

```
BBBBBBBBBBBB    00000000    00000000    TTTTTTTTTTTTTT    SSSSSSSSSSSS
BBBBBBBBBBBB    00000000    00000000    TTTTTTTTTTTTTT    SSSSSSSSSSSS
BBBBBBBBBBBB    00000000    00000000    TTTTTTTTTTTTTT    SSSSSSSSSSSS
BBB      BBB 000      000      000      000      TTT      SSS
BBB      BBB 000      000      000      000      TTT      SSS
BBB      BBB 000      000      000      000      TTT      SSS
BBB      BBB 000      000      000      000      TTT      SSS
BBB      BBB 000      000      000      000      TTT      SSS
BBB      BBB 000      000      000      000      TTT      SSS
BBBBBBBBBBBB    000      000      000      000      TTT      SSSSSSSSSS
BBBBBBBBBBBB    000      000      000      000      TTT      SSSSSSSSSS
BBBBBBBBBBBB    000      000      000      000      TTT      SSSSSSSSSS
BBB      BBB 000      000      000      000      TTT      SSS
BBB      BBB 000      000      000      000      TTT      SSS
BBB      BBB 000      000      000      000      TTT      SSS
BBB      BBB 000      000      000      000      TTT      SSS
BBB      BBB 000      000      000      000      TTT      SSS
BBB      BBB 000      000      000      000      TTT      SSS
BBBBBBBBBBBB    00000000    00000000    TTT      SSSSSSSSSSSS
BBBBBBBBBBBB    00000000    00000000    TTT      SSSSSSSSSSSS
BBBBBBBBBBBB    00000000    00000000    TTT      SSSSSSSSSSSS
```

```

LL      000000  CCCCCCCC  KK      KK  DDDDDDDD  AAAAAA  TTTTTTTTTT  AAAAAA
LL      000000  CCCCCCCC  KK      KK  DDDDDDDD  AAAAAA  TTTTTTTTTT  AAAAAA
LL      00      00  CC      CC  KK      KK  DD      DD  AA      AA  TT      TT  AA      AA
LL      00      00  CC      CC  KK      KK  DD      DD  AA      AA  TT      TT  AA      AA
LL      00      00  CC      CC  KK      KK  DD      DD  AA      AA  TT      TT  AA      AA
LL      00      00  CC      CC  KK      KK  DD      DD  AA      AA  TT      TT  AA      AA
LL      00      00  CC      CC  KK      KK  DD      DD  AA      AA  TT      TT  AA      AA
LL      00      00  CC      CC  KK      KK  DD      DD  AA      AA  TT      TT  AA      AA
LL      00      00  CC      CC  KK      KK  DD      DD  AA      AA  TT      TT  AA      AA
LL      00      00  CC      CC  KK      KK  DD      DD  AA      AA  TT      TT  AA      AA
LL      00      00  CC      CC  KK      KK  DD      DD  AA      AA  TT      TT  AA      AA
LL      00      00  CC      CC  KK      KK  DD      DD  AA      AA  TT      TT  AA      AA
LLLLLLLLLLLL  000000  CCCCCCCC  KK      KK  DDDDDDDD  AAAAAA  TTTTTTTTTT  AAAAAA
LLLLLLLLLLLL  000000  CCCCCCCC  KK      KK  DDDDDDDD  AAAAAA  TTTTTTTTTT  AAAAAA

```

```

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
LLLLLLLLLLLL  IIIIII  SSSSSSSS
LLLLLLLLLLLL  IIIIII  SSSSSSSS

```

LOCKDATA
Table of contents

- Routines to lock/unlock SYSGEN ^{L 16} databas 15-SEP-1984 23:55:42 VAX/VMS Macro V04-00

