```
BBBBBBBB      AAAAAA       SSSSSSSS   DDDDDDDD    IIIIII      SSSSSSSS   PPPPPPPP      AAAAAA      TTTTTTTTTT
BBBBBBBB      AAAAAA       SSSSSSSS   DDDDDDDD    IIIIII      SSSSSSSS   PPPPPPPP      AAAAAA      TTTTTTTTTT
BB    BB    AA    AA   SS            DD    DD     II       SS          PP      PP   AA    AA         TT
BB    BB    AA    AA   SS            DD    DD     II       SS          PP      PP   AA    AA         TT
BB    BB    AA    AA   SS            DD    DD     II       SS          PP      PP   AA    AA         TT
BB    BB    AA    AA   SS            DD    DD     II       SS          PP      PP   AA    AA         TT
BBBBBBBB    AA    AA     SSSSSS      DD    DD     II         SSSSSS    PPPPPPPP     AA    AA         TT
BBBBBBBB    AA    AA     SSSSSS      DD    DD     II         SSSSSS    PPPPPPPP     AA    AA         TT
BB    BB   AAAAAAAAAA        SS      DD    DD     II             SS    PP         AAAAAAAAAA         TT
BB    BB   AAAAAAAAAA        SS      DD    DD     II             SS    PP         AAAAAAAAAA         TT
BB    BB    AA    AA         SS      DD    DD     II             SS    PP         AA    AA           TT
BB    BB    AA    AA         SS      DD    DD     II             SS    PP         AA    AA           TT
BBBBBBBB    AA    AA   SSSSSSSS   DDDDDDDD    IIIIII      SSSSSSSS   PP         AA    AA           TT
BBBBBBBB    AA    AA   SSSSSSSS   DDDDDDDD    IIIIII      SSSSSSSS   PP         AA    AA           TT

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 BAS$$DISPATCH_T (            ! I/O dispatch tables for all languages
     2    0002   0                    IDENT = '1-021'  ! File: BASDISPAT.B32 Edit: PLL1021
     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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    14    0014   1 !*   INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR  ANY  OTHER  *
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    16    0016   1 !*   OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY  *
    17    0017   1 !*   TRANSFERRED.                                                           *
    18    0018   1 !*                                                                          *
    19    0019   1 !*   THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE  *
    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:     BASIC I/O
    32    0032   1 !
    33    0033   1 ! ABSTRACT:
    34    0034   1 !
    35    0035   1 !       This module contains the Global dispatch tables for the UDF (user data
    36    0036   1 !       formatter) level and REC (record) level for BASIC.
    37    0037   1 !       In addition it contains a routine which signals errors for invalid
    38    0038   1 !       statement types.
    39    0039   1 !
    40    0040   1 ! ENVIRONMENT:
    41    0041   1 !
    42    0042   1 !       AST reentrant - all OWN storage is read only
    43    0043   1 !
    44    0044   1 ! AUTHOR: Donald G. Petersen     , CREATION DATE: 07-Dec-78
    45    0045   1 !
    46    0046   1 ! MODIFIED BY:
    47    0047   1 !
    48    0048   1 !       DGP,06-Dec-78 : VERSION 1-001
    49    0049   1 ! 1-001 - original.  DGP 06-Dec-78
    50    0050   1 ! 1-002 - Add some functionality to OTS$$SIGDIS_ERR.  DGP 08-Dec-78
    51    0051   1 ! 1-003 - Change dispatch tables to longwords.  DGP 11-Dec-78
    52    0052   1 ! 1-004 - Add Basic READ to dispatch tables.  DGP 12-Dec-78
    53    0053   1 ! 1-005 - Change FORLNK require file to OTSLNK.  JBS 22-DEC-78
    54    0054   1 ! 1-006 - Signal the proper errors in the error routine.  DGP 18-Jan-79
    55    0055   1 ! 1-007 - Change file name to OTSDISPAT to agree with RTL standards
    56    0056   1 !                 and internal comments.  JBS 27-JAN-1979
    57    0057   1 ! 1-008 - Use 32-bit addresses for externals.  JBS 27-JAN-1979
```

```
   58      0058  1 ! 1-009 - Track SBL's changes to the statement types in the ISB.
   59      0059  1 !         JBS 09-FEB-1979
   60      0060  1 ! 1-010 - Add GET and PUT.  DGP 19-Feb-79
   61      0061  1 ! 1-011 - Add PRINT USING and straighten up a lot of Basic stuff.  DGP
   62      0062  1 !         15-May-79
   63      0063  1 ! 1-012 - Add MAT INPUT.  DGP 05-Jun-79
   64      0064  1 ! 1-013 - Add MAT PRINT.  DGP 15-Jun-79
   65      0065  1 ! 1-014 - Add remaining FORTRAN statement types.  Indexed REWRITE,
   66      0066  1 !         keyed READ, internal READ and WRITE.  SBL 18-Jun-1979
   67      0067  1 ! 1-015 - Remove all of the FORTRAN entries.  They are moved to
   68      0068  1 !         FOR$$DISPATCH_T.  Rename this module BAS$$DISPATCH_T.
   69      0069  1 !         JBS 26-JUN-1979
   70      0070  1 ! 1-016 - Use ISB symbols for table length.  JBS 12-JUL-1979
   71      0071  1 ! 1-017 - Add BAS$$SIGDIS_JSB.  JBS 01-AUG-1979
   72      0072  1 ! 1-018 - Add Basic MAT READ and MAT LINPUT.  DGP 11-Oct-79
   73      0073  1 ! 1-019 - Add REC9 for Mat Print.  DGP 12-Oct-79
   74      0074  1 ! 1-020 - Add BAS$$REC_MLI1.  DGP 12-Oct-79
   75      0075  1 ! 1-021 - Add Basic GET by RFA and FIND by RFA. PLL 4-Jun-1982
   76      0076  1 !--
   77      0077  1
   78      0078  1 !\BLF/PAGE>
```

```
:   80        0079   1 !
:   81        0080   1 ! SWITCHES:
:   82        0081   1 !
:   83        0082   1
:   84        0083   1 SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);
:   85        0084   1
:   86        0085   1 !
:   87        0086   1 ! LINKAGE
:   88        0087   1 !
:   89        0088   1
:   90        0089   1 REQUIRE 'RTLIN:OTSLNK';                          ! Define all linkages
:   91        0518   1
:   92        0519   1 !
:   93        0520   1 ! TABLE OF CONTENTS:
:   94        0521   1 !
:   95        0522   1
:   96        0523   1 FORWARD ROUTINE
:   97        0524   1     BAS$$SIGDIS_ERR : CALL_CCB NOVALUE,          ! Signal a dispatch error
:   98        0525   1     BAS$$SIGDIS_JSB : JSB_ODFO NOVALUE;          ! (JSB entry point)
:   99        0526   1
:  100        0527   1 !
:  101        0528   1 ! INCLUDE FILES:
:  102        0529   1 !
:  103        0530   1
:  104        0531   1 REQUIRE 'RTLIN:RTLPSECT';
:  105        0626   1
:  106        0627   1 REQUIRE 'RTLML:OTSISB';                          ! Define ISB offsets
:  107        0795   1
:  108        0796   1 REQUIRE 'RTLML:OTSLUB';                          ! Define LUB offsets
:  109        0936   1
:  110        0937   1 !
