VMS Internals

Source Listings

VMS Internals

Source Listings

The following are trademarks of Digital Equipment Corporation,
Maynard, Massachusetts:

DIGITAL	DECsystem-10	MASSBUS
DEC	DECSYSTEM-20	OMNIBUS
PDP	DIBOL	OS/8
DECUS	EDUSYSTEM	RSTS
UNIBUS	VAX	RSX
	VMS	IAS

SOURCE LISTINGS

The following pages contain sample listing files from the VAX/VMS executive. These listings are used in conjunction with the course handouts for selected topics.

Filename	Description
1. ASTDEL.LIS	This file contains the AST delivery interrupt service routine and the routines that queue an AST to a process.
2. RSE.LIS	This file contains the routines that system events are reported to. The routines that change a process state to computable are found here.
3. SCHED.LIS	This file contains the rescheduling interrupt service routine.
4. SYSPCNTRL.LIS	This file contains the system services that control a process state (Hibernate, Wake, Suspend, Resume). Some executive utility routines are also included in this file.
5. SYSWAIT.LIS	This file contains the event flag system services and common code that puts a process into a wait state.
6. SYSCOMMON.LIS	This file contains listheads, vector addresses, etc. for one of the common data bases of the system.
7. SYSPARAM.MAR	This file contains the executive control parameters and certain key variables.
8. SYS.MAP	This file is the map of the executive image.

1

ASTDEL.LIS

```
   1-       .TITLE   ASTDEL - AST ENQUEUE AND DELIVERY
   2        .IDENT   'V03-000'
   3
   4  ;
   5  ;*******************************************************************************
   6  ;*                                                                            *
   7  ;* COPYRIGHT (c) 1978, 1980, 1982 BY                                          *
   8  ;* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.                     *
   9  ;* ALL RIGHTS RESERVED.                                                       *
  10  ;*                                                                            *
  11  ;* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED      *
  12  ;* ONLY IN  ACCORDANCE  WITH  THE  TERMS  OF  SUCH  LICENSE  AND WITH THE     *
  13  ;* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR  ANY  OTHER      *
  14  ;* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY      *
  15  ;* OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY      *
  16  ;* TRANSFERRED.                                                               *
  17  ;*                                                                            *
  18  ;* THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE      *
  19  ;* AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT      *
  20  ;* CORPORATION.                                                               *
  21  ;*                                                                            *
  22  ;* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS      *
  23  ;* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                    *
  24  ;*                                                                            *
  25  ;*                                                                            *
  26  ;*******************************************************************************
  27
  28  ;++
  29  ; FACILITY: EXECUTIVE, SCHEDULER
  30  ;
  31  ; ABSTRACT:
  32  ;    ASTDEL CONTAINS THE AST DELIVERY INTERRUPT SERVICE ROUTINE AND THE
  33  ;    ASSOCIATED SUBROUTINES SCH$QAST AND SCH$NEWLVL.  THESE ROUTINES
  34  ;    IMPLEMENT THE PRIMITIVE AST QUEUEING AND DELIVERY MECHANISMS.
  35  ;
  36  ; ENVIRONMENT:
  37  ;    MODE = KERNEL
  38  ;--
  39  ;
  40  ;      .PAGE
  41        .SBTTL   HISTORY                    ; DETAILED
  42  ;
  43  ; AUTHOR:  R. HUSTVEDT      CREATION DATE: 1-SEP-76
  44  ;
  45  ; MODIFIED BY:
  46  ;
  47  ;    V02-009 KTA0054          Kerbey T. Altmann      23-Dec-1918
  48  ;            Add new piggyback kast routine for IPAST.
  49  ;            Make EXE$ASTDEL a global symbol.
  50  ;
  51  ;    V02-008 SRB0037          Steve Beckhardt        28-Oct-1981
  52  ;            Added entry point SCH$REMOVACB.
  53  ;
  54  ;    V02-007 SRB0023          Steve Beckhardt        3-Jun-1981
  55  ;            Added routine SCH$SWAPACBS.
  56  ;
  57  ;    V02-006 KDM0053          Kathleen D. Morse      15-May-1981
```

```
58 ;              Add entry points for loadable multi-processing code.
59 ;              Fix a couple comments.
60 ;
61 ;    V02-005 RIH0001          Richard l. Hustvedt      25-Aug-1980
62 ;              General performance enhancement and re-organization.
63 ;
64
```

```
  66        .SBTTL   DECLARATIONS
  67
  68 ;
  69 ; INCLUDE FILES:
  70 ;
  71        $ACBDEF                              ; AST CONTROL BLOCK DEFINITIONS
  72        $IPLDEF                              ; IPL DEFINITIONS
  73        $PCBDEF                              ; PCB DEFINITIONS
  74        $PHDDEF                              ; PHD DEFINITIONS
  75        $PRDEF                               ; PROCESSOR REGISTER DEFINITIONS
  76        $PRIDEF                              ; PRIORITY INCREMENT CLASS DEFS
  77        $PSLDEF                              ; PSL FIELD DEFINITIONS
  78        $SSDEF                               ; STATUS CODE DEFINITIONS
  79
  80 ;
  81 ; EQUATED SYMBOLS:
  82 ;
  83 ASTEXIT=0                                   ; AST EXIT CHANGE MODE CODE
  84 ;
  85 ; OWN STORAGE:
  86 ;
  87        .PSECT   ASEXENONPAGED,LONG
  88
```

```
  90       .SBTTL   SCH$ASTDEL - AST DELIVERY INTERRUPT HANDLER
  91
  92 ;++
  93 ; FUNCTIONAL DESCRIPTION:
  94 ;    SCH$ASTDEL RECEIVES THE AST DELIVERY INTERRUPT (IPL - 2) WHICH
  95 ;    IS INITIATED BY AN REI INSTRUCTION DETECTING ASTLVL LESS THAN
  96 ;    OR EQUAL TO PSL<CURRENT_MODE>.  THE HEAD OF THE AST QUEUE
  97 ;    FOR THE CURRENT PROCESS IS REMOVED AND PROCESSED.  SPECIAL
  98 ;    KERNEL MODE ASTS ARE PROCESSED WITH IPL REMAINING AT IPL 2.
  99 ;    NORMAL ASTS ARE DELIVERED BY PUSHING THE AST INFORMATION ON
 100 ;    THE STACK OF THE MODE RECEIVING THE AST AND THE AST ACTIVE
 101 ;    BIT FOR THAT MODE IS SET TO PREVENT SUBSEQUENT ASTS UNTIL THE
 102 ;    CURRENT ONE FOR THAT MODE HAS BEEN PROCESSED.
 103 ;    SPURIOUS AST INTERRUPTS WILL BE DETECTED AND IGNORED.
 104 ;
 105 ;    THIS ROUTINE CONTAINS TWO HOOKS FOR LOADABLE MULTI-PROCESSING
 106 ;    CODE.  THE FIRST HOOK, MPH$ASTDELHK, IS REPLACED BY A BRANCH
 107 ;    TO THE LOADABLE CODE, WHILE THE SECOND HOOK, MPH$ASTDELCONT, IS
 108 ;    THE ENTRY POINT AT WHICH THE LOADABLE CODE REJOINS THE COMMON
 109 ;    LINE OF EXECUTION.
 110 ;
 111 ;
 112 ; CALLING SEQUENCE:
 113 ;    IPL - 2  INTERRUPT
 114 ;
 115 ;
 116 ; INPUT PARAMETERS:
 117 ;    00(SP) = PC AT AST DELIVERY INTERRUPT
 118 ;    04(SP) = PSL AT AST DELIVERY INTERRUPT
 119 ;
 120 ; IMPLICIT INPUTS:
 121 ;    PCB OF CURRENT PROCESS LOCATED VIA SCH$GL_CURPCB
 122 ;    AST CONTROL BLOCK AT HEAD OF AST QUEUE FOR PROCESS
 123 ;
 124 ; OUTPUT PARAMETERS:
 125 ;    NONE
 126 ;
 127 ; COMPLETION CODES:
 128 ;    NONE
 129 ;--
 130
 131       .ALIGN   LONG                         ; INTERRUPT ROUTINES ON LW BOUND
 132 SCH$ASTDEL::                                ; AST DELIVERY INTERRUPT HANDLER
 133       PUSHL    R5                           ; SAVE R0-R5
 134       PUSHL    R4                           ; ONE REGISTER AT A TIME FOR
 135       PUSHL    R3                           ; SPEED AT THE
 136       PUSHL    R2                           ; EXPENSE OF SPACE AND
 137       PUSHL    R1                           ; CLARITY
 138       PUSHL    R0                           ; (PUSHLS ARE FASTER THAN MOVQ OR PUSHR)
 139 GETNEXT:MOVL        W^SCH$GL_CURPCB,R4 ; GET POINTER TO CURRENT PCB
 140       SETIPL   #IPL$_SYNCH                  ; BLOCK SYSTEM EVENTS
 141 MPH$ASTDELHK::                              ; MULTI-PROCESSING CHECK HOOKS HERE
 142       REMQUE   @PCB$L_ASTQFL(R4),R5         ; AND REMOVE HEAD OF QUEUE
 143       BVS      QEMPTY                       ; EXIT IF QUEUE EMPTY
 144 MPH$ASTDELCONT::                            ; MULTI-PROCESSING CHECK RETURNS TO HERE
 145       BBCC     #ACB$V_KAST,ACB$B_RMOD(R5),NORM ; BR IF NORMAL AST
```

```
147      .SBTTL  KAST - SPECIAL KERNEL AST DISPATCHING
148 ;
149 ; AST LEVEL WILL BE LEFT AT 0 (KERNEL) WHILE PROCESSING THE SPECIAL KERNEL
150 ; AST.  IT WILL BE CORRECTED EVENTUALLY BEFORE IPL IS DROPPED BELOW
151 ; IPL$_ASTDEL BY REPEATED TRIPS TO GETNEXT.
152 ;
153 ; THE KERNEL AST ROUTINE IS ENTERED VIA A JSB TO THE SPECIFIED
154 ; ADDRESS WITH IPL=2 AND THE POINTER TO THE AST CONTROL BLOCK
155 ; IN R5.  IT IS THE RESPONSIBILITY OF THE KERNEL AST ROUTINE
156 ; TO PROPERLY RELEASE OR OTHERWISE DISPOSE OF THE AST CONTROL
157 ; BLOCK.  THE PCB BASE ADDRESS IS IN R4.
158 ;
159 ; REGISTERS R0-R5 HAVE BEEN PRESERVED AND ARE AVAILABLE FOR
160 ; USE BY THE AST ROUTINE.
161 ;
162 ;
163 ; SINCE KAST ROUTINES OFTEN QUEUE NORMAL ASTS, QIO FOR EXAMPLE, ATTEMPT
164 ; TO DELIVER FURTHER ASTS WITHOUT INCURRING REDUNDANT EXIT AND ENTRY COSTS
165 ;
166
167     PUSHAB  GETNEXT                   ; SET RETURN ADDRESS TO CONTINUE WITH Q
168     SETIPL  #IPL$_ASTDEL              ; DROP IPL TO PERMIT SYSTEM EVENTS
169     JMP     @ACB$L_KAST(R5)           ; DO KERNEL MODE AST
170
171 ;
172 ; THIS UNUSUAL CALLING SEQUENCE IS TO MINIMIZE THE NUMBER OF TAKEN
173 ; BRANCHES AND IS EQUIVALENT TO:
174 ;    JSB     @ACB$L_KAST(R5)
175 ;    BRB     GETNEXT
176 ;
```

```
178       .SBTTL   ASTDEL EXITS
179 ;
180 ; IF THE ASTMODE IS DISABLED OR ACTIVE, THEN SET ASTLVL TO PREVENT
181 ; FURTHER INTERRUPTS.  THERE IS AN ASSUMPTION (AND HAS BEEN FOREVER)
182 ; THAT AN INNER ACCESS MODE WILL NOT EXIT TO AN OUTER ACCESS MODE
183 ; WITH EITHER AN ACTIVE AST OR LEAVING ASTS DISABLED.
184 ;
185
186 BLOCKED:                                 ;
187
188 ;
189 ; THE AST DELIVERY INTERRUPT WAS SPURIOUS, A PENDING IPL-2 INTERRUPT LEFT
190 ; OVER FROM THE PREVIOUS PROCESS.  THESE OCCUR INFREQUENTLY AND ARE
191 ; DETECTED BY COMPARING THE ACCESS MODE OF THE FIRST AST IN THE QUEUE
192 ; WITH THE CURRENT MODE OF THE INTERRUPTED PSL.  SPURIOUS IPL-2 INTERRUPTS
193 ; ARE ALSO DETECTED BY THE REMQUE ABOVE FINDING AN EMPTY QUEUE.
194 ;
195
196 SPURIOUS:                                ;
197     INSQUE   (R5),PCB$L_ASTQFL(R4)  ; REQUEUE AT HEAD OF QUEUE
198     BRB      SETLVL                  ; AND SET NEW ASTLEVEL
199
200 ;
201 ; THE AST QUEUE IS NOW EMPTY.   EITHER THE AST DELIVERY INTERRUPT IS
202 ; SPURIOUS OR ALL OF THE QUEUED ASTS HAVE BEEN CANCELED BY SIMPLY REMOVING
203 ; THEM FROM THE QUEUE. INSURE THAT ASTLVL IS SET TO PREVENT FURTHER
204 ; INTERRUPTS.
205 ; R4 - PCB ADDRESS
206 ;
207 MPH$QEMPTYCONT::                         ; MULTI-PROCESSING CHECK RETURNS TO HERE
208 QEMPTY:
209     MOVL     #4,R1                   ; SET NULL AST LEVEL
210 ;
211 ; SET AST LEVEL TO BEST ESTIMATE OF CORRECT ACCESS MODE.
212 ;
213 ; R1 - NEW ACCESS MODE TO SET IN ASTLVL
214 ;
215 SETLVL:      MOVL     PCB$L_PHD(R4),R0 ; GET PROCESS HEADER ADDRESS
216     MOVB     R1,PHD$B_ASTLVL(R0)      ; SET ASTLEVEL IN HW PCB
217     MTPR     R1,#PR$_ASTLVL           ; AND PROCESSOR REGISTER
218 ASTDEXIT:                             ; AST DELIVERY EXIT
219     MOVQ     (SP)+,R0                 ; RESTORE REGISTERS R0,R1
220     MOVQ     (SP)+,R2                 ; RESTORE REGISTERS R2,R3
221     MOVQ     (SP)+,R4                 ; RESTORE REGISTERS R4,R5
222     REI                              ; AND RETURN
```

```
224       .SBTTL  NORM - NORMAL AST DELIVERY
225 ;
226 ;     AT THIS POINT THE KERNEL STACK IS:
227 ;     00(SP) = SAVED R0
228 ;     04(SP) = SAVED R1
229 ;     08(SP) = SAVED R2
230 ;     12(SP) = SAVED R3
231 ;     16(SP) = SAVED R4
232 ;     20(SP) = SAVED R5
233 ;     24(SP) = SAVED PC
234 ;     28(SP) = SAVED PSL
235 ;
236 ;     R0 - PHD ADDRESS
237 ;     R1 - ACCESS MODE OF NEXT ACB OR NULL AST LEVEL
238 ;     R4 - PCB ADDRESS
239 ;     R5 - ACB ADDRESS
240 ;
241
242 NORM:                                   ; NORMAL AST DELIVERY
243       ASSUME  ACB$V_MODE EQ 0
244       ASSUME  ACB$S_MODE EQ 2
245       CLRL    R1                        ; BACKGROUND R3 WITH ZEROES
246       BICB3   #^C<3>,ACB$B_RMOD(R5),R1; EXTRACT ACCESS MODE FOR CURRENT AST
247       CMPZV   #PSL$V_CURMOD,#PSL$S_CURMOD,28(SP),R1  ; IS CURRENT MODE LEGAL
248       BLSS    SPURIOUS                  ; BR IF SPURIOUS
249       MOVAB   (R1)+,R3                  ; SET FOR NEXT ACCESS MODE
250       BBC     R3,PCB$B_ASTEN(R4),BLOCKED ; BR IF AST DISABLED
251       BBSS    R3,PCB$B_ASTACT(R4),BLOCKED ; SET AST ACTIVE
252       MTPR    R1,#PR$_ASTLVL            ; SET AST LEVEL IN PROCESSOR REGISTER
253       MOVL    PCB$L_PHD(R4),R0          ; GET PROCESS HEADER ADDRESS
254       MOVB    R1,PHD$B_ASTLVL(R0)       ; SET AST LEVEL IN HW PCB
255       BBC     #ACB$V_QUOTA,ACB$B_RMOD(R5),30$ ; SKIP IF NO QUOTA ACCOUNTING
256       INCW    PCB$W_ASTCNT(R4)          ; UPDATE OUTSTANDING COUNT
257 30$:                                    ; AND DELIVER AST
258       SETIPL  #IPL$_ASTDEL              ; NOW DROP IPL TO PERMIT SYSTEM EVENTS
259 ;
260 ;     A NEW VALUE FOR ASTLVL HAS NOW BEEN COMPUTED AND SET.
261 ;     THE AST REPRESENTED BY THE AST CONTROL BLOCK LOCATED VIA
262 ;     R5 CAN NOW BE DELIVERED.
263 ;
264       TSTL    R3                        ; CHECK FOR DELIVERY TO KERNEL
265       BNEQ    NOTKMODE                  ; BR IF NOT KERNEL MODE
```

```
267        .SBTTL  NORMAL KERNEL MODE AST
268 ;
269 ;   DELIVER NORMAL AST TO KERNEL MODE
270 ;
271 KMODE:       MOVQ    (SP)+,R0          ; RESTORE R0,R1
272      CMPL    16(SP),#ASTEXIT_CHMK     ; DELIVERY OCCUR DURING ASTEXIT REI?
273      BNEQ    40$                      ; NO, JUST CONTINUE
274      BITB    #<PSLSM_CURMOD-          ; WAS INTERRUPTED MODE KERNEL?
275              @<-PSLSV_CURMOD>>,23(SP);
276      BEQL    50$             ; YES, PREVIOUS AST R0,R1,PC,PSL ALREADY ON STACK
277 ;
278 ;   00(SP) = R2, 04(SP) = R3, 08(SP) = R4, 12(SP) = R5,
279 ;   16(SP) = PC, 20(SP) = PSL
280 ;
281 40$:
282      MOVQ    8(SP),-(SP)                     ; SHUFFLE STACK
283 ;
284 ;   00(SP) = R4, 04(SP) = R5, 08(SP) = R2, 12(SP) = R3,
285 ;   16(SP) = R4, 20(SP) = R5, 24(SP) = PC, 28(SP) = PSL
286 ;
287      MOVQ    8(SP),-(SP)                     ; OPEN FOR AST ARG LIST
288 ;
289 ;   00(SP) = R2, 04(SP) = R3, 08(SP) = R4, 12(SP) = R5,
290 ;   16(SP) = R2, 20(SP) = R3, 24(SP) = R4, 28(SP) = R5,
291 ;   32(SP) = PC, 36(SP) = PSL
292 ;
293      MOVQ    R0,24(SP)                       ; SET R0,R1 IN ARG LIST
294 50$:     MOVL    ACBSL_ASTPRM(R5),20(SP) ; SET AST PARAMETER IN ARG LIST
295      MOVL    #5,16(SP)               ; SET COUNT FOR ARGUMENT LIST
296      MOVL    R5,R0                   ; RELEASE AST CONTROL BLOCK
297      PUSHL   ACBSL_AST(R5)           ; SAVE AST ROUTINE ADDRESS
298      BBC     #ACBSV_PKAST,ACBSB_RMOD(R5),60$ ; BR IF NO PIGGY-BACK KAST
299 ;
300 ; CALL PIGGY-BACK SPECIAL KERNEL AST ROUTINE.
301 ;   R5 - ACB ADDRESS (MUST BE PRESERVED)
302 ;   IPL = IPLS_ASTDEL (MUST NOT BE LOWERED)
303 ;
304      JSB     @ACBSL_KAST(R5)         ; CALL KAST ROUTINE
305      BRB     70$                     ; NO DELETE FOR PKAST
306 60$:     BBS     #ACBSV_NODELETE,ACBSB_RMOD(R5),70$; BR IF NOT DELETEABL
307      BSBW    EXESDEANONPAGED         ; TO DYNAMIC POOL
308 70$:     MOVQ    (SP)+,R1             ; RESTORE R1,R2
309      MOVQ    (SP)+,R3                ; RESTORE R3,R4
310      MOVL    (SP)+,R5                ; RESTORE R5
311      SETIPL  #0                      ; DROP IPL TO ZERO
312 ;    BRB     EXESASTDEL              ; FALL THROUGH TO CALL AST ROUTINE
```

```
314 ;
315 ;      CALL AST ROUTINE WITH AST ARGUMENT LIST
316 ;
317 ;      THE CALL IS EXECUTED AT THE MODE WHICH RECEIVED THE AST WITH
318 ;      THE AST ARGUMENT LIST ON THE TOP OF THE STACK.  WHEN THE
319 ;      AST ROUTINE RETURNS FROM THE CALL, AN ASTEXIT CHANGE MODE
320 ;      TO KERNEL INSTRUCTION WILL BE ISSUED.  ASTEXIT WILL RESET
321 ;      THE AST ACTIVE BIT FOR THE CURRENT MODE AND MAY CAUSE DELIVERY
322 ;      OF ADDITIONAL ASTS.
323 ;
324 ;      AST ARGUMENT LIST:
325 ;      ------------------
326 ;
327 ;      00(SP) = NUMBER OF ARGUMENTS, =5
328 ;      04(SP) = AST PARAMETER
329 ;      08(SP) = SAVED R0
330 ;      12(SP) = SAVED R1
331 ;      16(SP) = SAVED PC
332 ;      20(SP) = SAVED PSL
333 ;
334 EXE$ASTDEL::                           ; DELIVER AST CALL
335      CALLG   (SP),(R1)                 ; CALL AST ROUTINE
336 EXE$ASTRET::                           ; RETURN ADDRESS FOR AST CALL
337      ADDL    #8,SP                     ; REMOVE ARG COUNT AND ASTPRM
338      CHMK    S^#ASTEXIT                ; AND EXIT FROM AST ROUTINE
339 ASTEXIT_CHMK:                          ; RETURN ADDRESS FOR AST EXIT CHMK
340      MOVQ    (SP)+,R0                  ; RESTORE R0,R1
341      REI                               ; EXECUTE REI IN MODE OF AST
342
```

```
344        .SBTTL  NORMAL EXEC, SUPER AND USER MODE AST
345  ;
346  ;    DELIVER NORMAL AST FOR EXEC, SUPER AND USER MODE
347  ;
348
349  NOTKMODE:                                  ; NOT AN AST FOR KERNEL MODE
350  ;
351        MFPR      R3,R1                      ; GET STACK POINTER
352        IFNOWRT   #24,-24(R1),STACKERR,R3    ; ENOUGH STACK SPACE??
353        MOVQ      24(SP),-(R1)               ; MOVE PC,PSL TO PROPER STACK
354        MOVQ      (SP)+,-(R1)                ; AND R0,R1 FROM KERNEL STACK
355        CMPL      16(SP),#ASTEXIT_CHMK       ; DELIVERY OCCUR DURING ASTEXIT REI?
356        BEQL      50$                        ; YES, CHECK FOR SAME MODE
357  10$:        MOVL    ACB$L_ASTPRM(R5),-(R1)   ; SET AST PARAMETER IN ARG LIST
358        MOVL      #5,-(R1)                   ; AND FINALLY, ARGUMENT COUNT OF 5
359        MTPR      R1,R3                      ; SAVE UPDATED STACK POINTER
360        PUSHL     ACB$L_AST(R5)              ; STACK AST ENTRY POINT
361        MOVL      R5,R0                      ; SET ADDRESS OF ACB FOR RELEASE
362        MOVAB     EXE$ASTDEL,20(SP)          ; SET PC TO AST DELIVERY CALL
363        MOVAL     (R3)[R3],R3                ; MODE=MODE*5, CURMOD=PRVMOD
364        ASSUME    PSL$V_CURMOD EQ PSL$V_PRVMOD+2; FOR ABOVE MOVAL
365        ASHL      #PSL$V_PRVMOD,R3,24(SP)    ; SYNTHESIZE PSL FOR PROPER MODE
366        BITB      #<ACB$M_NODELETE!ACB$M_PKAST>,ACB$B_RMOD(R5) ; SPECIAL ACTIONS?
367        BNEQ      40$                        ; BR IF SO AND DECODE
368  20$:        BSBW    EXE$DEANONPAGED          ; RELEASE AST CONTROL BLOCK
369  30$:        MOVQ    (SP)+,R1                 ; RESTORE R1,R2
370        MOVQ      (SP)+,R3                   ; RESTORE R3,R4
371        MOVL      (SP)+,R5                   ; RESTORE R5
372        REI                                  ; AND ENTER AST MODE
373                                             ; DROPS IPL TO ZERO
374  40$:        BBC     #ACB$V_PKAST,ACB$B_RMOD(R5),30$ ; BR IF NO PIGGY-BACK K
375  ;
376  ; CALL PIGGY-BACK SPECIAL KERNEL AST ROUTINE.
377  ;    R5 - ACB ADDRESS (MUST BE PRESERVED)
378  ;    IPL = IPL$_ASTDEL (MUST NOT BE LOWERED)
379  ;
380        JSB       @ACB$L_KAST(R5)            ; CALL KAST ROUTINE
381        BRB       30$                        ; NO DELETE FOR PKAST
382  ;
383  ; SPECIAL CASE FOR AST DURING AST EXIT.
384  ;
385  50$:        CMPZV   #PSL$V_CURMOD,-          ; WAS AST'S MODE THE ONE INTERRUPTED?
386              #PSL$S_CURMOD,20(SP),R3  ;
387        BNEQ      10$                        ; NO, JUST CONTINUE
388        ADDL      #16,R1                     ; POP R0,R1,PC,PSL - ALREADY ON STACK
389        BRB       10$                        ; CONTINUE
390
391  ;
392  ;    REFLECT STACK ERROR
393  ;
394  STACKERR:                                  ; ERROR IN STACK MOVE
395        CMPL      #PSL$C_USER,R3             ; IS THIS AST FOR USER MODE?
396        BNEQ      10$                        ; NO, THEN WE CANT EXTEND THE STACK
397        PUSHR     #^M<R1,R2,R3,R4,R5>        ; SAVE NECESSARY REGISTERS
398        MOVAB     -24(R1),R2                 ; COMPUTE DESIRED STACK TOP ADDRESS
399        JSB       EXE$EXPANDSTK              ; EXPAND USER STACK TO DESIRED SIZE
400        POPR      #^M<R1,R2,R3,R4,R5>        ; RESTORE REGISTERS
```

```
401     BLBS    R0,NOTKMODE             ; CONTINUE IF SPACE CREATED
402 10$:        BBCC    R3,PCB$B_ASTACT(R4),20$ ; CLEAR AST ACTIVE BIT
403 20$:        MOVQ    16(SP),-(SP)    ; CREATE SPACE ON STACK
404     MOVQ    16(SP),-(SP)            ; BY MOVING R2-R5 DOWN
405     MOVQ    40(SP),32(SP)           ; SAVE PC,PSL AT INTERRUPT
406     MOVL    ACB$L_AST(R5),40(SP)    ; SET PC AT FAULT TO AST ADDRESS
407     MOVL    ACB$L_ASTPRM(R5),28(SP) ; SET ASTPRM IN ARGLIST
408     MOVL    R1,24(SP)               ; SAVE STACK VA AT FAULT
409     MULL    #1+<1@<PSL$V_CURMOD-PSL$V_PRVMOD>>,R3   ; CURRENT MODE = PREV
410     ROTL    #PSL$V_PRVMOD,R3,44(SP) ; SYNTHESIZE NEW PSL FOR FAULT
411     MOVL    R5,R0                   ; SET ADDRESS FOR RELEASE OF ACB
412     BBC     #ACB$V_PKAST,ACB$B_RMOD(R5),30$ ; BR IF NO PIGGY-BACK KAST
413 ;
414 ; CALL PIGGY-BACK SPECIAL KERNEL AST ROUTINE.
415 ;    R5 - ACB ADDRESS (MUST BE PRESERVED)
416 ;    IPL = IPL$_ASTDEL (MUST NOT BE LOWERED)
417 ;
418     JSB     @ACB$L_KAST(R5)         ; CALL KAST ROUTINE
419     BRB     40$                     ; NO DELETE FOR PKAST
420 30$:        BBS     #ACB$V_NODELETE,ACB$B_RMOD(R5),40$ ; BR IF NOT DELETEAB
421     BSBW    EXE$DEANONPAGED         ; AND DEALLOCATE IT
422 40$:        POPR    #^M<R2,R3,R4,R5> ; RESTORE ALL REGISTERS
423     POPR    #^M<R0,R1>              ; FROM POINT OF INTERRUPT
424     SETIPL  #0                      ; DROP IPL TO 0
425     BRW     EXE$ASTFLT              ; REFLECT EXCEPTION
```

```
427        .SBTTL  EXE$IPAPBKAST - SPECIAL PIGGY BACK KAST FOR IPAST SERVICE
428 ;++
429 ; FUNCTIONAL DESCRIPTION:
430 ;     THIS ROUTINE IS A SPECIAL PIGGY BACK KAST ROUTINE CALLED BY
431 ;     ASTDEL DURING DELIVERY OF THE INTER-PROCESS AST.  IT TAKES THE
432 ;     IPAST INDEX RESIDING IN ACB$L_AST AND USES IT TO INDEX INTO THE
433 ;     VECTOR OF AST ADDRESSES LOCATED IN THE VECTOR PAGE OF THE CONTROL
434 ;     REGION.  THIS ADDRESS REPLACES WHAT WAS ON THE STACK WHEN THIS
435 ;     ROUTINE WAS ENTERED.  ROUTINE IS INCLUDED HERE SINCE ITS HAS
436 ;     KNOWLEDGE OF HOW STACK LOOKS WHEN PIGGYBACK AST IS CALLED.
437 ;
438 ; INPUTS:
439 ;     4(SP) --> AST ADDRESS
440 ;     ACB$L_AST(R5) = INDEX OF IPASTS
441 ;
442 ; OUTPUTS:
443 ;     4(SP) --> NEW AST ADDRESS
444 ;
445 ;--
446
447 EXE$IPAPBKAST::
448        MOVL    ACB$L_AST(R5),R2          ; Pick up index
449        MOVL    @#CTL$AL_IPASTVEC[R2],R0  ; Get IPAST address
450        BEQL    10$                       ; No longer in use
451        MOVL    R0,4(SP)                  ; Fixup AST delivery address
452 10$:           MOVL    R5,R0             ; Transfer address of packet
453        BRW     EXE$DEANONPAGED           ; Get rid of it
```

```
455        .SBTTL  SCH$QAST - ENQUEUE AST CONTROL BLOCK FOR PROCESS
456 ;++
457 ; FUNCTIONAL DESCRIPTION:
458 ;    SCH$QAST INSERTS THE AST CONTROL BLOCK SUPPLIED IN THE PROPER
459 ;    POSITION BY ACCESS MODE IN THE AST QUEUE OF THE PROCESS SPECIFIED
460 ;    BY THE PID FIELD OF THE AST CONTROL BLOCK.  AN AST ARRIVAL EVENT
461 ;    IS THEN REPORTED FOR THE PROCESS TO REACTIVATE FROM A WAIT STATE
462 ;    IF APPROPRIATE.  THE AST CONTROL BLOCK WILL BE RELEASED IMMEDIATELY
463 ;    IF THE PID SPECIFIES A NON-EXISTENT PROCESS.
464 ;
465 ;    LOADABLE MULTI-PROCESSING CODE WILL REPLACE THIS ROUTINE WITH
466 ;    ENTIRELY NEW CODE, AT MPH$QAST.
467 ;
468 ; CALLING SEQUENCE:
469 ;    BSB/JSB SCH$QAST
470 ;
471 ; INPUT PARAMETERS:
472 ;    R2 - PRIORITY INCREMENT CLASS
473 ;    R5 - POINTER TO AST CONTROL BLOCK
474 ;
475 ; IMPLICIT INPUTS:
476 ;    PCB OF PROCESS IDENTIFIED BY PID FIELD
477 ;
478 ; OUTPUT PARAMETERS:
479 ;    R0 - COMPLETION STATUS CODE
480 ;    R4 - PCB ADDRESS OF PROCESS FOR WHICH AST WAS QUEUED
481 ;
482 ; SIDE EFFECTS:
483 ;    THE PROCESS IDENTIFIED BY THE PID IN THE AST CONTROL BLOCK
484 ;    WILL BE MADE EXECUTABLE IF NOT SUSPENDED.
485 ;
486 ; COMPLETION CODES:
487 ;    SS$_NORMAL   -   NORMAL SUCCESSFUL COMPLETION STATUS
488 ;    SS$_NONEXPR  -   NON-EXISTENT PROCESS
489 ;--
490        .ENABL  LSB
491 QNONEXPR:                               ;
492        MOVL    R5,R0                     ; RELEASE AST CONTROL BLOCK
493        BSBW    EXE$DEANONPAGED           ; IF NO SUCH PROCESS
494        MOVZWL  #SSS_NONEXPR,R0           ; SET ERROR STATUS CODE
495        BRB     QEXIT                     ; AND EXIT
496
497 MPH$QAST::                              ; MULTI-PROCESSING HOOK TO REPLACE RTN
498 SCH$QAST::                              ; ENQUEUE AST FOR PROCESS
499        MOVZWL  ACB$L_PID(R5),R0          ; GET PROCESS INDEX FOR AST TARGET
500        DSBINT  #IPL$_SYNCH               ; DISABLE SYSTEM EVENTS
501        MOVL    @W^SCH$GL_PCBVEC[R0],R4   ; LOOK UP PCB ADDRESS
502        CMPL    ACB$L_PID(R5),PCB$L_PID(R4) ; CHECK FOR MATCH IN PID
503        BNEQ    QNONEXPR                  ; PID MISMATCHES
504        CLRL    R0                        ; ASSUME KERNEL MODE AND CLEAR HIGH BITS
505        INSQUE  (R5),PCB$L_ASTQFL(R4)     ; ASSUME QUEUE IS EMPTY AND ATTEMPT INSER
506        BNEQ    50$                       ; BR IF IT WAS NOT EMPTY
507        TSTB    ACB$B_RMOD(R5)            ; CHECK FOR SPECIAL KERNEL AST
508        BLSS    10$                       ; BR IF YES
509        BICB3   #^C<3>,ACB$B_RMOD(R5),R0  ; GET AST MODE
510 ;
511 ; THE PROCESS HEADER ADDRESS IS ALWAYS A SYSTEM SPACE ADDRESS (NEGATIVE NU
```

```
512 ; WHILE THE PROCESS HEADER IS RESIDENT.  DURING THE OUTSWAP TRANSITION IT
513 ; IS THE BALANCE SLOT INDEX, A SMALL POSITIVE NUMBER.  FINALLY, AFTER
514 ; OUTSWAP IT IS SET TO ZERO.  HENCE, THE FOLLOWING TEST COMBINES THE FETCH
515 ; OF THE PHD ADDRESS WITH THE TEST FOR PROCESS RESIDENCE.
516 ;
517 10$:          MOVL    PCB$L_PHD(R4),R1 ; POINT TO PROCESS HEADER
518     BGEQ      20$                     ; DON'T SET ASTLVL IF NOT RESIDENT
519     MOVB      RO,PHD$B_ASTLVL(R1)     ; SET ASTLVL IN PROCESS HEADER
520 20$:          CMPL    W^SCH$GL_CURPCB,R4 ; IS PROCESS CURRENT PROCESS
521     BEQL      40$                     ; YES,
522     RPTEVT    AST                     ; REPORT AST ARRIVAL
523 30$:          MOVZWL  #SS$_NORMAL,R0  ; SET SUCCESS STATUS CODE
524 QEXIT:        ENBINT                  ; ENABLE INTERRUPTS
525     RSB                               ; AND RETURN
526 ;
527 ; IF THE AST IS BEING ENQUEUED FOR THE CURRENT PROCESS, THEN THE REPORTING
528 ; OF THE AST EVENT CAN BE BYPASSED AND THE ASTLVL PROCESSOR REGISTER MUST
529 ; SET INSTEAD.
530 ;
531 40$:          MTPR    RO,#PR$_ASTLVL  ; ALSO SET ASTLVL REGISTER
532     BRB       30$                     ;
533 ;
534 ; THE AST QUEUE WAS NOT EMPTY (ITS USUAL CONDITION) AND THE PROPER
535 ; POSITION FOR THE NEW AST MUST BE LOCATED.  SINCE THE AST CONTROL
536 ; BLOCK HAS BEEN ERRONEOUSLY INSERTED ON THE QUEUE, IT MUST BE REMOVED
537 ; FIRST.
538 ;
539 50$:          REMQUE  (R5),R5         ; ELSE CORRECT MISTAKE
540     MOVAL     PCB$L_ASTQFL(R4),R1     ; POINT TO QUEUE HEADER
541     MOVL      (R1),R3                 ; GET FIRST ENTRY ON QUEUE
542     TSTB      ACB$B_RMOD(R5)          ; CHECK FOR SPECIAL KERNEL AST
543     BGEQ      70$                     ; BR IF NOT
544 ;
545 ; THE NEW AST IS A SPECIAL KERNEL AST.  IT WILL GO AFTER ALL OTHER SPECIAL
546 ; KERNEL ASTS OR AT THE HEAD OF THE QUEUE IF THERE ARE NONE.
547 ;
548 60$:          CMPL    R1,R3           ; CHECK FOR END OF QUEUE
549     BEQL      110$                    ; BR IF NOT
550     TSTB      ACB$B_RMOD(R3)          ; CHECK FOR SPECIAL KERNEL IN QUEUE
551     BGEQ      110$                    ; BR IF NOT
552     MOVL      (R3),R3                 ; FLINK ON TO NEXT ACB
553     BRB       60$                     ;
554 ;
555 ; THE NEW AST IS A NORMAL AST.  IT WILL GO AFTER ALL SPECIAL KERNEL ASTS
556 ; AND ASTS WITH LOWER ACCESS MODE.
557 ;
558 70$:          BICB3   #^C<3>,ACB$B_RMOD(R5),R0 ; GET AST MODE
559 80$:          CMPL    R1,R3           ; CHECK FOR END OF QUEUE
560     BEQL      110$                    ; INSERT IF AT END
561     CMPZV     #ACB$V_MODE,#ACB$S_MODE,-
562               ACB$B_RMOD(R3),R0       ; COMPARE ACCESS MODES
563     BGTR      100$                    ; IF GTR AT RIGHT PLACE
564 90$:          MOVL    (R3),R3         ; FLINK ON TO NEXT ACB
565     BRB       80$                     ;
566 100$:         TSTB    ACB$B_RMOD(R3)  ; IS THIS ENTRY A SPECIAL KAST?
567     BLSS      90$                     ; YES, MUST GO AFTER THIS
568 ;
```

```
569 ; NOW THE CORRECT POSITION HAS BEEN LOCATED.  INSERT THE AST CONTROL BLOCK
570 ; ON THE QUEUE AND COMPUTE THE NEW VALUE FOR ASTLVL BY INTERROGATING THE
571 ; MODE OF THE AST CONTROL BLOCK AT THE HEAD OF THE QUEUE.
572 ;
573 110$:         INSQUE  (R5),@ACB$L_ASTQBL(R3)  ; INSERT AFTER PREVIOUS
574    CLRL    R0                        ; ASSUME KERNEL MODE
575    MOVL    PCB$L_ASTQFL(R4),R1       ; GET HEAD OF AST QUEUE
576    TSTB    ACB$B_RMOD(R1)            ; IS IT KAST?
577    BLSS    10$                       ; BR IF YES TO SET ASTLVL
578    BICB3   #^C<3>,ACB$B_RMOD(R1),R0; GET AST MODE FOR HEAD OF QUEUE
579    BRB     10$                       ; GO SET ASTLVL
580
581    .DSABL LSB
582    ASSUME  ACB$V_MODE EQ 0
583    ASSUME  ACB$S_MODE EQ 2
584    ASSUME  ACB$V_KAST EQ 7
585
```

```
587       .SBTTL   SCH$NEWLVL - COMPUTE NEW AST LEVEL
588 ;
589 ;    SCH$NEWLVL - COMPUTE NEW ASTLVL
590 ;
591 ;    THIS ROUTINE COMPUTES THE NEW AST LEVEL.  MPH$NEWLVLHK IS
592 ;    THE LOCATION OF A HOOK FOR LOADABLE MULTI-PROCESSING CODE.
593 ;    THE REMAINDER OF THE ROUTINE IS REPLACED BY THE LOADABLE CODE.
594 ;
595 ; INPUT:
596 ;    R4 - ADDRESS OF CURRENT PCB
597 ;
598 ; OUTPUT:
599 ;    PR$_ASTLVL - NEW AST LEVEL
600 ;    PHD$V_ASTLVL - NEW AST LEVEL
601 ;
602       .ENABL   LSB
603 SCH$NEWLVL::                             ; COMPUTE NEW AST LEVEL
604       MOVAL    PCB$L_ASTQFL(R4),R0       ; GET ADDRESS OF AST QUEUE
605       DSBINT   #IPL$_SYNCH               ; DISABLE SYSTEM EVENTS
606       CLRL     R2                        ; ASSUME KERNEL MODE
607       MOVL     (R0),R1                   ; GET FLINK
608       CMPL     R0,R1                     ; AND CHECK FOR EMPTY QUEUE
609       BEQL     20$                       ; YES, QUEUE IS EMPTY
610       ASSUME   ACB$V_KAST EQ 7
611       TSTB     ACB$B_RMOD(R1)            ; CHECK FOR KERNEL AST
612       BLSS     10$                       ; BR IF NOT
613       BICB3    #^C<3>,ACB$B_RMOD(R1),R2; GET REQUEST MODE
614 10$:      MOVL     PCB$L_PHD(R4),R0 ; GET ADDRESS OF PHD
615 MPH$NEWLVLHK::                           ; MULTI-PROCESSING HOOK REPLACES REST
616                                          ; OF THIS ROUTINE
617       ASSUME   PHD$S_ASTLVL EQ 8         ; FOR USE OF MOVB
618       MOVB     R2,PHD$B_ASTLVL(R0)       ; SET ASTLVL IN PHD
619       MTPR     R2,#PR$_ASTLVL            ; SET ASTLVL REGISTER
620       ENBINT                             ; ENABLE SYSTEM EVENTS AGAIN
621       RSB                                ; RETURN
622 ;
623 20$:      MOVL     #4,R2                 ; SET NULL AST LEVEL
624       BRB      10$                       ;
625       .DSABL   LSB
```

```
627     .SBTTL  SCH$SWAPACBS - SWAP AST CONTROL BLOCKS
628     .SBTTL  SCH$REMOVACB - REMOVE AST CONTROL BLOCK
629
630 ;++
631 ;
632 ; FUNTIONAL DESCRIPTION:
633 ;
634 ;     SCH$SWAPACBS REMOVES AN ACB FROM AN AST QUEUE AND INSERTS ANOTHER
635 ;     ACB IN ITS PLACE.  I.E. IT SWAPS THE TWO ACBS.  THIS IS NORMALLY
636 ;     DONE BECAUSE THE ACB BEING REMOVED IS PART OF A LARGER STRUCTURE
637 ;     THAT MUST BE FREED UP FOR ANOTHER PURPOSE.  THE ACB BEING
638 ;     INSERTED IS NORMALLY A COPY OF THE ONE BEING REMOVED EXCEPT THAT THE
639 ;     ACB$M_NODELETE BIT IS NORMALLY CLEARED.  I.E. THE ONE BEING
640 ;     REMOVED WAS NOT DELETABLE BUT THE ONE BEING INSERTED IS.
641 ;
642 ;
643 ;     SCH$REMOVACB IS AN ALTERNATE ENTRY POINT THAT SIMPLY REMOVES
644 ;     AN ACB FROM AN AST QUEUE.
645 ;
646 ; CALLING SEQUENCE:
647 ;
648 ;     BSB/JSB SCH$SWAPACBS
649 ;     BSB/JSB SCH$REMOVACB
650 ;     NOTE:   THESE ROUTINES MUST BE CALLED AT IPL$_SYNCH
651 ;
652 ; INPUT PARAMETERS:
653 ;
654 ;     R2      ADDRESS OF ACB TO INSERT (SCH$SWAPACBS ONLY)
655 ;     R5      ADDRESS OF ACB TO REMOVE
656 ;
657 ; OUTPUT PARAMETERS:
658 ;
659 ;     NONE
660 ;--
661
662 SCH$SWAPACBS::
663     INSQUE  (R2),(R5)                  ; INSERT NEW ACB AFTER OLD ONE
664 SCH$REMOVACB::
665     REMQUE  (R5),R5                    ; REMOVE OLD ACB
666     RSB
667
668
669
670     .END
```

