEC EDT\$FDEC - format a decimal number
.IDENT \V04-000\

.EXTRN EDT\$\$FMT_CH

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

.ENTRY EDT\$\$FMT_DCML, Save R2,R3,R4

```

MOVAB EDT$$FMT_CH, R4      : 0659
MOVL  N, R3                : 0703
BGEQ  1$                   :
PUSHL #45                  : 0706
CALLS #1, EDT$$FMT_CH     :
MNEGL R3, POSITIVE_N     : 0707
BRB   2$                   : 0703
MOVL  R3, POSITIVE_N     : 0710
CMLP  POSITIVE_N, #10    : 0717
BLSS  3$                   :
DIVL3 #10, POSITIVE_N, -(SP)
CALLS #1, EDT$$FMT_DCML
EMUL  #1, POSITIVE_N, #0, -(SP) : 0722
EDIV  #10, (SP)+, R0, R0
PUSHAB 48(R0)
CALLS #1, EDT$$FMT_CH
RET

```

```

001C 00000
54 00000000G 00 9E 00002
53          04 AC D0 00009
           0A 18 0000D
           2D DD 0000F
64         01 FB 00011
52         53 CE 00014
           03 11 00017
52         53 D0 00019 1$:
0A         52 D1 0001C 2$:
           08 19 0001F
           0A C7 00021
7E         01 FB 00025
AF         01 7A 00029 3$:
50         8E 0A 7B 0002E
           30 0A 9F 00033
64         01 FB 00036
           04 00039

```

: Routine Size: 58 bytes, Routine Base: _EDT\$CODE + 0000

```

: 154      0724 1
: 155      0725 1 !<BLF/PAGE>

```

EDT\$FDEC
V04-000

EDT\$FDEC - format a decimal number
EDT\$\$FMT_DCML - format a decimal number

H 11
16-Sep-1984 00:20:37
14-Sep-1984 12:23:05

VAX-11 Bliss-32 V4.0-742
DISK\$VMSMASTER:[EDT.SRC]FDEC.BLI;1

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(4)

: 157 0726 1 END
: 158 0727 1
: 159 0728 0 ELUDOM

! of module EDT\$FDEC

PSECT SUMMARY

Name	Bytes	Attributes
_EDT\$CODE	58	NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

Library Statistics

File	Total	Symbols Loaded	Percent	Pages Mapped	Processing Time
_\$255\$DUA28:[EDT.SRC]EDT.L32;1	377	0	0	40	00:00.2
_\$255\$DUA28:[EDT.SRC]PSECTS.L32;1	2	1	50	7	00:00.1

COMMAND QUALIFIERS

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

: Size: 58 code + 0 data bytes
: Run Time: 00:09.6
: Elapsed Time: 00:12.6
: Lines/CPU Min: 4564
: Lexemes/CPU-Min: 12119
: Memory Used: 58 pages
: Compilation Complete