:  111        0938   1 ! MACROS:
:  112        0939   1 !
:  113        0940   1 !      NONF
:  114        0941   1 !
:  115        0942   1 ! EQUATED SYMBOLS:
:  116        0943   1 !
:  117        0944   1 !      NONE
:  118        0945   1 !
:  119        0946   1 ! EXTERNAL REFERENCES:
:  120        0947   1 !
:  121        0948   1
:  122        0949   1 EXTERNAL LITERAL
:  123        0950   1     OTS$_FATINTERR,
:  124        0951   1     OTS$_IO_CONCLO;
:  125        0952   1
:  126        0953   1 EXTERNAL ROUTINE
:  127        0954   1     LIB$STOP : NOVALUE;                          ! Signal ar error and stop
:  128        0955   1
:  129        0956   1 !+
:  130        0957   1 ! Formatting level of abstraction
:  131        0958   1 !-
:  132        0959   1
:  133        0960   1 EXTERNAL ROUTINE
:  134        0961   1     BAS$$UDF_RL0 : JSB_UDFO NOVALUE,             ! Initialize read list-directed
:  135        0962   1     BAS$$UDF_RL1 : CALL_CCB,                     ! Transmit one I/O list element
:  136        0963   1     BAS$$UDF_RL9 : JSB_ODF9 NOVALUE,             ! Terminate read list directed
```

```
    137       0964   1       BAS$$UDF_WF0 : CALL_CCB NOVALUE,      ! Initialize write formatted
    138       0965   1       BAS$$UDF_WF1 : CALL_CCB NOVALUE,      ! Transmit one I/O list element
    139       0966   1       BAS$$UDF_WF9 : JSB_ODF9 NOVALUE,      ! Terminate write formatted
    140       0967   1       BAS$$UDF_WL0 : JSB_UDF0 NOVALUE,      ! Initialize write list-directed
    141       0968   1       BAS$$UDF_WL1 : CALL_CCB NOVALUE,      ! Transmit one I/O list element
    142       0969   1       BAS$$UDF_WL9 : JSB_ODF9 NOVALUE,      ! Terminate write list-directed
    143       0970   1       BAS$$UDF_RMF0 : JSB_UDF0 NOVALUE,     ! Initialize read memory formatted
    144       0971   1       BAS$$UDF_RMF1 : CALL_CCB NOVALUE,     ! Transmit one I/O list element
    145       0972   1       BAS$$UDF_RMF9 : JSB_ODF9 NOVALUE;     ! Terminate read memory formatted
    146       0973   1
    147       0974   1   !+
    148       0975   1   ! Record processing level of abstraction
    149       0976   1   !-
    150       0977   1
    151       0978   1   EXTERNAL ROUTINE
    152       0979   1       BAS$$REC_RSL0 : JSB_REC0 NOVALUE,     ! Initialize read list-directed
    153       0980   1       BAS$$REC_RSL1 : JSB_REC1 NOVALUE,     ! Transmit one record
    154       0981   1       BAS$$REC_RSL9 : JSB_REC9 NOVALUE,     ! Terminate read list-directed
    155       0982   1       BAS$$REC_WF0 : JSB_REC0 NOVALUE,      ! Initialize write formatted
    156       0983   1       BAS$$REC_WF1 : JSB_REC1 NOVALUE,      ! Write one record
    157       0984   1       BAS$$REC_WF9 : JSB_REC9 NOVALUE,      ! Terminate write formatted
    158       0985   1       BAS$$REC_WSL0 : JSB_REC0 NOVALUE,     ! Initialize write list-directed
    159       0986   1       BAS$$REC_WSL1 : JSB_REC1 NOVALUE,     ! Write one record
    160       0987   1       BAS$$REC_WSL9 : JSB_REC9 NOVALUE,     ! Terminate write list-directed
    161       0988   1       BAS$$REC_RMF0 : JSB_REC0 NOVALUE,     ! Initialize read memory formatted
    162       0989   1       BAS$$REC_RMF1 : JSB_REC1 NOVALUE,     ! More initialization
    163       0990   1       BAS$$REC_RMF9 : JSB_REC9 NOVALUE,     ! Terminate read memory formatted
    164       0991   1       BAS$$REC_GSE : JSB_REC9 NOVALUE,      ! GET sequential (RMS) one record
    165       0992   1       BAS$$REC_PSE : JSB_REC9 NOVALUE,      ! PUT sequential (RMS) one record
    166       0993   1       BAS$$REC_MPR9 : JSB_REC9 NOVALUE,     ! terminate Mat Print
    167       0994   1       BAS$$REC_MIN0 : JSB_REC0 NOVALUE,     ! initialize MAT INPUT
    168       0995   1       BAS$$REC_MIN1 : JSB_REC1,             ! read one record
    169       0996   1       BAS$$REC_MIN9 : JSB_REC9 NOVALUE,     ! terminate MAT INPUT
    170       0997   1       BAS$$REC_MLI1 : JSB_REC1,             ! Mat Linput - read one record
    171       0998   1       BAS$$REC_MRE1 : JSB_REC1;             ! return failure - MAT READ
    172       0999   1
    173       1000   1   !
    174       1001   1   ! OWN STORAGE:
    175       1002   1   !
    176       1003   1   DISPATCH_PSECTS (BAS);                    ! Define GLOBAL PSECTs same as code
    177       1004   1                                            ! so short offsets to reach
    178       1005   1   !<BLF/PAGE>
```

```
 180    1006   1 !+
 181    1007   1 ! GLOBAL DISPATCH VECTORS (indexed by I/O statement type numbers):
 182    1008   1 ! Connects the first level of abstraction (UPI) to the
 183    1009   1 ! second level (UDF). Note: The comments down the
 184    1010   1 ! side describe the I/O statement index (UPI level) into the
 185    1011   1 ! dispatch table rather than the external routine contained in
 186    1012   1 ! the entry (UDF level). The entries are the name of the
 187    1013   1 ! User data formatters (UDF level = 2nd level of abstraction) -
 188    1014   1 ! First letter: R = READ, W = WRITE; second letter: F = formatted,
 189    1015   1 ! W = unformatted, L = list-directed.
 190    1016   1 ! Declare as GLOBAL rather then GLOBAL BIND because
 191    1017   1 ! BLISS doesn't allow BIND table = ... - table).
