

BBBBBBBBBBBB		AAAAAAAAA		SSSSSSSSSS		RRRRRRRRRR		TTTTTTTTTTTT		LLL
BBBBBBBBBBBB		AAAAAAAAA		SSSSSSSSSS		RRRRRRRRRR		TTTTTTTTTTTT		LLL
BBBBBBBBBBBB		AAAAAAAAA		SSSSSSSSSS		RRRRRRRRRR		TTTTTTTTTTTT		LLL
BBB	BBB	AAA	AAA	SSS		RRR	RRR	TTT		LLL
BBB	BBB	AAA	AAA	SSS		RRR	RRR	TTT		LLL
BBB	BBB	AAA	AAA	SSS		RRR	RRR	TTT		LLL
BBB	BBB	AAA	AAA	SSS		RRR	RRR	TTT		LLL
BBB	BBB	AAA	AAA	SSS		RRR	RRR	TTT		LLL
BBB	BBB	AAA	AAA	SSS		RRR	RRR	TTT		LLL
BBB	BBB	AAA	AAA	SSS		RRR	RRR	TTT		LLL
BBBBBBBBBBBB		AAA	AAA	SSSSSSSS		RRRRRRRRRR		TTTTTTTTTTTT		LLL
BBBBBBBBBBBB		AAA	AAA	SSSSSSSS		RRRRRRRRRR		TTTTTTTTTTTT		LLL
BBBBBBBBBBBB		AAA	AAA	SSSSSSSS		RRRRRRRRRR		TTTTTTTTTTTT		LLL
BBB	BBB	AAAAAAAAAAAA		SSS		RRR	RRR	TTT		LLL
BBB	BBB	AAAAAAAAAAAA		SSS		RRR	RRR	TTT		LLL
BBB	BBB	AAAAAAAAAAAA		SSS		RRR	RRR	TTT		LLL
BBB	BBB	AAA	AAA	SSS		RRR	RRR	TTT		LLL
BBB	BBB	AAA	AAA	SSS		RRR	RRR	TTT		LLL
BBB	BBB	AAA	AAA	SSS		RRR	RRR	TTT		LLL
BBB	BBB	AAA	AAA	SSS		RRR	RRR	TTT		LLL
BBBBBBBBBBBB		AAA	AAA	SSSSSSSS		RRR	RRR	TTT		LLLLLLLLLLLLLLLL
BBBBBBBBBBBB		AAA	AAA	SSSSSSSS		RRR	RRR	TTT		LLLLLLLLLLLLLLLL
BBBBBBBBBBBB		AAA	AAA	SSSSSSSS		RRR	RRR	TTT		LLLLLLLLLLLLLLLL


```

1 0001 0 MODULE BAS$SEG (
2 0002 0 IDENT = '1-005'
3 0003 0 ) =
4 0004 1 BEGIN
5 0005 1
6 0006 1 *****
7 0007 1 *
8 0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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25 0025 1 *
26 0026 1 *
27 0027 1 *****
28 0028 1
29 0029 1
30 0030 1 ++
31 0031 1 FACILITY: String support library
32 0032 1
33 0033 1 ABSTRACT:
34 0034 1
35 0035 1 This module extracts a substring according to the BASIC-PLUS-2
36 0036 1 syntax. It finds the substring of a main string starting at the
37 0037 1 character position specified by the second input parameter and
38 0038 1 continues for the number of characters specified by the third
39 0039 1 input parameter. This substring is copied to the destination string.
40 0040 1
41 0041 1 ENVIRONMENT: User mode, AST level or not or mixed
42 0042 1
43 0043 1 AUTHOR: R. Will, CREATION DATE: 21-Feb-79
44 0044 1
45 0045 1 MODIFIED BY:
46 0046 1
47 0047 1 R. Will, 28-Feb-79: VERSION 01
48 0048 1 01 - original
49 0049 1 02 - change linkage and call to COPY routine. 15-Mar-79 RW
50 0050 1 1-003 - Make the string linkages start with STR$. JBS 04-JUN-1979
51 0051 1 1-004 - Change call to STR$COPY. JBS 16-JUL-1979
52 0052 1 1-005 - CALL STR$POS EXTR, DELETE THIS MODULE WHEN COMPILER CALLS STR$.
53 0053 1 RW 1-NOV-79
54 0054 1 --
55 0055 1
56 0056 1 !<BLF/PAGE>
    
```

```

: 58      0057 1 |
: 59      0058 1 | SWITCHES:
: 60      0059 1 |
: 61      0060 1 |
: 62      0061 1 | SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);
: 63      0062 1 |
: 64      0063 1 |
: 65      0064 1 | LINKAGES:
: 66      0065 1 |
: 67      0066 1 |
: 68      0067 1 |
: 69      0068 1 | TABLE OF CONTENTS:
: 70      0069 1 |
: 71      0070 1 |
: 72      0071 1 | FORWARD ROUTINE
: 73      0072 1 |     BAS$SEG : NOVALUE;                ! Find the SEG of a string
: 74      0073 1 |
: 75      0074 1 |
: 76      0075 1 | INCLUDE FILES:
: 77      0076 1 |
: 78      0077 1 |
: 79      0078 1 | REQUIRE 'RTLIN:RTLPSECT';           ! Declare PSECTs code
: 80      0173 1 |
: 81      0174 1 |
: 82      0175 1 | MACROS:
: 83      0176 1 |
: 84      0177 1 |
: 85      0178 1 | EQUATED SYMBOLS:
: 86      0179 1 |
: 87      0180 1 |
: 88      0181 1 | PSECT DECLARATIONS
: 89      0182 1 |
: 90      0183 1 | DECLARE_PSECTS (BAS);
: 91      0184 1 |
: 92      0185 1 | OWN STORAGE:
: 93      0186 1 |
: 94      0187 1 |
: 95      0188 1 | EXTERNAL REFERENCES:
: 96      0189 1 |
: 97      0190 1 |
: 98      0191 1 | EXTERNAL ROUTINE
: 99      0192 1 |     STR$POS_EXTR;                    ! Routine to do the copy
: 100     0193 1 |