RSE.LIS

2

```
 1       .TITLE   RSE - REPORT SYSTEM EVENT
 2       .IDENT   'V03-000'
 3
 4 ;
 5 ;***********************************************************************
 6 ;*                                                                     *
 7 ;* COPYRIGHT (c) 1978, 1980, 1982 BY                                   *
 8 ;* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.              *
 9 ;* ALL RIGHTS RESERVED.                                               *
10 ;*                                                                     *
11 ;* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED *
12 ;* ONLY IN   ACCORDANCE WITH   THE   TERMS   OF   SUCH   LICENSE   AND WITH THE *
13 ;* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR   ANY   OTHER *
14 ;* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY *
15 ;* OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF   THE   SOFTWARE IS   HEREBY *
16 ;* TRANSFERRED.                                                        *
17 ;*                                                                     *
18 ;* THE INFORMATION IN THIS SOFTWARE IS   SUBJECT TO CHANGE WITHOUT NOTICE *
19 ;* AND   SHOULD   NOT   BE   CONSTRUED AS   A COMMITMENT BY DIGITAL EQUIPMENT *
20 ;* CORPORATION.                                                        *
21 ;*                                                                     *
22 ;* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE   OR   RELIABILITY OF ITS *
23 ;* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.             *
24 ;*                                                                     *
25 ;*                                                                     *
26 ;***********************************************************************
27
28 ;++
29 ; FACILITY: EXECUTIVE, SCHEDULER
30 ;
31 ; ABSTRACT:
32 ;    THIS MODULE CONTAINS THE SYSTEM EVENT REPORTING ROUTINES AND
33 ;    THEIR SUPPORTING SUBROUTINES.
34 ;
35 ; ENVIRONMENT:
36 ;    MODE = KERNEL
37 ;--
38 ;
```

```
40        .SBTTL  HISTORY                 ; DETAILED
41  ;
42  ; AUTHOR:  R. HUSTVEDT      CREATION DATE: 6-SEP-76
43  ;
44  ;   V02-014 LJK0093          Lawrence J. Kenah       1-Dec-1981
45  ;           Add global label to allow SENDAST mechanism to be available
46  ;           as a general mechanism for delivering EXIT ASTs to a
47  ;           process.
48  ;
49  ;   V02-013 LJK0085          Lawrence J. Kenah       17-Nov-1981
50  ;           Alter method in which process that has exceeded its CPU
51  ;           time limit gets extra time for execution.
52  ;           Do not deliver ASTs for automatic working set adjustment
53  ;           or CPU time expiration if process is marked for delete.
54  ;
55  ;   V02-012 HRJ0033          Herb Jacobs             08-Nov-1981
56  ;           Remove use of AWSMAX limiting parameter.
57  ;
58  ;   V02-011 HRJ0020          Herb Jacobs             17-Jul-1981
59  ;           Account for WSEXTENT being index rather than size.
60  ;
61  ;   V02-010 JLV0050          Jake VanNoy             2-Jul-1981
62  ;           Changed PSECT names from ASE1, ASE2 to AES1, AES2 to
63  ;           allow SYSBRDCST to grow with affecting the size of
64  ;           this module.
65  ;
66  ;   V02-009 HRJ0020          Herb Jacobs             20-Apr-1981
67  ;           Added support to allow working sets to conditionally grow
68  ;           to new quota WSEXTENT based on system wide BORROWLIM.
69  ;
70  ;   V02-008 LJK0012          Lawrence J. Kenah       2-Mar-1981
71  ;           Prevented enqueuing of multiple ASTs for automatic working set
72  ;           adjustment by using input access mode parameter as flag.
73  ;           Put this check into common code with enqueuing of ASTs for
74  ;           CPU time limit expiration.
75  ;
76  ;   V02-007 SRB0007          Steve Beckhardt         22-Oct-1980
77  ;           Fixed bug in cpu time expiration AST handler by
78  ;           clearing the AST.
79  ;
80
```

```
 82        .SBTTL   DECLARATIONS
 83
 84 ;
 85 ; INCLUDE FILES:
 86 ;
 87        $ACBDEF                          ; DEFINE AST CONTROL BLOCK
 88        $DYNDEF                          ; DEFINE STRUCTURE TYPE CODES
 89        $CEBDEF                          ; DEFINE COMMON EVENT BLOCK
 90        $IPLDEF                          ; IPL DEFINITIONS
 91        $PCBDEF                          ; PCB DEFINITIONS
 92        $PHDDEF                          ; PROCESS HEADER DEFINITIONS
 93        $PRDEF                           ; PROCESSOR REGISTER DEFS
 94        $PRIDEF                          ; PRIORITY INCREMENT CLASSES
 95        $SSDEF                           ; DEFINE STATUS CODES
 96        $STATEDEF                        ; STATE DEFINITIONS
 97        $WQHDEF                          ; WAIT QUEUE HEADER DEFINITIONS
 98 ;
 99 ; MACROS:
100 ;
101        .MACRO   EVENT,EVTN,STATLIST,EACTION,CONT=0
102        .IF      NB,EVTN
103 EVT$_'EVTN==EVTCTR
104        .ENDC
105 EVTCTR=EVTCTR+1
106        .WORD    EACTION-STACT
107 RSE...=.
108        .PSECT   AES2,BYTE
109 STMSK=CONT
110        .IRP     ST,<STATLIST>
111 STMSK=STMSK+<1@SCHSC_'ST>
112        .ENDR
113        .LONG    STMSK
114        .PSECT   AES1,BYTE
115 .=RSE...
116        .ENDM    EVENT
117
118 ;
119 ;     GENERATE MASK FOR WAIT STATES
120 ;
121 ;     GMASK    STATENAME
122 ;
123
124        .MACRO   GMASK,STATE
125 ST=SCHSC_'STATE
126 WAITST=WAITST+<1@ST>
127        .ENDM    GMASK
128 ;
129 ; EQUATED SYMBOLS:
130 ;
131 EVTCTR=0                                ; INITIALIZE EVENT COUNTER TO 0
132 WAITST=0                                ; INITIALIZE WAIT STATE MASK
133 ASTEXIT=0                               ; AST EXIT CHANGE MODE CODE
134 ;
135 ; OWN STORAGE:
136 ;
137        .PSECT   AES2,BYTE                ; STATE EVENT MASK PSECT
138 STET=          .                        ; BASE OF STATE EVENT TABLE
```

