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```
0001 0 MODULE LNK_DATABASE
0002 0           (IDENT = 'V04-000') =
0003 0
0004 1 BEGIN
0005 1
0006 1
0007 1 *****
0008 1 *
0009 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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0026 1 *
0027 1 *
0028 1 *****
0029 1
0030 1
0031 1
0032 1
0033 1
0034 1 ++
0035 1
0036 1 MODULE: LNK_DATABASE
0037 1
0038 1 FACILITY: LINKER
0039 1
0040 1 ABSTRACT: GLOBAL DATA BASE OF THE LINKER
0041 1
0042 1 HISTORY:
0043 1
0044 1     VERSION: X01.00
0045 1
0046 1     AUTHOR: T.J. PORTER 15-JAN-77
0047 1
0048 1     MODIFIED BY:
0049 1
0050 1     V03-002 ADE0001 Alan D. Eldridge 18-Apr-1984
0051 1     Removed 'map' from DEF$C_LNKCTL.
0052 1
0053 1     V03-001 JWT0152 Jim Teague 20-Feb-1984
0054 1     Implement variable length ISDs.
0055 1
0056 1 --
```



```

58 0057 1 |
59 0058 1 |++
60 0059 1 |
61 0060 1 | FUNCTIONAL DESCRIPTION:
62 0061 1 |
63 0062 1 |     This module contains the data base required throughout the whole
64 0063 1 |     of the linker in addition to some global definitions.
65 0064 1 |
66 0065 1 |--
67 0066 1 |
68 0067 1 | LIBRARY
69 0068 1 |     'STARLETL32' ;
70 0069 1 | REQUIRE
71 0070 1 |     'PREFIX' ;                               ! some general macros and defintions
72 0185 1 | LIBRARY
73 0186 1 |     'DATBAS' ;
74 0187 1 |
75 0188 1 | GLOBAL LITERAL
76 0189 1 |     LNK$K_MAX_FILENAME_LENGTH = 39,          ! Maximum filename length
77 0190 1 |     LNK$K_DZROMIN = 5,                       ! Default minimum empty page size before compression
78 0191 1 |     LNK$K_ISDMAX = 95 ;                      ! Default limit on isections created
79 0192 1 | !
80 0193 1 | GLOBAL
81 0194 1 |     LNK$GL_CTLMSK : BLOCK [1] ;              ! Control flags for this link
82 0195 1 |
83 0196 1 | GLOBAL LITERAL
84 0197 1 |     DEF$C_LNKCTL = LNK$M_IMAGE OR             ! define the flag bits
85 0198 1 |                   LNK$M_EXE OR               ! Default control flags
86 0199 1 |                   LNK$M_SUPSYS OR           ! -- produce an executable
87 0200 1 |                   LNK$M_SUPDBG OR          ! With system and debugger
88 0201 1 |                   LNK$M_PICIMG OR          ! Symbols suppressed
89 0202 1 |                   LNK$M_SYSLIB OR          ! Initially assumed pic
90 0203 1 |                   LNK$M_SYSSHR ;           ! But with system library search enabled
91 0204 1 | !
92 0205 1 | GLOBAL
93 0206 1 |     LNK$GL_SHRSYMS,                          ! Number of symbols referenced into shareabl
94 0207 1 |     LNK$GL_SHRIMGs,                          ! Number of shareable images referenced
95 0208 1 |     LNK$GL_CLUTREE : REF BLOCK [,BYTE] INITIAL (0), ! Listhead for cluster tree
96 0209 1 |     LNK$GL_CLULST : VECTOR [2]               ! List of cluster descriptors
97 0210 1 |                   INITIAL (0, LNK$GL_CLULST),
98 0211 1 |     LNK$GL_DEFCLU : BBLOCK [CLUS$C_SIZE]     ! Establish the default cluster
99 0212 1 |                   INITIAL (0,               ! Not yet linked and no fdb's yet
100 0213 1 |                   0,                        ! No previous cluster yet
101 0214 1 |                   0, LNK$GL_DEFCLU [CLUS$L_FSTFDB]
102 0215 1 |                   0, 0,
103 0216 1 |                   0, LNK$GL_DEFCLU [CLUS$L_FSTISD] ! Listheads for global and non-global psects
104 0217 1 |                   0, 0,                    ! Singly linked i-section list
105 0218 1 |                   0, 0,                    ! Cluoffset and lastcluster are 0
106 0219 1 |                   0, 0,                    ! Special g^ ref list
107 0220 1 |                   0, 0,                    ! Number of shr image symbols and list head
108 0221 1 |                   0, LNK$GL_DEFCLU [CLUS$L_FSTADRL] ! Singly linked list of .ADDRESS VA offse
109 0222 1 |                   0,                        ! No fixup image section
110 0223 1 |                   0,                        ! No image sections in cluster
111 0224 1 |                   0, 0,                    ! Zero base and size
112 0225 1 |                   0,                        ! No owning cluster
113 0226 1 |                   .WORD (0)                ! No flags set
114 0227 1 |                   .BYTE (0)                ! No pfc

```

