D 8

```
LLL                 IIIIIIIII     BBBBBBBBBBBB     RRRRRRRRRRRR     TTTTTTTTTTTTTTT  LLL
LLL                 IIIIIIIII     BBBBBBBBBBBB     RRRRRRRRRRRR     TTTTTTTTTTTTTTT  LLL
LLL                 IIIIIIIII     BBBBBBBBBBBB     RRRRRRRRRRRR     TTTTTTTTTTTTTTT  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     RRRRRRRRRRRR           TTT        LLL
LLL                    III        BBBBBBBBBBBB     RRRRRRRRRRRR           TTT        LLL
LLL                    III        BBBBBBBBBBBB     RRRRRRRRRRRR           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
LLL                    III        BBB         BBB  RRR      RRR           TTT        LLL
LLL                    III        BBB         BBB  RRR      RRR           TTT        LLL
LLLLLLLLLLLLLLL     IIIIIIIII     BBBBBBBBBBBB     RRR         RRR        TTT        LLLLLLLLLLLLLLL
LLLLLLLLLLLLLLL     IIIIIIIII     BBBBBBBBBBBB     RRR         RRR        TTT        LLLLLLLLLLLLLLL
LLLLLLLLLLLLLLL     IIIIIIIII     BBBBBBBBBBBB     RRR         RRR        TTT        LLLLLLLLLLLLLLL
```

```
LL             IIIIII    BBBBBBBB      GGGGGGGG  EEEEEEEEEE  TTTTTTTTTT    SSSSSSSS  YY      YY    IIIIII
LL             IIIIII    BBBBBBBB      GGGGGGGG  EEEEEEEEEE  TTTTTTTTTT    SSSSSSSS  YY      YY    IIIIII
LL               II      BB      BB    GG        EE              TT        SS        YY      YY      II
LL               II      BB      BB    GG        EE              TT        SS        YY      YY      II
LL               II      BB      BB    GG        EE              TT        SS          YY  YY        II
LL               II      BB      BB    GG        EE              TT        SS          YY  YY        II
LL               II      BBBBBBBB      GG        EEEEEEEE        TT          SSSSSS      YY          II
LL               II      BBBBBBBB      GG        EEEEEEEE        TT          SSSSSS      YY          II
LL               II      BB      BB    GG  GGGGGG  EE              TT                SS    YY          II
LL               II      BB      BB    GG  GGGGGG  EE              TT                SS    YY          II
LL               II      BB      BB    GG      GG  EE              TT                SS    YY          II
LL               II      BB      BB    GG      GG  EE              TT                SS    YY          II
LLLLLLLLLL     IIIIII    BBBBBBBB      GGGGGG    EEEEEEEEEE      TT        SSSSSSSS      YY        IIIIII
LLLLLLLLLL     IIIIII    BBBBBBBB      GGGGGG    EEEEEEEEEE      TT        SSSSSSSS      YY        IIIIII


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
```

```
;     1          0001  0 MODULE LIB$GETSYI ( %TITLE 'Get System-Wide Information'
;     2          0002  0                    IDENT = '1-007'          ! File: LIBGETSYI.B32 Edit: MDL1007
;     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                           *
;     9          0009  1 !*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.            *
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;    16          0016  1 !*  OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY  *
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;    18          0018  1 !*                                                                    *
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;    20          0020  1 !*  AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT  *
;    21          0021  1 !*  CORPORATION.                                                       *
;    22          0022  1 !*                                                                    *
;    23          0023  1 !*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS  *
;    24          0024  1 !*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.            *
;    25          0025  1 !*                                                                    *
;    26          0026  1 !*                                                                    *
;    27          0027  1 !**********************************************************************
;    28          0028  1 !
;    29          0029  1
;    30          0030  1 !++
;    31          0031  1 ! FACILITY:     General Utility Library
;    32          0032  1 !
;    33          0033  1 ! ABSTRACT:
;    34          0034  1 !
;    35          0035  1 !       LIB$GETSYI obtains a specified item of System-Wide