 192    1018   1 !-
 193    1019   1 !+
 194    1020   1 ! Initialization of UDF level:
 195    1021   1 !-
 196    1022   1
 197    1023   1 GLOBAL
 198    1024   1     BAS$$AA_UDF_PRO : VECTOR [ISB$K_BASSTTYHI - ISB$K_BASSTTYLO + 2,, SIGNED] INITIAL (
 199    1025   1             BAS$$SIGDIS_JSB - BAS$$AA_UDF_PRO, ! I/O on closed unit
 200    1026   1                                       ! I/O statement type:
 201    1027   1             BAS$$UDF_WLO - BAS$$AA_UDF_PRO,    ! BASIC Print
 202    1028   1             BAS$$UDF_RLO - BAS$$AA_UDF_PRO,    ! BASIC Linput
 203    1029   1             BAS$$SIGDIS_JSB - BAS$$AA_UDF_PRO, ! BASIC  PUT place holder
 204    1030   1             BAS$$UDF_RLO - BAS$$AA_UDF_PRO,    ! BASIC Input
 205    1031   1             BAS$$UDF_WFO - BAS$$AA_UDF_PRO,    ! BASIC Print Using
 206    1032   1             BAS$$UDF_RLO - BAS$$AA_UDF_PRO,    ! BASIC Input Line
 207    1033   1             BAS$$SIGDIS_JSB - BAS$$AA_UDF_PRO, ! BASIC DELETE place holder
 208    1034   1             BAS$$UDF_RMFO - BAS$$AA_UDF_PRO,   ! BASIC Read memory formatted
 209    1035   1             BAS$$SIGDIS_JSB - BAS$$AA_UDF_PRO, ! BASIC UPDATE place holder
 210    1036   1             BAS$$SIGDIS_JSB - BAS$$AA_UDF_PRO, ! BASIC GET sequential
 211    1037   1             BAS$$SIGDIS_JSB - BAS$$AA_UDF_PRO, ! BASIC RESTORE place holder
 212    1038   1             BAS$$SIGDIS_JSB - BAS$$AA_UDF_PRO, ! BASIC SCRATCH place holder
 213    1039   1             BAS$$SIGDIS_JSB - BAS$$AA_UDF_PRO, ! BASIC PUT relative place holder
 214    1040   1             BAS$$SIGDIS_JSB - BAS$$AA_UDF_PRO, ! BASIC GET relative place holder
 215    1041   1             BAS$$SIGDIS_JSB - BAS$$AA_UDF_PRO, ! BASIC FIND relative place holder
 216    1042   1             BAS$$SIGDIS_JSB - BAS$$AA_UDF_PRO, ! BASIC UNLOCK place holder
 217    1043   1             BAS$$SIGDIS_JSB - BAS$$AA_UDF_PRO, ! BASIC FREE place holder
 218    1044   1             BAS$$SIGDIS_JSB - BAS$$AA_UDF_PRO, ! BASIC GET indexed place holder
 219    1045   1             BAS$$SIGDIS_JSB - BAS$$AA_UDF_PRO, ! BASIC PUT indexed place holder
 220    1046   1             BAS$$SIGDIS_JSB - BAS$$AA_UDF_PRO, ! BASIC MOVE FROM/MOVE TO place holder
 221    1047   1             BAS$$SIGDIS_JSB - BAS$$AA_UDF_PRO, ! BASIC FIND indexed place holder
 222    1048   1             BAS$$UDF_RLO - BAS$$AA_UDF_PRO,    ! BASIC MAT INPUT
 223    1049   1             BAS$$SIGDIS_JSB - BAS$$AA_UDF_PRO, ! BASIC RESTORE place holder
 224    1050   1             BAS$$UDF_RLO - BAS$$AA_UDF_PRO,    ! BASIC eventually MAT LINPUT
 225    1051   1             BAS$$SIGDIS_JSB - BAS$$AA_UDF_PRO, ! BASIC FIND seq. place holder
 226    1052   1             BAS$$SIGDIS_JSB - BAS$$AA_UDF_PRO, ! BASIC place holder
 227    1053   1             BAS$$UDF_WLO - BAS$$AA_UDF_PRO,    ! BASIC MAT PRINT
 228    1054   1             BAS$$UDF_RMFO - BAS$$AA_UDF_PRO,   ! BASIC MAT READ
 229    1055   1             BAS$$SIGDIS_JSB - BAS$$AA_UDF_PRO, ! BASIC GET by RFA place holder
 230    1056   1             BAS$$SIGDIS_JSB - BAS$$AA_UDF_PRO); ! BASIC FIND by RFA place holder
 231    1057   1 !<BLF/PAGE>
```

```
 :  233      1058  1 !+
 :  234      1059  1 ! Transmit a single I/O list element
 :  235      1060  1 !-
 :  236      1061  1
 :  237      1062  1 GLOBAL
 :  238      1063  1     BAS$$AA_UDF_PR1 : VECTOR [ISB$K_BASSTTYHI - ISB$K_BASSTTYLO + 2,, SIGNED] INITIAL (
 :  239      1064  1         BAS$$SIGDIS_ERR - BAS$$AA_UDF_PR1, ! I/O on closed unit
 :  240      1065  1                                   ! I/O statement type:
 :  241      1066  1         BAS$$UDF_WL1 - BAS$$AA_UDF_PR1,    ! BASIC Print
 :  242      1067  1         BAS$$UDF_RL1 - BAS$$AA_UDF_PR1,    ! BASIC Linput
 :  243      1068  1         BAS$$SIGDIS_ERR - BAS$$AA_UDF_PR1, ! BASIC place holder for PUT
 :  244      1069  1         BAS$$UDF_RLT - BAS$$AA_UDF_PRT,    ! BASIC Input
 :  245      1070  1         BAS$$UDF_WF1 - BAS$$AA_UDF_PR1,    ! BASIC Print Using
 :  246      1071  1         BAS$$UDF_RL1 - BAS$$AA_UDF_PR1,    ! BASIC Input Line
 :  247      1072  1         BAS$$SIGDIS_ERR - BAS$$AA_UDF_PR1, ! BASIC DELETE place holder
 :  248      1073  1         BAS$$UDF_RMF1 - BAS$$AA_UDF_PR1,   ! BASIC Read memory formatted
 :  249      1074  1         BAS$$SIGDIS_ERR - BAS$$AA_UDF_PR1, ! BASIC UPDATE place holder
 :  250      1075  1         BAS$$SIGDIS_ERR - BAS$$AA_UDF_PR1, ! BASIC GET seq. place holder
 :  251      1076  1         BAS$$SIGDIS_ERR - BAS$$AA_UDF_PR1, ! BASIC RESTORE place holder
 :  252      1077  1         BAS$$SIGDIS_ERR - BAS$$AA_UDF_PR1, ! BASIC SCRATCH place holder
 :  253      1078  1         BAS$$SIGDIS_ERR - BAS$$AA_UDF_PR1, ! BASIC PUT relative place holder
 :  254      1079  1         BAS$$SIGDIS_ERR - BAS$$AA_UDF_PR1, ! BASIC GET relative place holder
 :  255      1080  1         BAS$$SIGDIS_ERR - BAS$$AA_UDF_PR1, ! BASIC FIND relative place holder
 :  256      1081  1         BAS$$SIGDIS_ERR - BAS$$AA_UDF_PR1, ! BASIC UNLOCK place holder
 :  257      1082  1         BAS$$SIGDIS_ERR - BAS$$AA_UDF_PR1, ! BASIC FREE place holder
 :  258      1083  1         BAS$$SIGDIS_ERR - BAS$$AA_UDF_PR1, ! BASIC GET indexed place holder