```

: 115      0228 1      ,BYTE (0) ! Round up to longword boundary
: 116      0229 1      ,COUNTEDSTRING ('DEFAULT_CLUSTER')
: 117      0230 1
: 118      0231 1      LNK$GL_CURCLU : REF BBLOCK ! Current cluster initially the default
: 119      0232 1      INITIAL (LNK$GL_DEFCLU [CLUSL_NXTCLU]),
: 120      0233 1 !
: 121      0234 1 !      LNK$GL_FVMLST, ! Initially empty free virtual memory list
: 122      0235 1      LNK$GL_IMGFI : REF BBLOCK, ! Pointer to the image file descriptor
: 123      0236 1      LNK$GL_MAPFI : REF BBLOCK, ! Pointer to map file descriptor
: 124      0237 1      LNK$GL_SYMFI : REF BBLOCK, ! Pointer to symbol table file descriptor
: 125      0238 1 !
: 126      0239 1      LNK$GT_IMGNA : VECTOR [LNK$K_MAX_FILENAME_LENGTH + 1, BYTE], ! Image name counted string
: 127      0240 1      LNK$GT_IMGID : VECTOR [SYM$C_MAX[NG + 1, BYTE], ! Image ident counted string
: 128      0241 1      LNK$GW_MISECTS : WORD INITIAL (LNK$K_ISD$MAX), ! Maximum number of image sections
: 129      0242 1      LNK$GW_DZROMIN : WORD INITIAL (LNK$K_DZROMIN), ! Threshold on minimum size of empty
: 130      0243 1 ! regions before compressing
: 131      0244 1 !
: 132      0245 1      LNK$GB_PASS : BYTE ; ! Current pass
: 133      0246 1 !
: 134      0247 1 GLOBAL BIND
: 135      0248 1      LNK$GL_DEFBAS = LNK$GL_DEFCLU [CLUSL_BASE],
: 136      0249 1      LNK$GW_DEFLAGS = LNK$GL_DEFCLU [CLUSW_FLAGS],
: 137      0250 1      LNK$GL_LASTCLU = LNK$GL_CLULST [1] ; ! Pointer to last cluster descriptor
: 138      0251 1
: 139      0252 0 END ELUDOM

```

```

.TITLE LNK_DATABASE
.IDENT \V04-000\

.PSECT $GLOBAL$,NOEXE,2

0000 LNK$GL_CTLMSK::
      .BLKB 4
0004 LNK$GL_SHRSYMS::
      .BLKB 4
0008 LNK$GL_SHRIMGs::
      .BLKB 4
00000000 0000C LNK$GL_CLUTREE::
      .LONG 0
00000000 00010 LNK$GL_CLULST::
      .LONG 0
00000000 00014 .ADDRESS LNK$GL_CLULST
00000000 00018 LNK$GL_DEFCLU::
      .LONG 0, 0, 0
      .ADDRESS LNK$GL_DEFCLU+8
00000000 00024 .LONG 0, 0, 0
00000000 00028 .ADDRESS LNK$GL_DEFCLU+24
00000000 00034 .LONG 0, 0, 0, 0, 0, 0, 0, 0
00000000 00038 .ADDRESS LNK$GL_DEFCLU+60
00000000 00058 .LONG 0, 0, 0, 0, 0
00000000 0005C .WORD 0
0000 00070 .BYTE 0
00 00072 .BYTE 0
00 00073 .BYTE 0
0F 00074 .BYTE 15
52 45 54 53 55 4C 43 5F 54 4C 55 41 46 45 44 00075 .ASCII \DEFAULT_CLUSTER\

```



```

00000000' 00084 .BLKB 28
           000A0 LNK$GL_CURCLU::
             .ADDRESS LNK$GL_DEFCLU
           000A4 LNK$GL_FVMLST::
             .BLKB 4
           000A8 LNK$GL_IMGFIL::
             .BLKB 4
           000AC LNK$GL_MAPFIL::
             .BLKB 4
           000B0 LNK$GL_SYMFIL::
             .BLKB 4
           000B4 LNK$GT_IMGNAM::
             .BLKB 40
           000DC LNK$GT_IMGID::
             .BLKB 32
005F 000FC LNK$GW_MISECTS::
             .WORD 95
0005 000FE LNK$GW_DZROMIN::
             .WORD 5
           00100 LNK$GB_PASS::
             .BLKB 1

```

```

LNK$K_MAX_FILENAME_LENGTH== 39
LNK$K_DZROMIN== 5
LNK$K_ISDMAX== 95
DEF$C_LNKCTL== 1229827
LNK$GL_DEFBAS== LNK$GL_DEFCLU+76
LNK$GW_DEFLAGS== LNK$GL_DEFCLU+88
LNK$GL_LASTCLU== LNK$GL_CLULST+4

```

PSECT SUMMARY

Name	Bytes	Attributes
\$GLOBALS	257	NOVEC, WRT, RD, NOEXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)
. ABS .	0	NOVEC, NOWRT, NORD, NOEXE, NOSHR, LCL, ABS, CON, NOPIC, ALIGN(0)

Library Statistics

File	Symbols		Pages Mapped	Processing Time
	Total	Loaded Percent		
_\$255\$DUA28:[SYSLIB]STARLET.L32;1	9776	6 0	581	00:01.1
-\$255\$DUA28:[LINKER.OBJ]DATBAS.L32;1	538	15 2	28	00:00.5

LNK\_DATABASE  
V04=000

8 2  
15-Sep-1984 23:56:06  
14-Sep-1984 12:40:28

VAX-11 Bliss-32 V4.0-742  
[LINKER.SRC]LNKDATBAS.B32;1

Page 5  
(2)

COMMAND QUALIFIERS

BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LISS:LNKDATBAS/OBJ=OBJ\$:LNKDATBAS MSRC\$:LNKDATBAS/UPDATE=(ENH\$:LNKDATBAS)

: Size: 0 code + 257 data bytes  
: Run Time: 00:04.4  
: Elapsed Time: 00:14.1  
: Lines/CPU Min: 3405  
: Lexemes/CPU-Min: 12378  
: Memory Used: 40 pages  
: Compilation Complete

LNK  
V04



0216 AH-BT13A-SE  
VAX/VMS V4.0

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