;    36          0036  1 !       and formats it in an appropriate manner.
;    37          0037  1 !
;    38          0038  1 ! ENVIRONMENT:  User mode - AST reentrant
;    39          0039  1 !
;    40          0040  1 ! AUTHOR: Steven B. Lionel, CREATION DATE: 11-Jan-1983
;    41          0041  1 !
;    42          0042  1 ! MODIFIED BY:
;    43          0043  1 !
;    44          0044  1 ! 1-001 - Original.  SBL 11-Jan-1983
;    45          0045  1 ! 1-002 - Change format codes to LIB$K_FMT_.  SBL 11-Mar-1983
;    46          0046  1 ! 1-003 - Change string length to 512.  SBL 11-Mar-1983
;    47          0047  1 ! 1-004 - Add support for new argument to SYS$GETSYI - NODENAME and
;    48          0048  1 !         CSID.  DG 19-Oct-1983
;    49          0049  1 ! 1-005 - Take out support added in 004 temporarily.  DG 18-Feb-1984
;    50          0050  1 ! 1-006 - Add support from 004 again - this time only passing the
;    51          0051  1 !         optional arguments if they are present.  DG 20-Mar-1984
;    52          0052  1 ! 1-007 - Optional argument CSID should be passed as a 0 by value if not
;    53          0053  1 !         present, not by reference.  MDL 19-Jul-1984
;    54          0054  1 !--
;    55          0055  1
```

```
;    57          0056  1 %SBTTL 'Declarations'
;    58          0057  1 !
;    59          0058  1 ! PROLOGUE FILE:
;    60          0059  1 !
;    61          0060  1
;    62          0061  1 REQUIRE 'RTLIN:LIBPROLOG';                  ! Switches, PSECTS, macros
;    63          0132  1
;    64          0133  1 !
;    65          0134  1 ! LINKAGES:
;    66          0135  1 !
;    67          0136  1 !       NONE
;    68          0137  1 !
;    69          0138  1 ! TABLE OF CONTENTS:
;    70          0139  1 !
;    71          0140  1
;    72          0141  1 FORWARD ROUTINE
;    73          0142  1     LIB$GETSYI;                             ! Get System-Wide Information
;    74          0143  1
;    75          0144  1 !
;    76          0145  1 ! MACROS:
;    77          0146  1 !
;    78          0147  1 !       NONE
;    79          0148  1 !
;    80          0149  1 ! EQUATED SYMBOLS:
;    81          0150  1 !
;    82          0151  1 !       NONE
;    83          0152  1 !
;    84          0153  1 ! FIELDS:
;    85          0154  1 !
;    86          0155  1 !       NONE
;    87          0156  1 !
;    88          0157  1 ! OWN STORAGE:
;    89          0158  1 !
;    90          0159  1 !       NONE
;    91          0160  1 !
;    92          0161  1 ! EXTERNALS:
;    93          0162  1 !
;    94          0163  1
;    95          0164  1 EXTERNAL ROUTINE
;    96          0165  1     LIB$$GETSYI,                                        ! Internal routine
;    97          0166  1     LIB$ANALYZE_SDESC_R2: LIB$ANALYZE_SDESC_R2$LINKAGE, ! Get length and pointer
;    98          0167  1     LIB$GET_EF,                                         ! Allocate event flag number
;    99          0168  1     LIB$FREE_EF: NOVALUE,                               ! Free event flag number
;   100          0169  1     LIB$SCOPY_R_DX6: LIB$SCOPY_R_DX6$LINKAGE;           ! Copy string by reference.
;   101          0170  1
;   102          0171  1 EXTERNAL LITERAL
;   103          0172  1     LIB$_INVARG,                                        ! Invalid argument
;   104          0173  1     LIB$_STRTRU;                                        ! String truncated
```

```
;  106          0174  1 %SBTTL 'LIB$GETSYI - Get Device/Volume Information'
;  107          0175  1 GLOBAL ROUTINE LIB$GETSYI (
;  108          0176  1     ITEM_CODE: REF VECTOR [, WORD],      ! Code of desired item
;  109          0177  1     OUT_VALUE: REF VECTOR [, LONG],      ! Output numeric value
;  110          0178  1     OUT_STRING: REF BLOCK [, BYTE],      ! Output string descriptor
;  111          0179  1     OUT_LEN: REF VECTOR [, WORD],        ! Output string length
;  112          0180  1     CSID: REF VECTOR [, LONG],           ! Node identification (CSID)
;  113          0181  1     NODE_NAME: REF BLOCK [, BYTE]        ! Node name descriptor
;  114          0182  1     ) =
;  115          0183  1
;  116          0184  1 !++
;  117          0185  1 ! FUNCTIONAL DESCRIPTION:
;  118          0186  1 !
;  119          0187  1 !       LIB$GETSYI  provides a simplified interface to the $GETSYI system