 :  259      1084  1         BAS$$SIGDIS_ERR - BAS$$AA_UDF_PR1, ! BASIC PUT indexed place holder
 :  260      1085  1         BAS$$SIGDIS_ERR - BAS$$AA_UDF_PR1, ! BASIC MOVE FROM/MOVE TO place holder
 :  261      1086  1         BAS$$SIGDIS_ERR - BAS$$AA_UDF_PR1, ! BASIC FIND indexed place holder
 :  262      1087  1         BAS$$UDF_RLT - BAS$$AA_UDF_PRT,    ! BASIC MAT INPUT
 :  263      1088  1         BAS$$SIGDIS_ERR - BAS$$AA_UDF_PR1, ! BASIC RESTORE place holder
 :  264      1089  1         BAS$$UDF_RLT - BAS$$AA_UDF_PRT,    ! BASIC Mat Linput
 :  265      1090  1         BAS$$SIGDIS_ERR - BAS$$AA_UDF_PR1, ! BASIC FIND seq. place holder
 :  266      1091  1         BAS$$SIGDIS_ERR - BAS$$AA_UDF_PR1, ! BASIC place holder
 :  267      1092  1         BAS$$UDF_WLT - BAS$$AA_UDF_PRT,    ! BASIC MAT PRINT
 :  268      1093  1         BAS$$UDF_RMF1 - BAS$$AA_UDF_PR1,   ! BASIC MAT READ
 :  269      1094  1         BAS$$SIGDIS_ERR - BAS$$AA_UDF_PR1, ! BASIC GET by RFA place holder
 :  270      1095  1         BAS$$SIGDIS_ERR - BAS$$AA_UDF_PR1); ! BASIC FIND by RFA place holder
 :  271      1096  1 !<BLF/PAGE>
```

```
 273        1097  1  !+
 274        1098  1  ! End I/O list entry points:
 275        1099  1  !-
 276        1100  1
 277        1101  1  GLOBAL
 278        1102  1      BAS$$AA_UDF_PR9 : VECTOR [ISB$K_BASSTTYHI - ISB$K_BASSTTYLO + 2,, SIGNED] INITIAL (
 279        1103  1              BAS$$SIGDIS_JSB - BAS$$AA_UDF_PR9, ! I/O on closed unit
 280        1104  1                              ! I/O statement type:
 281        1105  1              BAS$$UDF_WL9 - BAS$$AA_UDF_PR9,     ! BASIC Print
 282        1106  1              BAS$$UDF_RL9 - BAS$$AA_UDF_PR9,     ! BASIC Linput
 283        1107  1              BAS$$SIGDIS_JSB - BAS$$AA_UDF_PR9,  ! BASIC place holder for PUT
 284        1108  1              BAS$$UDF_RL9 - BAS$$AA_UDF_PR9,     ! BASIC Input
 285        1109  1              BAS$$UDF_WF9 - BAS$$AA_UDF_PR9,     ! BASIC Print Using
 286        1110  1              BAS$$UDF_RL9 - BAS$$AA_UDF_PR9,     ! BASIC Input Line
 287        1111  1              BAS$$SIGDIS_JSB - BAS$$AA_UDF_PR9,  ! BASIC DELETE place holder
 288        1112  1              BAS$$UDF_RMF9 - BAS$$AA_UDF_PR9,    ! BASIC Read memory formatted
 289        1113  1              BAS$$SIGDIS_JSB - BAS$$AA_UDF_PR9,  ! BASIC UPDATE place holder
 290        1114  1              BAS$$SIGDIS_JSB - BAS$$AA_UDF_PR9,  ! BASIC GET seq. place holder
 291        1115  1              BAS$$SIGDIS_JSB - BAS$$AA_UDF_PR9,  ! BASIC RESTORE place holder
 292        1116  1              BAS$$SIGDIS_JSB - BAS$$AA_UDF_PR9,  ! BASIC SCRATCH place holder
 293        1117  1              BAS$$SIGDIS_JSB - BAS$$AA_UDF_PR9,  ! BASIC PUT relative place holder
 294        1118  1              BAS$$SIGDIS_JSB - BAS$$AA_UDF_PR9,  ! BASIC GET relative place holder
 295        1119  1              BAS$$SIGDIS_JSB - BAS$$AA_UDF_PR9,  ! BASIC FIND relative place holder
 296        1120  1              BAS$$SIGDIS_JSB - BAS$$AA_UDF_PR9,  ! BASIC UNLOCK place holder
 297        1121  1              BAS$$SIGDIS_JSB - BAS$$AA_UDF_PR9,  ! BASIC FREE place holder
 298        1122  1              BAS$$SIGDIS_JSB - BAS$$AA_UDF_PR9,  ! BASIC GET indexed place holder
 299        1123  1              BAS$$SIGDIS_JSB - BAS$$AA_UDF_PR9,  ! BASIC PUT indexed place holder
 300        1124  1              BAS$$SIGDIS_JSB - BAS$$AA_UDF_PR9,  ! BASIC MOVE FROM/MOVE TO place holder
 301        1125  1              BAS$$SIGDIS_JSB - BAS$$AA_UDF_PR9,  ! BASIC FIND indexed place holder
 302        1126  1              BAS$$UDF_RL9 - BAS$$AA_UDF_PR9,     ! BASIC MAT INPUT
 303        1127  1              BAS$$SIGDIS_JSB - BAS$$AA_UDF_PR9,  ! BASIC RESTORE place holder
 304        1128  1              BAS$$UDF_RL9 - BAS$$AA_UDF_PR9,     ! BASIC Mat Linput
 305        1129  1              BAS$$SIGDIS_JSB - BAS$$AA_UDF_PR9,  ! BASIC FIND seq. place holder
 306        1130  1              BAS$$SIGDIS_JSB - BAS$$AA_UDF_PR9,  ! BASIC place holder
 307        1131  1              BAS$$UDF_WL9 - BAS$$AA_UDF_PR9,     ! BASIC MAT PRINT
 308        1132  1              BAS$$UDF_RMF9 - BAS$$AA_UDF_PR9,    ! BASIC MAT READ
 309        1133  1              BAS$$SIGDIS_JSB - BAS$$AA_UDF_PR9,  ! BASIC GET by RFA place holder
 310        1134  1              BAS$$SIGDIS_JSB - BAS$$AA_UDF_PR9); ! BASIC FIND by RFA place holder
 311        1135  1  !<BLF/PAGE>
```

```
313    1136   1  !+
314    1137   1  ! Dispatch tables to call record processing level of abstraction
315    1138   1  ! routines (REC = 3rd level). Used to connect 2nd level of
316    1139   1  ! abstraction (UDF) to third level of abstraction (REC).
317    1140   1  ! The dispatch tables are indexed by I/O statement type (1st
318    1141   1  ! level UPI.)
319    1142   1  ! Record processing routine names have the form:
320    1143   1  ! First letters: R = READ, W = WRITE));
321    1144   1  ! Second letters: S = sequential, D = direct, M = memory));
322    1145   1  ! third letters: F = formatted, U = unformatted, L = list-directed.
323    1146   1  !-
324    1147   1  !+
325    1148   1  ! Initialize entry points (read first record or setup
326    1149   1  ! output buffer).
