





```

1 0001 0 MODULE LIB$CHAR (
2 0002 0
3 0003 0 IDENT = '1-007' ! File: LIBCHAR.B32 Edit: RKR1007
4 0004 0
5 0005 0 ) =
6 0006 1 BEGIN
7 0007 1
8 0008 1 *****
9 0009 1 *
10 0010 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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27 0027 1 *
28 0028 1 *
29 0029 1 *****
30 0030 1
31 0031 1
32 0032 1 **
33 0033 1 FACILITY: General Library Support
34 0034 1
35 0035 1 ABSTRACT:
36 0036 1
37 0037 1 Return a byte-length integer (FORTRAN INTEGER*1) as a
38 0038 1 one-character string.
39 0039 1
40 0040 1 ENVIRONMENT: VAX-11 User Mode
41 0041 1
42 0042 1 AUTHOR: Tomas N. Hastings, 06-AUG-1977
43 0043 1
44 0044 1 MODIFIED BY:
45 0045 1
46 0046 1 1-001 - Update version number and copyright notice. The edit number
47 0047 1 on version 0 was 3. JBS 16-NOV-1978
48 0048 1 1-002 - Add "" to PSECT directives. JBS 21-DEC-1978
49 0049 1 1-003 - Translate to BLISS and handle a dynamic result string
50 0050 1 correctly. JBS 20-MAR-1979
51 0051 1 1-004 - Change LIB$$ and OTS$$ to STR$. JBS 21-MAY-1979
52 0052 1 1-005 - Change call to STR$COPY. JBS 16-JUL-1979
53 0053 1 1-006 - Use handler to translate error codes. RW 22-Jan-1980
54 0054 1 1-007 - Redirect copy call from STR$COPY_R to LIB$COPY_R_DX6. This
55 0055 1 eliminates the need for a handler and the need to change
56 0056 1 STR$ statuses to LIB$ statuses.
57 0057 1 RKR 26-MAY-1981

```

LIBSCHAR  
1-007

G 15  
16-Sep-1984 00:39:10  
14-Sep-1984 12:38:27

VAX-11 Bliss-32 V4.0-742  
[LIBRTL.SRC]LIBCHAR.B32;1

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(1)

: 58  
: 59  
: 60  
0058 1 !--  
0059 1  
0060 1 !<BLF/PAGE>

```
.. 62      0061  1  |
.. 63      0062  1  | SWITCHES:
.. 64      0063  1  |
.. 65      0064  1  |
.. 66      0065  1  | SWITCHES ADDRESSING MODE
.. 67      0066  1  |         (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);
.. 68      0067  1  |
.. 69      0068  1  |
.. 70      0069  1  | LINKAGES:
.. 71      0070  1  |
.. 72      0071  1  | REQUIRE 'RTLIN:STRLNK';           ! Linkage to LIB$SCOPY_R_DX6
.. 73      0256  1  |
.. 74      0257  1  | TABLE OF CONTENTS:
.. 75      0258  1  |
.. 76      0259  1  |
.. 77      0260  1  | FORWARD ROUTINE
.. 78      0261  1  |     LIB$CHAR;                     ! Make a 1-char string
.. 79      0262  1  |
.. 80      0263  1  |
.. 81      0264  1  | INCLUDE FILES:
.. 82      0265  1  |
.. 83      0266  1  |
.. 84      0267  1  | REQUIRE 'RTLIN:RTLPSECT';        ! Macros for defining psects
.. 85      0362  1  |
.. 86      0363  1  |
.. 87      0364  1  | MACROS:
.. 88      0365  1  |     NONE
.. 89      0366  1  |
.. 90      0367  1  | EQUATED SYMBOLS:
.. 91      0368  1  |     NONE
.. 92      0369  1  |
.. 93      0370  1  |
.. 94      0371  1  | PSECTS:
.. 95      0372  1  |
.. 96      0373  1  |
.. 97      0374  1  | DECLARE_PSECTS (LIB);             ! Declare psects for LIB$ facility
.. 98      0375  1  |
.. 99      0376  1  | OWN STORAGE:
.. 100     0377  1  |     NONE
.. 101     0378  1  |
.. 102     0379  1  | EXTERNAL REFERENCES:
.. 103     0380  1  |
.. 104     0381  1  |
.. 105     0382  1  |
.. 106     0383  1  | EXTERNAL ROUTINE
.. 107     0384  1  |     LIB$SCOPY_R_DX6 : STRING_JSB;   ! Copy string
```

```
109 0385 1 GLOBAL ROUTINE LIB$CHAR (      ! Make a 1-char string
110 0386 1
111 0387 1     RESULT_STR,      ! Descriptor of result string
112 0388 1     BYTE_INTEGER    ! Byte to make up the string
113 0389 1
114 0390 1         ) : =
115 0391 1
116 0392 1     ++
117 0393 1     FUNCTIONAL DESCRIPTION:
118 0394 1
119 0395 1     Return unsigned byte integer (FORTRAN INTEGER*1) as a
120 0396 1     one-character 8 bit ASCII string. The range of the input
121 0397 1     integer is 0 to 255. Since the output string is the first
122 0398 1     argument, this can be considered as either a subroutine with
123 0399 1     two parameters or a string function with one.
124 0400 1
125 0401 1     FORMAL PARAMETERS:
126 0402 1
127 0403 1     RESULT_STR.wt.dx      Address of the descriptor into which
128 0404 1                       the one-character string is written.
129 0405 1     BYTE_INTEGER.rbu.r    The byte to put in that string.
130 0406 1
131 0407 1     IMPLICIT INPUTS:
132 0408 1
133 0409 1     NONE
134 0410 1
135 0411 1     IMPLICIT OUTPUTS:
136 0412 1
137 0413 1     NONE
138 0414 1
139 0415 1     COMPLETION CODES:
140 0416 1
141 0417 1     $$$ NORMAL           Procedure successfully completed
142 0418 1     LIB$STRTRU           Success, but source string truncated
143 0419 1     LIB$INSVIRMEM       Insufficient virtual memory
144 0420 1     LIB$INVSTRDES       Invalid string descriptor
145 0421 1     LIB$FATERRLIB       Fatal error in library
146 0422 1
147 0423 1     SIDE EFFECTS:
148 0424 1
149 0425 1     May allocate a little space for the result string.
150 0426 1
151 0427 1     --
152 0428 1
153 0429 2     BEGIN
154 0430 2
155 0431 2     RETURN (LIB$COPY_R_DX6 (1, .BYTE_INTEGER, .RESULT_STR)) ;
156 0432 2
157 0433 1     END;                                ! end of LIB$CHAR
```

```
.TITLE LIB$CHAR
.IDENT \1-007\
.EXTRN LIB$COPY_R_DX6
.PSECT _LIB$CODE,NOWRT, SHR, PIC,2
```