139   .PSECT AES1,BYTE

```
141      .SBTTL   SCH$RSE - REPORT SYSTEM EVENT
142
143 ;++
144 ; FUNCTIONAL DESCRIPTION:
145 ;    SCH$RSE RECEIVES SYSTEM EVENT REPORTS FROM VARIOUS SOURCES
146 ;    AND PERFORMS THE APPROPRIATE ACTION FOR THE SPECIFIED PROCESS.
147 ;    EVENT REPORTING MUST BE PERFORMED WITH IPL=IPL$_SYNCH.
148 ;    AS A SIDE EFFECT OF AN EVENT REPORT, THE RESCHEDULING INTERRUPT
149 ;    MAY BE TRIGGERED IF APPROPRIATE.
150 ;
151 ; CALLING SEQUENCE:
152 ;    BSB/JSB SCH$RSE
153 ;    .BYTE    EVT$_EVENTNAME
154 ;
155 ;    THIS CALLING SEQUENCE IS GENERATED BY THE RPTEVT SYSTEM MACRO
156 ;
157 ;    REPEVT   EVENTNAME
158 ;
159 ; INPUT PARAMETERS:
160 ;    R2 - SITUATIONAL PRIORITY INCREMENT CLASS NUMBER
161 ;    R4 - PCB ADDRESS OF PROCESS FOR WHICH EVENT IS REPORTED
162 ;
163 ;    EVENT NUMBER CONTAINED IN BYTE LOCATED BY ADDRESS AT TOP
164 ;    OF STACK.  @(SP)
165 ;
166 ; IMPLICIT INPUTS:
167 ;    SCHEDULER DATA BASE
168 ;
169 ; OUTPUT PARAMETERS:
170 ;    NONE
171 ;
172 ; IMPLICIT OUTPUTS:
173 ;    NONE
174 ;
175 ; COMPLETION CODES:
176 ;    NONE
177 ;
178 ; SIDE EFFECTS:
179 ;    A RESECHEDULING INTERRUPT MAY BE REQUESTED IF THE SPECIFIED
180 ;    PROCESS IS HIGHER IN PRIORITY THAN THE CURRENT PROCESS.
181 ;
182 ;--
183
184 SCH$RSE::                              ; REPORT SYSTEM EVENT
185      MOVZBL   @(SP),R3                 ; GET EVENT NUMBER
186      INCL     (SP)                     ; UPDATE RETURN ADDRESS
187      MOVZWL   PCB$W_STATE(R4),R1       ; GET CURRENT STATE NUMBER
188 10$:          MOVL     W^STET[R3],R0   ; GET STATE MASK FOR EVENT
189      BBS      R1,R0,ACTION             ; DO ACTION IF STATE BIT SET
190      INCL     R3                       ; CHECK NEXT ACTION
191      BLBS     R0,10$                   ; IF CONTINUATION
192      RSB                               ; OTHERWISE IGNORE EVENT
193
194 ACTION:       CASEL    R3,#0,S^#MAXEVT ; SWITCH ON EVENT NUMBER(UPDATED)
195 STACT:                                 ; BASE OF ACTION TABLE
196      EVENT    AST,<-                   ; AST EVENT
197               CEF,-                    ; COMMON EVENT FLAG WAIT
```

```
198                COLPG,-                      ; COLLIDED PAGE WAIT
199                FPG,-                        ; FREE PAGE WAIT
200                HIB,-                        ; RESIDENT HIBERNATE
201                HIBO,-                       ; NON-RESIDENT HIBERNATE
202                LEF,-                        ; LOCAL EVENT FLAG WAIT
203                LEFO,-                       ; LOCAL EVENT FLAG WAIT (NON-RES)
204                MWAIT,-                      ; MUTEX WAIT
205                PFW,-                        ; PAGE FAULT WAIT
206                >,EVENTE                     ; AST EXECUTABLE STATE CHANGE
207 EVT$_COLPGA==EVT$_AST                       ; USE SAME EVENT FOR COLLIDED PAGE AVAI
208
209
210     EVENT     EVENT,<LEF>,LEFEVT,CONT=1 ; EVENT FLAG SETTING
211     EVENT     ,<CEF>,CEFEVT,CONT=1      ; COMMON EVENT FLAG SET
212     EVENT     ,<LEFO>,EVENTE            ; NON-RESIDENT LOCAL EVENT
213
214     EVENT     FPGA,<-                      ; FREE PAGE AVAILABLE
215                FPG,-                        ; FREE PAGE WAIT STATE
216                >,EVENTF                     ; EXECUTABLE STATE CHANGE
217     EVENT     WAKE,<-                      ; WAKE EVENT
218                HIB,-                        ; RESIDENT HIBERNATE
219                HIBO,-                       ; NON-RESIDENT HIBERNATE
220                >,EVENTE                     ;
221
222
223     EVENT     RESUME,<-                   ; RESUME EVENT
224                SUSP,-                       ; RESIDENT SUSPENDED
225                SUSPO,-                      ; NON-RESIDENT SUSPENDED
226                >,EVENTE                     ; EXECUTABLE
227
228
229     EVENT     PFCOM,<-                    ; PAGE FAULT COMPLETE EVENT
230                PFW,-                        ; PAGE FAULT WAIT
231                >,EVENTE                     ; EXECUTABLE
232
233     EVENT     SETPRI,<-                   ; SET PRIORITY EVENT
234                COM,-                        ; RESIDENT COMPUTE
235                COMO,-                       ; NON-RESIDENT COMPUTE
236                >,EVENTF                     ; EXECUTABLE
237
238     EVENT     SWPOUT,<-                   ; SWAP OUT EVENT
239                HIB,-                        ; RESIDENT HIBERNATE
240                LEF,-                        ; RESIDENT LOCAL EVENT FLAG WAIT
241                SUSP,-                       ; RESIDENT SUSPENDED
242                >,SWPO,CONT=1                ; SIMPLE SWAP OUT
243     EVENT     ,<-                          ; SWAP OUT EVENT CONINUATION
244                COM,-                        ; RESIDENT COMPUTE
245                >,SWPOE                      ; EXECUTABLE OUTSWAP
246
247 ;
248 ;    IF CASE FALLS THROUGH, THEN BUGCHECK WITH ILLEGAL EVENT
249 ;    NUMBER.
250 ;
251 MAXEVT=EVTCTR-1                             ; MAXIMUM EVENT NUMBER
252      BUG_CHECK ILLEVTNUM,FATAL             ; ILLEGAL EVENT NUMBER
253
```

```
255 ;
256 ;     COMMON EVENT FLAG SET
257 ;
258 CEFEVT:                                   ;
259     BLBC     PCB$L_STS(R4),EVENTE     ; BR IF NOT RESIDENT
260 LEFEVT:                                   ; LOCAL EVENT FLAG SET FOR RESIDENT PRO
261     MOVL     PCB$L_PHD(R4),R3         ; POINT TO PHD
262     ADDL     #4,PHD$L_PC(R3)          ; SKIP PC OVER CHMK INSTRUCTION
263     MOVZWL   #SS$_NORMAL,PHD$L_R0(R3); SET NORMAL COMPLETION FOR WAIT
264 ;
265 ;     EVENT EXECUTABLE ACTION ROUTINE
266 ;
267
268 EVENTE:                                   ; EVENT EXECUTABLE STATE CHANGE
269 EVENTF:                                   ; ACTIVATE WITH NO WAIT TIME ACCOUNTING
270     PUSHAB   B^SCH$CHSE              ; MAKE UNWAIT EXIT THROUGH CHSE
271 ;   BRB      SCH$UNWAIT             ; AND FALL INTO UNWAIT
272
```

```
274        .SBTTL   SCH$UNWAIT - DECREMENT COUNT IN WAIT QUEUE
275 ;++
276 ;
277 ; FUNCTIONAL DESCRIPTION:
278 ;   SCH$UNWAIT DECREMENTS THE NUMBER OF PROCESSES IN THE WAIT
279 ;   QUEUE SELECTED BY THE SPECIFIED PCB AND STATE VALUE.
280 ;
281 ; CALLING SEQUENCE:
282 ;   BSB/JSB SCH$UNWAIT
283 ;
284 ; INPUT PARAMETERS:
285 ;   R1 - STATE NUMBER  (PRESERVED)
286 ;   R2 - UNUSED        (PRESERVED)
287 ;   R4 - PCB ADDRESS   (PRESERVED)
288 ;
289 ; IMPLICIT INPUTS:
290 ;   PCB LOCATED BY ADDRESS IN R4
291 ;
292 ; IMPLICIT OUTPUTS:
293 ;   COUNT IN WAIT QUEUE HEADER IS DECREMENTED IF STATE IS A WAIT
294 ;   STATE.
295 ;
296 ;--
297
298 SCH$UNWAIT::                              ; DECREMENT PROPER WAIT COUNT
299       BBC      R1,B^WAITMSK,20$          ; SKIP OUT IF NOT WAIT STATE
300       CMPW     #SCH$C_CEF,R1             ; CHECK FOR COMMON EVENT FLAG WAIT
301       BEQL     30$                       ; CEF WAIT
302       MULL     #WQH$C_LENGTH,R1          ; COMPUTE BYTE INDEX TO WQ HDR
303       MOVAB    W^SCH$AQ_WQHDR[R1],R0     ; COMPUTE ADDRESS OF WAIT Q HEADER
304 10$:           DECW     WQH$W_WQCNT(R0)  ; DECREMENT WAIT QUEUE COUNT
305 20$:           RSB                       ; RETURN
306
307 30$:           MOVZBL   PCB$B_WEFC(R4),R0 ; WAIT CLUSTER NUMBER
308       MOVL     PCB$L_EFCS(R4)[R0],R0     ; GET CLUSTER ADDRESS
309       ADDL     #CEB$L_WQFL,R0            ; POINT TO WAIT QUEUE HEADER
310       BRB      10$                       ; GO DECREMENT WAIT COUNT
311
312       GMASK    CEF                       ; COMMON EVENT FLAG
313       GMASK    LEF                       ; LOCAL EVENT FLAG WAIT
314       GMASK    LEFO                      ; LOCAL EVENT FLAG WAIT
315       GMASK    HIB                       ; HIBERNAT WAIT
316       GMASK    HIBO                      ; HIBERNATE WAIT
317       GMASK    FPG                       ; FREE PAGE WAIT
318       GMASK    COLPG                     ; COLLISION PAGE WAIT
319       GMASK    PFW                       ; PAGE FAULT WAIT
320       GMASK    SUSP                      ; SUSPENDED WAIT
321       GMASK    SUSPO                     ; SUSPENDED WAIT
322       GMASK    MWAIT                     ; MUTEX WAIT
323 WAITMSK:.LONG          WAITST            ; MASK OF WAIT STATES
324
```

```
326      .SBTTL   SITUATIONAL PRIORITY INCREMENT TABLE
327 ;
328 ; FIXED DATA:
329 ;              SITUATIONAL PRIORITY INCREMENT TABLE
330 ;                  (INDEXED BY PRIORITY INCREMENT CLASS)
331 ;
332
333 B_PINC:                                ;
334      .BYTE   0                 ; CLASS 0 - NONE
335      .BYTE   2                 ; CLASS 1 - I/O COMPLETE
336      .BYTE   3                 ; CLASS 2 - RESOURCE AVAIL
337      .BYTE   4                 ; CLASS 3 - TERM OUTPUT COMP
338      .BYTE   6                 ; CLASS 4 - TERM INPUT COMP
339
340
341 EXESTATE:                              ; EXECUTABLE STATE MASK
342      .LONG   <1@SCH$C_COM>!<1@SCH$C_COMO>
343
```

```
345        .SBTTL   SCH$CHSE - CHANGE STATE TO EXECUTABLE
346 ;++
347 ; FUNCTIONAL DESCRIPTION:
348 ;    SCH$CHSE CHANGES THE STATE OF A PROCESS, AS REPRESENTED BY
349 ;    ITS PCB, TO AN EXECUTABLE STATE.  THE RESCHEDULING INTERRUPT
350 ;    WILL BE TRIGGERED IF THE PROCESS IS RESIDENT AND HAS A PRIOITY
351 ;    GREATER THAN THAT OF THE CURRENTLY EXECUTING PROCESS.  A
352 ;    PRIORITY INCREMENT CLASS NUMBER SUPPLIED AS A REGISTER CONTAINED
353 ;    ARGUMENT IS USED TO COMPUTE THE NEW PROCESS PRIORITY FROM ITS
354 ;    BASE PRIORITY.
355 ;
356 ; CALLING SEQUENCE:
357 ;    BSB/JSB SCH$CHSE
358 ;
359 ; INPUT PARAMETERS:
360 ;    R0 - NEW PRIORITY          (SCH$CHSEP ONLY)
361 ;    R2 - PRIORITY INCREMENT CLASS NUMBER    (SCH$CHSE ONLY)
362 ;              0 => NO INCREMENT (PAGEFAULT I/O COMPLETION)
363 ;              1 => NON-TERMINAL I/O COMPLETION
364 ;              2 => RESOURCE AVAILABILITY
365 ;              3 => TERMINAL OUTPUT COMPLETION
366 ;              4 => TERMINAL INPUT COMPLETION
367 ;    R4 - PCB ADDRESS
368 ;
369 ; IMPLICIT INPUTS:
370 ;    SCH$AQ_COMT - COMPUTE QUEUE HEADERS FOR COM,COMO STATES
371 ;    SCH$GB_PRI  - CURRENT PROCESS PRIORITY.
372 ;
373 ;
374 ; OUTPUT PARAMETERS:
375 ;    R2 - R2 , PRIORITY INCREMENT CLASS NUMBER IF SCH$CHSE. (PRESERVED)
376 ;    R3 - R3 (PRESERVED)
377 ;
378 ; IMPLICIT OUTPUTS:
379 ;    SCH$AQ_COMH  -  VECTOR OF COMPUTE QUEUE HEADERS.
380 ;    SCH$GL_COMQS -  COMPUTE QUEUE SUMMARY BIT VECTOR.
381 ;
382 ; COMPLETION CODES:
383 ;    NONE
384 ;
385 ; SIDE EFFECTS:
386 ;    THE PCB SPECIFIED IS REMOVED FROM ITS PRESENT STATE QUEUE
387 ;    AND INSERTED IN THE APPROPRIATE COMPUTE QUEUE, COM OR COMO,
388 ;    AT THE PRIORITY COMPUTED FOR THE SPECIFIED SITUATION CLASS.
389 ;    THE SUMMARY BIT FOR THE DESTINATION STATE QUEUE IS SET TO
390 ;    NOTE THAT IT IS OCCUPIED.
391 ;    IF THE NEW PRIORITY FOR THE PROCESS IS GREATER THAN THAT OF
392 ;    CURRENT PROCESS AND IT IS RESIDENT, THE RESCHEDULING INTERRUPT
393 ;    WILL BE TRIGGERED.
394 ;
395 ;--
396 SCH$CHSE::                               ;CHANGE TO EXECUTABLE STATE
397      CLRL    R0                          ; CLEAR HIGH SUM BITS FOR ADDB
398      SUBB3   B_PINC[R2],PCB$B_PRIB(R4),R0 ; ADD PRIORITY INCR
399      CMPB    R0,PCB$B_PRI(R4)            ; CHECK FOR > CURRENT PRI
400      BLEQ    10$                         ; NO
401      MOVB    PCB$B_PRI(R4),R0            ; KEEP CURRENT PRIORITY INSTEAD
```

```
402 10$:          CMPB     R0,#16            ; CHECK FOR RESULT >15
403      BGEQ     SCH$CHSEP                  ; YES, USE COMPUTED VALUE
404      MOVB     PCB$B_PRIB(R4),R0          ; KEEP AT BASE IF LESS
405
406 ;
407 ;    SCH$CHSEP - SUB-ENTRY POINT WITH PRIORITY PRECOMPUTED IN R0
408 ;
409
410 SCH$CHSEP::                    ; ENTRY WITH PRIO IN R0
411      MFPR     #PR$_IPL,R1               ; GET IPL
412      CMPL     R1,#IPL$_SYNCH            ; MUST BE AT SYNCH OR GREATER
413      BLSS     BADIPL                    ; NO, FATAL ERROR
414      REMQUE   (R4),R1                   ; REMOVE FROM CURREN QUEUE
415      BNEQ     10$                       ; CONTINUE IF QUEUE NOTEMPTY
416      MOVZWL   PCB$W_STATE(R4),R1        ; GET OLD STATE
417      BBC      R1,EXESTATE,10$           ; NO SUMMARY BITS
418      MOVZBL   PCB$B_PRI(R4),R1          ; GET CURRENT PRI
419      BLBC     PCB$W_STATE(R4),5$        ; SKIP IF RESIDENT
420      ADDL     #32,R1                    ; MAKE NONRES PRIO
421 5$:  BBCC     R1,W^SCH$GL_COMQS,10$     ; CLEAR PRESENCE BIT FOR STATE
422 10$:          MOVB    R0,PCB$B_PRI(R4)  ; SAVE NEW PRIO
423      MOVL     #SCH$C_COM,R1             ; ASSUME COM STATE
424      BLBS     PCB$L_STS(R4),20$         ; CHECK FOR RESIDENCE
425      INCL     R1                        ; COMO=COM+1
426      ADDL2    #32,R0                    ; COMO HEADERS FOLLOW COM
427      BSBW     SCH$SWPWAKE               ; WAKE SWAPPER
428      BRB      30$                       ; COMPLETE STATE CHANGE
429 20$:          CMPB    W^SCH$GB_PRI,R0   ; IS PRIO GREATER THAN CURRENT PROCESS
430      BLSS     30$                       ; NO, DONT RESCHEDULE
431      SOFTINT #IPL$_SCHED                ; TRIGGER RESCHEDULE INTERRUPT
432 30$:          MOVW    R1,PCB$W_STATE(R4)       ; SET NEW STATE
433      MOVAQ    W^SCH$AQ_COMT[R0],R1      ; COMPUTE HDR ADDR
434      BBSS     R0,W^SCH$GL_COMQS,40$     ; SET SUMMARY BIT FOR NEW QUEUE
435 40$:          INSQUE   (R4),@(R1)+      ; INSERT IN NEW QUEUE
436      RSB                                ; RETURN
437
438 BADIPL:       BUG_CHECK BADRSEIPL,FATAL        ; BAD IPL AT ENTRANCE TO RSE
439
```

```
441        .SBTTL  SWPO - SWAP OUT SIMPLE NON-EXECUTABLE
442 ;
443 ;   SWPO - SWAP OUT ACTION ROUTINE FOR SIMPLE NON-EXECUTABLE STATES
444 ;
445 SWPO:                                    ; NON-EXECUTABLE OUTSWAP
446      BSBW    SCH$UNWAIT              ; REMOVE FROM WAIT QUEUE
447      INCW    PCB$W_STATE(R4)         ; UPDATE STATE NUMBER
448      REMQUE  (R4),R1                 ; REMOVE FROM WAIT QUEUE
449      INSQUE  (R4),@WQH$L_WQBL+WQHSC_LENGTH(R0) ; INSERT AT TAIL OF QUEUE
450      INCW    WQH$W_WQCNT+WQHSC_LENGTH(R0)   ; NOTE COUNT IN WAIT QUEUE
451      RSB                             ; EXIT
452
453 ;
454 ;   SWPOE - SWAP OUT EXECUTABLE ACTION ROUTINE
455 ;
456 SWPOE:       MOVZBL  PCB$B_PRI(R4),R0        ; GET PRIORITY
457      BRW     SCH$CHSEP               ; AND CHANGE TO COMO
```

```
459       .SBTTL   SCH$QEND - QUANTUM END ROUTINE
460
461 ;++
462 ;
463 ; FUNCTIONAL DESCRIPTION:
464 ;    SCH$QEND IS CALLED BY THE TIMER WHEN THE QUANTUM FOR THE CURRENT
465 ;    PROCESS HAS BEEN EXHAUSTED.  A NEW QUANTUM IS INITIALIZED
466 ;    THE PROCESS PLACED AT ITS BASE PRIORITY AND THE RESCHEDULING
467 ;    INTERRUPT TRIGGERED.  A CHECK IS MADE FOR CPU TIME LIMIT EXPIRATION
468 ;    AND APPROPRIATE EXIT ASTS GENERATED WHEN THE LIMIT IS REACHED.
469 ;    THE AUTOMATIC WORKING SET SIZE LOGIC IS INVOKED IF ENABLED TO
470 ;    TRADEOFF WORKING SET SIZE AGAINST PAGEFAULT RATE.
471 ;
472 ; CALLING SEQUENCE:
473 ;    BSB/JSB SCH$QEND
474 ;
475 ; INPUT PARAMETERS:
476 ;    R4 - PCB ADDRESS OF CURRENT PROCESS
477 ;    R5 - PROCESS HEADER ADDRESS
478 ;
479 ; IMPLICIT INPUTS:
480 ;    PCB OF CURRENT PROCESS
481 ;    PROCESS HEADER OF CURRENT PROCESS
482 ;
483 ; IMPLICIT OUTPUTS:
484 ;    PHD$W_QUANT - INITIALIZED TO A NEW QUANTUM
485 ;    PCB$V_INQUAN - INITIAL QUANTUM FLAG CLEARED
486 ;
487 ;--
488
489 SCH$QEND::                                ; QUANTUM END ROUTINE
490       BBCC     #PCB$V_INQUAN,PCB$L_STS(R4),10$ ; CLEAR INITIAL QUAN FLAG
491 10$:      MOVW     SCH$GW_QUAN,PHD$W_QUANT(R5)    ; SET NEW QUANTUM
492       CMPB     PCB$B_PRI(R4),#16        ; CHECK FOR REAL-TIME
493       BLSS     50$                      ; YES
494       BSBW     SCH$SWPWAKE              ; AND FORCE SWAP SCHEDULE
495 ;
496 ;
497 ;    CHECK FOR CPU TIME LIMIT EXPIRATION
498 ;
499       TSTL     PHD$L_CPULIM(R5)         ; IS THERE ANY LIMIT?
500       BNEQ     60$                      ; YES, GO CHECK IT OUT
501 40$:      BBS      #PCB$V_DISAWS,PCB$L_STS(R4),45$ ; BRANCH IF ADJUSTMENT
502       MOVL     W^SCH$GL_WSINC,R3        ; ASSUME INCREMENT
503       BEQL     45$                      ; BR IF NO AUTO WS ADJUSTMENT
504       BSBB     WSADJUST                ; ELSE GO DO IT
505 45$:      TSTL     W^SCH$GL_COMOQS ; IS THERE ANY INSWAP PENDING?
506       BEQL     47$                      ; NO
507       MOVB     PCB$B_PRIB(R4),PCB$B_PRI(R4)    ; YES, FORCE TO BASE PRIORITY
508       BSBW     SCH$SWPWAKE             ; AND WAKE SWAPPER
509 47$:      SOFTINT #IPL$_SCHED          ; TRIGGER RESCHEDULING INT
510 50$:      RSB                          ; AND RETURN
511
512 ;
513 ;    A non-zero limit exists, check for processor time expiration
514 ;
515 ;    If CPU time limit is exceeded then an additional amount of time will
```

```
516 ;    be allowed for each access mode.  An AST will be issued to cause an
517 ;    exit for each of the access modes.  The additional time allowance will
518 ;    be provided for each access mode.
519 ;
520
521 60$:           SUBL3    PHD$L_CPULIM(R5),PHD$L_CPUTIM(R5),R0 ; HAS LIMIT BEEN R
522      BLSSU   40$                     ; NO, CONTINUE NORMALLY
523 ;
524 ;    CPU LIMIT HAS EXPIRED, AN AST WILL BE SENT TO NOTIFY THE PROCESS
525 ;
526      ADDL2   W^SGN$GL_EXTRACPU,R0       ; COMPUTE TOTAL AMOUNT OF EXTRA TIME
527      ADDL2   R0,PHD$L_CPULIM(R5)        ; GIVE EXTRA TIME FOR CLEANUP
528      ADDL2   R0,PHD$L_EXTRACPU(R5)      ;  AND RECORD AMOUNT OF EXTRA TIME
529      MOVAB   PHD$B_CPUMODE(R5),R0       ; GET ADDRESS OF AST ACCESS MODE
530      PUSHAB  40$                       ; SET RETURN ADDRESS
531      MOVZWL  #SS$_EXCPUTIM,R3          ; PASS EXIT STATUS TO SENDAST
532 SCH$FORCEDEXIT::
533      BSBW    SENDAST                   ; SEND AST TO PROCESS
534 ;
535 ;    CPU TIME EXPIRATION AST HANDLER
536 ;
537 CPUABRT:.WORD         0              ; NULL ENTRY MASK
538      CHMK    S^#ASTEXIT               ; EXIT FROM AST ROUTINE (CLEAR AST)
539 10$:           $EXIT_S 4(AP)          ; EXIT TO INVOKE EXIT HANDLERS
540      BRB     10$                     ; JUST IN CASE
541
542 ;
543 ;    Adjust working set size automatically to achieve desired tradeoff
544 ;    between page fault rate and working set size.  There are two page
545 ;    fault rate thresholds: SCH$GL_PFRATL, the lower threshold and
546 ;    SCH$GL_PFRATH, the higher threshold.  Each time SCH$QEND is invoked,
547 ;    the page fault rate is computed and compared with these thresholds.
548 ;    If it is above the high threshold the working set size is increased
549 ;    by SCH$GW_WSINC and if the rate is below the lower threshold, the
550 ;    working set size is decreased by SCH$GW_WSDEC.  The actual adjustment
551 ;    is performed by a normal kernel mode AST.
552 ;
553 ;    Automatic adjustment of working set size is constrained by the values:
554 ;    SCH$GW_AWSMIN and WSEXTENT per process that establish upper and lower
555 ;    values  for automatic working set size adjustment.  Working set size
556 ;    adjustment is further constrained by the process quota.
557 ;
558 ;
559 ;    R3 - Working set increment
560 ;
561 WSADJUST:                               ; AUTO-ADJUST WORKING SET SIZE
562      SUBL3   PHD$L_TIMREF(R5),-        ; COMPUTE DELTA-T
563              PHD$L_CPUTIM(R5),R0       ;
564      BNEQ    10$                      ; BR IF NON-ZERO
565      INCL    R0                       ; ELSE FORCE TO ONE FOR DIVIDE
566 10$:
567      CMPL    R0,W^SCH$GL_AWSTIME       ; IS THIS A MEANINGFUL INTERVAL?
568      BLSS    NOADJUST                  ; NO, TRY AGAIN LATER
569      SUBL3   PHD$L_PFLREF(R5),-        ; COMPUTE DELTA-PGFLT
570              PHD$L_PAGEFLTS(R5),R1     ;
571      MOVL    PHD$L_PAGEFLTS(R5),PHD$L_PFLREF(R5) ; SAVE NEW PAGE FAULT REF
572      MOVL    PHD$L_CPUTIM(R5),PHD$L_TIMREF(R5)   ; AND SAVE CPUTIME REF
```

```
573      MULL      #1000,R1                 ; MULTIPLY BY SCALE FACTOR
574      DIVL      R0,R1                    ; AND COMPUTE PAGEFLTS/10SEC
575      MOVL      R1,PHD$L_PFLTRATE(R5)    ; SAVE CURRENT RATE
576      CMPL      R1,W^SCH$GL_PFRATH       ; ARE WE ABOVE HIGH THRESHOLD?
577      BGEQ      ADJUSTUP                 ; YES,
578      MNEGL     W^SCH$GL_WSDEC,R3        ; NO, GET DECREMENT VALUE
579      CMPL      R1,W^SCH$GL_PFRATL       ; ARE WE BELOW LOW THRESHOLD?
580      BGEQ      NOADJUST                 ; NO, IN DEAD BAND -- NOTHING TO DO
581      CMPW      PCB$W_PPGCNT(R4),W^SCH$GW_AWSMIN ; ARE WE AT LOWER WS LIMIT?
582      BLEQU     NOADJUST                 ; YES, NOTHING TO DO
583      BRB       ADJUST                   ;
584 NOADJUST:                               ;
585      RSB                                ;
586 ADJUSTUP:                               ;
587      SUBW3     PHD$W_WSLIST(R5),PHD$W_WSQUOTA(R5),R1
588                                         ; ASSUME HIGH LIMIT WILL BE QUOTA
589      MOVZWL    PHD$W_WSSIZE(R5),R0      ; GET CURRENT WORKING SET SIZE
590      CMPW      W^SCH$GL_BORROWLIM,W^SCH$GL_FREECNT ; ARE THERE LOTS OF FREE PA
591      BGTR      10$                      ; BRANCH IF MEMORY IS AT A PREMIUM
592      SUBW3     PHD$W_WSLIST(R5),PHD$W_WSEXTENT(R5),R1
593                                         ; ALLOW LARGER GROWTH SIZE
594 10$:       CMPW    R0,R1               ; ARE WE AT MAXIMUM SIZE?
595      BGTRU     NOADJUST                 ; YES, CAN'T GO ANY LARGER
596      SUBW      PCB$W_GPGCNT(R4),R0      ; DETERMINE IF WS IS FULL
597      SUBW      PCB$W_PPGCNT(R4),R0      ;·BY SUBTRACTING CURRENT PHYSICAL SIZE
598      BGTRU     NOADJUST                 ; BR SPACE LEFT
599      BLSSU     WSERR                    ; BRANCH IF WS SMALLER THAN PAGES IN US
600 ADJUST:       MOVAB   PHD$B_AWSMODE(R5),R0 ; GET ADDRESS OF AST ACCESS MODE
601      BSBB      SENDAST                  ; SEND AST TO PROCESS
602
603 ADJWS:        .WORD   0                 ;
604      MOVL      @#CTL$GL_PHD,R1          ; GET PHD ADDRESS SO
605      CLRB      PHD$B_AWSMODE(R1)        ;   ACCESS MODE FLAG CAN BE RESET
606      $ADJWSL_S         4(AP)            ; ADJUST BY PARAMETER IN AST ARGLIST
607      RET                                ; AND RETURN
608
609 WSERR:        BUG_CHECK WSSIZEERR,FATAL ; WORKING SET SIZE CALC IN ERROR
```

```
611       .SBTTL   SENDAST - Send AST to process
612 ;++
613 ; FUNCTIONAL DESCRIPTION: SENDAST IS CALLED BY SCH$QEND TO SEND ASTS TO
614 ;    THE PROCESS THAT INVOKE FUNCTIONS UNAVAILABLE TO THE ENVIRONMENT OF
615 ;    SCH$QEND. THESE INCLUDE ADJUSTING THE WORKING SET AND EXITTING.
616 ;
617 ; INPUT PARAMETERS:
618 ;
619 ;    R0       - ADDRESS OF ACCESS MODE FOR AST
620 ;                 (NEGATIVE CONTENTS PREVENT SENDING AST)
621 ;    R3       - AST PARAMETER
622 ;    R4       - PCB ADDRESS
623 ;    (SP)     - AST ADDRESS
624 ;    4(SP)    - RETURN ADDRESS FOR THIS SUBROUTINE
625 ;--
626 SENDAST:                              ;
627       PUSHL   R0                      ; SAVE ADDRESS OF ACCESS MODE
628       PUSHL   R3                      ; AND AST PARAMETER
629       TSTB    (R0)                    ; CHECK VALUE OF ACCESS MODE
630       BLSS    10$                     ; DO NOT QUEUE AST IF NEGATIVE
631       BBS     #PCB$V_DELPEN,PCB$L_STS(R4),10$ ;  NOR IF MARKED FOR DELETE
632       MOVZWL  #ACB$C_LENGTH,R1        ; SET SIZE REQUIRED
633       BSBW    EXE$ALONONPAGED         ; ALLOCATE A BLOCK
634       BLBC    R0,10$                  ; NONE, TRY LATER
635       MOVB    #DYN$C_ACB,ACB$B_TYPE(R2); SET TYPE OF STRUCTURE
636       MOVW    R1,ACB$W_SIZE(R2)       ; AND SIZE OF STRUCTURE
637       MOVL    (SP)+,ACB$L_ASTPRM(R2)  ; AND AST PARAMETER VALUE
638       MOVB    @(SP),ACB$B_RMOD(R2)    ; SET ACCESS MODE FOR AST
639       DECB    @(SP)+                  ; INDICATE SUCCESS FOR THIS ACCESS MODE
640       MOVL    (SP)+,ACB$L_AST(R2)     ; SET AST ADDRESS
641       MOVL    PCB$L_PID(R4),ACB$L_PID(R2)     ; SET PID FOR AST
642       PUSHR   #^M<R4,R5>              ; SAVE REGS FOR QAST
643       MOVL    R2,R5                   ; SET ADDRESS OF ACB
644       CLRL    R2                      ; NULL PRIORITY INCREMENT
645       BSBW    SCH$QAST                ; QUEUE AST FOR PROCESS
646       POPR    #^M<R4,R5>              ; RESTORE PCB,PHD ADDRESSES
647       RSB                             ; EXIT
648
649 ; Error path if nonpaged pool allocation fails or if AST access mode is
650 ; negative, indicating either an AST in progress (for automatic working
651 ; set adjustment) or all access modes are done (for CPU time limit expira
652
653 10$:      ADDL    #12,SP             ; CLEAN PARAMETERS FROM STACK
654    RSB                               ; AND EXIT
655
```

```
657
658       .SBTTL   SCH$WAKE - WAKE PROCESS INTERNAL
659 ;++
660 ; FUNCTIONAL DESCRIPTION:
661 ;    SCH$WAKE WAKES THE PROCESS SPECIFIED BY THE PID SUPPLIED.
662 ;
663 ; CALLING SEQUENCE:
664 ;    BSB/JSB SCH$WAKE
665 ;
666 ; INPUT PARAMETERS:
667 ;    R1 - PID OF PROCESS TO WAKE
668 ;
669 ; OUTPUT PARAMETERS:
670 ;    R0 - COMPLETION STATUS CODE
671 ;    R4 - PCB ADDRESS OF PROCESS AWAKENED
672 ;
673 ; COMPLETION CODES:
674 ;    SS$_NORMAL  -  NORMAL SUCCESSFUL COMPLETION STATUS
675 ;    SS$_NONEXPR -  NONEXISTENT PROCESS (INVALID PID)
676 ;
677 ; ENVIRONMENT:
678 ;    IPL = IPL$_SYNCH
679 ;
680 ;--
681 SCH$WAKE::                              ; WAKE PROCESS INTERNAL
682       MOVZWL   R1,R4                    ; GET PROCESS INDEX (PIX)
683       MOVL     @W^SCH$GL_PCBVEC[R4],R4  ; LOOK UP PCB ADDRESS
684       CMPL     R1,PCB$L_PID(R4)         ; VERIFY PID
685       BNEQ     30$                      ; REPORT ERROR
686       BBSS     #PCB$V_WAKEPEN,PCB$L_STS(R4),10$    ; SET WAKE PENDING
687 10$:                                    ;
688       MOVZBL   #PRI$_RESAVL,R2          ; SET PRIORITY INCREMENT CLASS
689       RPTEVT   WAKE                     ; REPORT WAKE EVENT
690       MOVZWL   #SS$_NORMAL,R0           ; SET SUCCESS CODE
691 20$:  RSB                              ; RETURN
692
693 30$:      MOVZWL   #SS$_NONEXPR,R0 ; SET NONEXISTENT PROCESS STATUS
694       RSB                              ;
```

```
696        .SBTTL   SCH$SWPWAKE - WAKE SWAPPER PROCESS
697 ;++
698 ; FUNCTIONAL DESCRIPTION:
699 ;    SCH$SWPWAKE AWAKENS THE SWAPPER PROCESS TO PERFORM SOME OPERATION.
700 ;
701 ; CALLING SEQUENCE:
702 ;    BSB/JSB SCH$SWPWAKE
703 ;
704 ; INPUT PARAMETERS:
705 ;    NONE
706 ;
707 ; OUTPUT PARAMETERS:
708 ;    R0-R4 PRESERVED
709 ;
710 ; SIDE EFFECTS:
711 ;    A WAKE EVENT IS GENERATED FOR THE SWAPPER PROCESS WHICH CAN
712 ;    CAUSE THE PROCESSOR TO BE RESCHEDULED.
713 ;
714 ;--
715
716 SCH$SWPWAKE::                          ; WAKE SWAPPER PROCESS
717       TSTL    W^SCH$GL_COMOQS          ; ANY INSWAP CANDIDATES?
718       BNEQ    10$                      ; YES, MUST WAKE SWAPPER THEN
719       CMPL    W^SCH$GL_MFYCNT,W^SCH$GL_MFYLIM ; ARE THERE MODIFIED PAGES TO W
720       BGEQ    10$                      ; YES, MUST WAKE SWAPPER THEN
721       CMPL    W^SCH$GL_FREECNT,W^SCH$GL_FREELIM ; DO WE NEED FREE PAGES?
722       BLSS    10$                      ; YES, MUST WAKE SWAPPER THEN
723       TSTW    W^SCH$GW_DELPHDCT        ; ARE THERE DELETED HEADERS TO PURGE?
724       BNEQ    10$                      ; YES, MUST WAKE SWAPPER THEN
725       TSTL    W^EXE$GL_PFATIM          ; WAS THERE A POWER FAIL RECOVERY?
726       BEQL    20$                      ; BR IF NONE
727 10$:          TSTB    W^SCH$GB_SIP     ; SWAPPER ALREADY BUSY?
728       BNEQ    20$                      ; BR IF YES
729       PUSHR   #^M<R0,R1,R2,R3,R4>      ; SAVE R0-R4
730       MOVL    W^SCH$GL_SWPPID,R1       ; GET PID OF SWAPPER
731       BSBB    SCH$WAKE                 ; AND AWAKEN IT
732       POPR    #^M<R0,R1,R2,R3,R4>      ; RESTORE R0-R4
733 20$:          RSB                      ; AND RETURN TO CALLER
734
735       .END
```

