```
LLL              IIIIIIIIII   BBBBBBBBBBBB   RRRRRRRRRRR    TTTTTTTTTTTTTTTT   LLL
LLL              IIIIIIIIII   BBBBBBBBBBBB   RRRRRRRRRRR    TTTTTTTTTTTTTTTT   LLL
LLL              IIIIIIIIII   BBBBBBBBBBBB   RRRRRRRRRRR    TTTTTTTTTTTTTTTT   LLL
LLL                 III       BBB      BBB   RRR      RRR          TTT         LLL
LLL                 III       BBB      BBB   RRR      RRR          TTT         LLL
LLL                 III       BBB      BBB   RRR      RRR          TTT         LLL
LLL                 III       BBB      BBB   RRR      RRR          TTT         LLL
LLL                 III       BBB      BBB   RRR      RRR          TTT         LLL
LLL                 III       BBBBBBBBBBBB   RRRRRRRRRRR          TTT         LLL
LLL                 III       BBBBBBBBBBBB   RRRRRRRRRRR          TTT         LLL
LLL                 III       BBB      BBB   RRR   RRR            TTT         LLL
LLL                 III       BBB      BBB   RRR   RRR            TTT         LLL
LLL                 III       BBB      BBB   RRR   RRR            TTT         LLL
LLL                 III       BBB      BBB   RRR      RRR          TTT         LLL
LLL                 III       BBB      BBB   RRR      RRR          TTT         LLL
LLLLLLLLLLLLLLL     III       BBBBBBBBBBBB   RRR      RRR          TTT         LLLLLLLLLLLLLL
LLLLLLLLLLLLLLL  IIIIIIIIII   BBBBBBBBBBBB   RRR      RRR          TTT         LLLLLLLLLLLLLL
LLLLLLLLLLLLLLL  IIIIIIIIII   BBBBBBBBBBBB   RRR      RRR          TTT         LLLLLLLLLLLLLL
```

```
LL        IIIIII  BBBBBBBB    AAAAAA   BBBBBBBB  UU      UU  PPPPPPPP    CCCCCCCC    AAAAAA
LL        IIIIII  BBBBBBBB    AAAAAA   BBBBBBBB  UU      UU  PPPPPPPP    CCCCCCCC    AAAAAA
LL          II    BB    BB  AA    AA   BB    BB  UU      UU  PP    PP  CC         AA      AA
LL          II    BB    BB  AA    AA   BB    BB  UU      UU  PP    PP  CC         AA      AA
LL          II    BB    BB  AA    AA   BB    BB  UU      UU  PP    PP  CC         AA      AA
LL          II    BBBBBBBB  AA    AA   BBBBBBBB  UU      UU  PPPPPPPP  CC         AA      AA
LL          II    BBBBBBBB  AA    AA   BBBBBBBB  UU      UU  PPPPPPPP  CC         AA      AA
LL          II    BB    BB  AAAAAAAAAA BB    BB  UU      UU  PP        CC         AAAAAAAAAA
LL          II    BB    BB  AAAAAAAAAA BB    BB  UU      UU  PP        CC         AAAAAAAAAA
LL          II    BB    BB  AA    AA   BB    BB  UU      UU  PP        CC         AA      AA
LL          II    BB    BB  AA    AA   BB    BB  UU      UU  PP        CC         AA      AA  ....
LLLLLLLLLL  IIIIII  BBBBBBBB  AA    AA  BBBBBBBB  UUUUUUUUUU  PP         CCCCCCCC  AA      AA  ....
LLLLLLLLLL  IIIIII  BBBBBBBB  AA    AA  BBBBBBBB  UUUUUUUUUU  PP         CCCCCCCC  AA      AA  ....
```

```
LL        IIIIII    SSSSSSSS
LL        IIIIII    SSSSSSSS
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
```

```
0000      1          .TITLE  LIB$AB_UPCASE - String Upcase Translate Table
0000      2          .IDENT  /1-0017                    ; File: LIBABUPCA.MAR Edit: SBL1001
0000      3
0000      4  ;
0000      5  ;****************************************************************************
0000      6  ;*                                                                          *
0000      7  ;*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                                 *
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0000     23  ;*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                 *
0000     24  ;*                                                                          *
0000     25  ;*                                                                          *
0000     26  ;****************************************************************************
0000     27  ;
0000     28
0000     29  ;++
0000     30  ; FACILITY: General Utility Library
0000     31  ;
0000     32  ; ABSTRACT:
0000     33  ;
0000     34  ;     This module contains LIB$AB_UPCASE, a translate table which can
0000     35  ;     be used as the argument of LIB$MOVTC (or a MOVTC instruction) to
0000     36  ;     translate ASCII lower case letters (''a'' through ''z'') to their
0000     37  ;     upper case equivalents.
0000     38  ;
0000     39  ; ENVIRONMENT: No executable code.
0000     40  ;
0000     41  ; AUTHOR: Steven B. Lionel, CREATION DATE: 25-September-1981
0000     42  ;
0000     43  ; MODIFIED BY:
0000     44  ;
0000     45  ; 1-001 - Original. SBL 25-Sep-1981
0000     46  ;--
```