LIB\$CHAR  
1-007

J 15  
16-Sep-1984 00:39:10 VAX-11 Bliss-32 V4.0-742  
14-Sep-1984 12:38:27 [LIBRTL.SRC]LIBCHAR.B32;1

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			007C	00000
52	04	AC	D0	00002
51	08	AC	D0	00006
50		01	D0	0000A
	00000000G	00	16	0000D
			04	00013

```

.ENTRY LIB$CHAR, Save R2,R3,R4,R5,R6
MOVL RESULT_SFR, R2
MOVL BYTE_INTEGER, R1
MOVL #1, R0
JSB LIB$SCOPY_R_DX6
RET

```

```

: 0385
: 0431
:
: 0433

```

: Routine Size: 20 bytes, Routine Base: \_LIB\$CODE + 0000

```

: 158 0434 1
: 159 0435 1 END
: 160 0436 1
: 161 0437 0 ELUDOM

```

: end of module LIB\$CHAR

PSECT SUMMARY

Name	Bytes	Attributes
_LIB\$CODE	20	NOVEC,NOWRT, RD, EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

COMMAND QUALIFIERS

: BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LISS:LIBCHAR/OBJ=OBJ\$:LIBCHAR MSRCS:LIBCHAR/UPDATE=(ENHS:LIBCHAR)

```

: Size: 20 code + 0 data bytes
: Run Time: 00:01.7
: Elapsed Time: 00:09.5
: Lines/CPU Min: 15514
: Lexemes/CPU-Min: 46437
: Memory Used: 21 pages
: Compilation Complete

```

RTLMACB32 REQ	STRMACROS REQ	RTLOOBBG REQ	RTLPSECT REQ	STRLNK REQ	RTLMACMAR MAR	LIBASCEBC LIS	LIBASTINP LIS	LIBBINTRE LIS	LIBCHAR LIS
					LIBDEF FOR	LIBANASTR LIS	LIBASNMBX LIS	LIBBBCCI LIS	
					LIBABUPCA LIS	LIBADDP LIS			
					SIGDEF FOR	LIBASCTIM LIS			
					LIBTABMAC MAR	LIBATTACH LIS			
					LIBA2EREV LIS	LIBBBSST LIS	LIBCALLG LIS	LIBCLICAL LIS	
					LIBADDP LIS				