```

```

: 102      0194 1 GLOBAL ROUTINE BAS$SEG (DEST_DESC,      ! Pointer to destination descriptor
: 103      0195 1      SRC_DESC,                      ! Pointer to source descriptor
: 104      0196 1      START_POS,                    ! First character to be included
: 105      0197 1      END_POS) : NOVALUE =          ! Last character position to include
: 106      0198 1
: 107      0199 1
: 108      0200 1  +-+
: 109      0201 1  FUNCTIONAL DESCRIPTION:
: 110      0202 1
: 111      0203 1      This routine extracts the characters starting at the
: 112      0204 1      character position in the source string specified by the 3rd input
: 113      0205 1      parameter and continuing to the character position in the source
: 114      0206 1      string specified by the 4th input parameter, and copies that substring
: 115      0207 1      to the destination string (by JSB to STR$$COPY_R_R8) according
: 116      0208 1      to the syntax of the class of the destination string.
: 117      0209 1      If the starting position is < 1, 1 is used. If the ending position is
: 118      0210 1      > length of the source string, the length of the source string is
: 119      0211 1      used. If the starting position > the ending position, a null string
: 120      0212 1      is returned.
: 121      0213 1  FORMAL PARAMETERS:
: 122      0214 1
: 123      0215 1      DEST_DESC.wt.dx                pointer to destination string descriptor
: 124      0216 1      SRC_DESC.rt.dx                 pointer to source string descriptor
: 125      0217 1      START_POS.rw.v                 character position in src to start substring
: 126      0218 1      END_POS.rw.v                   character position in src to end substring
: 127      0219 1
: 128      0220 1  IMPLICIT INPUTS:
: 129      0221 1
: 130      0222 1      NONE
: 131      0223 1
: 132      0224 1  IMPLICIT OUTPUTS:
: 133      0225 1
: 134      0226 1      NONE
: 135      0227 1
: 136      0228 1  ROUTINE VALUE:
: 137      0229 1  COMPLETION CODES:
: 138      0230 1
: 139      0231 1      NONE
: 140      0232 1
: 141      0233 1  SIDE EFFECTS:
: 142      0234 1
: 143      0235 1      NONE
: 144      0236 1
: 145      0237 1  --
: 146      0238 1
: 147      0239 1  BEGIN
: 148      0240 1
: 149      0241 1  MAP
: 150      0242 1  DEST_DESC : REF BLOCK [8,BYTE];
: 151      0243 1
: 152      0244 1  MAP
: 153      0245 1  SRC_DESC : REF BLOCK [8,BYTE];
: 154      0246 1
: 155      0247 1  STR$POS EXTR (DEST_DESC [0,0,0,0], SRC_DESC [0,0,0,0],
: 156      0248 1  START_POS, END_POS);
: 157      0249 1  RETURN;
: 158      0250 1  END;                                !End of BAS$SEG

```

```

.TITLE BASSSEG
.IDENT \1-005\
.EXTRN STR$POS_EXTR
.PSECT _BASSCODE, NOWRT, SHR, PIC, 2
.ENTRY BASSSEG, Save nothing
PUSHAB END POS
PUSHAB START POS
MOVQ DEST_DESC, -(SP)
CALLS #4, STR$POS_EXTR
RET

```

```

: 0194
: 0247
:
: 0250

```

```

00000000G 7E 00
10 AC 9F 00002
0C AC 9F 00005
04 AC 7D 00008
04 FB 0000C
04 00013

```

: Routine Size: 20 bytes, Routine Base: _BASSCODE + 0000

```

: 159 0251 1
: 160 0252 1 END
: 161 0253 1
: 162 0254 0 ELUDOM

```

!End of module

PSECT SUMMARY

Name	Bytes	Attributes
_BASSCODE	20	NOVEC, NOWRT, RD, EXE, SHR, LCL, REL, CON, PIC, ALIGN(2)

COMMAND QUALIFIERS

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

```

: Size: 20 code + 0 data bytes
: Run Time: 00:01.8
: Elapsed Time: 00:04.5
: Lines/CPU Min: 8327
: Lexemes/CPU-Min: 21770
: Memory Used: 19 pages
: Compilation Complete

```

0031 AH-BT13A-SE
VAX/VMS V4.0

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