;  120          0188  1 !       service.  It provides status and identification information about
;  121          0189  1 !       the system.
;  122          0190  1 !
;  123          0191  1 !       LIB$GETSYI provides the following features in addition  to  those
;  124          0192  1 !       provided by the $GETSYI system service:
;  125          0193  1 !
;  126          0194  1 !             o  Instead of a list of  item  descriptors,  which  may  be
;  127          0195  1 !                difficult  to  construct  in  high-level  languages, the
;  128          0196  1 !                single item desired is  specified  as  an  integer  code
;  129          0197  1 !                which  is  passed  by reference.  Results are written to
;  130          0198  1 !                separate arguments.
;  131          0199  1 !
;  132          0200  1 !             o  For items which return numeric  values,  LIB$GETSYI  can
;  133          0201  1 !                optionally  provide a formatted string interpretation of
;  134          0202  1 !                the value.
;  135          0203  1 !
;  136          0204  1 !             o  For string arguments, all string  classes  supported  by
;  137          0205  1 !                the Run-Time Library are understood.
;  138          0206  1 !
;  139          0207  1 !             o  Calls to LIB$GETSYI are synchronous.   LIB$GETSYI  calls
;  140          0208  1 !                LIB$GET_EF  to  allocate  a  local event flag number for
;  141          0209  1 !                synchronization.
;  142          0210  1 !
;  143          0211  1 !       LIB$GETSYI does not provide the ability to obtain more  than  one
;  144          0212  1 !       item of information in a single call.
;  145          0213  1 !
;  146          0214  1 ! CALLING SEQUENCE:
;  147          0215  1 !
;  148          0216  1 !       ret-status.wlc.v = LIB$GETSYI (
;  149          0217  1 !                item-code.rw.r,
;  150          0218  1 !                [out-value.wz.r]
;  151          0219  1 !                [, [out-string.wt.dx]
;  152          0220  1 !                [, [out-len.wwu.r] ]]
;  153          0221  1 !                [, csid.mlu.r]
;  154          0222  1 !                [, node-name.rt.dx])
;  155          0223  1 !
;  156          0224  1 ! FORMAL PARAMETERS:
;  157          0225  1 !
;  158          0226  1 !  item-code
;  159          0227  1 !       A longword integer item identifier code that specifies which item
;  160          0228  1 !       of information you are requesting.  All valid $GETSYI item codes,
;  161          0229  1 !       whose names begin with SYI$_, are accepted.
;  162          0230  1 !
```

```
;  163          0231  1 !  out-value
;  164          0232  1 !       A longword or quadword into which is placed the numeric
;  165          0233  1 !       value of the information requested. If an item only returns
;  166          0234  1 !       a string value, this parameter is ignored.
;  167          0235  1 !
;  168          0236  1 !  out-string
;  169          0237  1 !       A string into which is placed the string representation of
;  170          0238  1 !       the information requested. If out-string is not specified,
;  171          0239  1 !       and the value returned has only a string representation, the
;  172          0240  1 !       error status LIB$_INVARG is returned.
;  173          0241  1 !
;  174          0242  1 !  out-len
;  175          0243  1 !       A word integer into which is placed the number of significant
;  176          0244  1 !       characters written to out-string, not including blank padding
;  177          0245  1 !       or truncated characters.
;  178          0246  1 !
;  179          0247  1 !  csid
;  180          0248  1 !       A longword specifying the node identification (CSID) of the
;  181          0249  1 !       node for which information is to be returned.  If not
;  182          0250  1 !       specified, node-name is used. The longword is updated to
;  183          0251  1 !       contain the CSID actually used, which may be different than
;  184          0252  1 !       what was originally specified if node-name is specified or
;  185          0253  1 !       if "wild card node searching" is used.
;  186          0254  1 !
;  187          0255  1 !  node-name
;  188          0256  1 !       A string specifying the name of the node for which