327    1150   1  !-
328    1151   1
329    1152   1  GLOBAL
330    1153   1      BAS$$AA_REC_PRO : VECTOR [ISB$K_BASSTTYHI - ISB$K_BASSTTYLO + 2,, SIGNED] INITIAL (
331    1154   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PRO, ! I/O to closed unit
332    1155   1                              ! I/O statement type:
333    1156   1              BAS$$REC_WSLO - BAS$$AA_REC_PRO,   ! BASIC Print
334    1157   1              BAS$$REC_RSLO - BAS$$AA_REC_PRO,   ! BASIC Linput
335    1158   1              BAS$$REC_PSE - BAS$$AA_REC_PRO,    ! BASIC PUT sequential
336    1159   1              BAS$$REC_RSLO - BAS$$AA_REC_PRO,   ! BASIC Input
337    1160   1              BAS$$REC_WFO - BAS$$AA_REC_PRO,    ! BASIC Print Using
338    1161   1              BAS$$REC_RSLO - BAS$$AA_REC_PRO,   ! BASIC Input Line
339    1162   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PRO, ! BASIC DELETE place holder
340    1163   1              BAS$$REC_RMFO - BAS$$AA_REC_PRO,   ! BASIC Read memory formatted
341    1164   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PRO, ! BASIC UPDATE place holder
342    1165   1              BAS$$REC_GSE - BAS$$AA_REC_PRO,    ! BASIC GET sequential
343    1166   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PRO, ! BASIC RESTORE place holder
344    1167   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PRO, ! BASIC SCRATCH place holder
345    1168   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PRO, ! BASIC PUT relative place holder
346    1169   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PRO, ! BASIC GET relative place holder
347    1170   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PRO, ! BASIC FIND relative place holder
348    1171   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PRO, ! BASIC UNLOCK place holder
349    1172   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PRO, ! BASIC FREE place holder
350    1173   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PRO, ! BASIC GET indexed place holder
351    1174   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PRO, ! BASIC PUT indexed place holder
352    1175   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PRO, ! BASIC MOVE FROM/MOVE TO place holder
353    1176   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PRO, ! BASIC FIND indexed place holder
354    1177   1              BAS$$REC_MIRO - BAS$$AA_REC_PRO,   ! BASIC MAT INPUT
355    1178   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PRO, ! BASIC RESTORE indexed place holder
356    1179   1              BAS$$REC_RSLO - BAS$$AA_REC_PRO,   ! BASIC Mat Linput
357    1180   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PRO, ! BASIC FIND seq. place holder
358    1181   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PRO, ! BASIC place holder
359    1182   1              BAS$$REC_WSLO - BAS$$AA_REC_PRO,   ! BASIC MAT PRINT
360    1183   1              BAS$$REC_RMFO - BAS$$AA_REC_PRO,   ! BASIC MAT READ
361    1184   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PRO, ! BASIC GET by RFA place holder
362    1185   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PRO); ! BASIC FIND by RFA place holder
363    1186   1  !<BLF/PAGE>
```

```
:   365        1187   1  !+
:   366        1188   1  ! Intermediate transfer a record - read second and
:   367        1189   1  ! subsequent records for this I/O statement or write
:   368        1190   1  ! first and all but last record for this I/O statement.
:   369        1191   1  !-
:   370        1192   1
:   371        1193   1  GLOBAL
:   372        1194   1      BAS$$AA_REC_PR1 : VECTOR [ISB$K_BASSTTYHI - ISB$K_BASSTTYLO + 2,, SIGNED] INITIAL (
:   373        1195   1          BAS$$SIGDIS_JSB - BAS$$AA_REC_PR1, ! I/O to closed unit
:   374        1196   1                                  ! I/O statement type:
:   375        1197   1          BAS$$REC_WSL1 - BAS$$AA_REC_PR1,     ! BASIC Print
:   376        1198   1          BAS$$REC_RSL1 - BAS$$AA_REC_PR1,     ! BASIC Linput
:   377        1199   1          BAS$$SIGDIS_JSB - BAS$$AA_REC_PR1,   ! BASIC place holder for PUT
:   378        1200   1          BAS$$REC_RSL1 - BAS$$AA_REC_PR1,     ! BASIC Input
:   379        1201   1          BAS$$REC_WF1 - BAS$$AA_REC_PR1,      ! BASIC Print Using
:   380        1202   1          BAS$$REC_RSL1 - BAS$$AA_REC_PR1,     ! BASIC Input Line
:   381        1203   1          BAS$$SIGDIS_JSB - BAS$$AA_REC_PR1,   ! BASIC DELETE place holder
:   382        1204   1          BAS$$REC_RMF1 - BAS$$AA_REC_PR1,     ! BASIC Read memory formatted
:   383        1205   1          BAS$$SIGDIS_JSB - BAS$$AA_REC_PR1,   ! BASIC UPDATE place holder
:   384        1206   1          BAS$$SIGDIS_JSB - BAS$$AA_REC_PR1,   ! BASIC GET seq. place holder
:   385        1207   1          BAS$$SIGDIS_JSB - BAS$$AA_REC_PR1,   ! BASIC RESTORE place holder
:   386        1208   1          BAS$$SIGDIS_JSB - BAS$$AA_REC_PR1,   ! BASIC SCRATCH place holder
:   387        1209   1          BAS$$SIGDIS_JSB - BAS$$AA_REC_PR1,   ! BASIC PUT relative place holder
:   388        1210   1          BAS$$SIGDIS_JSB - BAS$$AA_REC_PR1,   ! BASIC GET relative place holder
:   389        1211   1          BAS$$SIGDIS_JSB - BAS$$AA_REC_PR1,   ! BASIC FIND relative place holder
:   390        1212   1          BAS$$SIGDIS_JSB - BAS$$AA_REC_PR1,   ! BASIC UNLOCK place holder
:   391        1213   1          BAS$$SIGDIS_JSB - BAS$$AA_REC_PR1,   ! BASIC FREE place holder
:   392        1214   1          BAS$$SIGDIS_JSB - BAS$$AA_REC_PR1,   ! BASIC GET indexed place holder
:   393        1215   1          BAS$$SIGDIS_JSB - BAS$$AA_REC_PR1,   ! BASIC PUT indexed place holder
:   394        1216   1          BAS$$SIGDIS_JSB - BAS$$AA_REC_PR1,   ! BASIC MOVE FROM/MOVE TO place holder
:   395        1217   1          BAS$$SIGDIS_JSB - BAS$$AA_REC_PR1,   ! BASIC FIND indexed place holder
:   396        1218   1          BAS$$REC_MIN1 - BAS$$AA_REC_PR1,     ! BASIC MAT INPUT
:   397        1219   1          BAS$$SIGDIS_JSB - BAS$$AA_REC_PR1,   ! BASIC RESTORE indexed place holder
:   398        1220   1          BAS$$REC_MLI1 - BAS$$AA_REC_PR1,     ! BASIC eventually MAT LINPUT