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BOO\$LOCK_GEN - Lock SYSGEN database
BOO\$UNLOCK_GEN - Unlock SYSGEN database

```
0000 1      .IF      NDF,STASW
0000 2      .TITLE  LOCKDATA - Routines to lock/unlock SYSGEN database
0000 3      .IFF
0000 4      .TITLE  STALOCK - Dummy routines for STASYSGEN
0000 5      .ENDC
0000 6      .IDENT  'V04-000'
0000 7      :
0000 8      :*****
0000 9      :*
0000 10     :*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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0000 24     :*
0000 25     :*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
0000 26     :*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0000 27     :*
0000 28     :*
0000 29     :*****
0000 30     :
0000 31     :++
0000 32     :
0000 33     : Facility: System generation and initialization
0000 34     :
0000 35     : Abstract: LOCKDATA provides subroutines which allow synchronization of
0000 36     :           access to the SYSGEN device database.
0000 37     :
0000 38     : Environment:
0000 39     :
0000 40     : Author: Maryann Hinden, Creation date: 08-June-1983
0000 41     :
0000 42     : Modification History:
0000 43     :
0000 44     :           V03-002 WHM0001      Bill Matthews      29-Feb-1984
0000 45     :                   Enable queueing of the SYSGEN database lock request.
0000 46     :
0000 47     :           V03-001 MSH0001      Maryann Hinden   13-Jul-1983
0000 48     :                   Use general addressing mode for EXE$GL_SYSID_LOCK.
0000 49     : --
0000 50     :
0000 51     :
0000 52     : Include files:
0000 53     :
0000 54     : $LCKDEF      ; Define lock manager symbols
0000 55     : $SSDEF      ; Define system status values
0000 56     : $SYSGMSGDEF ; Sysgen messages
0000 57     :
```

```
0000 58 :  
0000 59 : Equated Symbols:  
0000 60 :  
00000002 0000 61 LOCK_EFN = 2 ; Event flag number used for lock request  
00000018 0000 62 LOCK_FLAGS = LCK$M_SYNCSTS!- ; Flags specified for lock request  
0000 63 LCK$M_SYSTEM  
0000 64  
00000000 65 .PSECT PAGED_DATA NOEXE  
0000 66 :  
0000 67 : Data for SYSGEN database lock  
0000 68 :  
4E 45 47 53 59 53 00000008'010E0000' 0000 69 BOO$GB_RES DSC:: ; Descriptor for resource name  
45 53 41 42 41 54 41 44 5F 24 000E 70 .ASCID /SYSGEN$DATABASE/  
0018 71  
00000000 0018 72 BOO$LOCK_STATUS:: ; LOCK_STATUS and LOCK_ID form  
001C 73 .LONG 0 ; the Lock status block for the  
00000000 001C 74 BOO$LOCK_ID:: ; lock request  
0020 75 .LONG 0  
00000000 76  
00000000 77 .PSECT PAGED_CODE NOWRT
```

LOCKDATA
V04-000

- Routines to lock/unlock SYSGEN ^{C 1} databas 15-SEP-1984 23:55:42 VAX/VMS Macro V04-00 Page 3
4-SEP-1984 23:04:48 [BOOTS.SRC]LOCKDATA.MAR;1 (1)