;  189          0257  1 !       information is to be returned.  If not specified, csid
;  190          0258  1 !       is used.  If neither node-name or csid are
;  191          0259  1 !       specified, the caller's node is used.  See the
;  192          0260  1 !       description of the csid argument for more information.
;  193          0261  1 !
;  194          0262  1 !  IMPLICIT INPUTS:
;  195          0263  1 !
;  196          0264  1 !       NONE
;  197          0265  1 !
;  198          0266  1 !  IMPLICIT OUTPUTS:
;  199          0267  1 !
;  200          0268  1 !       NONE
;  201          0269  1 !
;  202          0270  1 !  COMPLETION STATUS:
;  203          0271  1 !
;  204          0272  1 !       SS$_NORMAL       Normal successful completion
;  205          0273  1 !       LIB$_STRTRU      String truncated.  This is an alternate success status.
;  206          0274  1 !       LIB$_INSEF       Insufficient event flags
;  207          0275  1 !       LIB$_INVSTRDES   Invalid string descriptor
;  208          0276  1 !       LIB$_WRONUMARG   Wrong number of arguments
;  209          0277  1 !       LIB$_xxx         Any error status from LIB$SCOPY_R_DX
;  210          0278  1 !       SS$_BADPARAM     The item code is not recognized as valid.
;  211          0279  1 !       SS$_xxx          Any error status from $GETSYI
;  212          0280  1 !
;  213          0281  1 !  SIDE EFFECTS:
;  214          0282  1 !
;  215          0283  1 !       NONE
;  216          0284  1 !
;  217          0285  1 !--
```

```
;  219     0286  2     BEGIN
;  220     0287  2
;  221     0288  2     LOCAL
;  222     0289  2         RET_STRING: VECTOR [512, BYTE],          ! Local string for value
;  223     0290  2         RET_LENGTH: WORD,                        ! Length of RET_STRING
;  224     0291  2         RET_NUMBER: VECTOR [2, LONG],            ! Local quadword for value
;  225     0292  2         RET_TYPE,                                ! Returned type code
;  226     0293  2         EVENT_FLAG,                              ! Event flag number
;  227     0294  2         EF_STATUS, SYI_STATUS, COPY_STATUS,      ! Return statuses
;  228     0295  2         STR_STATUS,
;  229     0296  2         LCL_NODE_NAM_DSC: BLOCK [8, BYTE],       ! Local descriptor for NODE_NAM
;  230     0297  2         NODE_NAM_DSC_ADR;                        ! Address of NODE_NAM descriptor
;  231     0298  2
;  232     0299  2     BUILTIN
;  233     0300  2         NULLPARAMETER;
;  234     0301  2
;  235     0302  2     !+
;  236     0303  2     ! Validate argument count.
;  237     0304  2     !-
;  238     0305  2
;  239     0306  2     $LIB$VALIDATE_ARGCOUNT (2,6);
;  240     0307  2
;  241     0308  2     !+
;  242     0309  2     ! Build static descriptor for NODE_NAME, if any.
;  243     0310  2     !-
;  244     0311  2
;  245     0312  2     IF NULLPARAMETER (6)
;  246     0313  2     THEN
;  247     0314  2         NODE_NAM_DSC_ADR = 0    ! Omitted
;  248     0315  2     ELSE
;  249     0316  3         BEGIN
;  250     0317  3         LCL_NODE_NAM_DSC [DSC$B_DTYPE] = DSC$K_DTYPE_T;
;  251     0318  3         LCL_NODE_NAM_DSC [DSC$B_CLASS] = DSC$K_CLASS_S;
;  252     0319  3         STR_STATUS = LIB$ANALYZE_SDESC_R2 (NODE_NAME [0,0,0,0],
;  253     0320  3             LCL_NODE_NAM_DSC [DSC$W_LENGTH], LCL_NODE_NAM_DSC [DSC$A_POINTER]);
;  254     0321  3         IF NOT .STR_STATUS
;  255     0322  3         THEN
;  256     0323  3             RETURN .STR_STATUS;
;  257     0324  3         NODE_NAM_DSC_ADR = LCL_NODE_NAM_DSC;
;  258     0325  2         END;
;  259     0326  2
;  260     0327  2     !+
;  261     0328  2     ! Allocate an event flag number to use for the $GETSYI.
;  262     0329  2     !-
;  263     0330  2
;  264     0331  2     EF_STATUS = LIB$GET_EF (EVENT_FLAG);
;  265     0332  2     IF NOT .EF_STATUS
;  266     0333  2     THEN
;  267     0334  2         RETURN .EF_STATUS;
;  268     0335  2
;  269     0336  2     !+
;  270     0337  2     ! Call LIB$$GETSYI to do the work.
;  271     0338  2     !-
;  272     0339  2
;  273     0340  2     SYI_STATUS = LIB$$GETSYI (
;  274     0341  2         .ITEM_CODE [0],
;  275     0342  2         RET_STRING,
```

```
;  276     0343  2          RET_NUMBER,
;  277     0344  2          RET_LENGTH,
;  278     0345  2          RET_TYPE,
;  279     0346  2          .EVENT_FLAG,