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```
          0000      48              .SBTTL  DECLARATIONS
          0000      49  ;
          0000      50  ; LIBRARY MACRO CALLS:
          0000      51  ;
          0000      52              NONE
          0000      53  ;
          0000      54  ; EXTERNAL DECLARATIONS:
          0000      55  ;
          0000      56              .DSABL  GBL             ; Force all external symbols to be declared
          0000      57              NONE
          0000      58  ;
          0000      59  ; MACROS:
          0000      60  ;
          0000      61              NONE
          0000      62  ;
          0000      63  ; EQUATED SYMBOLS:
          0000      64  ;
          0000      65              NONE
          0000      66  ;
          0000      67  ; OWN STORAGE:
          0000      68  ;
          0000      69              NONE
          0000      70  ;
          0000      71  ; PSECT DECLARATIONS:
          0000      72  ;
      00000000      73              .PSECT _LIB$CODE PIC, USR, CON, REL, LCL, SHR, -
          0000      74                      EXE, RD, NOWRT, LONG
          0000      75
```

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```
                 0000     77              .SBTTL  LIB$AB_UPCASE - String Upcase Translate Table
                 0000     78  ;++
                 0000     79  ; FUNCTIONAL DESCRIPTION:
                 0000     80  ;
                 0000     81  ;       LIB$AB_UPCASE is a translate table, suitable for use with
                 0000     82  ;       a MOVTC instruction, which specified translation of
                 0000     83  ;       lower case ASCII characters to their upper case equivalent.
                 0000     84  ;
                 0000     85  ;       Only the characters 'a' through 'z' are translated, all
                 0000     86  ;       other characters translate to themselves.
                 0000     87  ;
                 0000     88  ;--
                 0000     89
                 0000     90  LIB$AB_UPCASE::
                 0000     91
    00000000     0000     92  I=0
                 0000     93              .REPEAT <^A/a/-0>
                 0000     94              .BYTE   I
                 0000     95  I=I+1
          00     0000     96              .ENDR
                 0061     97              .REPEAT 26
                 0061     98              .BYTE   I-<^A/a/-^A/A/>
                 0061     99  I=I+1
          41     0061    100              .ENDR
                 007B    101              .REPEAT <255-^A/z/>
                 007B    102              .BYTE   I
                 007B    103  I=I+1
          7B     007B    104              .ENDR
                 0100    105
                 0100    106
                 0100    107              .END                                    ; End of module LIB$AB_UPCASE
```

LIB$AB_UPCASE   00000000 RG   01

```
                          +-------------------+
                          ! Psect synopsis !
                          +-------------------+
```

PSECT name	Allocation	PSECT No.	Attributes									
. ABS .	00000000 (0.)	00 (0.)	NOPIC	USR	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE
_LIB$CODE	00000100 (256.)	01 (1.)	PIC	USR	CON	REL	LCL	SHR	EXE	RD	NOWRT	NOVEC	LONG

```
                     +------------------------+
                     ! Performance indicators !
                     +------------------------+
```

Phase	Page faults	CPU Time	Elapsed Time
Initialization	29	00:00:00.04	00:00:01.01
Command processing	132	00:00:00.33	00:00:02.57
Pass 1	98	00:00:01.10	00:00:04.13
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	33	00:00:00.35	00:00:01.51
Symbol table output	1	00:00:00.00	00:00:00.00
Psect synopsis output	3	00:00:00.02	00:00:00.33
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	298	00:00:01.85	00:00:09.57

The working set limit was 900 pages.
15252 bytes (30 pages) of virtual memory were used to buffer the intermediate code.
There were 10 pages of symbol table space allocated to hold 2 non-local and 0 local symbols.
107 source lines were read in Pass 1, producing 8 object records in Pass 2.
0 pages of virtual memory were used to define 0 macros.

```
                     +-------------------------+
                     ! Macro library statistics !
                     +-------------------------+
```

Macro library name	Macros defined
_255DUA28:[SYSLIB]STARLET.MLB;2	0

0 GETS were required to define 0 macros.

There were no errors, warnings or information messages.

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

RTLMACMAR
MAR

LIBASCEBC
LIS

LIBASTINP
LIS

RTLMACB32
REQ

STRMACROS
REQ

LIBBINTRE
LIS

RTLODBG
REQ

LIBDEF
FOR

LIBANASTR
LIS

LIBASNMBX
LIS

LIBBBCCI
LIS

LIBCHAR
LIS

LIBABUPCA
LIS

LIBADDX
LIS

RTLPSECT
REQ

SIGDEF
FOR

LIBASCTIM
LIS

LIBTABMAC
MAR

LIBATTACH
LIS

STRLNK
REQ

LIBA2EREV
LIS

LIBBBSSI
LIS

LIBCALLG
LIS

LIBCLICAL
LIS

LIBADDP
LIS