:   399        1221   1          BAS$$SIGDIS_JSB - BAS$$AA_REC_PR1,   ! BASIC FIND seq. place holder
:   400        1222   1          BAS$$SIGDIS_JSB - BAS$$AA_REC_PR1,   ! BASIC place holder
:   401        1223   1          BAS$$REC_WSL1 - BAS$$AA_REC_PR1,     ! BASIC MAT PRINT
:   402        1224   1          BAS$$REC_MRE1 - BAS$$AA_REC_PR1,     ! BASIC MAT READ
:   403        1225   1          BAS$$SIGDIS_JSB - BAS$$AA_REC_PR1,   ! BASIC GET by RFA place holder
:   404        1226   1          BAS$$SIGDIS_JSB - BAS$$AA_REC_PR1);  ! BASIC FIND by RFA place holder
:   405        1227   1  !<BLF/PAGE>
```

```
407    1228   1  !+
408    1229   1  ! End of I/O list record processing
409    1230   1  !-
410    1231   1
411    1232   1  GLOBAL
412    1233   1      BAS$$AA_REC_PR9 : VECTOR [ISB$K_BASSTTYHI - ISB$K_BASSTTYLO + 2,, SIGNED] INITIAL (
413    1234   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PR9, ! I/O to closed unit
414    1235   1                              ! I/O statement type:
415    1236   1              BAS$$REC_WSL9 - BAS$$AA_REC_PR9,    ! BASIC Print
416    1237   1              BAS$$REC_RSL9 - BAS$$AA_REC_PR9,    ! BASIC Linput
417    1238   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PR9,  ! BASIC place holder for PUT
418    1239   1              BAS$$REC_RSL9 - BAS$$AA_REC_PR9,    ! BASIC Input
419    1240   1              BAS$$REC_WF9 - BAS$$AA_REC_PR9,     ! BASIC Print Using
420    1241   1              BAS$$REC_RSL9 - BAS$$AA_REC_PR9,    ! BASIC Input Line
421    1242   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PR9,  ! BASIC DELETE place holder
422    1243   1              BAS$$REC_RMF9 - BAS$$AA_REC_PR9,    ! BASIC Read memory formatted
423    1244   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PR9,  ! BASIC UPDATE place holder
424    1245   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PR9,  ! BASIC GET seq. place holder
425    1246   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PR9,  ! BASIC RESTORE place holder
426    1247   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PR9,  ! BASIC SCRATCH place holder
427    1248   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PR9,  ! BASIC PUT relative place holder
428    1249   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PR9,  ! BASIC GET relative place holder
429    1250   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PR9,  ! BASIC FIND relative place holder
430    1251   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PR9,  ! BASIC UNLOCK place holder
431    1252   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PR9,  ! BASIC FREE place holder
432    1253   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PR9,  ! BASIC GET indexed place holder
433    1254   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PR9,  ! BASIC PUT indexed place holder
434    1255   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PR9,  ! BASIC MOVE FROM/MOVE TO place holder
435    1256   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PR9,  ! BASIC FIND indexed place holder
436    1257   1              BAS$$REC_MIN9 - BAS$$AA_REC_PR9,    ! BASIC MAT INPUT
437    1258   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PR9,  ! BASIC RESTORE indexed place holder
438    1259   1              BAS$$REC_RSL9 - BAS$$AA_REC_PR9,    ! BASIC Mat Linput
439    1260   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PR9,  ! BASIC FIND seq. place holder
440    1261   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PR9,  ! BASIC place holder
441    1262   1              BAS$$REC_MPR9 - BAS$$AA_REC_PR9,    ! BASIC MAT PRINT
442    1263   1              BAS$$REC_RMF9 - BAS$$AA_REC_PR9,    ! BASIC MAT READ
443    1264   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PR9,  ! BASIC GET by RFA place holder
444    1265   1              BAS$$SIGDIS_JSB - BAS$$AA_REC_PR9); ! BASIC FIND by RFA place holder
445    1266   1  !+
446    1267   1  !        Return to normal PSECT definition
447    1268   1  !-
448    1269   1  DECLARE_PSECTS (BAS);
449    1270   1  !
```

```
  451    1271   1  ROUTINE BAS$$SIGDIS_ERR : CALL_CCB NOVALUE =     !
  452    1272   1
  453    1273   1  !++
  454    1274   1  ! FUNCTIONAL DESCRIPTION:
  455    1275   1  !
  456    1276   1  !       Signal an error from the I/O dispatch process.  The error code
  457    1277   1  !       signalled depends on the statement type.  One statement type is
  458    1278   1  !       used by CLOSE to catch dispatches on a closed unit, which can
  459    1279   1  !       happen if the CLOSE is done as part of recursive I/O.  If the
  460    1280   1  !       statement type is not the one used by CLOSE, we have an error
  461    1281   1  !       in the RTL (an invalid statement type).
  462    1282   1  !
  463    1283   1  ! FORMAL PARAMETERS:
  464    1284   1  !
  465    1285   1  !       NONE
  466    1286   1  !
  467    1287   1  ! IMPLICIT INPUTS:
  468    1288   1  !
  469    1289   1  !       ISB$B_STTM_TYPE.rb.r               Statement type of I/O statement
  470    1290   1  !
  471    1291   1  ! IMPLICIT OUTPUTS:
  472    1292   1  !
  473    1293   1  !       NONE
  474    1294   1  !
  475    1295   1  ! ROUTINE VALUE:
  476    1296   1  ! COMPLETION CODES:
  477    1297   1  !
  478    1298   1  !       NONE
  479    1299   1  !
  480    1300   1  ! SIDE EFFECTS:
  481    1301   1  !
  482    1302   1  !       Signals OTS$_IO_CONCLO if the LUB is not open, or
  483    1303   1  !       OTS$_FATINTERR if it is.
  484    1304   1  !
  485    1305   1  !--
  486    1306   1
  487    1307   2      BEGIN
  488    1308   2
  489    1309   2      EXTERNAL REGISTER
  490    1310   2          CCB : REF BLOCK [, BYTE];
  491    1311   2
  492    1312   3      IF ( NOT .CCB [LUB$V_OPENED])
  493    1313   2      THEN
  494    1314   2  !+
  495    1315   2  ! The file must have been closed with I/O still active on it.
  496    1316   2  !-
  497    1317   2          LIB$STOP (OTS$_IO_CONCLO)
  498    1318   2      ELSE
  499    1319   2  !+
  500    1320   2  ! This must be an attempt to use an unimplemented feature.  It represents
  501    1321   2  ! an internal error in the OTS.