;  280     0347  3          ( IF NULLPARAMETER (5)
;  281     0348  3            THEN
;  282     0349  3                0 ! Omitted
;  283     0350  3            ELSE
;  284     0351  2                CSID ),
;  285     0352  2          .NODE_NAM_DSC_ADR);
;  286     0353  2
;  287     0354  2      !+
;  288     0355  2      ! Free the event flag.
;  289     0356  2      !-
;  290     0357  2
;  291     0358  2      LIB$FREE_EF (EVENT_FLAG);
;  292     0359  2
;  293     0360  2      !+
;  294     0361  2      ! Check for errors.
;  295     0362  2      !-
;  296     0363  2
;  297     0364  2      IF NOT .SYI_STATUS
;  298     0365  2      THEN
;  299     0366  2          RETURN .SYI_STATUS;
;  300     0367  2
;  301     0368  2      !+
;  302     0369  2      ! Copy the numeric value, if desired.
;  303     0370  2      !-
;  304     0371  2
;  305     0372  2      IF OUT_VALUE [0] NEQA 0
;  306     0373  2      THEN
;  307     0374  3          BEGIN
;  308     0375  3          IF .RET_TYPE GTRU LIB$K_FMT_MAXSTRING   ! Is it a number?
;  309     0376  3          THEN
;  310     0377  4              BEGIN
;  311     0378  4              OUT_VALUE [0] = .RET_NUMBER [0];
;  312     0379  4              IF .RET_TYPE EQL LIB$K_FMT_DATE OR
;  313     0380  4                 .RET_TYPE EQL LIB$K_FMT_PRIVILEGE
;  314     0381  4              THEN
;  315     0382  4                  OUT_VALUE [1] = .RET_NUMBER [1]; ! Store second longword
;  316     0383  3              END;
;  317     0384  2          END;
;  318     0385  2
;  319     0386  2      !+
;  320     0387  2      ! Store string value if desired.
;  321     0388  2      !-
;  322     0389  2
;  323     0390  2      IF NOT NULLPARAMETER (3)
;  324     0391  2      THEN
;  325     0392  3          BEGIN
;  326     0393  3          COPY_STATUS = LIB$SCOPY_R_DX6 (.RET_LENGTH, RET_STRING,
;  327     0394  3              OUT_STRIN, [0,0,0,0]);
;  328     0395  3          IF NOT NULLPARAMETER (4)
;  329     0396  3          THEN
;  330     0397  4              BEGIN
;  331     0398  4              !+
;  332     0399  4              ! Store result string length.
```

```
0400 4              !-
0401 4              OUT_LEN [0] = .RET_LENGTH;
0402 4              IF .COPY_STATUS EQLU LIB$_STRTRU
0403 4              THEN
0404 4                  LIB$ANALYZE_SDESC_R2 (OUT_STRING [0,0,0,0]; OUT_LEN [0]);
0405 3              END;
0406 3          RETURN .COPY_STATUS;
0407 3          END
0408 2      ELSE IF .RET_TYPE LEQU LIB$K_FMT_MAXSTRING
0409 2      THEN
0410 2          RETURN LIB$_INVARG;      ! Only string value, but nothing to return it in
0411 2
0412 2      RETURN SS$_NORMAL;  ! Success
0413 2
0414 1      END;                                        ! End of routine LIB$GETSYI


                                                .TITLE  LIB$GETSYI Get System-Wide Information
                                                .IDENT  \1-007\

                                                .EXTRN  LIB$$GETSYI, LIB$ANALYZE_SDESC_R2
                                                .EXTRN  LIB$GET_EF, LIB$FREE_EF
                                                .EXTRN  LIB$SCOPY_R_DX6
                                                .EXTRN  LIB$_INVARG, LIB$_STRTRU
                                                .EXTRN  LIB$_WRONUMARG

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

                                   00FC 00000         .ENTRY  LIB$GETSYI, Save R2,R3,R4,R5,R6,R7          ; 0175
              57 00000000G    00   9E 00002         MOVAB   LIB$ANALYZE_SDESC_R2, R7                       ;
              5E      FDE4    CE   9E 00009         MOVAB   -540(SP), SP                                   ;
     50       6C              02   83 0000E         SUBB3   #2, (AP), DIFF                                 ; 0306
              04              50   91 00012         CMPB    DIFF, #4                                       ;
                              08   1B 00015         BLEQU   1$                                             ;
              50 00000000G    8F   D0 00017         MOVL    #LIB$_WRONUMARG, R0                            ;
                                   04 0001E         RET                                                    ;
              06              6C   91 0001F 1$:     CMPB    (AP), #6                                       ; 0312