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```

0000 81 .SBITL BOO$LOCK_GEN - Lock SYSGEN database
0000 82 :++
0000 83 : Functional description
0000 84 : Lock the SYSGEN database for create/modify, in order to
0000 85 : synchronize I/O database building. Used by LOAD, RELOAD,
0000 86 : AUTCONFIGURE, CONNECT.
0000 87 :
0000 88 : This routine attempts to acquire an exclusive mode system lock on
0000 89 : the SYSGEN$DATABASE resource in executive mode. So that this resource
0000 90 : is only specific to the local system, rather than a cluster, the $ENQ
0000 91 : request specifies a parent (resource) which identifies the system on
0000 92 : which the request is being made.
0000 93 :
0000 94 : The $ENQW entry point is used, so that if the resource is not
0000 95 : available immediately, the process will wait, with the assumption being
0000 96 : that it will get the resource soon. An event flag number is specified
0000 97 : to avoid possible interference with CONFIGURE.
0000 98 :
0000 99 : An alternate version of this routine (STALOCK) is provided in
0000 100 : which the calls to the entry points simply return a success status.
0000 101 : This is provided for use by STASYSGEN which runs standalone, and
0000 102 : therefore no locking is necessary.
0000 103 :
0000 104 : Calling sequence
0000 105 : JSB/BSBx BOO$LOCK_GEN
0000 106 :
0000 107 : Inputs
0000 108 : NONE
0000 109 :
0000 110 : Outputs
0000 111 : R0 - If LBS, locked database
0000 112 : LBC, then no current access to database (SYSGEN$NOLOCK)
0000 113 :--
0000 114 :
0000 115 BOO$LOCK_GEN::
0000 116 :
0000 117 .IF NDF, STASW
0000 118 $CMEXEC_S LOCK : Change mode to take out lock
0000 119 RSB : Return
0000 120 :
0000 121 LOCK: .WORD ^M<R2> : Null entry mask
50 00000000*GF 0004 0010 122 MOVL G^EXE$GL SYSID LOCK,R0 : Get ID of parent lock
0000 123 $ENQW_S efn = #LOCK_EFN,-
0000 124 lkmode = #LCK$R_EXMODE,-
0000 125 lksb = BOO$LOCK_STATUS,-
0000 126 flags = #LOCK_FLAGS,-
0000 127 resnam = BOO$GB_RESD$C,-
0000 128 parid = R0
0000 129 BLBC R0,10$ : If LBC, error
50 00000018*EF 0004 003D 130 MOVZWL BOO$LOCK_STATUS,R0 : Get final status
0000 131 BLBC R0,10$ : Success?
0000 132 RET : Yes
50 007C812A 8F 0004 0047 133 10$: MOVL #SYSGEN$NOLOCK,R0 : Indicate error
0000 134 RET
0000 135 :
0000 136 .IFF
0000 137

```

LOCKDATA
V04-000

- Routines to lock/unlock SYSGEN databas^{E 1} 15-SEP-1984 23:55:42 VAX/VMS Macro V04-00
BOO\$LOCK_GEN - Lock SYSGEN database 4-SEP-1984 23:04:48 [BOOTS.SRC]LOCKDATA.MAR;1

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(2)

```
0050 138      MOVZWL #SS$_NORMAL, R0      ; Force success
0050 139      RSB
0050 140
0050 141      .ENDC
0050 142
```



```

0050 144      .SBTTL  BOO$UNLOCK_GEN - Unlock SYSGEN database
0050 145      :++
0050 146      : Functional description
0050 147      :   Dequeue the lock requested by BOO$LOCK_GEN.
0050 148      :
0050 149      : Calling sequence
0050 150      :   JSB/BSBx  BOO$UNLOCK_GEN
0050 151      :
0050 152      : Input
0050 153      :   Lock id in lock status block (implicit).
0050 154      :
0050 155      : Output
0050 156      :   R0 - If LBS, successful completion
0050 157      :   LBC, error on dequeue (probably serious) - status SYSG$_DEQERR.
0050 158      :--
0050 159
0050 160 BOO$UNLOCK_GEN::
0050 161
0050 162      .IF      NDF,STASW
0050 163
0050 164      $CMEXEC_S UNLOCK      ; Change mode to access lock
05  005F 165      RSB          ; Return
0060 166
0000 0060 167 UNLOCK: .WORD    0      ; Null entry mask
0062 168      $DEQ_S  lkid = BOO$LOCK_ID ; Dequeue lock
0073 169      BLBS    RO,10$      ; If LBS, all okay
50  007C 07 50  E8 0073 169      BLBS    RO,10$      ; If LBS, all okay
      8F  D0 0076 170      MOVL   #SYSG$_DEQERR,R0 ; Indicate error
      04  007D 171 10$: RET
007E 172
007E 173      .IFF
007E 174
007E 175      MOVZWL #SS$_NORMAL,R0 ; Force success
007E 176      RSB
007E 177
007E 178      .ENDC
007E 179      .END

```

