


```

LL          IIIIII  BBBB8888  SSSSSSSS  KK      KK  PPPPPPPP  CCCCCCCC
LL          IIIIII  88888888  SSSSSSSS  KK      KK  PPPPPPPP  CCCCCCCC
LL          II      88      88  SS      SS  KK      KK  PP      PP  CC
LL          II      88      88  SS      SS  KK      KK  PP      PP  CC
LL          II      88      88  SS      SS  KK      KK  PP      PP  CC
LL          II      88      88  SS      SS  KK      KK  PP      PP  CC
LL          II      88888888  SSSSSS  KKKKKK  PPPPPPPP  CC
LL          II      88888888  SSSSSS  KKKKKK  PPPPPPPP  CC
LL          II      88      88  SS      SS  KK      KK  PP      PP  CC
LL          II      88      88  SS      SS  KK      KK  PP      PP  CC
LL          II      88      88  SS      SS  KK      KK  PP      PP  CC
LL          II      88      88  SS      SS  KK      KK  PP      PP  CC
LLLLLLLLLL IIIIII  88888888  SSSSSSSS  KK      KK  PP      PP  CCCCCCCC
LLLLLLLLLL IIIIII  88888888  SSSSSSSS  KK      KK  PP      PP  CCCCCCCC

```

```

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

```

LIB\$SKPC
Table of contents

- Skip characters in a character string ^{N 4} 16-SEP-1984 00:19:52 VAX/VMS Macro V04-00

Page 0

(2) 59
(3) 87

DECLARATIONS
LIB\$SKPC - Skip characters

LIB\$
Symb

DSC\$
DSC\$
LIB\$
LIB\$
MASK
SOUR
TABL

PSEC

A
\$ABS
_LIB

Phas

Init
Comm
Pass
Symb
Pass
Symb
Psec
Cros
Asse

The
7912
Ther
163
8 pa

Macr

_S25

190

Ther

MACH

```

0000 1      .TITLE LIB$SKPC - Skip characters in a character string
0000 2      .IDENT /1-005/ ; File: LIB$SKPC.MAR Edit: RKR1005
0000 3
0000 4
0000 5 :*****
0000 6 :
0000 7 :  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
0000 8 :  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
0000 9 :  ALL RIGHTS RESERVED.
0000 10 :
0000 11 :  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
0000 12 :  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
0000 13 :  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
0000 14 :  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
0000 15 :  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
0000 16 :  TRANSFERRED.
0000 17 :
0000 18 :  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
0000 19 :  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
0000 20 :  CORPORATION.
0000 21 :
0000 22 :  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
0000 23 :  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0000 24 :
0000 25 :*****
0000 26 :
0000 27 :
0000 28 :
0000 29 :++
0000 30 : FACILITY: General Utility Library
0000 31 :
0000 32 : ABSTRACT:
0000 33 :
0000 34 :     Return the relative position of the non-matching character or
0000 35 :     zero.
0000 36 :
0000 37 : ENVIRONMENT: User Mode, AST Reentrant
0000 38 :
0000 39 :--
0000 40 : AUTHOR: Donald G. Petersen, CREATION DATE: 03-Jan-78
0000 41 :
0000 42 : MODIFIED BY:
0000 43 :
0000 44 :     DGP, 03-Jan-78 : VERSION 00
0000 45 : 01 - Original
0000 46 : 00-02 - DGP 06-Jan-78 Relative position not found properly
0000 47 : 1-001 - Update version number and copyright notice. JBS 16-NOV-78
0000 48 : 1-002 - Add "" to the PSECT directive. JBS 21-DEC-78
0000 49 : 1-003 - Enhance to recognize additional classes of string descriptors
0000 50 :         by invoking LIB$ANALYZE_SDESC_R3 to extract length and
0000 51 :         address of 1st data byte. RKR 26-MAY-1981.
0000 52 : 1-004 - Add special-case code to process string descriptors that
0000 53 :         'read' like fixed string descriptors. RKR 7-OCT-1981.
0000 54 : 1-005 - Redirect jsb's from LIB$ANALYZE_SDESC_R3 to
0000 55 :         LIB$ANALYZE_SDESC_R2. Reorganize regs to avoid using R5
0000 56 :         which can be removed from entry mask.
0000 57 :         RKR 18-NOV-1981.