                              05   1F 00022         BLSSU   2$                                             ;
                        18    AC   D5 00024         TSTL    24(AP)                                         ;
                              04   12 00027         BNEQ    3$                                             ;
                              53   D4 00029 2$:     CLRL    NODE_NAM_DSC_ADR                               ; 0314
                              1B   11 0002B         BRB     4$                                             ;
        0E    AE      010E    8F   B0 0002D 3$:     MOVW    #270, LCL_NODE_NAM_DSC+2                       ; 0317
              50        18    AC   D0 00033         MOVL    NODE_NAME, R0                                  ; 0320
                              67   16 00037         JSB     LIB$ANALYZE_SDESC_R2                           ;
        0C    AE              51   B0 00039         MOVW    R1, LCL_NODE_NAM_DSC                           ;
        10    AE              52   D0 0003D         MOVL    R2, LCL_NODE_NAM_DSC+4                         ;
              0E              50   E9 00041         BLBC    STR_STATUS, 5$                                 ; 0321
              53        0C    AE   9E 00044         MOVAB   LCL_NODE_NAM_DSC, NODE_NAM_DSC_ADR             ; 0324
                        08    AE   9F 00048 4$:     PUSHAB  EVENT_FLAG                                     ; 0331
     00000000G  00            01   FB 0004B         CALLS   #1, LIB$GET_EF                                 ;
              01              50   E8 00052 5$:     BLBS    EF_STATUS, 6$                                  ; 0332
                                   04 00055         RET                                                    ;
                              53   DD 00056 6$:     PUSHL   NODE_NAM_DSC_ADR                               ; 0352
              05              6C   91 00058         CMPB    (AP), #5                                       ; 0347
                              05   1F 0005B         BLSSU   7$                                             ;
                        14    AC   D5 0005D         TSTL    20(AP)                                         ;
```

```
                              04  12 00060        BNEQ    8$                              ;
                              7E  D4 00062  7$:   CLRL    -(SP)                           ;
                              06  11 00064        BRB     9$                              ;
           50          14     AC  9E 00066  8$:   MOVAB   CSID, R0                        ;
                              50  DD 0006A        PUSHL   R0                              ;
                       10     AE  DD 0006C  9$:   PUSHL   EVENT_FLAG                      ; 0346
                       0C     AE  9F 0006F        PUSHAB  RET_TYPE                        ; 0340
                       14     AE  9F 00072        PUSHAB  RET_LENGTH                      ;
                       28     AE  9F 00075        PUSHAB  RET_NUMBER                      ;
                       34     AE  9F 00078        PUSHAB  RET_STRING                      ;
           7E          04     BC  3C 0007B        MOVZWL  @ITEM_CODE, -(SP)               ; 0341
 00000000G 00                 08  FB 0007F        CALLS   #8, LIB$$GETSYI                 ;
           52                 50  D0 00086        MOVL    R0, SYI_STATUS                  ;
                       08     AE  9F 00089        PUSHAB  EVENT_FLAG                      ; 0358
 00000000G 00                 01  FB 0008C        CALLS   #1, LIB$FREE_EF                 ;
           04                 52  E8 00093        BLBS    SYI_STATUS, 10$                 ; 0364
           50                 52  D0 00096        MOVL    SYI_STATUS, R0                  ; 0366
                                  04 00099        RET                                     ;
           50          08     AC  D0 0009A 10$:   MOVL    OUT_VALUE, R0                   ; 0372
                              18  13 0009E        BEQL    12$                             ;
           03                 6E  D1 000A0        CMPL    RET_TYPE, #3                    ; 0375
                              13  1B 000A3        BLEQU   12$                             ;
           60          14     AE  D0 000A5        MOVL    RET_NUMBER, (R0)                ; 0378
           0B                 6E  D1 000A9        CMPL    RET_TYPE, #11                   ; 0379
