BASRTL

BASLEFT

LIS

```
    1    0001   0   MODULE BAS$LEFT (                          ! Extract the substring of the BASIC LEFT
    2    0002   0                   IDENT = '1-005'            ! File: BASLEFT.B32
    3    0003   0                   ) =
    4    0004   1   BEGIN
    5    0005   1
    6    0006   1   !****************************************************************************
    7    0007   1   !*                                                                          *
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   25    0025   1   !*                                                                          *
   26    0026   1   !*                                                                          *
   27    0027   1   !****************************************************************************
   28    0028   1   !
   29    0029   1
   30    0030   1   !++
   31    0031   1   ! FACILITY: String support library
   32    0032   1   !
   33    0033   1   ! ABSTRACT:
   34    0034   1   !
   35    0035   1   !       This module extracts a substring according to the
   36    0036   1   !       BASIC-PLUS-2 syntax.  It finds the substring of a main string
   37    0037   1   !       starting at the left end of the string (character position 1)
   38    0038   1   !       and continues through the nth character of the string.  This
   39    0039   1   !       substring is copied to the destination string.
   40    0040   1   !
   41    0041   1   ! ENVIRONMENT: User mode, AST level or not or mixed
   42    0042   1   !
   43    0043   1   ! AUTHOR: R. Will, CREATION DATE: 19-Feb-79
   44    0044   1   !
   45    0045   1   ! MODIFIED BY:
   46    0046   1   !
   47    0047   1   !  R. Will, 19-Feb-79: VERSION 01
   48    0048   1   ! 01    - original
   49    0049   1   ! 02    - change linkage and call to COPY routine. 13-Mar-79 RW
   50    0050   1   ! 1-003 - Change string linkages to start with STR$.   JBS 04-JUN-1979
   51    0051   1   ! 1-004 - Change call to STR$$COPY.   JBS 16-JUL-1979
   52    0052   1   ! 1-005 - CALL STR$LEFT.  DELETE THIS MODULE WHEN COMPILER CHANGES.  RW  31-OCT-79
   53    0053   1   !--
   54    0054   1
   55    0055   1   !<BLF/PAGE>
```

BAS$LEFT
1-005

K 12
16-Sep-1984 00:41:59   VAX-11 Bliss-32 V4.0-742
14-Sep-1984 11:55:13   [BASRTL.SRC]BASLEFT.B32;1

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```
 57      0056   1  !
 58      0057   1  ! SWITCHES:
 59      0058   1  !
 60      0059   1
 61      0060   1  SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);
 62      0061   1
 63      0062   1  !
 64      0063   1  ! LINKAGES:
 65      0064   1  !
 66      0065   1
 67      0066   1  !
 68      0067   1  ! TABLE OF CONTENTS:
 69      0068   1  !
 70      0069   1
 71      0070   1  FORWARD ROUTINE
 72      0071   1     BAS$LEFT : NOVALUE;                          ! Find the LEFT of a string
 73      0072   1
 74      0073   1  !
 75      0074   1  ! INCLUDE FILES:
 76      0075   1  !
 77      0076   1
 78      0077   1  REQUIRE 'RTLIN:RTLPSECT';                       ! Declare PSECTS code
 79      0172   1
 80      0173   1  !
 81      0174   1  ! MACROS:
 82      0175   1  !
 83      0176   1  !
 84      0177   1  ! EQUATED SYMBOLS:
 85      0178   1  !
 86      0179   1  !
 87      0180   1  ! PSECT DECLARATIONS
 88      0181   1  !
 89      0182   1  DECLARE_PSECTS (BAS);
 90      0183   1  ! OWN STORAGE:
 91      0184   1  !
 92      0185   1  !
 93      0186   1  !
 94      0187   1  ! EXTERNAL REFERENCES:
 95      0188   1  !
 96      0189   1
 97      0190   1  EXTERNAL ROUTINE
 98      0191   1     STR$LEFT;               ! Routine to do the copy
 99      0192   1
```