  502    1322   2  !-
  503    1323   2          LIB$STOP (OTS$_FATINTERR);
  504    1324   2
  505    1325   2      0
  506    1326   1      END;                                      !End of BAS$$SIGDIS_ERR
```

```
                                                      .TITLE   BAS$$DISPATCH_T
                                                      .IDENT   \1-021\

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

00000000* 00000000* 00000000V 00000000* 00000000* 00000000V 00000  BAS$$AA_UDF_PR0::
                                                             .LONG   <BAS$$SIGDIS_JSB-BAS$$AA_UDF_PR0>, -
00000000V 00000000V 00000000V 00000000* 00000000V 00000000* 00018          <BAS$$UDF_WL0-BAS$$AA_UDF_PR0>, -
00000000V 00000000V 00000000V 00000000V 00000000V 00000000V 00030          <BAS$$UDF_RL0-BAS$$AA_UDF_PR0>, -
00000000V 00000000* 00000000V 00000000V 00000000V 00000000V 00048          <BAS$$SIGDIS_JSB-BAS$$AA_UDF_PR0>, -
00000000V 00000000* 00000000* 00000000V 00000000V 00000000* 00060          <BAS$$UDF_RL0-BAS$$AA_UDF_PR0>, -
                                        00000000V 00078                     <BAS$$UDF_WF0-BAS$$AA_UDF_PR0>, -
                                                                            <BAS$$UDF_RL0-BAS$$AA_UDF_PR0>, -
                                                                            <BAS$$SIGDIS_JSB-BAS$$AA_UDF_PR0>, -
                                                                            <BAS$$UDF_RMF0-BAS$$AA_UDF_PR0>, -
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                                                             .LONG   <BAS$$SIGDIS_ERR-BAS$$AA_UDF_PR1>, -
00000000* 00000000* 00000000* 00000000* 00000000* 00000000* 00094          <BAS$$UDF_WL1-BAS$$AA_UDF_PR1>, -
00000000* 00000000* 00000000* 00000000* 00000000* 00000000* 000AC          <BAS$$UDF_RL1-BAS$$AA_UDF_PR1>, -
00000000* 00000000* 00000000* 00000000* 00000000* 00000000* 000C4          <BAS$$SIGDIS_ERR-BAS$$AA_UDF_PR1>, -
00000000* 00000000* 00000000* 00000000* 00000000* 00000000* 000DC          <BAS$$UDF_RL1-BAS$$AA_UDF_PR1>, -
                                        00000000* 000F4                     <BAS$$UDF_WF1-BAS$$AA_UDF_PR1>, -
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                                                                <BAS$$SIGDIS_ERR-BAS$$AA_UDF_PR1>
00000000* 00000000* 00000000V 00000000* 00000000* 00000000V 000F8 BAS$$AA_UDF_PR9::
                                                                .LONG   <BAS$$SIGDIS_JSB-BAS$$AA_UDF_PR9>, -
00000000V 00000000V 00000000V 00000000* 00000000V 00000000* 00110    <BAS$$UDF_WL9-BAS$$AA_UDF_PR9>, -
00000000V 00000000V 00000000V 00000000V 00000000V 00000000V 00128    <BAS$$UDF_RL9-BAS$$AA_UDF_PR9>, -
00000000V 00000000* 00000000V 00000000V 00000000V 00000000V 00140    <BAS$$SIGDIS_JSB-BAS$$AA_ODF_PR9>, -
00000000V 00000000* 000000C0* 00000000V 00000000V 00000000* 00158    <BAS$$UDF_RL9-BAS$$AA_UDF_PR9>, -
                                                            00000000V 00170    <BAS$$UDF_WF9-BAS$$AA_UDF_PR9>, -
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                                                                <BAS$$SIGDIS_JSB-BAS$$AA_UDF_PR9>, -
                                                                <BAS$$SIGDIS_JSB-BAS$$AA_UDF_PR9>
00000000* 00000000* 00000000* 00000000* 00000000* 00000000V 00174 BAS$$AA_REC_PRO::
                                                                .LONG   <BAS$$SIGDIS_JSB-BAS$$AA_REC_PRO>, -
00000000V 00000000* 00000000V 00000000* 00000000V 00000000* 0018C    <BAS$$REC_WSC0-BAS$$AA_REC_PRO>, -
00000000V 00000000* 00000000V 00000000V 00000000V 00000000V 001A4    <BAS$$REC_RSL0-BAS$$AA_REC_PRO>, -
00000000V 00000000* 000000C0V 00000000V 00000000V 00000000V 001BC    <BAS$$REC_PSE-BAS$$AA_REC_PRO>, -
00000000V 00000000* 00000000* 00000000V 00000000V 00000000* 001D4    <BAS$$REC_RSL0-BAS$$AA_REC_PRO>, -
                                                            00000000V 001EC    <BAS$$REC_WF0-BAS$$AA_REC_PRO>, -
                                                                <BAS$$REC_RSL0-BAS$$AA_REC_PRO>, -
                                                                <BAS$$SIGDIS_JSB-BAS$$AA_REC_PRO>, -
                                                                <BAS$$REC_RMF0-BAS$$AA_REC_PRO>, -
                                                                <BAS$$SIGDIS_JSB-BAS$$AA_REC_PRO>, -
                                                                <BAS$$REC_GSE-BAS$$AA_REC_PRO>, -
```

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                                                                    <BAS$$REC_RSC0-BAS$$AA_REC_PR0>, -
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                                                                    <BAS$$REC_WSC0-BAS$$AA_REC_PR0>, -
                                                                    <BAS$$REC_RMF0-BAS$$AA_REC_PR0>, -
                                                                    <BAS$$SIGDIS_JSB-BAS$$AA_REC_PR0>, -
                                                                    <BAS$$SIGDIS_JSB-BAS$$AA_REC_PR0>
00000000*  00000000*  00000000V  00000000*  00000000*  00000000V  001F0  BAS$$AA_REC_PR1::
                                                                    .LONG  <BAS$$SIGDIS_JSB-BAS$$AA_REC_PR1>, -
00000000V  00000000V  00000000V  00000000*  00000000V  00000000*  00208         <BAS$$REC_WSC1-BAS$$AA_REC_PR1>, -
00000000V  00000000V  00000000V  00000000V  00000000V  00000000V  00220         <BAS$$REC_RSL1-BAS$$AA_REC_PR1>, -
00000000V  00000000*  00000000V  00000000V  00000000V  00000000V  00238         <BAS$$SIGDIS_JSB-BAS$$AA_REC_PR1>, -
00000000V  00000000*  00000000*  00000000V  00000000V  00000000*  00250         <BAS$$REC_RSC1-BAS$$AA_REC_PR1>, -
                                                       00000000V  00268         <BAS$$REC_WF1-BAS$$AA_REC_PR1>, -
                                                                                <BAS$$REC_RSL1-BAS$$AA_REC_PR1>, -
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                                                                                <BAS$$REC_RMF1-BAS$$AA_REC_PR1>, -
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00000000*  00000000*  00000000V  00000000*  00000000*  00000000V  0026C  BAS$$AA_REC_PR9::
                                                                    .LONG  <BAS$$SIGDIS_JSB-BAS$$AA_REC_PR9>, -
00000000V  00000000V  00000000V  00000000*  00000000V  00000000*  00284         <BAS$$REC_WSC9-BAS$$AA_REC_PR9>, -
00000000V  00000000V  00000000V  00000000V  00000000V  00000000V  0029C         <BAS$$REC_RSL9-BAS$$AA_REC_PR9>, -
00000000V  00000000*  00000000V  00000000V  00000000V  00000000V  002B4         <BAS$$SIGDIS_JSB-BAS$$AA_REC_PR9>, -
```

```
00000000V 00000000* 00000000* 00000000V 00000000V 00000000* 002CC        <BAS$$REC_RSL9-BAS$$AA_REC_PR9>, -
                                                   00000000V 002E4        <BAS$$REC_WF9-BAS$$AA_REC_PR9>, -
                                                                          <BAS$$REC_RSL9-BAS$$AX_REC_PR9>, -