SCHED.LIS

3

```
   1          .TITLE   SCHED RESCHEDULING INTERRUPT HANDLER
   2          .IDENT   'V03-001'
   3   ;**********************************************************************
   4   ;*                                                                    *
   5   ;* COPYRIGHT (c) 1978, 1980, 1982 BY                                  *
   6   ;* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.             *
   7   ;* ALL RIGHTS RESERVED.                                               *
   8   ;*                                                                    *
   9   ;* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED *
  10   ;* ONLY IN  ACCORDANCE WITH   THE   TERMS  OF  SUCH  LICENSE  AND WITH THE *
  11   ;* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR   ANY   OTHER *
  12   ;* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY *
  13   ;* OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE   SOFTWARE IS  HEREBY *
  14   ;* TRANSFERRED.                                                       *
  15   ;*                                                                    *
  16   ;* THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE *
  17   ;* AND   SHOULD   NOT   BE  CONSTRUED AS   A COMMITMENT BY DIGITAL EQUIPMENT *
  18   ;* CORPORATION.                                                       *
  19   ;*                                                                    *
  20   ;* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE   OR   RELIABILITY OF ITS *
  21   ;* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.            *
  22   ;*                                                                    *
  23   ;*                                                                    *
  24   ;**********************************************************************
  25   ;
  26   ; MODIFIED BY:
  27   ;
  28   ;   V03-001 KDM0083        Kathleen D. Morse        31-Mar-1982
  29   ;           Add multi-processing hooks for replacement scheduling routines.
  30   ;
  31   ;
```

```
  33 ; INCLUDE FILES:
  34
  35        $DYNDEF                          ;STRUCTURE TYPE CODE DEFINITIONS
  36        $IPLDEF                          ;INTERRUPT PRIORITY LEVEL DEFINITIONS
  37        $PCBDEF                          ;PCB DEFINITIONS
  38        $PHDDEF                          ;PHD DEFINITIONS
  39        $PRDEF                           ;PROCESSOR REGISTER DEFINITIONS
  40        $STATEDEF                        ;STATE DEFINITIONS
  41        .PSECT   AEXENONPAGED,LONG       ; NONPAGED EXEC
```

```
43      .SBTTL  SCH$RESCHED RESCHEDULING INTERRUPT HANDLER
44  ;++
45  ; SCH$RESCHED - RESCHEDULING INTERRUPT HANDLER
46  ;
47  ; THIS ROUTINE IS ENTERED VIA THE IPL 3 RESCHEDULING INTERRUPT.
48  ; THE VECTOR FOR THIS INTERRUPT IS CODED TO CAUSE EXECUTION
49  ; ON THE KERNEL STACK.
50  ;
51  ; ENVIRONMENT:
52  ;   IPL=3 MODE=KERNEL IS=0
53  ; INPUT:
54  ;   00(SP)=PC AT RESCHEDULE INTERRUPT
55  ;   04(SP)=PSL AT INTERRUPT.
56  ;--
57      .ALIGN  LONG
58  MPH$RESCHED::                           ;MULTI-PROCESSING CODE HOOKS IN HERE
59  SCH$RESCHED::                           ;RESCHEDULE INTERRUPT HANDLER
60      SETIPL  #IPL$_SYNCH                 ;SYNCHRONIZE SCHEDULER WITH EVENT REPOR
61      SVPCTX                              ;SAVE CONTEXT OF PROCESS
62      MOVL    W^SCH$GL_CURPCB,R1          ;GET ADDRESS OF CURRENT PCB
63      MOVZBL  PCB$B_PRI(R1),R2            ;CURRENT PRIORITY
64      BBSS    R2,W^SCH$GL_COMQS,10$       ;MARK QUEUE NON-EMPTY
65  10$:    MOVW    #SCH$C_COM,PCB$W_STATE(R1) ;SET STATE TO RES COMPUTE
66      MOVAQ   W^SCH$AQ_COMT[R2],R3        ;COMPUTE ADDRESS OF QUEUE
67      INSQUE  (R1),@(R3)+                 ;INSERT AT TAIL OF QUEUE
68
69  ;+
70  ; SCH$SCHED - SCHEDULE NEW PROCESS FOR EXECUTION
71  ;
72  ; THIS ROUTINE SELECTS THE HIGHEST PRIORITY EXECUTABLE PROCESS
73  ; AND PLACES IT IN EXECUTION.
74  ;-
75  MPH$SCHED::                             ;MULTI-PROCESSING CODE HOOKS IN HERE
76  SCH$SCHED::                             ;SCHEDULE FOR EXECUTION
77      SETIPL  #IPL$_SYNCH                 ;SYNCHRONIZE SCHEDULER WITH EVENT REPOR
78      FFS     #0,#32,W^SCH$GL_COMQS,R2        ;FIND FIRST FULL STATE
79      BEQL    SCH$IDLE                    ;NO EXECUTABLE PROCESS??
80      MOVAQ   W^SCH$AQ_COMH[R2],R3        ;COMPUTE QUEUE HEAD ADDRESS
81      REMQUE  @(R3)+,R4                   ;GET HEAD OF QUEUE
82      BVS     QEMPTY                      ;BR IF QUEUE WAS EMPTY (BUG CHECK)
83      BNEQ    20$                         ;QUEUE NOT EMPTY
84      BBCC    R2,W^SCH$GL_COMQS,20$       ;SET QUEUE EMPTY
85  20$:                                    ;
86      CMPB    #DYN$C_PCB,PCB$B_TYPE(R4)   ;MUST BE A PROCESS CONTROL BLOCK
87      BNEQ    QEMPTY                      ;OTHERWISE FATAL ERROR
88      MOVW    #SCH$C_CUR,PCB$W_STATE(R4)  ;SET STATE TO CURRENT
89      MOVL    R4,W^SCH$GL_CURPCB          ;NOTE CURRENT PCB LOC
90      CMPB    PCB$B_PRIB(R4),PCB$B_PRI(R4) ;CHECK FOR BASE
91                                          ;PRIORITY=CURRENT
92      BEQL    30$                         ;YES, DONT FLOAT PRIORITY
93      BBC     #4,PCB$B_PRI(R4),30$        ;DONT FLOAT REAL TIME PRIORITY
94      INCB    PCB$B_PRI(R4)               ;MOVE TOWARD BASE PRIO
95  30$:    MOVB    PCB$B_PRI(R4),W^SCH$GB_PRI      ;SET GLOBAL PRIORITY
96      MTPR    PCB$L_PHYPCB(R4),#PR$_PCBB      ;SET PCB BASE PHYS ADDR
97      LDPCTX                              ;RESTORE CONTEXT
98      REI                                 ;NORMAL RETURN
99
```

```
100 SCH$IDLE:                               ;NO ACTIVE, EXECUTABLE PROCESS
101     SETIPL    #IPL$_SCHED               ;DROP IPL TO SCHEDULING LEVEL
102     MOVB      #32,W^SCH$GB_PRI          ;SET PRIORITY TO -1(32) TO SIGNAL IDLE
103     BRB       SCH$SCHED                 ;AND TRY AGAIN
104
105 QEMPTY:       BUG_CHECK QUEUEMPTY,FATAL      ;SCHEDULING QUEUE EMPTY
106
107     .END
```

SYSPCNTRL.LIS

4

```
   1        .TITLE  SYSPCNTRL PROCESS CONTROL SERVICES
   2        .IDENT  'V03-001'
   3
   4  ;
   5  ;******************************************************************************
   6  ;*                                                                            *
   7  ;* COPYRIGHT (c) 1978, 1980, 1982 BY                                          *
   8  ;* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.                     *
   9  ;* ALL RIGHTS RESERVED.                                                       *
  10  ;*                                                                            *
  11  ;* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED      *
  12  ;* ONLY IN   ACCORDANCE WITH   THE   TERMS   OF   SUCH   LICENSE   AND WITH THE *
  13  ;* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR   ANY   OTHER    *
  14  ;* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY      *
  15  ;* OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE   SOFTWARE IS   HEREBY    *
  16  ;* TRANSFERRED.                                                               *
  17  ;*                                                                            *
  18  ;* THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE      *
  19  ;* AND   SHOULD   NOT   BE   CONSTRUED AS   A COMMITMENT BY DIGITAL EQUIPMENT  *
  20  ;* CORPORATION.                                                               *
  21  ;*                                                                            *
  22  ;* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE   OR   RELIABILITY OF ITS    *
  23  ;* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                    *
  24  ;*                                                                            *
  25  ;*                                                                            *
  26  ;******************************************************************************
  27
  28  ;++
  29  ; FACILITY: EXECUTIVE, PROCESS CONTROL SYSTEM SERVICES
  30  ;
  31  ; ABSTRACT:
  32  ;    THIS MODULE CONTAINS THE ROUTINES WHICH IMPLEMENT THE PROCESS
  33  ;    CONTROL SERVICES, SUSPEND, RESUME, HIBERNATE AND WAKE.
  34  ;
  35  ; AUTHOR:
  36  ;    R. HUSTVEDT
  37  ;
  38  ; MODIFIED BY:
  39  ;
  40  ;    V03-001 LJK0152          Lawrence J. Kenah        24-Mar-1982
  41  ;            Store PID at IPL 2 instead of at IPL 7 to prevent possible
  42  ;            page faults at elevated IPL.
  43  ;
  44  ;    V02-002 TMH0002          Tim Halvorsen            23-Jan-1982
  45  ;            Allow access to other processes in the same job,
  46  ;            instead of the current check which allows access only
  47  ;            to direct subprocesses.  This allows you to "see" and
  48  ;            re-ATTACH to a parent process without privileges.
  49  ;
  50  ;    V02-001 TCM0001          Trudy C. Matthews        16-Mar-1981
  51  ;            Have EXE$NAMPID return success if process id's are identical.
  52  ;---
  53  ;
```

```
    54       .SBTTL   DECLARATIONS
    55
    56 ;
    57 ; INCLUDE FILES:
    58 ;
    59
    60       $ACBDEF                          ; DEFINE AST CONTROL BLOCK
    61       $IPLDEF                          ; IPL DEFINITIONS
    62       $PCBDEF                          ; PCB OFFSET DEFINITIONS
    63       $PRDEF                           ; PROCESSOR REGISTER DEFS
    64       $PRIDEF                          ; PRIORITY INCREMENT DEFINITIONS
    65       $PRVDEF                          ; PRIVILEGE BIT DEFINITIONS
    66       $RSNDEF                          ; RESOURCE NUMBER DEFINITIONS
    67       $SSDEF                           ; STATUS DEFINITIONS
    68       $STATEDEF                        ; SCHEDULER STATE DEFINITIONS
    69 ;
    70 ; EQUATED SYMBOLS:
    71 ;
    72 PID=4                                  ; DISPLACEMENT TO PID ARGUMENT
    73 PRCNAM=8                               ; DISPLACEMENT TO PROCESS NAME
    74
    75       .PSECT   AEXENONPAGED,BYTE       ; NONPAGED EXEC
    76
```

```
 78      .SBTTL   EXE$SUSPND - SUSPEND SYSTEM SERVICE
 79 ;++
 80 ;    EXE$SUSPND - SUSPEND SYSTEM SERVICE
 81 ;
 82 ; FUNCTIONAL DESCRIPTION:
 83 ;    EXE$SUSPND IMPLEMENTS THE SUSPEND PROCESS SYSTEM SERVICE.
 84 ;    THIS SERVICE CAUSES THE SPECIFIED PROCESS TO BE SUSPENDED
 85 ;    BY INITIATING A KERNEL MODE AST IF NOT THE CURRENT PROCESS.
 86 ;    A SUSPENDED PROCESS CANNOT RECEIVE ASTS AND WILL ONLY BE
 87 ;    RESUMED AS A RESULT OF THE RESUME SYSTEM SERVICE OR A
 88 ;    DELETE PROCESS REQUEST.
 89 ;
 90 ;
 91 ; CALLING SEQUENCE:
 92 ;    CALLG    ARGLIST,EXE$SUSPND
 93 ;
 94 ;
 95 ; INPUT PARAMETERS:
 96 ;    04(AP) - PROCESS IDENTIFICATION POINTER (PID)
 97 ;    08(AP) - PROCESS NAME DESCRIPTOR POINTER
 98 ;    R4 - PCB ADDRESS OF CURRENT PROCESS
 99 ;
100 ; IMPLICIT INPUTS:
101 ;    PCB OF CURRENT PROCESS
102 ;    PCB OF TARGET PROCESS
103 ;
104 ;
105 ; OUTPUT PARAMETERS:
106 ;    R0 - COMPLETION STATUS
107 ;    @PID(AP) - PROCESS IDENTIFICATION OF TARGET PROCESS
108 ;
109 ; COMPLETION CODES:
110 ;    SS$_NORMAL   -   NORMAL SUCCESSFUL COMPLETION
111 ;    SS$_NOPRIV   -   INSUFFICIENT PRIVILEGE FOR REQUESTED OPERATION
112 ;    SS$_NONEXPR  -   NON-EXISTENT PROCESS
113 ;    SS$_ACCVIO   -   ACCESS VIOLATION ON WRITE DESTINATION
114 ;    SS$_INSFMEM  -   INSUFFICIENT DYNAMIC MEMORY FOR REQUEST
115 ;                       ( ONLY RETURNED IF NO RESOURCE WAIT ENABLE )
116 ;
117 ; SIDE EFFECTS:
118 ;    NONE
119 ;
120 ;--
121
122 EXE$SUSPND::                            ; SUSPEND SYSTEM SERVICE
123      .WORD    ^M<R2,R3,R4,R5>          ; REGISTER SAVE MASK FOR R2-R5
124      BSBW     EXE$NAMPID               ; TRANSLATE AND VERIFY ARGS
125      SETIPL   #0                       ; ENABLE
126      PUSHL    R1                       ; SAVE PID
127      BLBC     R0,20$                   ; CONTINUE IF NO ERROR
128      BBSSI    #PCB$V_SUSPEN,PCB$L_STS(R4),10$ ; EXIT IF ALREADY SUSPENDED
129      BSBW     EXE$ALLOCIRP             ; ALLOCATE I/O PACKET FOR AST
130      BLBC     R0,20$                   ; IF LBC THEN NO PACKET ALLOCATED
131      MOVL     R2,R5                    ; SETUP POINTER TO AST CONTROL BLK
132      MOVAL    B^SUSPND,ACB$L_KAST(R5)  ; SET FOR KERNEL AST OM PROCESS
133      MOVB     #^X80,ACB$B_RMOD(R5)     ; SET ACCESS MODE FOR AST
134      MOVL     (SP)+,ACB$L_PID(R5)      ; SET PID FOR AST
```

```
135      CLRL    R2                      ; SET NULL PRIORITY INCREMENT
136      BSBw    SCH$QAST                ; QUEUE KERNEL AST
137 10$:         BRB     EXITN           ; EXIT WITH NORMAL STATUS
138 20$:         RET                     ; ERROR RETURN
139
```

```
141 ;
142 ; KERNEL AST ROUTINE TO SUSPEND PROCESS
143 ;
144 ; CALLING SEQUENCE:
145 ;    JSB      SUSPND
146 ;
147 ; INPUT PARAMETERS:
148 ;    R4 - PCB ADDRESS
149 ;    R5 - ADDRESS OF AST CONTROL BLOCK
150 ;
151 ; OUTPUT PARAMETERS:
152 ;    NONE
153 ;
154 ; IMPLICIT INPUTS:
155 ;    PCB OF CURRENT PROCESS LOCATED VIA SCH$GL_CURPCB
156 ;
157 ; IMPLICIT OUTPUTS:
158 ;    PCB$V_SUSPEN - CLEARED
159 ;                             > WHEN PROCESS IS RESUMED
160 ;    PCB$V_RESPEN - CLEARED
161 ;-
162
163 SUSPND:                                   ; SUSPEND KERNEL AST ROU'INE
164      MOVL     R5,R0                        ; GET PACKET ADDRESS FOR RELEASE
165      BSBW     EXE$DEANONPAGED              ; DEALLOCATE PACKET
166 10$:          MOVPSL   -(SP)               ;;; SAVE PSL ON STACK
167      SETIPL   #IPL$_SYNCH                  ;;; DISABLE SYSTEM EVENIS
168      BBCCI    #PCB$V_RESPEN,PCB$L_STS(R4),30$ ;;; BR IF NO PNDING RESUME
169      BBCCI    #PCB$V_SUSPEN,PCB$L_STS(R4),20$ ; CLEAR SUSPENI PENDING
170 20$:          SETIPL   #IPL$_ASTDEL        ; DROP TO ASTDEL IPL
171      TSTL     (SP)+                        ; CLEAN PSL FROM STACK
172      RSB                                   ; AND EXIT
173 30$:          MOVAL    W^SCH$GQ_SUSP,R2          ;;; GET QUEUE HEADER ADDRESS
174      BSBW     SCH$WAITK                    ;;; WAIT WITH CLEAN STACK
175      BRB      10$                          ; AND CLEAR RESUME PENDING FLAG
176
177
```

```
179         .SBTTL   EXE$RESUME - RESUME SYSTEM SERVICE
180 ;++
181 ;     EXE$RESUME - RESUME SYSTEM SERVICE
182 ;
183 ; FUNCTIONAL DESCRIPTION:
184 ;     EXE$RESUME IMPLEMENTS THE RESUME SYSTEM SERVICE WHICH RESTARTS
185 ;     A SUSPENDED PROCESS.
186 ;
187 ; INPUT PARAMETERS:
188 ;     04(AP) - PROCESS IDENTIFICATION POINTER (PID)
189 ;     08(AP) - PROCESS NAME DESCRIPTOR POINTER
190 ;     R4 - PCB ADDRESS OF CURRENT PROCESS
191 ;
192 ; IMPLICIT INPUTS:
193 ;     PCB OF CURRENT PROCESS
194 ;     PCB OF TARGET PROCESS
195 ;     PROCESS HEADER OF CURRENT PROCESS
196 ;
197 ; OUTPUT PARAMETERS:
198 ;     R0 - COMPLETION STATUS
199 ;     @PID - PROCESS IDENTIFICATION OF TARGET PROCESS
200 ;
201 ; IMPLICIT OUTPUTS:
202 ;     NONE
203 ;
204 ; COMPLETION CODES:
205 ;     SS$_NORMAL   -  NORMAL SUCCESSFUL COMPLETION
206 ;     SS$_NOPRIV   -  INSUFFICIENT PRIVILEGE FOR REQUESTED OPERATION
207 ;     SS$_NONEXPR  -  NON-EXISTENT PROCESS
208 ;     SS$_ACCVIO   -  ACCESS VIOLATION ON WRITE DESTINATION
209 ;
210 ; SIDE EFFECTS:
211 ;     NONE
212 ;--
213
214 EXE$RESUME::                           ; RESUME SYSTEM SERVICE
215         .WORD    ^M<R2,R3,R4>          ; REGISTER SAVE MASK FOR R2-R4
216         BSBB     EXE$NAMPID            ; CONVERT AND VALIDATE
217         BLBC     R0,EXIT               ; EXIT IF ERROR OCCURRED
218         MOVZBL   #PRI$_RESAVL,R2          ;;; SET PRIORITY INCREMENT CLASS
219         BBSSI    #PCB$V_RESPEN,PCB$L_STS(R4),10$ ;;; SET RESUME PENDING
220 10$:     RPTEVT   RESUME                ;;; REPORT RESUME EVENT
221         BRB      EXITN                 ;;; AND TAKE NORMAL EXIT
222
```

```
224      .SBTTL  EXE$HIBER - HIBERNATE SYSTEM SERVICE
225 ;++
226 ;    EXE$HIBER - HIBERNATE SYSTEM SERVICE
227 ;
228 ; FUNCTIONAL DESCRIPTION:
229 ;    EXE$HIBER IMPLEMENTS THE HIBERNATE SYSTEM SERVICE WHICH
230 ;    PLACES THE PROCESS IN A WAIT STATE, HIB , UNTIL IT
231 ;    IS RE-AWAKENED BY A WAKE SYSTEM SERVICE.  ASTS MAY BE DELIVERED
232 ;    WHILE THE PROCESS IS IN A HIBERNATE STATE.
233 ;
234 ;
235 ;
236 ; CALLING SEQUENCE:
237 ;    CALLG   ARGLIST,EXE$HIBER
238 ;
239 ;
240 ; INPUT PARAMETERS:
241 ;    R4 - PCB ADDRESS OF CURRENT PROCESS
242 ;
243 ; IMPLICIT INPUTS:
244 ;    PROCESS CONTROL BLOCK(PCB) OF THE PROCESS ISSUING THE HIBERNATE
245 ;    SYSTEM SERVICE.
246 ;
247 ;
248 ; OUTPUT PARAMETERS:
249 ;    R0 - COMPLETION STATUS CODE
250 ;
251 ; IMPLICIT OUTPUTS:
252 ;    NONE
253 ;
254 ; COMPLETION CODES:
255 ;    SS$_NORMAL - NORMAL SUCCESSFUL COMPLETION
256 ;
257 ; SIDE EFFECTS:
258 ;    THE PROCESS WILL BE PLACED IN A WAIT STATE UNTIL EITHER
259 ;    AN AST IS DELIVERED OR A WAKE REQUEST IS MADE.
260 ;
261 ;--
262
263
264 EXE$HIBER::                          ; HIBERNATE SYSTEM SERVICE
265      .WORD    ^M<R2,R3,R4>            ; REGISTER SAVE MASK FOR R2-R4
266      SETIPL   #IPL$_SYNCH             ;;; BLOCK SCHEDULING EVENTS
267      BBCCI    #PCB$V_WAKEPEN,PCB$L_STS(R4),10$  ;;; CHECK FOR PENDING WAKE
268      BRB      EXITN                   ;;; AND RETURN TO CALLER
269
270 10$:                                 ;;; MUST HIBERNATE
271      MOVAL    W^SCH$GQ_HIBWQ,R2       ;;; SET ADDRESS OF WAIT QUEUE HDR
272      BRW      SCH$WAIT                ;;; AND WAIT
```

```
274         .SBTTL   EXE$WAKE - WAKE SYSTEM SERVICE
275 ;++
276 ;    EXE$WAKE - WAKE SYSTEM SERVICE
277 ;
278 ; FUNCTIONAL DESCRIPTION:
279 ;    THE WAKE SYSTEM SERVICE CAUSES A PROCESS IN A HIBERNATE STATE
280 ;    TO BE CHANGED TO AN EXECUTABLE STATE AND RE-EXECUTED.
281 ;    IF THE TARGET OF A WAKE SERVICE IS NOT CURRENTLY HIBERNATING,
282 ;    THEN A BIT IS POSTED WHICH WILL CAUSE A SUBSEQUENT HIBERNATE
283 ;    CALL BY THAT PROCESS TO RETURN IMMEDIATELY.
284 ;
285 ; CALLING SEQUENCE:
286 ;    CALLG    ARGLIST,EXE$WAKE
287 ;
288 ; INPUT PARAMETERS:
289 ;    04(AP) = PROCESS IDENTIFICATION (PID) OF PROCESS TO WAKE
290 ;    08(AP) = ADDRESS OF PROCESS NAME DESCRIPTOR
291 ;    R4 - PCB ADDRESS
292 ;
293 ; IMPLICIT INPUTS:
294 ;    PCB OF CURRENT PROCESS
295 ;    ALL PCBS LOCATED BY THE VECTOR @SCH$GL_PCBVEC
296 ;
297 ; OUTPUT PARAMETERS:
298 ;    R0 - COMPLETION STATUS CODE
299 ;    @PID(AP) - PROCESS IDENTIFICATION (PID) OF PROCESS AWAKENED
300 ;
301 ; IMPLICIT OUTPUTS:
302 ;    PCB$V_WAKEPEN BIT IN PCB$L_STS OF TARGET PROCESS WILL BE
303 ;    SET IF PROCESS IS NOT HIBERNATING.
304 ;
305 ; COMPLETION CODES:
306 ;    SS$_NORMAL - NORMAL SUCCESSFUL COMPLETION
307 ;    SS$_NONEXPR - NON-EXISTENT PROCESS
308 ;    SS$_NOPRIV - NO PRIVILEGE FOR ATTEMPTED OPERATION
309 ;    SS$_ACCVIO - ACCESS VIOLATION ON WRITE DESTINATION
310 ;
311 ; SIDE EFFECTS:
312 ;    THE TARGET PROCESS WILL BE CHANGED TO AN EXECUTABLE STATE,
313 ;    COM OR COMO, IF IT IS IN A HIBERNATE STATE AND
314 ;    RESCHEDULING WILL BE INITIATED IF NECESSARY.
315 ;
316 ;--
317 EXE$WAKE::                              ; WAKE SYSTEM SERVICE
318         .WORD    ^M<R2,R3,R4>           ; SAVE MASK FOR R2-R4
319         BSBB     EXE$NAMPID             ; CONVERT NAME TO PID
320 ;
321 ;    R0 - SUCCESS INDICATOR
322 ;    R1 - PID CORRESPONDING TO NAME STRING
323 ;    R4 - PCB ADDRESS IF NAME WAS FOUND
324 ;
325         BLBC     R0,EXIT                ; CONTINUE IF PROCESS LOCATED
326         BSBW     SCH$WAKE               ;;; WAKE PROCESS BY PID
327 EXITN:                                  ; EXIT HIBERNATE SERVICE
328         MOVZWL   #SS$_NORMAL,R0         ; SET NORMAL COMPLETION
329 EXIT:                                   ; RETURN WITH R0 SET
330         SETIPL   #0                     ; ENABLE
```

```
331      RET                              ; AND RETURN TO CALLER
332
333
```

```
335        .SBTTL  EXE$NAMPID - CONVERT PROCESS NAME TO PID
336 ;++
337 ;    EXE$NAMPID  -  CONVERT PROCESS NAME TO PID
338 ;
339 ; FUNCTIONAL DESCRIPTION:
340 ;    EXE$NAMPID OBTAINS THE PROPER PID AND PCB ADDRESS FOR A
341 ;    STANDARD PROCESS CONTROL SERVICE ARGUMENT LIST CONSISTING
342 ;    OF A PID/PROCESS-NAME PAIR.  THE ABSENCE OF BOTH SELECTS THE
343 ;    CURRENT PROCESS.  AFTER ANY NECESSARY NAME TRANSLATION AND
344 ;    PID VALIDATION, GROUP AND WORLD PROCESS CONTROL PRIVILEGES
345 ;    ARE CHECKED.
346 ;
347 ;
348 ; CALLING SEQUENCE:
349 ;    JSB/BSB EXE$NAMPID
350 ;
351 ; INPUT PARAMETERS:
352 ;    PID(AP) - ADDRESS OF PID SOURCE/DESTINATION
353 ;    PRCNAM(AP) - POINTER TO PROCESS DESCRIPTOR TO CONVERT TO PID
354 ;    R4 - PCB ADDRESS
355 ;
356 ; IMPLICIT INPUTS:
357 ;    @SCH$GL_PCBVEC - VECTOR OF PCB ADDRESSES
358 ;    PHD$L_PRIV - PRIVILEGE BIT VECTOR IN PROCESS HEADER
359 ;
360 ; OUTPUT PARAMETERS:
361 ;    R0 - COMPLETION STATUS
362 ;    R1 - PROCESS IDENTIFICATION (PID) OF NAMED PROCESS.
363 ;         ZERO IF NO MATCH IS FOUND.
364 ;    R4 - PCB ADDRESS OF PROCESS IF MATCH IS FOUND.
365 ;    @PID(AP) - PROCESS IDENTIFICATION (PID) OF SELECTED PROCESS
366 ;    IPL - IPL$_SYNCH (IPL UNCHANGED IF SS$_ACCVIO OR SS$_IVLOGNAM)
367 ;
368 ; COMPLETION CODES:
369 ;    SS$_NORMAL   -  NORMAL SUCCESSFUL COMPLETION
370 ;    SS$_IVLOGNAM  -  INVALID LOGICAL NAME STRING
371 ;    SS$_NONEXPR  -  NONEXISTENT PROCESS OR INVALID PID
372 ;    SS$_NOPRIV   -  NO PRIVILEGE FOR SPECIFIED OPERATION.
373 ;    SS$_ACCVIO  -  ACCESS VIOLATION FOR WRITE DESTINATION
374 ;
375 ; SIDE EFFECTS:
376 ;    NONE
377 ;
378 ;--
379 EXE$NAMPID::                          ; TRANSLATE PNAME TO PID
380      MOVL    PID(AP),R0               ; GET PID ADDRESS
381      BEQL    10S                      ; NO PID ADDRESS
382      IFNOWRT #4,(R0),ACCVIO           ; ERROR IF ACCESS VIOLATION
383      MOVL    (R0),R1                  ; NOW FETCH PID
384      BNEQ    GOTPID                   ; YES,
385 10S:         MOVL   PCB$L_PID(R4),R1       ; ASSUME CALLERS PID
386      MOVL    PRCNAM(AP),R3            ; GET PNAME ADDRESS IF SPECIFIED
387      BNEQ    20S                      ; WAS SPECIFIED
388      BRW     RETN                     ; NONE SPECIFIED, RETURN
389 20S:                                  ; MUST LOOK UP PROCESS NAME
390      IFNORD  #8,(R3),ACCVIO           ; CHECK DESCRIPTOR FOR READABLITY
391      MOVQ    (R3),R2                  ; GET DESCRIPTOR
```

```
392     TSTW    R2                           ; AND CHECK FOR ZERO LENGTH
393     BEQL    IVLNAM                       ; NOT A VALID NAME STRING
394     CMPW    #15,R2                       ; CHECK FOR MAXIMUM LENGTH
395     BLSSU   IVLNAM                       ; NOT A VALID NAME STRING
396     IFNORD  R2,(R3),ACCVIO               ; ACCESS VIOLATION IF STRING NOT READAB
397     PUSHL   R0                           ; SAVE PID ADDRESS
398     MOVL    SCH$GL_MAXPIX,R0             ; INITIALIZE PROCESS INDEX
399 PIXLOOP:                                 ; LOOP FOR EACH PROCESS INDEX
400     MOVL    @W^SCH$GL_PCBVEC[R0],R1      ; GET PCB ADDRESS FROM VECTOR
401     CMPW    PCB$W_GRP(R1),PCB$W_GRP(R4)  ; COMPARE GROUP NUMBERS
402     BNEQ    NEXTPIX                      ; NOT SAME GROUP, NEXT PIX
403     CMPB    R2,PCB$T_LNAME(R1)           ; COMPARE NAME LENGTH
404     BNEQ    NEXTPIX                      ; DIFFERENT LENGTH
405     PUSHR   #^M<R0,R1,R2,R3>             ; SAVE REGISTERS FOR CMPC3
406     CMPC3   R2,(R3),PCB$T_LNAME+1(R1)        ; COMPARE TEXT OF NAME
407     POPR    #^M<R0,R1,R2,R3>             ; RESTORE REGISTERS
408     BEQL    GOTNAM                       ; FOUND A MATCHING PROCESS NAME
409 NEXTPIX:                                 ; STEP TO NEXT PROCESS
410     SOBGEQ  R0,PIXLOOP                   ; UPDATE INDEX AND TRYA AGAIN
411     TSTL    (SP)+                        ; CLEAN PID ADDRESS FROM STACK
412     BRB     NONEX                        ; EXIT WITH NONEXISTENT PROCESS STATUS
413
414 ACCVIO:                                  ; ACCESS VIOLATION
415     MOVZWL  #SS$_ACCVIO,R0               ; SET ERROR CODE
416     RSB                                  ; AND EXIT
417
418 IVLNAM:                                  ; INVALID NAME
419     MOVZWL  #SS$_IVLOGNAM,R0             ; SET ERROR CODE
420     RSB                                  ; AND RETURN
421
422 GOTNAM:     MOVL    PCB$L_PID(R1),R1             ; GET FULL PID FOR NAME
423     POPL    R0                           ; RESTORE PID ADDRESS
424 GOTPID:                                  ; VERIFY PID AND CHECK PRIV
425     SETIPL  #IPL$_SYNCH                  ; BLOCK SYSTEM EVENTS
426     MOVZWL  R1,R2                        ; EXTRACT PROCESS INDEX
427     CMPL    R2,SCH$GL_MAXPIX             ; TEST AGAINST MAXIMUM VALUE
428     BGTRU   NONEX                        ; NONEXISTENT IF GTRU THAN MAXPIX
429     MOVL    @W^SCH$GL_PCBVEC[R2],R2      ; GET PCB ADDRESS
430     CMPL    R1,PCB$L_PID(R2)             ; CHECK FOR VALID PID
431     BEQL    VALPID                       ; YES,
432 NONEX:                                   ; PROCESS NON-EXISTENT
433     MOVZWL  #SS$_NONEXPR,R0              ; SET ERROR STATUS
434     RSB                                  ; AND RETURN TO CALLER
435 VALPID:                                  ; PID IS VALID, CHECK PRIV
436     CMPL    PCB$L_JIB(R2),PCB$L_JIB(R4)  ; IS IT IN OUR JOB (TREE)?
437     BEQL    RETURN                       ; IF SO, ALLOW IT WITHOUT PRIVILEGES
438     IFPRIV  WORLD,RETURN,R4              ; SUCCESS IF WORLD PRIVILEGE
439     CMPW    PCB$W_GRP(R2),PCB$W_GRP(R4)  ; ARE GROUP NUMBERS EQUAL
440     BNEQ    NOPRIV                       ; IF NOT, NO PRIVILEGE
441     IFNPRIV GROUP,NOPRIV,R4             ; ERROR IF NOT GROUP PRIV
442 RETURN:                                  ; SUCCESSFUL EXIT
443     MOVL    R2,R4                        ; MOVE PCB ADDRESS OF TARGET
444 RETN:                                    ; NORMAL STATUS EXIT
445     TSTL    R0                           ; WAS PID ADDRESS SPECIFIED
446     BEQL    10$                          ; NO, SKIP STORE OF PID
447     SETIPL  #IPL$_ASTDEL                 ; ALLOW PAGE FAULTS
448     MOVL    R1,(R0)                      ; STORE PID IN DESTINATION
```

```
449      CLRL     R0                        ; DO NOT WRITE PID A SECOND TIME
450      BRB      GOTPID                    ; MAKE SURE THAT PID IS STILL VALID
451
452 10$:         MOVZWL   #SS$_NORMAL,R0    ; SET SUCCESS STATUS
453      RSB                                ; AND RETURN TO CALLER
454 NOPRIV:      MOVZWL   #SS$_NOPRIV,R0    ; SET ERROR STATUS
455      RSB                                ; AND RETURN TO CALLER
456
```

```
458        .SBTTL   EXE$SETPRN - SET PROCESS NAME
459
460 ;++
461 ; FUNCTIONAL DESCRIPTION:
462 ;    EXE$SETPRN IMPLEMENTS THE SET PROCESS NAME SYSTEM
463 ;    SERVICE WHICH ALLOWS A PROCESS TO ESTABLISH A LOGICAL NAME
464 ;    FOR ITSELF.  ALL SUCH LOGICAL NAMES ARE IMPLICITLY QUALIFIED
465 ;    BY THE GROUP NUMBER OF THE PROCESS THEREBY ALLOWING THE SAME
466 ;    LOGICAL NAME TO BE USED BY PROCESSES IN DIFFERENT GROUPS.
467 ;
468 ; CALLING SEQUENCE:
469 ;    CALLG    ARGLIST,EXE$SETPRN
470 ;
471 ; INPUT PARAMETERS:
472 ;    04(AP) - ADDRESS OF PROCESS NAME STRING DESCRIPTOR
473 PRCNAM=4
474 ;    R4 - PCB ADDRESS OF CURRENT PROCESS
475 ;
476 ; IMPLICIT INPUTS:
477 ;    SCH$GL_CURPCB - POINTER TO PCB OF CURRENT PROCESS
478 ;    @SCH$GL_PCBVEC - VECTOR OF ALL PCB ADDRESSES
479 ;
480 ; OUTPUT PARAMETERS:
481 ;    NONE
482 ;
483 ; IMPLICIT OUTPUTS:
484 ;    PCB$T_NAME IN CURRENT PCB IS FILLED WITH THE SPECIFIED NAME
485 ;    PROVIDED NO ERROR HAS UCURRED.
486 ;
487 ; SIDE EFFECTS:
488 ;    NONE
489 ;
490 ; COMPLETION CODES:
491 ;    SS$_NORMAL    -  NORMAL SUCCESSFUL CUMPLETION STATUS
492 ;    SS$_ACCVIO    -  ALL OR PART OF NAME STRING IS INACCESSIBLE FOR READ
493 ;    SS$_IVLOGNAM  -  ILLEGAL LOGICAL NAME STRING LENGTH (>15)
494 ;    SS$_DUPLNAM   -  DUPLICATE PROCESS NAME WITHIN GROUP
495 ;
496 ;--
497
498 EXE$SETPRN::                           ; SET PROCESS NAME
499        .WORD    ^M<R2,R3,R4,R5,R6,R7>  ; SAVE REGISTERS R2-R7
500        MOVL     PRCNAM(AP),R5          ; GET ADDRESS OF PROCESS NAME
501        BNEQ     5$                     ; WAS SPECIFIED
502        CLRL     PCB$T_LNAME(R4)        ; CLEAR NAME FIELD OF PCB
503        BRB      65$                    ; AND EXIT WITH NORMAL STATUS
504 5$:    IFNORD   #8,(R5),80$     ; CHECK ACCESS FOR DESCRIPTOR
505        MOVQ     (R5),-(SP)             ; PUSH DESCRIPTOR ON STACK
506        TSTW     (SP)                   ; CHECK FOR ZERO LENGTH STRING
507        BEQL     10$                    ; INVALID NAME
508        IFNORD   (SP),@4(SP),80$        ; PROBE ENDS OF STRING
509        CMPW     (SP),#15               ; CHECK FOR MAXIMUM LENGTH
510        BLEQU    20$                    ; IF LEQU, WITHIN LIMIT
511 10$:        MOVZWL   #SS$_IVLOGNAM,R0       ; INVALID PROCESS NAME STATUS
512        RET                             ; AND RETURN
513 20$:        MOVL     SCH$GL_MAXPIX,R6       ; SET MAXIMUM PROCESS INDEX
514 30$:        MOVL     @W^SCH$GL_PCBVEC[R6],R7 ; GET PCB ADDRESS
```

```
515     CMPW     PCB$W_GRP(R4),PCB$W_GRP(R7)  ; CHECK FOR SAME GROUP
516     BNEQ     40$                      ; NO, SKIP IT
517     CMPB     (SP),PCB$T_LNAME(R7)     ; COMPARE LENGTHS
518     BNEQ     40$                      ; NOT EQUAL, TRY ANOTHER
519     CMPC3    (SP),@4(SP),PCB$T_LNAME+1(R7)    ; COMPARE NAMES WITH COUNTS
520     BEQL     50$                      ; MATCH
521 40$:    SOBGEQ   R6,30$               ; CONTINUE FOR ALL PCBS
522     BRB      60$                      ; NOT FOUND
523 50$:    CMPL     R4,R7                ; SAME PROCESS?
524     BNEQ     70$                      ; DUPLICATE NAME ERROR
525 60$:    MOVB     (SP),PCB$T_LNAME(R4)     ; SAVE NAME LENGTH
526     MOVC3    (SP),@4(SP),PCB$T_LNAME+1(R4)    ; MOVE NAME TO PCB
527 65$:    MOVZWL   #SS$_NORMAL,R0           ; SUCCESSFUL STATUS
528     RET                               ; AND RETURN
529 70$:    MOVZWL   #SS$_DUPLNAM,R0          ; DUPLICATE NAME WITHIN GROUP
530     RET                               ; AND RETURN
531
532 80$:    MOVZWL   #SS$_ACCVIO,R0       ; ACCESS VIOLATION
533     RET                               ; RETURN WITH ERROR STATUS
534     .END
```