```
 101    0193  1   GLOBAL ROUTINE BAS$LEFT (DEST_DESC,                      ! Pointer to destination descriptor
 102    0194  1           SRC_DESC,                                        ! Pointer to source descriptor
 103    0195  1           CHAR_POS) : NOVALUE =                            ! Last character to be included
 104    0196  1
 105    0197  1   !++
 106    0198  1   ! FUNCTIONAL DESCRIPTION:
 107    0199  1   !
 108    0200  1   !       This routine extracts the characters starting at the leftmost
 109    0201  1   !       character (character position 1) and continuing through the
 110    0202  1   !       character position specified by the input and copies that substring
 111    0203  1   !       to the destination string (by JSB to STR$$COPY_R_R8) according
 112    0204  1   !       to the syntax of the class of the destination string.
 113    0205  1   !       If the input character position is > the length of the input string,
 114    0206  1   !       then the length of the input string is used.  If the input character
 115    0207  1   !       position is < 1, the destination becomes a null string.
 116    0208  1   !
 117    0209  1   ! FORMAL PARAMETERS:
 118    0210  1   !
 119    0211  1   !       DEST_DESC.wt.dx                 pointer to destination string descriptor
 120    0212  1   !       SRC_DESC.rt.dx                  pointer to source string descriptor
 121    0213  1   !       CHAR_POS.rw.v                   value of last character position to include
 122    0214  1   !
 123    0215  1   ! IMPLICIT INPUTS:
 124    0216  1   !
 125    0217  1   !       NONE
 126    0218  1   !
 127    0219  1   ! IMPLICIT OUTPUTS:
 128    0220  1   !
 129    0221  1   !       NONE
 130    0222  1   !
 131    0223  1   ! ROUTINE VALUE:
 132    0224  1   ! COMPLETION CODES:
 133    0225  1   !
 134    0226  1   !       NONE
 135    0227  1   !
 136    0228  1   ! SIDE EFFECTS:
 137    0229  1   !
 138    0230  1   !       NONE
 139    0231  1   !
 140    0232  1   !--
 141    0233  1
 142    0234  2       BEGIN
 143    0235  2
 144    0236  2       MAP
 145    0237  2           DEST_DESC : REF BLOCK [8,BYTE];
 146    0238  2
 147    0239  2       MAP
 148    0240  2           SRC_DESC : REF BLOCK [8,BYTE];
 149    0241  2
 150    0242  2       STR$LEFT (DEST_DESC [0,0,0,0], SRC_DESC [0,0,0,0], CHAR_POS);
 151    0243  2       RETURN;
 152    0244  1       END;                                            !End of BAS$LEFT


                                                        .TITLE   BAS$LEFT
                                                        .IDENT   \1-005\
```

BAS$LEFT
1-005

M 12
16-Sep-1984 00:41:59   VAX-11 Bliss-32 V4.0-742
14-Sep-1984 11:55:13   [BASRTL.SRC]BASLEFT.B32;1

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```
                                                    .EXTRN   STR$LEFT

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

                                    0000 00000      .ENTRY   BAS$LEFT, Save nothing        ; 0193
                              0C  AC  9F 00002      PUSHAB   CHAR_POS                      ; 0242
                         7E   04  AC  7D 00005      MOVQ     DEST_DESC, -(SP)
              00000000G  00           03  FB 00009  CALLS    #3, STR$LEFT
                                         04 00010   RET                                   ; 0244
```

; Routine Size: 17 bytes,   Routine Base: _BAS$CODE + 0000

```
;  153          0245  1
;  154          0246  1 END                                      !End of module
;  155          0247  1
;  156          0248  0 ELUDOM
```

;
;
;   PSECT SUMMARY
;
;   Name   Bytes   Attributes
;
;   _BAS$CODE   17 NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

;   COMMAND QUALIFIERS

;   BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LIS$:BASLEFT/OBJ=OBJ$:BASLEFT MSRC$:BASLEFT/UPDATE=(ENH$:BASLEFT)

; Size: 17 code + 0 data bytes
; Run Time: 00:01.7
; Elapsed Time: 00:03.5
; Lines/CPU Min: 8752
; Lexemes/CPU-Min: 23294
; Memory Used: 18 pages
; Compilation Complete

BASINIGSC
LIS

BASINIT
LIS

BASINIDEF
LIS

BASINIDFS
LIS

BASINIGSB
LIS

BASINSTR
LIS

BASINIONE
LIS

BASLEFT
LIS

BASMARGIN
LIS

BASINIIOL
LIS

BASKILL
LIS

BASIOBEG
LIS

BASIOEND
LIS

BASMATADD
LIS

BASMAGTAP
LIS