```

```
0000 59 .SBTTL DECLARATIONS
0000 60 :
0000 61 : INCLUDE FILES: NONE
0000 62 :
0000 63 :
0000 64 : EXTERNAL SYMBOLS
0000 65 .DSABL GBL ; Only explicit externals
0000 66 .EXTRN LIB$ANALYZE_SDESC_R2 ; Extract length and address of
0000 67 ; 1st data byte of string
0000 68 :
0000 69 : MACROS:
0000 70 :
0000 71 $DSCDEF ; fields within a descriptor
0000 72 :
0000 73 :
0000 74 : EQUATED SYMBOLS: NONE
0000 75 :
0000 76 :
0000 77 :
0000 78 : OWN STORAGE: NONE
0000 79 :
0000 80 :
0000 81 :
0000 82 : PSECT DECLARATIONS:
0000 83 :
00000000 84 .PSECT _LIB$CODE PIC, SHR, LONG, EXE, NOWRT
0000 85
```

```

0000 87      .SBTTL LIB$SKPC - Skip characters
0000 88      :++
0000 89      : FUNCTIONAL DESCRIPTION:
0000 90      :
0000 91      : The character is compared with successive bytes of the string
0000 92      : specified by the string descriptor until an inequality is
0000 93      : found or the string is exhausted.
0000 94      : The relative position of the unequal byte or zero is returned.
0000 95      : If the string has a length of zero then a zero is returned.
0000 96      :
0000 97      : CALLING SEQUENCE:
0000 98      :
0000 99      :     index.wlu.v = LIB$SKPC (char.rt.dx, string.rt.dx)
0000 100     :
0000 101     :
0000 102     : INPUT PARAMETERS:
0000 103     :
0000 104     :     CHAR = 4                ; Adr of character desc
00000004 0000 105     :     STRING = 8                ; Adr of string desc
00000008 0000 106     :
0000 107     : IMPLICIT INPUTS:
0000 108     :
0000 109     :     NONE
0000 110     :
0000 111     : OUTPUT PARAMETERS:
0000 112     :
0000 113     :     NONE
0000 114     :
0000 115     : IMPLICIT OUTPUTS:
0000 116     :
0000 117     :     NONE
0000 118     :
0000 119     : FUNCTION VALUE:
0000 120     :
0000 121     :     index.wlu.v
0000 122     :
0000 123     : SIDE EFFECTS:
0000 124     :
0000 125     :     NONE
0000 126     :
0000 127     :--
0000 128     :
0000 129     : .ENTRY LIB$SKPC , ^M<R2, R3, R4> ; Entry point
50 04 AC 001C 0002 130     : MOVL CHAR(AP), R0 ; Address of character descr
02 03 A0 91 0006 131     : CMPB DSC$B_CLASS(R0), #DSC$K_CLASS_D ; read like fixed ?
06 1A 000A 132     : BGTRU 1$ ; no
53 04 A0 D0 000C 133     : MOVL DSC$A_POINTER(R0), R3 ; address-> R3
09 11 0010 134     : BRB 2$ ; join common flow
0012 135     :
00000000 GF 16 0012 136 1$: JSB G^LIB$ANALYZE_SDESC_R2 ; Extract: length->R1, addr->R2
53 52 D0 0018 137     : MOVL R2, R3 ; save addr of 1st data byte
001B 138     :
50 08 AC D0 001B 139 2$: MOVL STRING(AP), R0 ; Address of string descr
02 03 A0 91 001F 140     : CMPB DSC$B_CLASS(R0), #DSC$K_CLASS_D ; read like fixed ?
06 1A 0023 141     : BGTRU 3$ ;
51 08 BC 7D 0025 142     : MOVQ @STRING(AP), R1 ; length->R1, address->R2
06 11 0029 143     : BRB 4$ ; join common flow