SYSWAIT.LIS

5

```
    1       .TITLE  SYSWAIT EVENT FLAG WAIT SERVICES
    2       .IDENT  'V03-000'
    3 ;*********************************************************************
    4 ;*                                                                  *
    5 ;* COPYRIGHT (c) 1978, 1980, 1982 BY                                *
    6 ;* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.           *
    7 ;* ALL RIGHTS RESERVED.                                             *
    8 ;*                                                                  *
    9 ;* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED *
   10 ;* ONLY IN  ACCORDANCE WITH  THE  TERMS  OF  SUCH  LICENSE  AND WITH THE *
   11 ;* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR  ANY  OTHER *
   12 ;* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY *
   13 ;* OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY *
   14 ;* TRANSFERRED.                                                      *
   15 ;*                                                                  *
   16 ;* THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE *
   17 ;* AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT *
   18 ;* CORPORATION.                                                      *
   19 ;*                                                                  *
   20 ;* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS *
   21 ;* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.           *
   22 ;*                                                                  *
   23 ;*                                                                  *
   24 ;*********************************************************************
   25 ;++
   26 ; FACILITY: EXECUTIVE, EVENT FLAG SERVICES
   27 ;
   28 ; ABSTRACT: WAIT CONTAINS THE THREE FORMS OF EVENT FLAG WAIT
   29 ;         SYSTEM SERVICES WHICH PROVIDE FOR SINGLE EVENT WAIT AS
   30 ;         WELL AS COMBINATIONS OF MULTIPLE EVENTS.
   31 ;
   32 ;--
   33 ;
   34 ; AUTHOR:
   35 ;   R.HUSTVEDT : VERSION
   36 ;
   37 ; MODIFIED BY:
   38 ;
   39 ;   V02-011 LJK0114         Lawrence J. Kenah         20-Jan-1982
   40 ;           Repair broken word displacements.
   41 ;
   42 ;   V02-010 RIH0044         Richard I. Hustvedt       12-Jun-1981
   43 ;           Replace use of ASTLVL processor register with PHD$B_ASTLVL
   44 ;           to provide for MP.
   45 ;
   46 ;   V02-009 LJK0034         Lawrence J. Kenah         11-Jun-1981
   47 ;           Add SCHSWAITM entry point so that memory management
   48 ;           wait code uses common entry into the scheduler.
   49 ;
   50 ;   V02-008 LJK0023         Lawrence J. Kenah         13 May 1981
   51 ;           Put assumptions about PSL layout into ASSUME macros
   52 ;
   53 ;   V02-007 LJK0009         Lawrence J. Kenah         13 May 1981
   54 ;           Speed up boolean logic along $WFLAND code path
   55 ;
   56 ;   V03-006 HRJ0020         Herb Jacobs               4-May-1981
   57 ;           Record time of day at wait for longwait determination.
```

```
58 ;
59 ;   V02-005 RIH0028         RICHARD I. HUSTVEDT       24-APR-1981
60 ;           ADD CHECK FOR WAIT AT IPL 2 TO PREVENT COMPUTE LOOP WHEN
61 ;           AST IS PENDING.
62 ;
```

```
64       .SBTTL   DECLARATIONS
65
66 ;
67 ; INCLUDE FILES:
68 ;
69
70       $CEBDEF                                 ;COMMON EVENT BLOCK DEFS
71       $DYNDEF                                 ;DYNAMIC STRUCTURE TYPES
72       $IPLDEF                                 ;IPL DEFINITIONS
73       $PCBDEF                                 ;PCB DEFINITIONS
74       $PHDDEF                                 ;PHD DEFINITIONS
75       $PRDEF                                  ;PROCESSOR REGISTER DEFS
76       $PSLDEF                                 ;PSL DEFINITIONS
77       $SHBDEF                                 ;SHARED MEMORY CONTROL BLK DEFS
78       $SHDDEF                                 ;SHARED MEMORY COMMON DATA PAGE
79       $SSDEF                                  ;STATUS CODE DEFINITIONS
80       $STATEDEF                               ;STATE DEFINITIONS
81       $WQHDEF                                 ;WAIT QUEUE HEADER DEFS
82 ;
83 ; EQUATES:
84 ;
85 EFN=4                                         ;EVENT FLAG NUMBER
86 MASK=8                                        ;WAIT MASK
87       .PSECT   AEXENONPAGED                   ;NON-PAGED
```

```
 89       .SBTTL  EXE$WFLAND - WAIT FOR LOGICAL AND OF EVENT FLAGS
 90 ;++
 91 ;
 92 ;     EXE$WFLAND - WAIT FOR LOGICAL AND OF EVENT FLAGS
 93 ;
 94 ; FUNCTIONAL DESCRIPTION:
 95 ;     EXE$WFLAND RETURNS TO THE CALLER WHEN THE SET OF EVENT
 96 ;     FLAGS SELECTED BY THE MASK ARE ALL SET AND RETURNS THE
 97 ;     STATE OF ALL EVENT FLAGS IN THE SPECIFIED CLUSTER.
 98 ;
 99 ; CALLING SEQUENCE:
100 ;     CALLG   ARGLIST,EXE$WFLAND
101 ;
102 ; INPUT PARAMETERS:
103 ;     04(AP) - EVENT FLAG NUMBER SELECTING CLUSTER
104 ;     08(AP) - MASK SELECTING COMBINATION OF EVENTS
105 ;     R4 - PCB ADDRESS OF CURRENT PROCESS
106 ;
107 ; OUTPUT PARAMETERS:
108 ;     R0 - COMPLETION STATUS CODE
109 ;          CONDITION IS SATISFIED.
110 ;
111 ; SIDE EFFECTS:
112 ;     IF THE SET OF EVENT FLAGS SELECTED BY THE MASK ARE NOT
113 ;     ALL SET, THEN THE PROCESS ISSUING THE WAIT SERVICE CALL WILL
114 ;     BE PLACED IN A WAIT STATE.
115 ;
116 ; COMPLETION CODES:
117 ;     SS$_NORMAL - NORMAL SUCCESSFUL COMPLETION
118 ;     SS$_ILLEFC - ILLEGAL EVENT FLAG CLUSTER NUMBER.  EVENT NUMBER
119 ;                     NOT IN THE RANGE 0-127.
120 ;     SS$_UNASEFC - UNASSIGNED EVENT FLAG CLUSTER.
121 ;
122 ;--
123 EXE$WFLAND::                             ;WAIT FOR LOGICAL AND
124       .WORD   ^M<R2,R3,R4,R5>           ;REGISTER SAVE MASK FOR R2-R5
125       MOVL    #1,R1                     ;SET MODE TO WAITALL
126       BRB     WFRL                      ;AND MERGE WITH COMMON CODE
```

```
128        .SBTTL  EXE$WFLOR - WAIT FOR LOGICAL OR OF EVENTS
129 ;++
130 ;     EXE$WFLOR - WAIT FOR LOGICAL OR OF EVENTS
131 ;
132 ; FUNCTIONAL DESCRIPTION:
133 ;    EXE$WFLOR RETURNS TO THE CALLER WHEN ANY OF THE
134 ;    EVENTS SELECTED BY THE MASK WITHIN THE SPECIFIED CLUSTER
135 ;    ARE SET AND RETURNS THE STATE OF ALL 32 EVENT FLAGS IN THE
136 ;    CLUSTER.
137 ;
138 ; CALLING SEQUENCE:
139 ;    CALLG   ARGLIST,EXE$WFLOR
140 ;
141 ; INPUT PARAMETERS:
142 ;    04(AP) - EVENT FLAG NUMBER TO SELECT CLUSTER
143 ;    08(AP) - MASK SELECTING DESIRED COMBINATION OF EVENTS
144 ;    R4 - PCB ADDRESS OF CURRENT PROCESS
145 ;
146 ; OUTPUT PARAMETERS:
147 ;    R0 - COMPLETION STATUS CODE
148 ;         IS SATISFIED.
149 ;
150 ;
151 ; COMPLETION CODES:
152 ;    SS$_NORMAL - NORMAL SUCCESSFUL COMPLETION
153 ;    SS$_ILLEFC - ILLEGAL EVENT FLAG NUMBER NOT IN THE RANGE 0-127.
154 ;    SS$_UNASEFC - UNASSIGNED EVENT FLAG CLUSTER.
155 ;
156 ; SIDE EFFECTS:
157 ;    THE PROCESS ISSUING THE SERVICE CALL IS BE PLACED IN A
158 ;    WAIT STATE IF NONE OF THE SPECIFIED EVENTS ARE SET.
159 ;
160 ;--
161 EXE$WFLOR::                      ;WAIT FOR LOGICAL OR
162        .WORD   ^M<R2,R3,R4,R5>          ;REGISTER SAVE MASK FOR R2-R5
163        CLRL    R1                       ;SET MODE TO WAIT ANY
164 WFRL:  MOVL    MASK(AP),R0              ;GET WAIT MASK
165        BRB     EXE$WAIT                 ;MERGE WITH COMMON CODE
```

```
167        .SBTTL   EXE$WAITFR - WAIT FOR SINGLE EVENT
168 ;++
169 ;    EXE$WAITFR - WAIT FOR SINGLE EVENT
170 ;
171 ;
172 ; FUNCTIONAL DESCRIPTION:
173 ;    EXE$WAITFR RETURNS TO THE CALLER WHEN THE SPECIFIED SINGLE
174 ;    EVENT FLAG IS SET.  UPON RETURN THE STATE OF ALL 32 EVENT FLAGS
175 ;    WITHIN THE CLUSTER CONTAINING THE SPECIFIED EVENT ARE RETURN.
176 ;
177 ; CALLING SEQUENCE:
178 ;    CALLG    ARGLIST,EXE$WAITFR
179 ;
180 ; INPUT PARAMETERS:
181 ;    04(AP)=EVENT FLAG NUMBER
182 ;    R4 - PCB ADDRESS OF CURRENT PROCESS
183 ;
184 ; OUTPUT PARAMETERS:
185 ;    R0 - COMPLETION STATUS CODE
186 ;         SATISIFIED.
187 ;
188 ; SIDE EFFECTS:
189 ;    IF THE SPECIFIED EVENT FLAG IS NOT SET, THE PROCESS ISSUING THE
190 ;    WAIT SYSTEM SERVICE WILL BE PLACED IN THE APPROPRIATE WAIT
191 ;    STATE.
192 ;
193 ; COMPLETION CODES:
194 ;    SS$_NORMAL - NORMAL SUCCESSFUL COMPLETION
195 ;    SS$_ILLEFC - ILLEGAL EVENT FLAG NUMBER NOT IN THE RANGE 0-127.
196 ;    SS$_UNASEFC - UNASSIGNED EVENT FLAG CLUSTER.
197 ;
198 ; ENVIRONMENT:
199 ;    MODE=KERNEL
200 ;--
201 EXE$WAITFR::                        ;WAIT FOR SINGLE EVENT
202        .WORD    ^M<R2,R3,R4,R5>     ;SAVE REGISTERS R2,R3,R4,R5
203        CLRL     R1                  ;SET MODE
204        ROTL     EFN(AP),#1,R0       ;INIT MASK
205 ;      BRB      EXE$WAIT            ;AND MERGE WITH COMMON CODE
```

```
207      .SBTTL   EXE$WAIT - WAIT COMMON CODE
208 ;++
209 ;   EXE$WAIT - WAIT COMMON CODE
210 ;
211 ; INPUT:
212 ;     04(AP) = EVENT FLAG NUMBER
213 ;     R0 = MASK SELECTING EVENTS OF INTEREST
214 ;     R1 = ANY/ALL MODE SELECTOR
215 ;             0 => ANY
216 ;             1 => ALL
217 ;     R4 = PCB ADDRESS OF CURRENT PROCESS
218 ;
219 ; IMPLICIT INPUTS:
220 ;     CEB IF NON-LOCAL CLUSTER.
221 ;
222 ; OUTPUT:
223 ;     R0 - COMPLETION STATUS CODE
224 ;             SATISIFIED.
225 ;--
226 EXE$WAIT:                                ;WAIT COMMON CODE
227      CVTBL    EFN(AP),R2                 ;GET CLUSTER NUMBER
228      BLSS     10$                        ;ILLEGAL IF NOT (0,1,2,3)
229      ASHL     #-5,R2,R2                  ;RIGHT ALIGN CLUSTER NUMBER
230      MOVAL    PCB$L_EFCS(R4)[R2],R3      ;POINTER TO PCB EVENT CLUSTER
231      MOVB     R2,PCB$B_WEFC(R4)          ;SAVE WAIT CLUSTER NUMBER
232      SOBGTR   R2,30$                     ;BR IF COMMON CLUSTER R2 = (2,3)
233      MOVAQ    SCH$GQ_LEFWQ,R2            ;SET WAIT QUEUE POINTER
234      BRB      WAITCK                     ;
235 10$:          MOVZWL   #SS$_ILLEFC,R0    ;SET ERROR CODE FOR ILLEGAL CLUSTER
236      RET                                 ;AND EXIT
237 20$:          MOVZWL   #SS$_UNASEFC,R0   ;SET ERROR CODE FOR UNASSIGNED
238      RET                                 ;AND EXIT
239 30$:          ADDL3    #CEB$L_EFC,(R3),R2 ;GET CEB ADDRESS FOR EVENT FLAGS
240      BGEQ     20$                        ;CEB ASSIGNED (SYSTEM SPACE ADDRESS)
241      CMPB     #DYN$C_SLAVCEB,<CEB$B_TYPE-CEB$L_EFC>(R2) ;IS THIS IN SH MEM?
242      BNEQ     40$                        ;BR IF IN LOCAL MEMORY
243      MOVL     <CEB$L_MASTER-CEB$L_EFC>(R2),R3 ;GET ADR OF MASTER CEB
244      MOVL     CEB$L_EFC(R3),(R2)         ;COPY EFC FROM MASTER TO SLAVE CEB
245      ASSUME   <CEB$L_EFC+4> EQ CEB$L_WQFL
246 40$:          MOVAL    (R2)+,R3          ;GET EVENT POINTER AND WAIT QUEUE ADDR
247                                          ; R3=CEB$L_EFC, R2=CEB$L_WQFL
248 ;
249 ;   R0 - MASK SELECTING EVENTS OF INTEREST
250 ;   R1 - ANY/ALL MODE SELECTOR
251 ;   R2 - ADDRESS OF WAIT QUEUE HEADER
252 ;   R3 - ADDRESS OF EVENT FLAG VECTOR
253 ;   R4 - PCB ADDRESS
254 ;
255 WAITCK:                                  ;CHECK FOR WAIT SATISFIED
256      SETIPL   #IPL$_SYNCH                ;BLOCK SCHEDULING ACTIVITY
257      BITL     (R3),R0                    ;WAIT FOR LOGICAL OR MAY BE SATISFIED
258      BEQL     WAIT                       ;NO, MUST WAIT
259      BLBS     R1,WAITALL                 ; 1 => WAIT FOR ALL IN MASK
260 NOWAIT:                                  ;
261      MOVL     #SS$_NORMAL,R0             ;RETURN SUCCESS CODE
262      MOVL     12(FP),FP                  ;GET SAVED FRAME POINTER
263      ADDL     S^#EXE$C_CMSTKSZ,SP        ;CLEAN STACK TO PC,PSL
```

```
264     REI                             ;RETURN TO CALLER
266 WAITALL:                            ; WAIT FOR ALL SELECTED EVENTS
267     BICL2   (R3),R0                 ; CLEAR BITS FOR ALREADY SET FLAGS
268     BEQL    NOWAIT                  ;YES, DONT WAIT
269 WAIT:       INSV    R1,#PCB$V_WALL,#1,PCB$L_STS(R4) ;SET WAIT ALL FLAG
270     MCOML   R0,PCB$L_EFWM(R4)       ;SAVE INVERTED WAIT MASK
```

```
272      .SBTTL   SCH$WAIT - PLACE PROCESS IN SELECTED WAIT QUEUE
273 ;++
274 ;    SCH$WAIT - PLACE PROCESS IN SELECTED WAIT QUEUE
275 ;
276 ; FUNCTIONAL DESCRIPTION:
277 ;    SCH$WAIT PLACES THE CURRENT PROCESS IN A WAIT QUEUE
278 ;    SELECTED BY A WAIT QUEUE HEADER ADDRESS SUPPLIED IN A REGISTER
279 ;    A NEW PROCESS IS THEN SELECTED FOR EXECUTION.
280 ;
281 ; CALLING SEQUENCE:
282 ;    JMP/BR   SCH$WAIT
283 ;
284 ; INPUT PARAMETERS:
285 ;    R2 - WAIT QUEUE HEADER ADDRESS
286 ;    R4 - PCB ADDRESS
287 ;    00(SP) - PC AT WHICH TO RESTART PROCESS
288 ;    04(SP) - PSL WITH WHICH TO RESTART PROCESS
289 ;
290 ; IMPLICIT INPUTS:
291 ;    NONE
292 ;
293 ; SIDE EFFECTS:
294 ;    THE PROCESS SPECIFIED BY THE PCB ADDRESS IN R4 IS PLACED
295 ;    IN THE WAIT QUEUE LOCATED BY R2, ITS CONTEXT SAVED,
296 ;    AND A NEW PROCESS SCHEDULED.
297 ;
298 ;
299 ;--
300
301 SCH$WAIT::                              ;PLACE PROCESS IN WAIT STATE
302      CMPW     PCB$W_DIOCNT(R4),PCB$W_DIOLM(R4) ; CHECK FOR DIRECT I/O
303      BNEQ     10$                       ;YES, DONT TRIGGER SWAPPER
304      CMPW     PCB$W_BIOCNT(R4),PCB$W_BIOLM(R4) ;CHECK FOR BUFFERED I/O
305      BEQL     10$                       ;NO, NOT A LONG WAIT
306      BSBW     SCH$SWPWAKE               ;WAKE SWAPPER
307 10$:                                    ;
308      MOVL     12(SP),FP                 ;RESTORE FP
309      ADDL2    S^#EXE$C_CMSTKSZ,SP       ;CLEAN UP KERNEL STACK
310      SUBL2    #4,(SP)                   ;BACK UP SAVED PC
311 SCH$WAITK::                  ;WAIT WITH STACK ALREADY CLEAN
312      INCW     WQH$W_WQCNT(R2)           ;INCREMENT COUNT FOR QUEUE
313      INSQUE   (R4),WQH$L_WQFL(R2)       ;INSERT IN QUEUE
314      MOVW     WQH$W_WQSTATE(R2),PCB$W_STATE(R4) ;SET STATE FOR PROCESS
315 ;
316 ;                                       THE STATE NUMBER IS CONTAINED
317 ;                                       IN THE QUEUE HEADER
318 ;
319 SCH$WAITL::                  ;WAIT WITH STATE SET, STACK CLEANED
320      SVPCTX                              ;SAVE PROCESS CONTEXT
321 SCH$WAITM::                  ;ENTRY FOR MEMORY MANAGEMENT WAIT CODE
322      MOVL     PCB$L_PHD(R4),R5          ;GET PROCESS HEADER ADDRESS
323      ADDW     SCH$GW_IOTA,PHD$W_QUANT(R5) ;CHARGE QUOTA FOR VOLUNTARY WAIT
324      MOVW     EXE$GQ_SYSTIME+2,PHD$W_WAITIME(R5) ;RECORD TIME AT WAIT START
325      CMPB     #4,PHD$B_ASTLVL(R5)       ;NULL ASTLVL?
326      BNEQ     20$                       ;NO, DO LONG CHECK
327 10$:     BRW      W^SCH$SCHED           ;GO SCHEDULE NEXT PROCESS
328
```

```
329 20$:          MOVZBL  PHD$B_ASTLVL(R5),R0 ;FETCH AND ZERO EXTEND PENDING ASTL
330     CMPZV    #PSL$V_CURMOD,#PSL$S_CURMOD,PHD$L_PSL(R5),R0 ;COMPARE WITH WAIT
331                                           ;ACCESS MODE
332     BLSS     10$                          ;BRANCH IF AST NOT DELIVERABLE
333
334 ;
335 ; Test for assumptions that are being made about the layout of the
336 ; PSL that enables the next instruction to work correctly.
337 ;
338 ;   o  IPL field begins on a byte boundary
339 ;   o  IPL field fits into a single byte
340
341
342     ASSUME   <<<PSL$V_IPL/8>*8> - PSL$V_IPL> EQ 0 ; IPL must be byte aligned
343     ASSUME   PSL$S_IPL LE 8               ; IPL field must fit into byte
344
345     BITB     #<PSL$M_IPL@-PSL$V_IPL>,-
346              <PSL$V_IPL/8>+PHD$L_PSL(R5) ;MUST BE AT IPL 0 FOR DELIVERY
347     BNEQ     10$                          ;BRANCH IF AST NOT DELIVERABLE
348     CLRL     R2                           ;SET NULL PRIORITY INCREMENT
349     RPTEVT   AST                          ;REPORT AST EVENT
350     BRB      10$                          ;GO SCHEDULE NEXT PROCESS
351
352     .END
```