                              05  13 000AC        BEQL    11$                             ;
           0C                 6E  D1 000AE        CMPL    RET_TYPE, #12                   ; 0380
                              05  12 000B1        BNEQ    12$                             ;
        04 A0          18     AE  D0 000B3 11$:   MOVL    RET_NUMBER+4, 4(R0)             ; 0382
           03                 6C  91 000B8 12$:   CMPB    (AP), #3                        ; 0390
                              40  1F 000BB        BLSSU   14$                             ;
                       0C     AC  D5 000BD        TSTL    12(AP)                          ;
                              3B  13 000C0        BEQL    14$                             ;
           51          1C     AE  9E 000C2        MOVAB   RET_STRING, R1                  ; 0393
           52          0C     AC  D0 000C6        MOVL    OUT_STRING, R2                  ; 0394
           50          04     AE  3C 000CA        MOVZWL  RET_LENGTH, R0                  ;
              00000000G       00  16 000CE        JSB     LIB$SCOPY_R_DX6                 ;
           53                 50  D0 000D4        MOVL    R0, COPY_STATUS                 ;
           04                 6C  91 000D7        CMPB    (AP), #4                        ; 0395
                              1D  1F 000DA        BLSSU   13$                             ;
                       10     AC  D5 000DC        TSTL    16(AP)                          ;
                              18  13 000DF        BEQL    13$                             ;
        10 BC          04     AE  B0 000E1        MOVW    RET_LENGTH, @OUT_LEN            ; 0401
 00000000G 8F                 53  D1 000E6        CMPL    COPY_STATUS, #LIB$_STRTRU       ; 0402
                              0A  12 000ED        BNEQ    13$                             ;
           50          0C     AC  D0 000EF        MOVL    OUT_STRING, R0                  ; 0404
                              67  16 000F3        JSB     LIB$ANALYZE_SDESC_R2            ;
        10 BC                 51  B0 000F5        MOVW    R1, @OUT_LEN                    ;
           50                 53  D0 000F9 13$:   MOVL    COPY_STATUS, R0                 ; 0406
                                  04 000FC        RET                                     ;
           03                 6E  D1 000FD 14$:   CMPL    RET_TYPE, #3                    ; 0408
                              08  1A 00100        BGTRU   15$                             ;
           50 00000000G       8F  D0 00102        MOVL    #LIB$_INVARG, R0                ; 0410
                                  04 00109        RET                                     ;
           50                 01  D0 0010A 15$:   MOVL    #1, R0                          ; 0412
                                  04 0010D        RET                                     ; 0414

; Routine Size:  270 bytes,    Routine Base:  _LIB$CODE + 0000
```

```
;  349           0415  1 END                                               ! End of module LIB$GETSYI
;  350           0416  1
;  351           0417  0 ELUDOM



;                                   PSECT SUMMARY
;
;       Name                         Bytes                          Attributes
;
;  _LIB$CODE                              270  NOVEC,NOWRT,  RD ,  EXE,  SHR,  LCL,  REL,  CON,  PIC,ALIGN(2)



;                              Library Statistics
;
;                                               -------- Symbols --------         Pages        Processing
;       File                                    Total    Loaded   Percent         Mapped       Time
;
;  _$255$DUA28:[SYSLIB]STARLET.L32;1             9776         7         0           581          00:00.8
;  _$255$DUA28:[LIBRTL.OBJ]RTLLIB.L32;1            36         6        16             8          00:00.1



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

; Size:          270 code + 0 data bytes
; Run Time:         00:05.1
; Elapsed Time:     00:23.5
; Lines/CPU Min:     4867
; Lexemes/CPU-Min: 17206
; Memory Used:  107 pages
; Compilation Complete
```

LIBFLTUND
LIS

LIBGETSYI
LIS

LIBICHAR
LIS

LIBINITIA
LIS

LIBFIXUPF
LIS

LIBGETFOR
LIS

LIBGETINP
LIS

LIBINISHR
LIS

LIBGETDVI
LIS

LIBGETOPC
LIS

LIBFNDIMG
LIS

LIBGETMSG
LIS

LIBINDEX
LIS

LIBINSQHI
LIS

LIBGETJPI
LIS

LIBGETTAB
LIS