                                                                          <BAS$$SIGDIS_JSB-BAS$$XA_REC_PR9>, -
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                                                                          <BAS$$REC_RSL9-BAS$$AA_REC_PR9>, -
                                                                          <BAS$$SIGDIS_JSB-BAS$$XA_REC_PR9>, -
                                                                          <BAS$$SIGDIS_JSB-BAS$$AA_REC_PR9>, -
                                                                          <BAS$$REC_MPR9-BAS$$AA_REC_PR9>, -
                                                                          <BAS$$REC_RMF9-BAS$$AA_REC_PR9>, -
                                                                          <BAS$$SIGDIS_JSB-BAS$$XA_REC_PR9>, -
                                                                          <BAS$$SIGDIS_JSB-BAS$$AA_REC_PR9>

                                          .EXTRN    OTS$_FATINTERR, OTS$_IO_CONCLO
                                          .EXTRN    LIB$STOP, BAS$$UDF_RL0
                                          .EXTRN    BAS$$UDF_RL1, BAS$$UDF_RL9
                                          .EXTRN    BAS$$UDF_WF0, BAS$$UDF_WF1
                                          .EXTRN    BAS$$UDF_WF9, BAS$$UDF_WL0
                                          .EXTRN    BAS$$UDF_WL1, BAS$$UDF_WL9
                                          .EXTRN    BAS$$UDF_RMF0, BAS$$UDF_RMF1
                                          .EXTRN    BAS$$UDF_RMF9, BAS$$REC_RSL0
                                          .EXTRN    BAS$$REC_RSL1, BAS$$REC_RSL9
                                          .EXTRN    BAS$$REC_WF0, BAS$$REC_QF1
                                          .EXTRN    BAS$$REC_WF9, BAS$$REC_WSL0
                                          .EXTRN    BAS$$REC_WSL1, BAS$$REC_WSL9
                                          .EXTRN    BAS$$REC_RMF0, BAS$$REC_RMF1
                                          .EXTRN    BAS$$REC_RMF9, BAS$$REC_GSE
                                          .EXTRN    BAS$$REC_PSE, BAS$$REC_MPR9
                                          .EXTRN    BAS$$REC_MIN0, BAS$$REC_MIN1
                                          .EXTRN    BAS$$REC_MIN9, BAS$$REC_MLI1
                                          .EXTRN    BAS$$REC_MRE1

                     0000 00000 BAS$$SIGDIS_ERR:
                                          .WORD     Save nothing                                    ; 1271
            08    FC    AB  E8 00002       BLBS      -4(CCB), 1$                                      ; 1312
            00000000G  8F  DD 00006        PUSHL     #OTS$_IO_CONCLO                                 ; 1317
                       06  11 0000C        BRB       2$
            00000000G  8F  DD 0000E 1$:    PUSHL     #OTS$_FATINTERR                                 ; 1323
       00000000G 00   01  FB 00014 2$:    CALLS     #1, LIB$STOP
                       04 0001B           RET                                                        ; 1326

; Routine Size: 28 bytes,    Routine Base: _BAS$CODE + 02E8
```

BAS$$DISPATCH_T
1-021

F 16
16-Sep-1984 00:19:30   VAX-11 Bliss-32 V4.0-742
14-Sep-1984 11:54:52   [BASRTL.SRC]BASDISPAT.B32;1

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BAS$$DISPATCH_T
1-021

G 16
16-Sep-1984 00:19:30   VAX-11 Bliss-32 V4.0-742
14-Sep-1984 11:54:52   [BASRTL.SRC]BASDISPAT.B32;1

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```
508    1327  1  ROUTINE BAS$$SIGDIS_JSB : JSB_UDFO NOVALUE =      !
509    1328  1
510    1329  1  !++
511    1330  1  ! FUNCTIONAL DESCRIPTION:
512    1331  1  !
513    1332  1  !     Signal an error from the I/O dispatch process.  The error code
514    1333  1  !     signalled depends on the statement type.  One statement type is
515    1334  1  !     used by CLOSE to catch dispatches on a closed unit, which can
516    1335  1  !     happen if the CLOSE is done as part of recursive I/O.  If the
517    1336  1  !     statement type is not the one used by CLOSE, we have an error
518    1337  1  !     in the RTL (an invalid statement type).
519    1338  1  !
520    1339  1  ! FORMAL PARAMETERS:
521    1340  1  !
522    1341  1  !     NONE
523    1342  1  !
524    1343  1  ! IMPLICIT INPUTS:
525    1344  1  !
526    1345  1  !     ISB$B_STTM_TYPE.rb.r              Statement type of I/O statement
527    1346  1  !
528    1347  1  ! IMPLICIT OUTPUTS:
529    1348  1  !
530    1349  1  !     NONE
531    1350  1  !
532    1351  1  ! ROUTINE VALUE:
533    1352  1  ! COMPLETION CODES:
534    1353  1  !
535    1354  1  !     NONE
536    1355  1  !
537    1356  1  ! SIDE EFFECTS:
538    1357  1  !
539    1358  1  !     Signals OTS$_IO_CONCLO if the LUB is not open, or
540    1359  1  !     OTS$_FATINTERR if it is.
541    1360  1  !
542    1361  1  !--
543    1362  1
544    1363  2     BEGIN
545    1364  2
546    1365  2     EXTERNAL REGISTER
547    1366  2         CCB : REF BLOCK [, BYTE];
548    1367  2
549    1368  3     IF ( NOT .CCB [LUB$V_OPENED])
550    1369  2     THEN
551    1370  2  !+
552    1371  2  ! The file must have been closed with I/O still active on it.
553    1372  2  !-
554    1373  2         LIB$STOP (OTS$_IO_CONCLO)
555    1374  2     ELSE
556    1375  2  !+
557    1376  2  ! This must be an attempt to use an unimplemented feature.  It represents
558    1377  2  ! an internal error in the OTS.
559    1378  2  !-
560    1379  2         LIB$STOP (OTS$_FATINTERR);
561    1380  2
562    1381  2     0
563    1382  1     END;                                    !End of BAS$$SIGDIS_JSB
```

BAS$$DISPATCH_T
1-021

H 16
16-Sep-1984 00:19:30   VAX-11 BLiss-32 V4.0-742
14-Sep-1984 11:54:52   [BASRTL.SRC]BASDISPAT.B32;1

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```
                          08      FC  AB  E8 00000 BAS$$SIGDIS_JSB:
                                                          BLBS    -4(CCB), 1$                              ; 1368
                              00000000G 8F  DD C0004       PUSHL   #OTS$_IO_CONCLO                         ; 1373
                                        06  11 0000A        BRB     2$
                              00000000G 8F  DD 0000C 1$:    PUSHL   #OTS$_FATINTERR                        ; 1379
                   00000000G 00         01  FB 00012 2$:    CALLS   #1, LIB$STOP
                                        05 00019          RSB                                              ; 1382
```

; Routine Size: 26 bytes,   Routine Base: _BAS$CODE + 0304

```
;  564        1383  1 END                                      !End of module
;  565        1384  1
;  566        1385  0 ELUDOM
```

;   PSECT SUMMARY

```
;       Name                    Bytes                    Attributes
;   _BAS$CODE                     798  NOVEC,NOWRT,  RD , EXE,  SHR,  LCL,  REL,  CON,  PIC,ALIGN(2)
```

;   COMMAND QUALIFIERS

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

; Size: 54 code + 744 data bytes
; Run Time: 00:12.7
; Elapsed Time: 00:27.1
; Lines/CPU Min: 6558
; Lexemes/CPU-Min: 34456
; Memory Used: 135 pages
; Compilation Complete