SYSCOMMON.LIS

6

```
   1        .TITLE   SYSCOMMON DATA BASES
   2        .IDENT   'V03-003'
   3  ;
   4  ;************************************************************************
   5  ;*                                                                    *
   6  ;* COPYRIGHT (c) 1978, 1980, 1982 BY                                  *
   7  ;* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.             *
   8  ;* ALL RIGHTS RESERVED.                                              *
   9  ;*                                                                    *
  10  ;* THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED *
  11  ;* ONLY IN   ACCORDANCE WITH   THE   TERMS   OF   SUCH   LICENSE   AND WITH THE *
  12  ;* INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR   ANY    OTHER *
  13  ;* COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY *
  14  ;* OTHER PERSON.   NO TITLE TO AND OWNERSHIP OF   THE   SOFTWARE IS   HEREBY *
  15  ;* TRANSFERRED.                                                       *
  16  ;*                                                                    *
  17  ;* THE INFORMATION IN THIS SOFTWARE IS   SUBJECT TO CHANGE WITHOUT NOTICE *
  18  ;* AND   SHOULD   NOT   BE   CONSTRUED AS   A COMMITMENT BY DIGITAL EQUIPMENT *
  19  ;* CORPORATION.                                                       *
  20  ;*                                                                    *
  21  ;* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE   OR   RELIABILITY OF ITS *
  22  ;* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.            *
  23  ;*                                                                    *
  24  ;*                                                                    *
  25  ;************************************************************************
  26  ;
  27  ;++
  28  ; SYSTEM COMMON DATA BASES
  29  ;--
  30  ;
  31  ;
  32  ; AUTHOR: R. HEINEN 9-AUG-76
  33  ;
  34  ; MODIFICATION HISTORY:
  35  ;
  36  ;    V03-003 PHL0042          Peter H. Lipman          02-Apr-1982
  37  ;            Add EXE$GQ_BOOTCB_D cell in front of EXE$GL_BOOTCB
  38  ;            forming a descriptor for the portion of the Boot Control
  39  ;            Block to be checksummed.
  40  ;
  41  ;    V03-002 ROW0074          Ralph O. Weber           26-MAR-1982
  42  ;            Enhance the infinite-due-time TQE, already used to mark the
  43  ;            end of the TQE queue, to be a canonical TQE with the repeat
  44  ;            bit off (TEQ$V_REPEAT).  Give this enhanced block a global
  45  ;            name, EXE$AL_TQENOREPT, which routines not desiring to repeat
  46  ;            a timer call can use to place the address of the canonical TQE
  47  ;            in R5 before returning EXE$SWTIMINT thus ensuring no repeating
  48  ;            of the timer call.
  49  ;
  50  ;    V03-001 PHL0040          Peter H. Lipman          21-Mar-1982
  51  ;            Add EXE$GL_SAVEDUMP to record the number of blocks
  52  ;            of dump file saved in the page file.  This is the
  53  ;            number of blocks to be released to the page file
  54  ;            when the dump has been saved/analyzed.
  55  ;
  56  ;    V02-043 RIH0090          Richard I. Hustvedt       16-Feb-1982
  57  ;            Add cell for TIMESCHDL process priority boost scan.
```

```
 58 ;
 59 ;     V02-042 RIH0089          Richard I. Hustvedt      15-Feb-1982
 60 ;             Add fork block for pool expansion code.  Remove memory
 61 ;             allocation histogram.
 62 ;
 63 ;     V02-041 HRJ0050          Herb Jacobs              27-Jan-1982
 64 ;             Add global cells for machine check and memory error counts.
 65 ;
 66 ;     V02-040 RIH0084          Richard I. Hustvedt      18-Jan-1982
 67 ;             Add small request packet data base.
 68 ;
 69 ;     V02-039 JLV0143          Jake VanNoy              2-Jan-1982
 70 ;             Remove the EXE$V_xxx definitions and move them to
 71 ;             SYSPARAM.
 72 ;
 73 ;     V02-038 RIH0083          Richard I. Hustvedt      1-Jan-1982
 74 ;             Add cells to support non-paged pool extension.
 75 ;
 76 ;     V02-037 KTA0059          Kerbey T. Altmann        31-Dec-1981
 77 ;             Add flag TBCHK to EXE$GL_FLAGS.  Set if there is
 78 ;             a TBCHK processor register.
 79 ;
 80 ;     V02-036 DJD0001          Darrell Duffy            29-Dec-1981
 81 ;             Added IOC$GL_IRPMIN for minimum size of structure
 82 ;             to take from IRP lookaside list.
 83 ;             *TEMP* added memory alc instrumentation histogram
 84 ;
 85 ;     V02-035 HRJ0040          Herb JAcobs              20-Dec-1981
 86 ;             Added flags for knowing whether page file problem messages
 87 ;             have been issued.
 88 ;
 89 ;     V02-034 SRB0042          Steve Beckhardt          30-Nov-1981
 90 ;             Added LCK$GB_MAXDEPTH (contains maximum allowed depth
 91 ;             of resource names).
 92 ;
 93 ;     V02-033 HRJ0031          Herb Jacobs              2-Nov-1981
 94 ;             Add system wide flags for operator override of day type
 95 ;             as either primary or secondary.
 96 ;
 97 ;     V02-032 PHL0023          Peter H. Lipman          1-Nov-1981
 98 ;             Change SYS$SYSDISK to SYS$SYSDEVICE
 99 ;             Change 16 char name EXE$V_BLKHOL8USY to EXE$V_BLKHOLBSY
100 ;
101 ;     V02-031 SPF0041          Steve Forgey             28-Sep-1981
102 ;             Initally enable all accounting except image.
103 ;
104 ;     V02-030 PHL0017          Peter H. Lipman          21-Sep-1981
105 ;             Reuse the RMS Paging flag from V02-021, it wasn't needed.
106 ;             New flag allows for disabling the use of concealed devices.
107 ;
108 ;     V02-029 SRB0031          Steve Beckhardt          19-Aug-1981
109 ;             Added several more cells for lock manager use
110 ;
111 ;     V02-028 SPF0017          Steve Forgey             17-Aug-1981
112 ;             Add accounting manager flag field.
113 ;
114 ;     V02-027 KTA0026          Kerbey T. Altmann        21-Jul-1981
```

```
115 ;            Add indirection on LOG$AL_LOGTBL, and allow for
116 ;            table sizes on each table.
117 ;
118 ;   V02-026 KTA0023         Kerbey T. Altmann        17-Jun-1981
119 ;            Remove group/system name table listheads; add cells
120 ;            for use in hash table support of these names.
121 ;
122 ;   V02-025 STJ0050         Steven T. Jeffreys       13-Jun-1981
123 ;            Addes support for mount verification.  This includes
124 ;            the longwords EXE$GL_SYSFLAGS and EXE$GL_SVAPTE, and
125 ;            the blakhole page wait queue list head, EXE$GQ_BLKHOLWQ.
126 ;
127 ;   V02-024 KTA0022         Kerbey T. Altmann        14-Jun-1981
128 ;            Add new flag to EXE$GL_FLAGS, SSINHIBIT.  If set then
129 ;            system services can be inhibited on a per-process basis.
130 ;
131 ;   V02-023 PHL0010         Peter H. Lipman          05-Jun-1981
132 ;            Remove quad word descriptors for SYS.EXE, SYSDUMP.DMP
133 ;            and SWAPFILE.SYS.  Remove the system WCB.  This is
134 ;            now built by INIT.  SYS.EXE and SYSDUMP.DMP may now
135 ;            be non-contiguous.  The swapfile descriptor was obsolete
136 ;            some time ago.
137 ;
138 ;   V02-022 KTA0020         Kerbey T. Altmann        02-Jun-1981
139 ;            Added IOC$GL_CRBTMOUT, list of CRB's to check for timeout.
140 ;
141 ;   V02-021 PHL0009         Peter H. Lipman          30-Apr-1981
142 ;            Added EXE$GL_BOOTCB which points at data and code
143 ;            allowing BUGCHECK to do bootdriver style virtual
144 ;            block I/O from SYS.EXE and to SYSDUMP.DMP.
145 ;
146 ;            Added new flag to EXE$GL_FLAGS for RMS paging.  When RMS
147 ;            paging is shut off, RMS is loaded into non-paged pool.
148 ;
149 ;   V02-020 SRB0019         Steve Beckhardt          23-Apr -1981
150 ;            Added system variables for lock manager
151 ;
152 ;   V02-019 PHL0007         Peter H. Lipman          2-Apr-1981
153 ;            Change default device name from SYS$DISK to SYS$SYSDISK
154 ;
155 ;   V02-018 PHL0007         Peter H. Lipman          27-Mar-1981
156 ;            Add top level directory string passed from VMB to
157 ;            SYSBOOT to INIT.  This is the directory all the system
158 ;            directories are found in.  If null, then the system
159 ;            directories are in the MFD usual.
160 ;
161 ;   V02-017 KDM0048         Kathleen D. Morse        27-Mar-1981
162 ;            Add pointer to MP code that is loaded in pool.
163 ;
164 ;   V02-016 PHL0007         Peter H. Lipman          26-Mar-1981
165 ;            Add descriptor for FIL$OPENFILE cache.
166 ;
167 ;   V02-015 KTA0001         Kerbey T. Altmann        15-Dec-1981
168 ;            Add cell for system-wide user rundown service
169 ;            (EXE$GL_USRUNDWN).
170 ;
171 ;   V0214   CAS0002         C. A. Samuelson          12-Dec-1980
```

```
172 ;              Add cells for counting unexpected SCB interrupts and for
173 ;              wait loop iteration counter.
174 ;
175 ;    V0213   SPF0001        Steve Forgey               02-Oct-1980
176 ;              Add large request packet (LRP) data base.
177 ;
178 ;
179 ;
180 ; MACRO LIBRARY CALLS
181 ;
182      $ACMDEF                            ; DEFINE ACCOUNTING MANAGER OFFSETS
183      $CADEF                             ; DEFINE CONDITIONAL ASSEMBLY PARAMETER
184      $DYNDEF                            ; DEFINE DATA STRUCTURE CODES
185      $FKBDEF                            ; DEFINE FORK BLOCK OFFSETS
186      $IPLDEF                            ; DEFINE INTERRUPT PRIORITIES
187      $IRPDEF                            ; DEFINE IO REQUEST PACKET STRUCTURE
188      $LOGDEF                            ; DEFINE LOG OFFSETS
189      $SGNDEF                            ; DEFINE SYSGEN VALUES
190      $TQEDEF                            ; DEFINE TQE OFFSETS
191      $WCBDEF                            ; DEFINE WCB OFFSETS
192
193 ;
194 ; MACRO DEFINITIONS:
195 ;
196
197      .MACRO  TIME
198      .LONG   0                          ;
199      .LONG   ^X859034                   ; HIGH ORDER BITS OF TIME
200      .ENDM   TIME
201
```

```
203        .SBTTL   SYSCOMMON
204
205        .PSECT   $$$260,QUAD,WRT
206 ;+
207 ; SYSTEM COMMON DATA BASES
208 ;
209 ; SYSTEM FLAGS LONG WORD
210 ;
211 ; NOTE: THE ACTUAL DEFAULT SETTING FOR EXE$GL_FLAGS IS IN SYSPARAM IN
212 ;    CELL EXE$GL_DEFFLAGS AND IS COPIED INTO THE WORKING LOCATION,
213 ;    EXE$GL_FLAGS BY INIT.
214 ;
215 EXE$GL_FLAGS::
216        .LONG    0                        ; SYSTEM CONTROL FLAGS
217
218 ;
219 ; ERROR LOG MAILBOX CONTROL
220 ;
221 EXE$GQ_ERLMBX::                          ;
222        .WORD    0                        ; UNIT NUMBER (0 => NONE)
223        .WORD    0                        ; RESERVED
224        .LONG    0                        ; PID OF ASSIGNER
225
226
227 ;
228 ;    VECTORS TO USER SUPPLIED CHANGE MODE HANDLERS
229 ;
230 EXE$GL_USRCHMK::                         ; VECTOR TO USER SUPPLIED CHANGE MODE
231        .LONG    0                        ; TO KERNEL HANDLER
232 EXE$GL_USRCHME::                         ; VECTOR TO USER SUPPLIED CHANGE MODE
233        .LONG    0                        ; TO EXECUTIVE HANDLER
234
235 ;
236 ; FORK QUEUE LISTHEADS
237 ;
238
239        .ALIGN   QUAD
240 SWI$GL_FQFL::                            ; FORWARD LINK
241 A:  .LONG    A                           ; IPL-6 LISTHEAD
242 SWI$GL_FQBL::                            ; BACKWARD LINK
243        .LONG    A                        ;
244 2$: .LONG    2$,2$          ; IPL-7 LISTHEAD
245 3$: .LONG    3$,3$          ; IPL-8 LISTHEAD
246 4$: .LONG    4$,4$          ; IPL-9 LISTHEAD
247 5$: .LONG    5$,5$          ; IPL-10 LISTHEAD
248 6$: .LONG    6$,6$          ; IPL-11 LISTHEAD
249
250 ;
251 ; LOGICAL NAME TABLE ADDRESS TABLE
252 ;
253 ; NOTE: THE INDIRECTION ON THE SYSTEM/GROUP LEVEL IS NECESSARY SO
254 ;    THAT THE CODE THAT ACCESS ANY TABLE CAN BE SYMMETRICAL AND
255 ;    SIMPLE.  THE INDIRECTION ON THE PROCESS LEVEL IS DICATATED
256 ;    BY THE FACT THAT THE ADDRESS MAY BE DIFFERENT IN EACH PROCESS
257 ;    P1 SPACE.
258 ;
259
```

```
260 LOG$AL_LOGTBL::                        ; FIRST TWO SET UP NOW IN INIT
261       .LONG   10$                      ; SYSTEM NAME TABLE
262       .LONG   20$                      ; GROUP NAME TABLE
263       .LONG   CTL$GL_LOGTBL            ; PROCESS NAME TABLE
264
265 10$:         .LONG   0                 ; ADDR FILLED IN BY SWAPPER INIT
266 20$:         .LONG   0                 ; ADDR FILLED IN BY SWAPPER INIT
267
268 ;
269 ; LOGICAL NAME TABLE VARIABLE(S)
270 ;
271
272 LOG$AB_HTBLCNT::                        ; NUMBER OF ENTRIES IN HASH TABLE
273       .BYTE   0,0,0,0                  ; (EXPRESSED AS A POWER OF TWO)
274
275 ;
276 ; LOGICAL NAME TABLE MUTEX TABLE
277 ;
278
279 LOG$AL_MUTEX::                          ;
280       .WORD   -1,0                     ; SYSTEM NAME TABLE
281       .WORD   -1,0                     ; GROUP NAME TABLE
282
283 ;
284 ; ADDRESS OF SYSTEM BOOT DEVICE UCB AND DEFAULT DEVICE
285 ;
286
287 EXE$GL_SYSUCB::                         ; SYSTEM DEVICE UCB ADDRESS
288       .LONG   0                        ;
289 FIL$GT_DDDEV::                          ; FILE READ DEFAULT DEVICE STRING
290       .ASCIC  /SYS$SYSDEVICE/          ; LOGICAL NAME STRING


291 FIL$GT_TOPSYS::                         ; ASCIC TOP LEVEL DIR STRING
292       .BLKB    10                      ; FILLED IN BY INIT WITH STRING
293                                         ; FROM VMB AND SYSBOOT
294       .ALIGN  LONG
295 FIL$GQ_CACHE::                          ; FILE READ CACHE DESCRIPTOR
296       .BLKQ    1                       ;
297 EXE$GQ_BOOTCB_D::                       ; DESCRIPTOR FOR BOOT CONTROL BLOCK
298       .BLKQ    1                       ; BYTE COUNT TO BE CHECKSUMMED
299 EXE$GL_BOOTCB == EXE$GQ_BOOTCB_D+4      ; ADDRESS OF BOOT CONTROL BLOCK
300
301 EXE$GL_SAVEDUMP::                       ; BLOCK COUNT TO RELEASE TO PAGE FILE
302       .BLKL    1                       ; WHEN DUMP IN PAGE FILE IS COPIED
303
304 ;
305 ; I/O DONE PACKET QUEUE
306 ;
307
308       .ALIGN  QUAD
309 IOC$GL_PSFL::                           ;
310 B:  .LONG   B                          ; FORWARD LINK
311 IOC$GL_PSBL::                           ;
312       .LONG   B                        ; BACKWARD LINK
313
314 ;
```

```
315 ; I/O PACKET LOOK ASIDE LISTHEAD
316 ;
317
318 IOC$GL_IRPFL::                          ;
319      .LONG   IOC$GL_IRPFL                ;
320 IOC$GL_IRPBL::                          ;
321      .LONG   IOC$GL_IRPFL                ;
322 IOC$GL_IRPREM::                         ;
323      .LONG   0                           ; Address of partial packet
324 IOC$GL_IRPCNT::                         ;
325      .LONG   0                           ; Current count of allocated packets
326 IOC$GL_IRPMIN::                         ; Minimum size to take from list
327      .LONG   <<IRP$C_LENGTH*2>/3>
328
329
330
331 ;
332 ; SMALL REQUEST PACKET LOOK ASIDE LISTHEAD AND DATA BASE
333 ;
334
335 IOC$GL_SRPFL::                          ;
336      .LONG   IOC$GL_SRPFL                ;
337 IOC$GL_SRPBL::                          ;
338      .LONG   IOC$GL_SRPFL                ;
339 IOC$GL_SRPSIZE::                        ;
340      .LONG   0                           ;
341 IOC$GL_SRPMIN::                         ;
342      .LONG   0                           ;
343 IOC$GL_SRPSPLIT::                       ;
344      .LONG   0                           ;
345 IOC$GL_SRPREM::                         ;
346      .LONG   0                           ; Address of packet remainder
347 IOC$GL_SRPCNT::                         ;
348      .LONG   0                           ; Current count of allocated packets
349
350 ;
351 ; LARGE REQUEST PACKET LOOK ASIDE LISTHEAD AND DATA BASE
352 ;
353
354 IOC$GL_LRPFL::                          ;
355      .LONG   IOC$GL_LRPFL                ;
356 IOC$GL_LRPBL::                          ;
357      .LONG   IOC$GL_LRPFL                ;
358 IOC$GL_LRPSIZE::                        ;
359      .LONG   0                           ;
360 IOC$GL_LRPMIN::                         ;
361      .LONG   0                           ;
362 IOC$GL_LRPSPLIT::                       ;
363      .LONG   0                           ;
364 IOC$GL_LRPREM::                         ;
365      .LONG   0                           ; Address of packet remainder
366 IOC$GL_LRPCNT::                         ;
367      .LONG   0                           ; Current count of allocated packets
368 ;
369 ; FORK BLOCK TO USE FOR POOL EXPANSION
370 ;
371 IOC$GL_POOLFKB::
```

```
372      .LONG    0,0                      ; Flink, Blink
373      .WORD    FKB$C_LENGTH             ; Size
374      .BYTE    DYN$C_FRK                ; Type
375      .BYTE    IPL$_QUEUEAST            ; Fork IPL (6)
376      .LONG    0                        ; Fork PC
377      .LONG    0                        ; Fork R3
378      .LONG    0                        ; Fork R4
379 IOC$GL_PFKB1NT::                       ;
380      .LONG    0                        ; Fork block interlock 0 => free
381 ;
382 ;
383 ; SYSTEM AQB LISTHEAD
384 ;
385 IOC$GL_AQBLIST::
386      .LONG    0                        ; SINGLE LINK, EMPTY
387 ;
388 ; SYSTEM-WIDE MOUNTED VOLUME LIST
389 ;
390 IOC$GQ_MOUNTLST::
391      .LONG    .
392      .LONG    .-4
393 ;
394 ; TERMINAL BROADCAST MESSAGE LIST HEAD
395 ;
396 IOC$GQ_BRDCST::                        ;
397 1$: .LONG    1$,1$            ; EMPTY
398
399 ;
400 ; SINGLY LINKED LIST OF CRB'S TO SCAN FOR TIMEOUTS
401 ;
402 IOC$GL_CRBTMOUT::
403      .LONG    0                        ; EMPTY
404 ;
405 ; GROUP GLOBAL SECTION DESCRIPTOR LIST HEAD
406 ;
407
408 EXE$GL_GSDGRPFL::                      ; FORWARD LINK
409      .LONG    .
410 EXE$GL_GSDGRPBL::                      ; BACKWARD LINK
411      .LONG    .-4
412
413 ;
414 ; SYSTEM GLOBAL SECTION DESCRIPTOR LIST HEAD
415 ;
416
417 EXE$GL_GSDSYSFL::                      ; FORWARD LINK
418      .LONG    .
419 EXE$GL_GSDSYSBL::                      ; BACKWARD LINK
420      .LONG    .-4
421
422 ;
423 ; GLOBAL SECTION DESCRIPTOR BLOCK LOOK ASIDE LIST HEAD
424 ;
425
426 EXE$GL_GSDFREFL::                      ; FORWARD LINK
427      .LONG    .
428 EXE$GL_GSDFREBL::                      ; BACKWARD LINK
```

```
429         .LONG    .-4
430 ;
431 ; GLOBAL SECTION DESCRIPTOR DELETE PENDING LIST
432 ;
433
434 EXE$GL_GSDDELFL::                    ; FORWARD LINK
435         .LONG    .
436 EXE$GL_GSDDELBL::                    ; BACKWARD LINK
437         .LONG    .-4
438
439 ;
440 ; WINDOW CONTROL BLOCK DELETE QUEUE - GLOBAL SECTION WINDOWS ARE
441 ;    PLACED HERE WHEN THE SECTION IS DELETED. THEY ARE THEN
442 ;    REMOVED FROM THIS QUEUE AND DEACCESSED.
443 ;
444
445 EXE$GL_WCBDELFL::                    ; FORWARD LINK
446         .LONG    .
447 EXE$GL_WCBDELBL::                    ; BACKWARD LINK
448         .LONG    .-4
449
450 ;
451 ; SYSTEM WINDOW CONTROL BLOCK LIST - ALL WINDOWS CRAFTED BY MMG$INIWCB
452 ;    AND INIT ARE PLACED HERE.
453 ;
454
455 EXE$GL_SYSWCBFL::
456         .LONG    .                   ; FORWARD LINK
457 EXE$GL_SYSWCBBL::
458         .LONG    .-4                 ; BACKWARD LINK
459
460 ;
461 ; TIMER PERFORMANCE STATISTICS
462 ;
463
464         .IF NE   CA$_MEASURE         ; CHECK FOR MEASUREMENT ENABLED
465
466         .ALIGN   LONG
467 PMS$GL_KERNEL::                      ; TIME IN KERNEL MODE
468         .LONG    0
469 PMS$GL_EXEC:                         ; TIME IN EXECUTIVE MOVE
470         .LONG    0
471 PMS$GL_SUPER:                        ; TIME IN SUPERVISOR MODE
472         .LONG    0
473 PMS$GL_USER:                         ; TIME IN USER MODE
474         .LONG    0
475 PMS$GL_INTER:                        ; TIME ON INTERRUPT STACK
476         .LONG    0
477 PMS$GL_COMPAT::                      ; TIME IN COMPATIBILITY MODE
478         .LONG    0
479
480         .ENDC
481
482 ;
483 ; SYSTEM ABSOLUTE TIME IN SECONDS
484 ;
485
```

```
486        .ALIGN  LONG
487 EXE$GL_ABSTIM::                        ; ABSOLUTE TIME IN SECONDS
488        .LONG    0                      ;
489
490 ;
491 ; SYSTEM ABSOLUTE TIME IN NANOSECONDS
492 ;
493
494        .ALIGN  QUAD
495 EXE$GQ_SYSTIME::                        ; SYSTEM ABSOLUTE TIME IN NANOSECONDS
496        TIME                            ; QUAD WORD OF INITIAL TIME
497
498 EXE$GL_PFAILTIM::                       ; TODR AT POWER FAIL
499        .LONG    0                      ;
500 EXE$GL_PFATIM::                         ; DURATION OF LAST POWER FAILURE
501        .LONG    0                      ; IN .01 SECOND UNITS FOR POWER FAIL
502                                         ; AST.
503
504 ;
505 ; TIME DEPENDENT SCHEDULER REQUEST QUEUE
506 ;
507
508        .ALIGN  QUAD
509 EXE$GL_TQFL::                           ; FORWARD LINK OF TIME QUEUE LISTHEAD
510        .LONG    DEVICETIM              ; LINK TO DEVICE TIME OUT ENTRY
511 EXE$GL_TQBL:                            ; BACK LINK OF TIME QUEUE LISTHEAD
512        .LONG    PERMENTRY              ; LINK TO PERMENENT ENTRY
513
514 ;
515 ; DEVICE TIME OUT TIME QUEUE ENTRY
516 ;
517
518        .ALIGN  QUAD
519 DEVICETIM:                              ; DEVICE TIME OUT TIME QUEUE ENTRY
520        .LONG    PERMENTRY              ; FORWARD LINK TO PERMANENT ENTRY
521        .LONG    EXE$GL_TQFL            ; BACK LINK TO LISTHEAD
522        .WORD    0                      ; SIZE OF ENTRY
523        .BYTE    DYN$C_TQE              ; TYPE OF DATA STRUCTURE
524        .BYTE    TQE$C_SSREPT           ; REQUEST TYPE OF ENTRY
525        .LONG    EXE$TIMEOUT            ; PC OF SYSTEM SUBROUTINE
526        .LONG    IOC$GL_DEVLIST         ; ADDRESS OF I/O DATA BASE LISTHEAD
527        .BLKL    1                      ; ONE UNUSED LONGWORD
528        TIME                            ; QUAD WORD OF EXPIRATION TIME
529        .LONG    100000*100             ; DELTA REPEAT TIME OF 1 SECOND
530        .LONG    0                      ;
531
532 ;
533 ; PERMANENT TIME QUEUE ENTRY
534 ;
535
536        .ALIGN  QUAD
537 EXE$AL_TQENOREPT::                      ; Global name of canonical, no repeat,
538                                         ; timer queue entry
539 PERMENTRY:                             ; PERMENENT TIME QUEUE ENTRY
540        .LONG    EXE$GL_TQFL            ; FORWARD LINK TO LISTHEAD
541        .LONG    DEVICETIM             ; BACK LINK TO DEVICE TIME OUT ENTRY
542        .WORD    0                      ; SIZE OF ENTRY
```

```
543        .BYTE    DYN$C_TQE                    ; TYPE OF DATA STRUCTURE
544                                              ; This TQE cannot repeat.
545        .BYTE    TQE$C_TMSNGL & <^CTQE$M_REPEAT> ; REQUEST TYPE OF ENTRY
546        .BLKL    3                            ; THREE UNUSED LONGWORDS
547        .LONG    ^XOFFFFFFFF                  ; INFINITY EXPIRATION TIME
548        .LONG    ^XOFFFFFFFF                  ;
549
550
551 ;
552 ; IOC DATA BASE MUTEX
553 ;
554
555 IOC$GL_MUTEX::                               ; MUTEX FOR IOC DATA BASE
556        .WORD    -1                           ; INITIAL COUNT OF -1
557        .WORD    0                            ; ALL FLAGS CLEARED
558
559
560 ;
561 ; COMMON EVENT LIST MUTEX
562 ;
563
564 EXE$GL_CEBMTX::                              ; MUTEX FOR COMMON EVENT CLUSTER LIST
565        .WORD    -1                           ; INITIAL COUNT OF -1
566        .WORD    0                            ; ALL FLAGS CLEARED
567
568 ;
569 ; DYNAMIC PAGED MEMORY MUTEX
570 ;
571
572 EXE$GL_PGDYNMTX::                            ; PAGED DYNAMIC MEMORY MUTEX
573        .WORD    -1                           ; INITIAL COUNT OF -1
574        .WORD    0                            ; ALL FLAGS CLEAR
575 ;
576 ; GLOBAL SECTION DESCRIPTOR TABLE MUTEX
577 ;
578
579 EXE$GL_GSDMTX::                              ; GLOBAL SECTION DESCRIPTOR MUTEX
580        .WORD    -1                           ; INITIAL COUNT OF -1
581        .WORD    0                            ; ALL FLAGS CLEAR
582
583 ;
584 ; SHARED MEMORY GLOBAL SECTION DESCRIPTOR TABLE MUTEX
585 ;
586
587 EXE$GL_SHMGSMTX::                            ; SHARED MEMORY GLOBAL SECTION DSC MUTE
588
589        .WORD    -1                           ; INITIAL COUNT OF -1
590        .WORD    0                            ; ALL FLAGS CLEAR
591
592 ;
593 ; SHARED MEMORY MAILBOX TABLE MUTEX
594 ;
595
596 EXE$GL_SHMMBMTX::                            ; SHARED MEMORY MAILBOX TABLE MUTEX
597
598        .WORD    -1                           ; INITIAL COUNT OF -1
599        .WORD    0                            ; ALL FLAGS CLEAR
```

```
600
601 ;
602 ; ENQUEUE/DEQUEUE TABLES MUTEX
603 ;
604
605 EXE$GL_ENQMTX::                        ; ENQUEUE/DEQUEUE TABLES MUTEX
606      .WORD   -1                        ; INITIAL COUNT OF -1
607      .WORD   0                         ; ALL FLAGS CLEAR
608
609 ;
610 ; KNOWN FILE TABLE DATA
611 ;
612
613 EXE$GL_KFIMTX::                        ; KNOWN FILE TABLE MUTEX
614      .WORD   -1                        ; INITIAL COUNT OF -1
615      .WORD   0                         ; ALL FLAGS CLEAR
616 EXE$GL_KNOWNFIL::                      ; ADDRESS OF KNOWN FILE LIST VECTOR
617      .LONG   0                         ; EACH ENTRY OF WHICH POINTS TO
618                                        ; A LIST HEAD FOR THAT KNOWN FILE LIST
619 KFI$GL_F11AACP::                       ; ADDRESS OF KNOWN FILE ENTRY FOR
620      .LONG   0                         ; SYSTEM DISK ACP IF SHARING ACP
621
622 ;
623 ; GLOBAL PAGE TABLE
624 ;
625
626 EXE$GL_GPT::
627      .LONG   0                         ; ADDRESS OF FIRST FREE GLOBAL PTE
628                                        ; SETUP BY INIT
629      .LONG   0                         ; NO BYTES IN BLOCK
630
631 ;
632 ; SYSTEM VERSION NUMBER
633 ;
634 SYS$GQ_VERSION::                       ;
635      .LONG   SYS$K_VERSION
636      .ASCII  /    /
637
638      .ALIGN  LONG
639
640 ;
641 ; JOB CONTROLLER DATA CELLS
642 ;
643 SYS$GW_IJOBCNT::       .WORD   0        ; CURRENT COUNT OF INTERACTIVE LOGINS
644 SYS$GW_NJOBCNT::       .WORD   0        ; CURRENT COUNT OF NETWORK LOGINS
645 SYS$GW_BJOBCNT::       .WORD   0        ; CURRENT COUNT OF BATCH LOGINS
646
647 ;
648 ; PROCESS INDEX OF NEXT PROCESS TO CHECK FOR PRIORITY BOOST
649 ;
650 EXE$GW_SCANPIX::       .WORD   2        ; START AFTER SWAPPER AND NULL
651      .ALIGN  LONG
652
653 ;
654 ; ADDRESS OF SYSTEM-WIDE MESSAGE SECTION
655 ;
656 EXE$GL_SYSMSG::                .LONG   0        ; ADDRESS OF SYSTEM-WIDE MESSAG
```

```
657
658 ;
659 ; ADDRESS OF SYSTEM-WIDE USER RUNDOWN SERVICE VECTOR
660 ;
661 EXE$GL_USRUNDWN::
662      .LONG   0                          ; VECTOR FOR SYSTEM-WIDE RUNDOWN
663
664      .ALIGN  QUAD
665 ;
666 ; DYNAMIC STORAGE REGION - NONPAGED
667 ;
668
669      .PSECT  $$$260,QUAD,WRT
670 EXE$GL_NONPAGED::                        ;
671      .LONG   11                         ; DISABLE ALL FORK INTERRUPTS
672      .LONG   0                          ; ADDRESS OF FIRST FREE BLOCK
673      .LONG   0                          ; NO BYTES IN BLOCK
674 EXE$GL_SPLITADR::                        ; LOOKASIDE I/O PACKET LIST SPLIT ADDRE
675      .LONG   0                          ; ADDRESS OF FIRST FREE BLOCK
676
677
678 ;
679 ; DYNAMIC STORAGE REGION - PAGED
680 ;
681
682      .PSECT  $$$260,QUAD,WRT
683 EXE$GL_PAGED::                           ;
684      .LONG   0                          ; ADDRESS OF FIRST FREE BLOCK
685      .LONG   0                          ; NO BYTES IN BLOCK
686
687
688 ;
689 ; POINTER TO RMS SHARED FILE DATA BASE
690 ;
691 RMS$GL_SFDBASE::                         ; POINTER TO SHARED FILE DATA BASE
692      .LONG   0                          ; INITIALLY EMPTY
693
694 ;
695 ; SHARED MEMORY CONTROL BLOCK LISTHEAD
696 ;
697 EXE$GL_SHBLIST::                         ; SHARED MEMORY CONTROL BLOCKS
698      .LONG   0
699
700 ;
701 ; Address of the realtime control block that describes and contains the
702 ; bit map of SPTs used in connect to interrupt requests.
703 ;
704
705 EXE$GL_RTBITMAP::                        ; Realtime SPT bit map.
706      .LONG   0
707
708 ;
709 ; Cells for Machine Check recovery block
710 ;
711
712      .PSECT  $$$260,QUAD,WRT
713
```

```
714 MCHK$GL_MASK::
715      .LONG   0                         ; Function mask for current recovery bl
716 MCHK$GL_SP::
717      .LONG   0                         ; Saved SP for return at end of block
718                                        ; 0 (zero) if no current recovery block
719 ;
720 ; CPU error counts
721 ;
722 EXE$GL_MCHKERRS::
723      .LONG   0                         ; Count of machine checks since boot
724 EXE$GL_MEMERRS::
725      .LONG   0                         ; Count of memory errors since boot
726
727 ;
728 ; Cell to count unexpected DW780 Unibus Adapter interrupts through vector
729 ;
730 IO$GL_UBA_INT0::
731      .LONG   0                         ; Counter for UBA interrups thru vector
732 ;
733 ; PFN of page used to remap virtual address of powerfailed adapters to
734 ;
735 EXE$GL_BLAKHOLE::
736      .LONG   0                         ; Page to use for anything you don't ca
737
738 ;
739 ; Cell for counting unexpected interrupts through SCB NEXUS vector 0 and
740 ; through SCB vector 0.
741 ;
742 IO$GL_SCB_INT0::
743      .LONG   0                         ; Counter for unexpected SCB interrupts
744 ;
745 ; Cell for initial value for wait loop counter, replacing use of hardware
746 ; interval timer in device drivers.  Used by system macro $TIMEWAIT.
747 ;
748 EXE$GL_TENUSEC::
749      .LONG   0                         ; No. of times loop executes in 10 u-se
750 ;
751 ; Pointer to MP code, that is loaded into pool.
752 ;
753 EXE$GL_MP::
754      .LONG   0                         ; Pointer to MP code
755 ;
756 ; Site specific cell that can be used by users to contain the address of
757 ; allocated regions of pool or anything else they need.
758 ;
    EXE$GL_SITESPEC::                      ; Site specific longword
760      .LONG   0
761 ;
762 ; Address of top of interrupt stack (i.e. limit of stack)
763 ;
764 EXE$GL_INTSTKLM::                      ; Top of interrupt stack
765      .LONG   0
766 ;
767 ; Lock manager variables
768 ;
769 LCK$GL_IDTBL::                         ; Address of lock id table
770      .LONG   0
```

```
771 LCK$GL_NXTID::                          ; Next lock id to use
772       .LONG    0
773 LCK$GL_MAXID::                          ; Max. lock id
774       .LONG    0
775 LCK$GL_HASHTBL::                        ; Address of resource hash table
776       .LONG    0
777 LCK$GL_HTBLCNT::                        ; Number of entries in hash table
778       .LONG    0                        ; (expressed as a power of two)
779 LCK$GL_TIMOUTQ::                        ; Lock timeout queue header
780       .LONG    LCK$GL_TIMOUTQ           ; (used for deadlock detection)
781       .LONG    LCK$GL_TIMOUTQ
782 LCK$GL_PRCMAP::                         ; Address of process bitmap
783       .LONG    0                        ; (one bit for each process)
784 LCK$GB_MAXDEPTH::
785       .BYTE    0                        ; Maximum depth of resource names
786
787       .ALIGN   LONG
788
789
790 ;
791 ; DEFINE THE FLAG BITS IN EXE$GL_SYSFLAGS.
792 ;
793       $GBLINI  GLOBAL
794       $VIELD   EXE,0,<-
795               BLKHOLBSY,-               ; THE BLAKHOLE PAGE IS BUSY
796               >
797
798 ;
799 ; DEFINE A GLOBAL LONGWORD FOR SYSTEM-WIDE STATUS FLAGS.
800 ;
801 EXE$GL_SYSFLAGS::                        ; SYSTEM-WIDE STATUS FLAGS
802       .LONG    0
803
804 ;
805 ; DEFINE A LONGWORD THAT CONTAINS THE ACCOUNTING MANAGER CONTROL FLAGS
806 ;
807 EXE$GL_ACMFLAGS::                        ; ACCOUNTING MANAGER CONTROL FLAGS
808       .LONG    ^C<1@ACM$V_IMAGE>        ; ACCOUNTING ENABLED EXCEPT IMAGE
809
810 ;
811 ; DEFINE A LONGWORD THAT CONTAINS THE SYSTEM VIRTUAL ADDRESS OF A PTE
812 ; (IN THE SPT) THAT MAPS THE BLAKHOLE PAGE INTO SYSTEM SPACE.
813 ;
814 EXE$GL_SVAPTE::                          ; SVAPTE FOR PTE THAT MAPS BLAKHOLE PAG
815       .LONG    0
816
817 ;
818 ; DEFINE A QUADWORD A FUNCTION AS THE WAIT QUEUE LIST HEAD FOR THE BLAKHOL
819 ; PAGE.  DEVICES THAT WISH TO USE THE BLAKHOLE PAGE FOR MOUNT VERIFICATION
820 ; WILL BE PLACED IN THE WAIT QUEUE LIST IF THE BLAKHOLE PAGE IS BUSY.
821 ;
822 EXE$GQ_BLKHOLWQ::                        ; BLAKHOLE PAGE WAIT QUEUE LIST HEAD
823       .LONG    EXE$GQ_BLKHOLWQ          ; SET FLINK
824       .LONG    EXE$GQ_BLKHOLWQ          ; SET BLINK
825
826
827       .END
```