```

$BT1 = 00000001
BOOSGB RESDSC = 00000000 RG 02
BOOSLOCK_GEN = 00000000 RG 03
BOOSLOCK_ID = 00000010 RG 02
BOOSLOCK_STATUS = 00000018 RG 02
BOOSUNLOCK_GEN = 00000050 RG 03
EXESGL_SYSTD_LOCK ***** X 03
LCK$K_EXMODE = 00000005
LCK$M_SYNCSTS = 00000008
LCK$M_SYSTEM = 00000010
LOCK = 00000010 P 03
LOCK_EFN = 00000002
LOCK_FLAGS = 00000018
SYS$CMEXEC ***** GX 03
SYS$DEQ ***** GX 03
SYS$ENQW ***** GX 03
SYSG$_DEQERR = 007C8122
SYSG$_NOLOCK = 007C812A
UNLOCK = 00000060 P 03
    
```

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

PSECT name	Allocation	PSECT No.	Attributes
. ABS .	00000000 (0.)	00 (0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
\$ABSS	00000000 (0.)	01 (1.)	NOPIC USR CON ABS LCL NOSHR EXE RD WRT NOVEC BYTE
PAGED_DATA	00000020 (32.)	02 (2.)	NOPIC USR CON RE_ LCL NOSHR NOEYE RD WRT NOVEC BYTE
PAGED_CODE	0000007E (126.)	03 (3.)	NOPIC USR CON REL LCL NOSHR EXE RD NOWRT NOVEC BYTE

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

Phase	Page faults	CPU Time	Elapsed Time
Initialization	36	00:00:00.08	00:00:00.37
Command processing	138	00:00:00.63	00:00:04.01
Pass 1	225	00:00:05.30	00:00:10.92
Symbol table sort	0	00:00:00.77	00:00:01.17
Pass 2	48	00:00:00.94	00:00:01.78
Symbol table output	4	00:00:00.04	00:00:00.04
Psect synopsis output	1	00:00:00.02	00:00:00.13
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	454	00:00:07.79	00:00:18.43

The working set limit was 1200 pages.
26796 bytes (53 pages) of virtual memory were used to buffer the intermediate code.
There were 30 pages of symbol table space allocated to hold 514 non-local and 2 local symbols.
179 source lines were read in Pass 1, producing 15 object records in Pass 2.
17 pages of virtual memory were used to define 16 macros.

! Macro library statistics !

Macro library name	Macros defined
-----	-----
_\$255\$DUA28:[BOOTS.CBJ]BOOTS.MLB;1	0
-\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	1
-\$255\$DUA28:[SYSLIB]STARLET.MLB;2	12
TOTALS (all libraries)	13

649 GETS were required to define 13 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:LOCKDATA/CBJ=OBJ\$:LOCKDATA MSRCS:LOCKDATA/UPDATE=(ENHS:LOCKDATA)+EXECMLS/LIB+LIB\$:BOOTS.MLB/LIB

0038

AH-BT13A-SE
VAX/VMS V4.0

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Grid of 100 small document thumbnails (10 rows by 10 columns). The thumbnails are arranged in a grid and contain various technical documents, including:

- CONTO LIS
- DBTDRIV LIS
- DMBDRIV LIS
- DOBDRIV LIS
- LOADERSUB LIS
- CONFIGUTL LIS
- DLBDRIV LIS
- DXBDRIV LIS
- INITPGF IL LIS
- LOCKDATA LIS
- LOADDRU LIS
- LOADER LIS

Each thumbnail displays a page of text, likely technical specifications or user manuals, with some containing diagrams or tables.

A grid of 10 columns and 10 rows of technical diagrams and code snippets. Each cell contains a small schematic or code block, often with a label. The labels are as follows:

- Row 1: (Column 5) READLN LIS; (Column 7) RTFILREAD LIS; (Column 9) SHARE LIS
- Row 2: (Column 3) QUSS LIS; (Column 7) RMBTDRTUR LIS
- Row 3: (Column 1) MBBTDRTUR LIS; (Column 8) SCSLOADER LIS
- Row 4: (Column 6) RMSCONTU LIS
- Row 5: (Column 5) READRTR LIS
- Row 6: (Column 1) PABTDRTUR LIS
- Row 7: (Column 2) PUBTDRTUR LIS
- Row 8: (Column 3) PUTERROR LIS; (Column 5) READPRMP LIS

The diagrams consist of various symbols, lines, and text, representing different components or data flows within a system.