```

```

00000000'GF 16 002B 144
   54 51 3C 0031 145 3$: JSB G^LIB$ANALYZE_SDESC_R2 ; Extract: length->R1, addr->R2
62 51 63 3B 0034 146 4$: MOVZWL R1, R4 ; save string length
           0034 147
           0034 148 SKPC (R3), R1, (R2) ; skip characters
           0038 149 ; State of regs after a SKPC instr.
           0038 150 ; R0 = If found, number of bytes
           0038 151 ; remaining in string (including
           0038 152 ; skipped one),
           0038 153 ; else 0.
           0038 154 ; R1 = if found, address of byte found,
           0038 155 ; else address of 1 byte beyond
           0038 156 ; string.
           0038 157
           0038 158
           0038 159
50 54 06 13 0038 159 BEQL 10$ ; branch if none found
           50 A3 003A 160 SUBW3 R0, R4, R0 ; get relative position
           50 06 003E 161 INCL R0 ; one origin
           04 0040 162 10$: RET
           0041 163 .END

```

LIBSSKPC
Symbol table

CHAR	=	00000004		
DSCSA_POINTER	=	00000004		
DSCSB_CLASS	=	00000003		
DSCSK_CLASS_D	=	00000002		
LIBSANALYZE_SDESC_R2		*****	X	00
LIBSSKPC		00000000	RG	02
STRING	=	00000008		

! Psect synopsis !

PSECT name	Allocation	PSECT No.	Attributes													
. ABS .	00000000 (0.)	00 (0.)	NOPIC	USR	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE			
\$ABSS	00000000 (0.)	01 (1.)	NOPIC	USR	CON	ABS	LCL	NOSHR	EXE	RD	WRT	NOVEC	BYTE			
_LIBSCODE	00000041 (65.)	02 (2.)	PIC	USR	CON	REL	LCL	SHR	EXE	RD	NOWRT	NOVEC	LONG			

! Performance indicators !

Phase	Page faults	CPU Time	Elapsed Time
Initialization	37	00:00:00.05	00:00:00.99
Command processing	147	00:00:00.30	00:00:01.63
Pass 1	131	00:00:01.13	00:00:04.15
Symbol table sort	0	00:00:00.10	00:00:00.18
Pass 2	42	00:00:00.31	00:00:01.33
Symbol table output	3	00:00:00.01	00:00:00.02
Psect synopsis output	2	00:00:00.01	00:00:00.01
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	364	00:00:01.91	00:00:08.31

The working set limit was 900 pages.
8049 bytes (16 pages) of virtual memory were used to buffer the intermediate code.
There were 10 pages of symbol table space allocated to hold 135 non-local and 5 local symbols.
163 source lines were read in Pass 1, producing 13 object records in Pass 2.
8 pages of virtual memory were used to define 7 macros.

! Macro library statistics !

Macro library name	Macros defined
-----	-----
_\$255\$DUA28:[SYSLIB]STARLET.MLB;2	4

190 GETS were required to define 4 macros.

There were no errors, warnings or information messages.

MACRO/ENABLE=SUPPRESSION/DISABLE=(GLOBAL,TRACEBACK)/LIS=LIS\$:LIBSKPC/OBJ=OBJ\$:LIBSKPC MSRC\$:LIBSKPC/UPDATE=(ENH\$:LIBSKPC)

LIBSPAWN
LIS

LIBSTATUM
LIS

LIBTRAAZE
LIS

LIBSPANC
LIS

LIBSYMBOL
LIS

LIBTRNLOG
LIS

LIBSKPC
LIS

LIBTIMER
LIS

LIBTPARSE
LIS

LIBTRIMF1
LIS

LIBSTRET
LIS

LIBTRAE2A
LIS