SYSPARAM.MAR

```
            .IF      NDF,PRMSW                          ;
            .TITLE   SYSPARAM - SYSTEM PARAMETERS
            .IFF                                        ;
            .TITLE   PARAMETER - PARAMETER DESCRIPTORS FOR SYSPARAM
            .ENDC
            .IDENT   'V03-009'

;
;*********************************************************************************
;*                                                                             *
;*   COPYRIGHT (c) 1978, 1980, 1982 BY                                         *
;*   DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.                    *
;*   ALL RIGHTS RESERVED.                                                      *
;*                                                                             *
;*   THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED     *
;*   ONLY IN  ACCORDANCE WITH  THE  TERMS  OF  SUCH  LICENSE  AND WITH THE     *
;*   INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR  ANY  OTHER     *
;*   COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY     *
;*   OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY     *
;*   TRANSFERRED.                                                              *
;*                                                                             *
;*   THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE     *
;*   AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT     *
;*   CORPORATION.                                                              *
;*                                                                             *
;*   DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS     *
;*   SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                   *
;*                                                                             *
;*                                                                             *
;*********************************************************************************
;


;++
; FACILITY:  EXECUTIVE DATA BASE
;
; ABSTRACT:
;       SYSPARAM CONTAINS THE EXECUTIVE CONTROL PARAMETERS AND CERTAIN
;       KEY VARIABLES.
;
; ENVIRONMENT:
;
; AUTHOR:  R. I. HUSTVEDT, CREATION DATE:   09-OCT-1977
;
; MODIFIED BY:
;
;       V03-009 HRJ0064          Herb Jacobs             21-Apr-1982
;               Fix default values of RMS_DFMBC, RMS_EXTEND, MPW_LOLIMIT.
;
;
;       V03-008 JLV0208          Jake Vannoy             15-Apr-1982
;               Fix default values for TTY_SILOTIME, WSINC, WSDEC.
;
;       V03-007 JLV0207          Jake VanNoy             5-APR-1982
;               Add some smarts to PARAMETER macro to ignore dynamic
;               bits if they are not in EXE$GL_DEFFLAGS. This prevents
;               the dynamic bits in STJ0249 from being included in
;               PRM$M_DYNFLAGS.
;
;       V03-006 STJ0249          Steven T. Jeffreys      01-Apr-1982
;               Add global longword for system message flags.  Define
;               EXE$V_MOUNTMSG and EXE$V_DISMOUMSG to control operator
;               notification of mounts and dismounts, respectively.
```

```
;               By default, both are disabled.
;
;       V03-005 MLJ0085         Martin L. Jack          01-Apr-1982
;               Add EXE$V_JOBQUEUES, EXE$V_REINITQUE to control initialization
;               of JBCSYSQUE by job controller.
;
;
;       V03-004 PHL0041         Peter H. Lipman         01-Apr-1982
;               Default setting for SAVEDUMP must be off.
;
;
;       V03-003 HRJ0061         Herb Jacobs             28-Mar-1982
;               Fix categories for /MAJOR, /SYS, /SYSGEN, correct
;               some default values, and change global name of SWPFILCNT.
;
;
;       V03-002 PHL0040         Peter H. Lipman         22-Mar-1982
;               Add EXE$V_PAGFILDMP, EXE$V_SAVEDUMP, EXE$GW_PGFL_FID
;               to support the dump file in the page file.
;
;
;       V03-001 JLV0193         Jake VanNoy             15-MAR-1982
;               Add TTY_SILOTIME. Change defaults for TTY_OWNER and TTY_PROT
;               and PQL_ENQLM. Change names of TTYSCANDELTA to TTY_SCANDELTA
;               and DIALTYPE to TTY_DIALTYPE.
;
;
;       V02-081 RIH0095         Richard I. Hustvedt      2-Mar-1982
;               Add FREEGOAL parameter and adjust selected default values.
;
;
;       V02-080 JLV0189         Jake VanNoy             23-FEB-1982
;               Make Full duplex and No modem the defaults in TTY_DEFCHAR.
;
;
;       V02-079 HRJ0055         Herb Jacobs             23-Feb-1982
;               Add GROWLIM sysgen parameter and fix several more default
;               values.
;
;
;       V02-078 RIH0090         Richard I. Hustvedt     16-Feb-1982
;               Add process count of processes to scan.
;
;
;       V02-077 HRJ0053         Herb Jacobs             14-Feb-1982
;               Adjust more V3 default sysgen values.
;
;
;       V02-076 RLRUDA2         Robert L. Rappaport     12-Feb-1982
;               Another spelling correct for UDABURSTRATE.
;
;
;       V02-075 RIH0086         Richard I. Hustvedt     11-Feb-1982
;               Refine user parameter definitions and adjust selected
;               default values.
;
;
;       V02-074 RLRUDA1         Robert L. Rappaport     09-Feb-1982
;               Correct spelling of SCS$GB_UDABURST.
;
;
;       V02-073 HRJ0052         Herb Jacobs             08-Feb-1982
;               Add reserved user and VMS sysgen parameters.
;
;
;       V02-072 RLRUDAB         Robert L. Rappaport     08-Feb-1982
;               Added UDABURSTRATE parameter to allow for setting the
;               UDA50 burst rate.
;
;
;       V02-071 STJ0198         Steven T. Jeffreys,     05-Feb-1982
;               Added MVTIMEOUT parameter to set an upper limit on
;               the time a device will languish in mount verification.
;
;
;       V02-070 NPK2014         N. Kronenberg           31-Jan-1982
;               Tuned SCS min/max/default values and added parameter
```

```
;           PAPOOLINTERVAL.

;     V02-069 HRJ0049         Herb Jacobs            25-Jan-1982
;             Set default value for TBSKIPWSL.

;     V02-068 RIH0086         Richard I. Hustvedt    25-Jan-1982
;             Make IRP,LRP,SRP names consistent.  Set proper minimum
;             value for SRPSIZE.  Fix name inconsistencies for MPW
;             parameters.

;     V02-067 JLV0167         Jake VanNoy            25-Jan-1982
;             Make TTY_DMASIZE dynamic.

;     V02-066 RIH0085         Richard I. Hustvedt    23-Jan-1982
;             Adjust pool parameter defaults.  Add LRPMIN, SRPMIN

;     V02-065 HRJ0048         Herb Jacobs            18-Jan-1982
;             Reset default values for V3 to make SYSGEN USE DEFAULT useful.

;     V02-064 RIH0084         Richard I. Hustvedt    18-Jan-1982
;             Add parameters for the small request packet list.
;             Change LRP parameters to normal.  Adjust defaults for
;             virtual pool parameters.

;     V02-063 LJA0003         Laurie Anderson         8-Jan-1982
;             Removed RMS constants no longer in use because
;             SET RMS /COMPAT went away.

;     V02-062 JLV0142         Jake VanNoy             2-Jan-1981
;             Remove global definition of PRM$M_DYNFLAGS from
;             SYSPARAM, leaving it in PARAMETER only.

;     V02-061 JLV0142         Jake VanNoy             2-Jan-1981
;             Add to PARAMETER macro to create symbol PRM$M_DYNFLAGS.
;             Move EXE$V_xxx symbols from SYSCOMMON to this module.
;             Change DIALTYPE to be a bit mask. Correct spelling
;             error in RMS_DFMBFIDX parameter name.

;     V02-060 RIH0083         Richard I. Hustvedt    31-Dec-1981
;             Add parameters for virtual non-paged pool allocation.

;     V02-059 ACG0251         Andrew C. Goldstein,   29-Dec-1981  21:24
;             Add RMS_FILEPROT (default file protection)

;     V02-058 HRJ0040         Herb Jacobs            28-Dec-1981
;             Remove MPW_MINCLUSTER parameter, raise minimum value of
;             FREELIM to 2 times shell size to prevent swapper FPG wait.

;     V02-057 MIR0058         Michael I Rosenblum     9-Dec-1981
;             Add to the defaults to TTY_DEVDEPEND, TT$M_MODEM.

;     V02-056 LJK0096         Lawrence J. Kenah       3-Dec-1981
;             Change default and maximum values for KFILSTCNT.

;     V02-055 LJK0095         Lawrence J. Kenah       3-Dec-1981
;             Add cell that contains address of boundary between
;             nonpaged and pageable exec routines. This cell is
;             used by INIT and SYSBOOT.

;     V02-054 HRJ0036         Herb Jacobs            29-Nov-1981
;             Remove AWSMAX parameter.
```

```
;
;       V02-053 LJK0080            Lawrence J. Kenah        13-Nov-1981
;               Move cell containing maximum page file index out of
;               parameter area. Change name of cell containing minimum
;               page file index to MMG$GW_MINPFIDX.
;
;       V02-052 LJK0077            Lawrence J. Kenah         3-Nov-1981
;               Set maximum values for PAGFILCNT and SWPFILCNT to 63.
;               Remove SPECIAL designation from these two parameters.
;
;       V02-051 JLV0105            Jake VanNoy              30-Oct-1981
;               Add TTY$GW_CLASSNAM, terminal class driver name prefix.
;
;       V02-050 DJD0002            Darrell Duffy            26-October-1981
;               Add RJOBLIM parameter for remote terminals.
;
;       V02-049 PHL0017            Peter H. Lipman          21-Sep-1981
;               Add new CONCEAL_DEVICE parameter
;
;       V02-048 KTA0035            Kerbey T. Altmann        14-Sep-1981
;               Lower CHANCNT to 2047 due to current restriction that
;               all channel indexes must have same sign.
;
;       V02-047 LJK0066            Lawrence J. Kenah        11-Sep-1981
;               Allow PQL parameters to be other than DYNAMIC. Make
;               WSDEFAULT PQL parameters STATIC. Add checks in
;               in PQL macro for text strings that are too long.
;
;       V02-046 LJK0061            Lawrence J. Kenah         8-Sep-1981
;               Restricted new RMS parameter names to 15 characters and their
;               associated value names to 11 characters.
;
;       V02-045 LMK0004            Len Kawell               02-Sep-1981
;               Corrected name of RMSEXTEND.
;
;       V02-044 DJD0001            Darrell Duffy            24-August-1981
;               Added RMS_COMPAT and RMS_PROLOG for rms compatibility
;               checking.  Add RMS_EXTEND for extend quantity.
;               Also add GBLPAGFIL for page file backing store global
;               page limit.
;
;       V02-043 SRB0031            Steve Beckhardt          19-Aug-1981
;               Modified lock manager sysgen parameters, added
;               DLCKEXTRASTK parameter and modified logical name
;               hash table parameters.
;
;       V02-042 LJK0044            Lawrence J. Kenah        14-Aug-1981
;               Change PAGFILCNT and SWPFILCNT parameters to allow
;               multiple page and swap files. Eliminate obsolete
;               parameters and global cells.
;
;       V02-041 LJK0031            Lawrence J. Kenah        14-Aug-1981
;               Complete changes for large physical memory configurations
;               by adding MINPFN cell and removing temporary synonyms.
;
;       V02-040 KTA0030            Kerbey T. Altmann        13-Aug-1981
;               Change some spellings from KTA0028 and add new
;               switch made possible by MIR0012.
;
;       V02-039 MIR0012            Michael I. Rosenblum     13-Aug-1981
;               1) Changed the type word to a long word to accomidate
```

```
;           more parameters.
;           2) Added several terminal characteristics for the new
;              terminal driver support.
;
;   V02-038 KTA0028          Kerbey T. Altmann         30-Jul-1981
;           1) Add 4 longwords to record CPU harware/ucode revs.
;           2) Add size parameter for each log name table.
;           3) Add SCS parameters.
;
;   V02-037 JLV0052          Jake VanNoy               29-Jul-1981
;           Add TTY type to parameters so a SHOW/TTY can be done
;           from SYSGEN. Change MAXPRINTSYMB from 255 to 32.
;
;   V02-036 HRJ0023          Herb Jacobs               06-Jul-1981
;           Set better defaults for some of the paging/swapping
;           parameters.
;
;   V02-035 HRJ0023          Herb Jacobs               19-Jun-1981
;           Added swap allocation unit and MPW_MINCLUSTER.
;
;   V02-034 KTA0023          Kerbey T. Altmann         16-Jun-1981
;           Add parameter for logical name hash table size.
;
;   V02-033 JLV0028          Jake VanNoy               15-Jun-1981
;           Add TTY$GB_HANGUP, which defines whether LOGOUT hangs
;           up a dialup line or not.
;
;   V02-032 KTA0022          Kerbey T. Altmann         14-Jun-1981
;           Add new flag SSINHIBIT to EXE$GL_FLAGS. If set, then
;           code in INIT will reset vectors for CHMK, CHME to
;           special entry points that may inhibit system services.
;
;   V02-031 LJK0030          Lawrence J. Kenah         27-May-1981
;           Add global name MMG$GW_BIGPFN to upper word in cell
;           MMG$GL_MAXPFN. Change names of BLINK, FLINK, SHRCNT,
;           and WSLX from PFN$AW_name to PFN$Ax_name.
;
;           Add temporary synonyms for old names so that SYSBOOT
;           and XDELTA still work.
;
;   V02-030 HRJ0020          Herb Jacobs               4-May-1981
;           Added SCH$GW_LONGWAIT and SGN$GW_DZROCL.
;
;   V02-029 KTA0017          Kerbey T. Altmann         24-Apr-1981
;           Added new sysgen parameters for SCS services:
;           BUFFCOUNT,CONNCOUNT,RESPCOUNT.
;
;   V02-028 HRJ0020          Herb Jacobs               20-Apr-1981
;           Added new sysgen parameters for BORROWLIM, SWPPGCNT,
;           and new PQL entry for WSEXTENT.
;
;   V02-027 SRB0013          Steve Beckhardt           25-Mar-1981
;           Added new sysgen parameters for lock manager.
;           Also added PQL parameters for enqueue quota.
;
;   V02-026 KTA0002          Kerbey T. Altmann         14-Jan-1981
;           Change system date to 1981.
;
;   V02-025 RIH0003          Richard I. Hustvedt       3-Dec-1980
;           Raise maximum allowable numebr of processes to 8192.
;           Change SGN$GW_MAXGPGCT to a longword, SGN$GL_MAXGPGCT.
```

```
;
;         V02-024 SPF0001          Steve Forgey           02-Oct-1980
;                 Added large request packet (LRP) parameters, LRPCNT
;                 and LRPSIZE.
;
;         V02-023 SRB0004          Steve Beckhardt         4-Sep-1980
;                 Removed DYNAMIC qualifier from DUMPBUG
;
;--
          .PAGE
          .SBTTL    DECLARATIONS
;
; INCLUDE FILES:
;
          $PQLDEF                            ; DEFINE QUOTA LIST CODES
          $PRMDEF                            ; DEFINE PARAMETER DESCRIPTOR
          $TTDEF                             ; DEFINE TERMINAL CHARACTERISTICS
          $TT2DEF                            ; DEFINE MORE TERMINAL DEFINTIONS

;
; MACRO TO GENERATE PARAMETER DESCRIPTOR IF PRMSW IS TRUE OTHERWISE
; SIMPLY DEFINE PARAMETERS
;
;
; MACROS:
;
          .MACRO    PFNALC    SIZ,SYMLST
          .IRP      SYM,<SYMLST>
          DEFINE    PFN$A'SIZ'_'SYM
          .ENDR
          .ALIGN    LONG
          .LONG     0                              \
          .ENDM     PFNALC

          .MACRO    PARAMETER,ADDRESS,NAME,TYPE=STATIC,DEFAULT=0,MIN=-1,MAX=-1,-
                    UNIT,SIZE=LONG,BIT        ;
          .IF       DF,PRMSW                  ; DO IF CREATING PARAMETER DESCRIPTOR
PRMSAV...=.                                   ; SAVE LOC COUNTER
          .PSECT    $$$918,LONG               ;
BAS...=.                                      ; SET BASE FOR THIS DESCRIPTOR
          .BLKB     PRMSC_LENGTH              ; GENERATE SPACE
SAV...=.                                      ;
          PRM       L_ADDR                    ;
          .LONG     ADDRESS                   ;
          PRM       L_DEFAULT                 ;
          .LONG     DEFAULT                   ;
          PRM       L_MIN                     ;
          .LONG     MIN                       ;
          PRM       L_MAX                     ;
          .LONG     MAX                       ;
          .IF       GREATER         <%LENGTH(NAME)-PRMSC_MAXNAMLEN>
          .ERROR    ; The parameter called NAME has too many characters
          .ENDC
          PRM       T_NAME                    ;
          .ASCIC    %'NAME'%                  ;
          .IF       GREATER         <%LENGTH(UNIT)-PRMSC_MAXUNILEN>
          .ERROR    ; The quantity called UNIT has too many characters
          .ENDC
          PRM       T_UNIT                    ;
          .ASCIC    %'UNIT'%                  ;
```

```
        PRM     B_SIZE                  ; SET FIELD SIZE
        .IF     B,BIT                   ;
        .BYTE   PRM$C_'SIZE             ;
        .IFF                            ;
        .BYTE   1                       ;
        PRM     B_POS                   ;
        .BYTE   BIT                     ;
        .ENDC                           ;
        PRM     L_FLAGS                 ;
        TYP...=0                        ;
        .IRP    TYPNAM,<TYPE>           ;
        TYP...=TYP...!PRM$M_'TYPNAM     ;

        .IF NB BIT                      ; DEFINE PRM$M_DYNFLAGS
        .IF EQ PRM$M_'TYPNAM-PRM$M_DYNAMIC
        .IF IDN ADDRESS,EXE$GL_DEFFLAGS
        PRM$M_DYNFLAGS == PRM$M_DYNFLAGS!<1@BIT>
        .ENDC
        .ENDC
        .ENDC

        .ENDR                           ;
        .LONG   TYP...                  ;
        .=SAV...                        ; REPOSITION LOCATION COUNTER
        .PSECT  $$$917A,PAGE            ; BACK TO NORMAL PSECT
        .=PRMSAV...                     ; RESTORE LOCATION COUNTER
        .IFF                            ;
        .IF     B,BIT                   ;
        .ALIGN  'SIZE'                  ;
ADDRESS'::                              ; DEFINE GLOBAL VALUE
        .ENDC                           ;
        .ENDC                           ;
        .IF     B,BIT                   ;
        .ALIGN  'SIZE'                  ;
        .'SIZE' DEFAULT                 ; GENERATE DEFAULT VALUE
        .ENDC                           ;
        .ENDM   PARAMETER               ;

        .MACRO  PRM,OFFSET              ;
        .=BAS...+PRM$'OFFSET            ;
        .ENDM   PRM                     ;

;
; MACRO TO CONDITIONALLY DEFINE LABELS
;
        .MACRO  DEFINE,LABEL            ;
        .IF     NDF,PRMSW               ;
LABEL'::                                ;
        .IFF                            ;
LABEL':                                 ;
        .ENDC                           ;
        .ENDM   DEFINE                  ;
;
;       MACRO TO GENERATE PROCESS QUOTA LIST TABLES
;
;       PQL     QUOTA_NAME,DEFAULT,MIN,FLAG,UNIT,DYNAMIC_STATE
;
        .MACRO  PQL Q,DEFLT=0,MINIM=0,FLAG=0,UNT,DYNAMIC_FLAG=DYNAMIC
        .IF     NDF,PRMSW               ;
        .PSECT  $$$917,PAGE
        .IFF                            ;
```

```
                .PSECT  $$$917A,PAGE                ;
                .ENDC                               ;
                PQLSAV...=.                          ; SAVE LOCATION COUNTER
                .=PQL$AL_DEFAULT+<4*PQL$_'Q>        ; POINT INTO DEFAULT TABLE
                PARAMETER       ADDRESS=PQL$GD'Q,-          ;
                                DEFAULT=DEFLT,-            ;
                                NAME=PQL_D'Q,-   ;
                                SIZE=LONG,-                ;
                                TYPE=<PQL,SYSGEN,DYNAMIC_FLAG>,-         ;
                                UNIT=UNT                   ;
                .IF     NDF,PRMSW                    ;
                .PSECT  $$$917,PAGE                  ;
                .IFF
                .PSECT  $$$917A,PAGE                 ;
                .ENDC                                ;
PQLSAV...=.                                          ;
                .=PQL$AL_MIN+<4*PQL$_'Q>             ; POINT INTO MINIMUM VALUE TABLE
                PARAMETER       ADDRESS=PQL$GM'Q,-          ;
                                DEFAULT=MINIM,-            ;
                                NAME=PQL_M'Q,-   ;
                                SIZE=LONG,-                ;
                                TYPE=<PQL,SYSGEN,DYNAMIC_FLAG>,-         ;
                                UNIT=UNT                   ;
                .IF     NDF,PRMSW
                .PSECT  $$$917,PAGE                  ;
                .IFF
                .PSECT  $$$917A,PAGE
                .ENDC                                ;
PQLSAV...=.                                          ;
                .=PQL$AB_FLAG+PQL$_'Q                ; POINT INTO FLAG BYTE FOR QUOTA
                .BYTE   FLAG                         ; AND FILL IN FLAG
                .=PQLSAV...                          ; RESTORE LOCATION COUNTER
                .ENDM   PQL                          ;


;
; EQUATED SYMBOLS:
;
PQL_V_DEDUCT=0                                       ; DEDUCTIBILE QUOTA FLAG

PQL_M_DEDUCT=1                                       ; FLAG VALUE FOR DEDUCTIBLE QUOTA
DEDUCTIBLE=PQL_M_DEDUCT                              ; NAME FOR READIBILITY

.IF     DF,PRMSW                                     ; DO IF PARAMETER
PRM$M_DYNFLAGS == 0
.ENDC


;
; DEFINE THE CONTROL BITS IN EXE$GL_FLAGS
;
                $GBLINI GLOBAL
                $VIELD  EXE,0,<-
                        SYSWRTABL,-                 ; LEAVE SYSTEM READ ONLY CODE WRITABLE
                        NOAUTOCNF,-                 ; NO AUTOMATIC CONFIGURATION OF UBA
                        SYSPAGING,-                 ; ENABLE SYSTEM PAGING
                        POOLPGING,-                 ; ENABLE DYNAMIC POOL PAGING
                        SIMULATOR,-                 ; RUNNING ON SIMULATOR
                        NOCLOCK,-                   ; DO NOT TURN ON CLOCK
                        CRDENABL,-                  ; ENABLE CRD ERROR DETECTION
                        SBIERR,-                    ; ENABLE SBI ERROR INTERRUPT
                        INIT,-                      ; RMS AND FILE SYSTEM INITIALIZED
                        SETTIME,-                   ; FORCE SOLICITATION OF TIME
```

```
                    FATAL_BUG,-                  ; FORCE ALL BUG CHECKS FATAL
                    MULTACP,-                    ; USE MULTIPLE FILE ACP'S
                    NOCLUSTER,-                  ; TURN OFF PAGE FAULT CLUSTERING
                    BUGREBOOT,-                  ; AUTO REBOOT ON BUGCHECK
                    SYSUAFALT,-                  ; ALTERNATE LOGICAL NAME FOR SYSUAF
                    SHRF11ACP,-                  ; MAKE F11ACP SHARABLE AT BOOT TIME
                    BUGDUMP,-                    ; TAKE SYSTEM DUMP ON BUGCHECK
                    RESALLOC,-                   ; ENABLE RESOURCE ALLOCATION CHECKS
                    CONCEALED,-                  ; ENABLE USE OF CONCEALED DEVICES
                    SSINHIBIT,-                  ; INHIBIT SYSTEM SERVICES PER-PROCESS
                    EXPLICITP,-                  ; IF SET TODAY IS CONSIDERED PRIMARY
                    EXPLICITS,-                  ; IF SET TODAY IS CONSIDERED SECONDARY
                    PGFLFRAG,-                   ; SET IF PAGE FILE FRAGMENTED MSG ISSUED
                    PGFLCRIT,-                   ; SET IF PAGE FILE FULL MSG ISSUED
                    TBCHK,-                      ; SET IF PROCESSOR REGISTER TBCHK PRESEN'
                    PAGFILDMP,-                  ; SET IF DUMP IS IN PAGE FILE
                    SAVEDUMP,-                   ; SET TO SAVE DUMP UNTIL ANALYZED
                    JOBQUEUES,-                  ; Set if JOBCTL to enable queues
                    REINITQUE,-                  ; Set if JOBCTL to reinitialize JBCSYSQU
          >

;
; OWN STORAGE:
;
          .IF       NDF,PRMSW                    ;
          .PSECT    $$$917,PAGE                  ; PAGE ALIGNED
          .IFF                                   ;
          .PSECT    $$$917A,PAGE
          .ENDC                                  ;
          DEFINE    EXE$A_SYSPARAM               ; SYSTEM PARAMETER BASE
          .IF       DF,PRMSW                     ;
BOO$A_SYSPARAM::                                 ; BASE OF DEFAULTS
          .PSECT    $$$918,LONG                  ; PARAMETER DESCRIPTOR LIST
BOO$A_PRMBLK::                                   ;
          .ENDC                                  ;
          .IF       NDF,PRMSW                    ;
          .PSECT    $$$917,PAGE                  ;
          .IFF
          .PSECT    $$$917A,PAGE
          .ENDC

          .PAGE
          .SBTTL    SYSTEM TIME VARIABLES
;
;                   SYSTEM TIME VARIABLES
;
          DEFINE    EXE$GQ_TODCBASE              ; TIME OF DAY CLOCK BASE (BOOT TIME)
          .QUAD     ^X008A099474798000           ; 01-JAN-1982 00:00:00.00
;
          DEFINE    EXE$GL_TODR                  ; TIME OF DAY REGISTER VALUE CORRESPONDI
          .LONG     1@28                         ; TO EXE$GQ_TODCBASE; IT'S NOT ZERO
                                                 ; BECAUSE ANYTHING LESS THAN 1@28
                                                 ; IS USED TO INDICATE CLOCK LOST POWER
          .PAGE
          .SBTTL    SYSGEN PARAMETERS
;
;         SYSGEN PARAMETERS
;

;
; DEFAULT PAGE FAULT CLUSTER SIZE - SPECIFIES THE MAXIMUM NUMBER OF
```

```
;         PAGES WHICH WILL BE READ FROM SECTIONS NOT SPECIFYING A CLUSTER FACTOR.
;         THIS ALSO APPLIES TO PAGE FILE PAGES.
;
          PARAMETER           ADDRESS=SGN$GW_DFPFC,-    ;
                              DEFAULT=32,-             ;
                              MIN=0,-                  ;
                              MAX=127,-                ;
                              NAME=PFCDEFAULT,-        ;
                              SIZE=WORD,-              ;
                              TYPE=<DYNAMIC,SYS,MAJOR>,-      ;
                              UNIT=Pages
;
; DEFAULT PAGE TABLE PAGE FAULT CLUSTER SIZE - SPECIFIES THE MAXIMUM NUMBER OF
;         OF PAGE TABLES TO ATTEMPT TO READ TO SATISFY A FAULT FOR A NON-RESIDENT
;         PAGE TABLE.
;
          PARAMETER           ADDRESS=SGN$GB_PGTBPFC,-        ;
                              DEFAULT=2,-              ;
                              MIN=0,-                  ;
                              MAX=127,-                ;
                              NAME=PAGTBLPFC,-         ;
                              SIZE=BYTE,-              ;
                              TYPE=<DYNAMIC,SPECIAL>,-        ;
                              UNIT=Pages
;
;         PAGE FAULT CLUSTER FOR SYSTEM PAGING
;
          PARAMETER           ADDRESS=SGN$GB_SYSPFC,- ;
                              DEFAULT=1,-              ;
                              MIN=0,-                  ;
                              MAX=127,-                ;
                              NAME=SYSPFC,-            ;
                              SIZE=BYTE,-              ;
                              TYPE=<SPECIAL>,-         ;
                              UNIT=Pages
;
; NUMBER OF KNOWN FILE LISTS - ESTABLISHES THE MAXIMUM NUMBER OF KNOWN
;         FILE LISTS THAT CAN BE MADE KNOWN TO THE SYSTEM.
;
          PARAMETER           ADDRESS=SGN$GB_KFILSTCT,-       ;
                              DEFAULT=4,-              ;
                              MIN=2,-                  ;
                              MAX=255,-                ;
                              NAME=KFILSTCNT,-         ;
                              SIZE=BYTE,-              ;
                              TYPE=<SYSGEN,SYS>,-      ;
                              UNIT=Slots

          .ALIGN   WORD                          ;
;
; GLOBAL SECTION COUNT - DETERMINES THE MAXIMUM NUMBER OF GLOBAL SECTIONS
;         WHICH CAN BE MADE KNOWN TO THE SYSTEM BY ALLOCATING THE NECESSARY
;         STORAGE FOR THE GST ENTRIES.
;
          PARAMETER           ADDRESS=SGN$GW_GBLSECNT,-       ;
                              DEFAULT=80,-             ;
                              MIN=20,-                 ;
                              NAME=GBLSECTIONS,-       ;
                              SIZE=WORD,-              ;
                              TYPE=<SYSGEN,SYS,MAJOR>,-       ;
                              UNIT=Sections
```

```
;
; GLOBAL PAGE COUNT - ESTABLISHES THE SIZE OF THE GLOBAL PAGE TABLE AND THE
;       LIMIT FOR THE TOTAL NUMBER OF GLOBAL PAGES THAT CAN BE CREATED.
;

        PARAMETER           ADDRESS=SGN$GL_MAXGPGCT,-          ;
                            DEFAULT=3072,-          ;
                            MIN=512,-               ;
                            NAME=GBLPAGES,-         ;
                            SIZE=LONG,-             ;
                            TYPE=<SYSGEN,SYS,MAJOR>,-              ;
                            UNIT=Pages
;
; GLOBAL PAGE PAGE FILE PAGE LIMIT - ESTABLISHES THE MAXIMUM NUMBER OF GLOBAL
; PAGES WITH PAGE FILE BACKING STORE THAT CAN BE CREATED.
;

        PARAMETER           ADDRESS=SGN$GL_GBLPAGFIL,-          ;
                            DEFAULT=1024,-          ;
                            MIN=128,-               ;
                            NAME=GBLPAGFIL,-        ;
                            SIZE=LONG,-             ;
                            TYPE=<SYS>,-            ;
                            UNIT=Pages
;
; MAXIMUM PROCESS COUNT - DETERMINES THE MAXIMUM NUMBER OF PROCESSES
;
        PARAMETER           ADDRESS=SGN$GW_MAXPRCCT,-          ;
                            DEFAULT=72,-            ;
                            MIN=12,-                ;
                            MAX=8192,-              ;
                            NAME=MAXPROCESSCNT,-    ;
                            SIZE=WORD,-             ;
                            TYPE=<SYSGEN,SYS,MAJOR>,-              ;
                            UNIT=Processes

;
; PROCESS SCAN COUNT - DETERMINES THE MAXIMUM NUMBER OF PROCESSES TO SCAN
; FOR PRIORITY BOOSTING.
;
        PARAMETER           ADDRESS=SGN$GW_PIXSCAN,-;
                            DEFAULT=1,-             ;
                            MIN=0,-                 ;
                            MAX=8192,-              ;
                            NAME=PIXSCAN,-          ;
                            SIZE=WORD,-             ;
                            TYPE=<SPECIAL,DYNAMIC>,-;
                            UNIT=Processes

;
; PROCESS SECTION COUNT - GUARANTEED NUMBER OF PROCESS SECTIONS THAT CAN
;       BE CREATED.  DEPENDING ON SIZE OF WORKING SET, THE ACTUAL NUMBER
;       OF SECTIONS CAN ACTUALLY BE GREATER.
;
        PARAMETER           ADDRESS=SGN$GW_MAXPSTCT,-          ;
                            DEFAULT=32,-            ;
                            MIN=5,-                 ;
                            MAX=1024,-              ;
                            NAME=PROCSECTCNT,-      ;
                            SIZE=WORD,-             ;
                            TYPE=<SYSGEN,SYS>,-                 ;
```

UNIT=Sections

;
; MINIMUM WORKING SET SIZE - ESTABLISHES THE SMALLEST SIZE THAT ADJWSL WILL
;   SET A PROCESS' WORKING SET.
;
        PARAMETER   ADDRESS=SGN$GW_MINWSCNT,-   ;
                            DEFAULT=20,-   ;
                            MIN=10,-   ;
                            NAME=MINWSCNT,-   ;
                            SIZE=WORD,-   ;
                            TYPE=<STATIC,SYSGEN,SYS>,-   ;
                            UNIT=Pages

;
; NUMBER OF PAGING FILES - DETERMINES THE MAXIMUM NUMBER OF PAGING FILES
;   THAT CAN BE MADE KNOW TO THE SYSTEM.
;
        PARAMETER   ADDRESS=SGN$GW_PAGFILCT,-   ;
                            DEFAULT=2,-   ;
                            MIN=1,-   ;
                            MAX=63,-   ;
                            NAME=PAGFILCNT,-   ;
                            SIZE=WORD,-   ;
                            TYPE=<SYS,SYSGEN>,-   ;
                            UNIT=Files

;
; NUMBER OF SWAP FILES - ESTABLISHES THE MAXIMUM NUMBER OF SWAPFILES THAT
;   CAN BE MADE KNOWN TO THE SYSTEM.
;
        PARAMETER   ADDRESS=SGN$GW_SWPFILES,-   ;
                            DEFAULT=2,-   ;
                            MIN=0,-   ;
                            MAX=63,-   ;
                            NAME=SWPFILCNT,-   ;
                            SIZE=WORD,-   ;
                            TYPE=<SYS,SYSGEN>,-   ;
                            UNIT=Files

;
; SYSTEM WORKING SET COUNT - ESTABLISHES THE NUMBER OF PAGES FOR THE WORKING
;   SET CONTAINING THE CURRENTLY RESIDENT PAGES OF PAGABLE SYSTEM SPACE.
;
        PARAMETER   ADDRESS=SGN$GW_SYSDWSCT,-   ;
                            DEFAULT=160,-   ;
                            MIN=20,-   ;
                            MAX=16384,-   ;
                            NAME=SYSMWCNT,-   ;
                            SIZE=WORD,-   ;
                            TYPE=<SYSGEN,SYS,MAJOR>,-   ;
                            UNIT=Pages

;
; INTERRUPT STACK SIZE - ESTABLISHES THE SIZE OF THE INTERRUPT STACK IN PAGES
;
        PARAMETER   ADDRESS=SGN$GW_ISPPGCT,-   ;
                            DEFAULT=2,-   ;

```
                                MIN=1,-                         ;
                                NAME=INTSTKPAGES,-              ;
                                SIZE=WORD,-                     ;
                                TYPE=<SYS,SYSGEN>,-             ;
                                UNIT=Pages
;
; AMOUNT OF EXTRA INTERRUPT STACK TO LEAVE WHEN DOING DEADLOCK SEARCH
;
        PARAMETER               ADDRESS=LCK$GL_EXTRASTK,-       ;
                                DEFAULT=512,-                   ;
                                MIN=256,-                       ;
                                NAME=DLCKEXTRASTK,-             ;
                                SIZE=LONG,-                     ;
                                TYPE=<SPECIAL>,-                ;
                                UNIT=Bytes                      ;


;
; BALANCE SET COUNT - DETERMINES THE MAXIMUM NUMBER OF PROCESS THAT CAN BE
;       BE CONCURRENTLY RESIDENT.
;
        PARAMETER               ADDRESS=SGN$GL_BALSETCT,-       ;
                                DEFAULT=36,-    ;
                                MIN=4,-         ;
                                MAX=1024,-      ;
                                NAME=BALSETCNT,-            ;
                                SIZE=LONG,-     ;
                                TYPE=<SYSGEN,SYS,MAJOR>,-        ;
                                UNIT=Slots
;
; COUNT OF PRE-ALLOCATED I/O PACKETS - DETERMINES THE NUMBER OF I/O PACKETS
;       TO BE PRE-ALLOCATED AND LINKED TOGETHER FOR FAST ALLOCATION AND
;       DEALLOCATION.
;
        PARAMETER               ADDRESS=SGN$GL_IRPCNT,- ;
                                DEFAULT=60,-                    ;
                                MIN=0,-                         ;
                                MAX=32768,-                     ;
                                NAME=IRPCOUNT,-                 ;
                                SIZE=LONG,-                     ;
                                TYPE=<SYSGEN,MAJOR,SYS>,-       ;
                                UNIT=Packets
;
; NUMBER OF PACKETS TO WHICH THE IRPLIST MAY BE EXTENDED.
;
        PARAMETER               ADDRESS=SGN$GL_IRPCNTV,-;
                                DEFAULT=1000,-                  ;
                                MIN=0,-                         ;
                                MAX=32768,-                     ;
                                NAME=IRPCOUNTV,-                ;
                                SIZE=LONG,-                     ;
                                TYPE=<SYSGEN,SYS>,-             ;
                                UNIT=Packets
;
; MAXIMUM SIZE OF PROCESS WORKING SET. DETERMINES THE SYSTEM WIDE MAXIMUM
;       SIZE OF A PROCESS WORKING SET REGARDLESS OF PROCESS QUOTA.
;
        PARAMETER               ADDRESS=SGN$GL_MAXWSCNT,-       ;
                                DEFAULT=1024,-                  ;
                                MIN=60,-                        ;
                                MAX=16384,-                     ;
                                NAME=WSMAX,-                    ;
```

```
                        SIZE=LONG,-                    ;
                        TYPE=<SYSGEN,SYS,MAJOR>,-          ;
                        UNIT=Pages


;
; NON-PAGED DYNAMIC POOL - DETERMINES THE NUMBER OF BYTES TO ALLOCATE FOR
;       THE NON-PAGED DYNAMIC POOL.
;
        PARAMETER       ADDRESS=SGN$GL_NPAGEDYN,-          ;
                        DEFAULT=64000,-                ;
                        MIN=16384,-                    ;
                        NAME=NPAGEDYN,-                ;
                        SIZE=LONG,-                    ;
                        TYPE=<SYSGEN,SYS,MAJOR>,-          ;
                        UNIT=Bytes

;
; NON-PAGED DYNAMIC POOL - DETERMINES THE NUMBER OF BYTES TO WHICH
;       THE NON-PAGED DYNAMIC POOL MAY BE EXTENDED.  THIS PARAMETER
;       IS USED TO ALLOCATE THE NECESSARY PAGE TABLE ENTRIES.
;
        PARAMETER       ADDRESS=SGN$GL_NPAGEVIR,-          ;
                        DEFAULT=400000,-                  ;
                        MIN=16384,-                    ;
                        NAME=NPAGEVIR,-                ;
                        SIZE=LONG,-                    ;
                        TYPE=<SYSGEN,SYS>,-            ;
                        UNIT=Bytes

;
; PAGED DYNAMIC POOL - DETERMINES THE NUMBER OF BYTES TO ALLOCATE FOR THE
;       PAGED DYNAMIC POOL.
;
        PARAMETER       ADDRESS=SGN$GL_PAGEDYN,-           ;
                        DEFAULT=80000,-                ;
                        MIN=8192,-                     ;
                        NAME=PAGEDYN,-                 ;
                        SIZE=LONG,-                    ;
                        TYPE=<SYSGEN,SYS,MAJOR>,-              ;
                        UNIT=Bytes


;
; MAXIMUM VIRTUAL PAGE COUNT - DETERMINES THE TOTAL NUMBER OF PAGES THAT
;       CAN BE MAPPED FOR A PROCESS, WHICH CAN BE DIVIDED IN ANY FASHION
;       BETWEEN P0 AND P1 SPACE.
;
        PARAMETER       ADDRESS=SGN$GL_MAXVPGCT,-          ;
                        DEFAULT=8192,-                 ;
                        MIN=512,-                      ;
                        MAX=262144,-                   ; 128 MEGABYTES
                        NAME=VIRTUALPAGECNT,-          ;
                        SIZE=LONG,-                    ;
                        TYPE=<SYSGEN,SYS,MAJOR>,-          ;
                        UNIT=Pages


;
; REQUESTED SPT EXTENSION - NUMBER OF ADDITIONAL SPT SLOT TO ALLOW
;
        PARAMETER       ADDRESS=SGN$GL_SPTREQ,- ;
                        DEFAULT=720,-                  ;
                        NAME=SPTREQ,-                  ;
                        SIZE=LONG,-                    ;
                        TYPE=<SYS,SYSGEN>,-            ;
```

```
                        UNIT=Pages
;
; EXTRA USER STACK AUTOMATICALLY PROVIDED BY THE IMAGE ACTIVATOR
;       SO THAT THE OPERATING SYSTEM CAN RECOVER FROM A STACK OVERFLOW.
;
        PARAMETER         ADDRESS=SGN$GL_EXUSRSTK,- ;
                          DEFAULT=<2*512>,-         ;
                          MIN=<2*512>,-             ;
                          NAME=EXUSRSTK,-           ;
                          SIZE=LONG,-               ;
                          TYPE=<SPECIAL>,-          ;
                          UNIT=<Pages*512>          ;
;
; NUMBER OF LARGE REQUEST PACKETS TO ALLOCATE TO THE LRP LOOK ASIDE LIST
;
        PARAMETER         ADDRESS=SGN$GL_LRPCNT,- ;
                          DEFAULT=4,-               ;
                          MIN=0,-                   ;
                          MAX=4096,-                ;
                          NAME=LRPCOUNT,-           ;
                          SIZE=LONG,-               ;
                          TYPE=<SYS,SYSGEN,MAJOR>,-            ;
                          UNIT=<Packets>            ;
;
; NUMBER OF LARGE REQUEST PACKETS TO WHICH THE LRP LOOK ASIDE LIST
; MAY BE EXTENDED.  USED TO ALLOCATE THE APPROPRIATE VIRTUAL SPACE.
;
        PARAMETER         ADDRESS=SGN$GL_LRPCNTV,-;
                          DEFAULT=80,-              ;
                          MIN=0,-                   ;
                          MAX=4096,-                ;
                          NAME=LRPCOUNTV,-                    ;
                          SIZE=LONG,-               ;
                          TYPE=<SYS,SYSGEN>,-       ;
                          UNIT=<Packets>            ;
;
; SIZE OF LARGE REQUEST PACKETS (BYTES)
;
        PARAMETER         ADDRESS=SGN$GL_LRPSIZE,-;
                          DEFAULT=576,-             ;
                          MIN=256,-                 ;
                          MAX=16384,-               ;
                          NAME=LRPSIZE,-            ;
                          SIZE=LONG,-               ;
                          TYPE=<SYS,SYSGEN>,-       ;
                          UNIT=<Bytes>              ;
;
; MINIMUM ALLOCATION REQUEST FOR LARGE REQUEST PACKETS (BYTES)
;
        PARAMETER         ADDRESS=SGN$GL_LRPMIN,-;
                          DEFAULT=480,-             ;
                          MIN=256,-                 ;
                          MAX=16384,-               ;
                          NAME=LRPMIN,-             ;
                          SIZE=LONG,-               ;
                          TYPE=<SPECIAL>,-          ;
                          UNIT=<Bytes>              ;
;
; NUMBER OF SMALL REQUEST PACKETS TO ALLOCATE TO THE SRP LOOK ASIDE LIST
;
        PARAMETER         ADDRESS=SGN$GL_SRPCNT,-;
```

```
                              DEFAULT=120,-               ;
                              MIN=0,-                     ;
                              MAX=4096,-                  ;
                              NAME=SRPCOUNT,-             ;
                              SIZE=LONG,-                 ;
                              TYPE=<SYS,SYSGEN,MAJOR>,-       ;
                              UNIT=<Packets>             ;
;
; NUMBER OF SMALL REQUEST PACKETS TO WHICH THE SRP LOOK ASIDE LIST
; MAY BE EXTENDED.  USED TO ALLOCATE THE APPROPRIATE VIRTUAL SPACE.
;
        PARAMETER             ADDRESS=SGN$GL_SRPCNTV,-;
                              DEFAULT=1000,-              ;
                              MIN=0,-                     ;
                              MAX=131072,-                ;
                              NAME=SRPCOUNTV,-            ;
                              SIZE=LONG,-                 ;
                              TYPE=<SYS,SYSGEN>,-         ;
                              UNIT=<Packets>             ;
;
; SIZE OF SMALL REQUEST PACKETS (BYTES)
;
        PARAMETER             ADDRESS=SGN$GL_SRPSIZE,-;
                              DEFAULT=96,-                ;
                              MIN=96,-                    ;
                              MAX=144,-                   ;
                              NAME=SRPSIZE,-              ;
                              SIZE=LONG,-                 ;
                              TYPE=<SPECIAL>,-            ;
                              UNIT=<Bytes>               ;
;
; MINIMUM ALLOCATION REQUEST FOR SMALL REQUEST PACKETS (BYTES)
;
        PARAMETER             ADDRESS=SGN$GL_SRPMIN,-;
                              DEFAULT=32,-                ;
                              MIN=0,-                     ;
                              MAX=144,-                   ;
                              NAME=SRPMIN,-               ;
                              SIZE=LONG,-                 ;
                              TYPE=<SPECIAL>,-            ;
                              UNIT=<Bytes>               ;
;
;       PERMANENT I/O CHANNEL COUNT - SPECIFES THE NUMBER OF PERMANENT I/O
;       CHANNELS TO PROVIDE.
;
        PARAMETER             ADDRESS=SGN$GW_PCHANCNT,-       ;
                              DEFAULT=127,-               ;
                              MIN=31,-                    ;
                              MAX=2047,-                  ;
                              NAME=CHANNELCNT,-           ;
                              SIZE=WORD,-                 ;
                              TYPE=<SPECIAL>,-            ;
                              UNIT=Channels
;
; DEFAULT NUMBER OF PAGES OF IMAGE I/O ADDRESS SPACE USED BY
;       THE IMAGE ACTIVATOR IF NOT SPECIFIED AT PROGRAM LINK TIME.
;
        PARAMETER             ADDRESS=SGN$GW_IMGIOCNT,-        ;
                              DEFAULT=32,-                ;
                              MIN=32,-                    ;
                              NAME=IMGIOCNT,-             ;
```

```
                        SIZE=WORD,-                    ;
                        TYPE=<DYNAMIC,SPECIAL>,-          ;
                        UNIT=Pages
        .PAGE
        .SBTTL   CONTROL PARAMETERS

        .ALIGN   WORD

;
;       GENERAL SYSTEM CONTROL PARAMETERS
;
        PARAMETER         ADDRESS=SCH$GW_QUAN,-   ; PROCESS QUANTUM
                          DEFAULT=-20,-           ; NEGATED
                          MIN=2,-                 ;
                          MAX=32767,-             ;
                          NAME=QUANTUM,-          ;
                          SIZE=WORD,-             ;
                          TYPE=<DYNAMIC,SYS,NEG,MAJOR>,-  ;
                          UNIT=10Ms               ;
;
;       MODIFIED PAGE WRITER CONTROL PARAMETERS
;
        DEFINE   MPWSAW_INITVAL
;
;       PAGE WRITE CLUSTER FACTOR - SPECIFIES THE NUMBER OF PAGES TO ATTEMPT
;       TO WRITE AS A SINGLE I/O TRANSFER TO CONTIGUOUS DISK.
;
        PARAMETER         ADDRESS=MPWSGW_MPWPFC,- ;
                          DEFAULT=96,-            ;
                          MIN=16,-                ;
                          MAX=120,-               ;
                          NAME=MPW_WRTCLUSTER,-   ;
                          SIZE=WORD,-             ;
                          TYPE=<SYSGEN,SYS>,-     ;
                          UNIT=Pages
;
;       MODIFIED PAGE LIST HIGH LIMIT - THRESHOLD AT WHICH TO BEGIN WRITING
;       MODIFIED PAGES.
;
        PARAMETER         ADDRESS=MPWSGW_HILIM,-  ;
                          DEFAULT=500,-           ;
                          MIN=0,-                 ;
                          MAX=16384,-             ;
                          NAME=MPW_HILIMIT,-      ;
                          SIZE=WORD,-             ;
                          TYPE=<SYSGEN,SYS>,-     ;
                          UNIT=Pages
;
;       MODIFIED PAGE LIST LOW LIMIT - THRESHOLD AT WHICH MODIFIED PAGE WRITING
;       WILL NORMALLY STOP.  WRITING STARTED AT THE HIGH LIMIT AND PAGES
;       ARE WRITTEN IN CHUNKS CONTROLLED BY THE CLUSTER FACTOR. WHEN THE
;       LENGTH OF THE MODIFIED PAGE LIST HAS BEEN REDUCED BELOW THE LOW LIMIT,
;       WRITING CEASES UNTIL ENOUGH PAGES HAVE BEEN ADDED TO EXCEED THE
;       HIGH LIMIT.
;
        PARAMETER         ADDRESS=MPWSGW_LOLIM,-  ;
                          DEFAULT=32,-            ;
                          MIN=0,-                 ;
                          MAX=16384,-             ;
                          NAME=MPW_LOLIMIT,-      ;
                          SIZE=WORD,-             ;
```

```
                        TYPE=<SYSGEN,SYS>,-        ;
                        UNIT=Pages
;
; MODIFIED PAGE WRITER I/O PRIORITY.  THIS PARAMETER SETS THE PRIORITY OF
; I/O TRANSFERS INITIATED BY THE MODIFIED PAGE WRITER.
;
        PARAMETER       ADDRESS=MPW$GB_PRIO,-    ;
                        DEFAULT=4,-             ;
                        MIN=0,-                 ;
                        MAX=31,-                ;
                        NAME=MPW_PRIO,-         ;
                        SIZE=BYTE,-             ;
                        TYPE=<SPECIAL,DYNAMIC>  ;
;
; SWAPPER I/O PRIORITY.  THIS PARAMETER SETS THE PRIORITY OF
; I/O TRANSFERS INITIATED BY THE SWAPPER.
;
        PARAMETER       ADDRESS=SWP$GB_PRIO,-    ;
                        DEFAULT=4,-             ;
                        MIN=0,-                 ;
                        MAX=31,-                ;
                        NAME=SWP_PRIO,- ;
                        SIZE=BYTE,-             ;
                        TYPE=<SPECIAL,DYNAMIC>  ;
;
; MODIFIED PAGE WRITER LOWER LIMIT THRESHOLD STOPPING USE OF MODIFIED PAGE
; WRITER FROM BEING USED AS PRIMARY MECHANISM TO RECOVER MEMORY.
;
        PARAMETER       ADDRESS=MPW$GL_THRESH,- ;
                        DEFAULT=200,-           ;
                        MIN=0,-                 ;
                        MAX=16384,-             ;
                        NAME=MPW_THRESH,-       ;
                        SIZE=LONG,-             ;
                        TYPE=<SYS,DYNAMIC>      ;
;
; MODIFIED PAGE WRITER BUSY WAIT LIMIT.  THIS IS USED AS A THRESHOLD OF
; WHEN TO PUT A PROCESS INTO RESOURCE WAIT IF IT IS GENERATING A MODIFIED
; PAGE AND THE SIZE OF THE MODIFIED LIST IS GREATER THAN THIS PARAMETER.
;
        PARAMETER       ADDRESS=MPW$GL_WAITLIM,-;
                        DEFAULT=500,-           ;
                        MIN=0,-                 ;
                        MAX=16384,-             ;
                        NAME=MPW_WAITLIMIT,-    ;
                        SIZE=LONG,-             ;
                        TYPE=<SYS,DYNAMIC>      ;
;
; MAXIMUM NUMBER OF WORKING SET LIST ENTRIES THAT MAY BE SKIPPED WHILE
; SCANNING FOR A "GOOD" ENTRY TO DISCARD.  SET TO 0 TO DISABLE SKIPPING.
;
        PARAMETER       ADDRESS=SGN$GW_WSLMXSKP,-        ;
                        DEFAULT=8,-             ;
                        MIN=0,-                 ;
                        MAX=512,-               ;
                        NAME=TBSKIPWSL,-                ;
                        SIZE=WORD,-             ;
                        TYPE=<DYNAMIC,SPECIAL>,-        ;
                        UNIT=Pages
```

```
; Maximum number of physical pages to be used - permits testing of smaller
; memory configurations without actually removing memory boards.
;
        PARAMETER          ADDRESS=MMG$GL_PHYPGCNT,-        ;
                           DEFAULT=16384,- ;
                           MIN=256,-          ;
                           MAX=16384,-        ;
                           NAME=PHYSICALPAGES,-    ;
                           SIZE=LONG,-        ;
                           TYPE=<SPECIAL>,-        ;
                           UNIT=Pages
;
; Page fault rate lower threshold.  This parameter sets the lower page fault rate
; threshold for automatic working set size adjustment.
;
        PARAMETER          ADDRESS=SCH$GL_PFRATL,- ;
                           DEFAULT=1,-        ;
                           MIN=0,- ;
                           NAME=PFRATL,-    ;
                           SIZE=LONG,-        ;
                           TYPE=<SYS,DYNAMIC,MAJOR>,-        ;
                           UNIT=Flts/10Sec ;
;
; Page fault rate high threshold.  This parameter sets the upper page fault
; rate threshold for automatic working set adjustment.
;
        PARAMETER          ADDRESS=SCH$GL_PFRATH,- ;
                           DEFAULT=120,-     ;
                           MIN=0,- ;
                           NAME=PFRATH,-    ;
                           SIZE=LONG,-        ;
                           TYPE=<SYS,DYNAMIC,MAJOR>,-        ;
                           UNIT=Flts/10Sec ;
;
; Page fault rate system threshold.  This parameter sets the target system page
; fault threshold.
;
        PARAMETER          ADDRESS=SCH$GL_PFRATS,- ;
                           DEFAULT=0,-        ;
                           MIN=0,- ;
                           NAME=PFRATS,-    ;
                           SIZE=LONG,-        ;
                           TYPE=<SPECIAL,DYNAMIC>,-        ;
                           UNIT=Flts/10Sec ;
;
; Working set increment.  This parameter sets the number of pages to increase the
; working set size to compensate for a high page fault rate.
;
        PARAMETER          ADDRESS=SCH$GL_WSINC,-  ;
                           DEFAULT=150,-     ;
                           MIN=0,- ;
                           NAME=WSINC,-    ;
                           SIZE=LONG,-        ;
                           TYPE=<SYS,DYNAMIC,MAJOR>,-        ;
                           UNIT=Pages        ;
;
; Working set decrement.  This parameter sets the number of pages to decrease
; the working set to compensate for a page fault rate below the lower threshold.
;
        PARAMETER          ADDRESS=SCH$GL_WSDEC,-  ;
                           DEFAULT=35,-      ;
```

```
                        MIN=0,- ;
                        NAME=WSDEC,-     ;
                        SIZE=LONG,-      ;
                        TYPE=<SYS,DYNAMIC,MAJOR>,-        ;
                        UNIT=Pages       ;
;
; Working set minimum. Sets the minimum working set size to ever be set
; by the automatic adjustment logic.
;
        PARAMETER       ADDRESS=SCH$GW_AWSMIN,- ;
                        DEFAULT=50,-     ;
                        MIN=0,-          ;
                        NAME=AWSMIN,-    ;
                        SIZE=WORD,-      ;
                        TYPE=<SYS,DYNAMIC>,-;
                        UNIT=Pages       ;
;
; Working set measurement interval.  Sets the minimum interval of compute
; time for the measurement of page fault rate.
;
        PARAMETER       ADDRESS=SCH$GL_AWSTIME,-         ;
                        DEFAULT=20,-     ;
                        MIN=1,-          ;
                        NAME=AWSTIME,-   ;
                        SIZE=LONG,-      ;
                        TYPE=<SYS,DYNAMIC>,-;
                        UNIT=10Ms        ;
;
; Swap rate control.  This parameter sets the swapping rate and serves to limit
; the consumption of disk bandwidth by swapping.
;
        PARAMETER       ADDRESS=SCH$GL_SWPRATE,-         ;
                        DEFAULT=500,-    ;
                        MIN=0,- ;
                        NAME=SWPRATE,-   ;
                        SIZE=LONG,-      ;
                        TYPE=<SPECIAL,DYNAMIC>,-         ;
                        UNIT=10Ms/Swap   ;
;
; Desired process page count for an outswap swap.  This parameter sets the
; number of pages to attempt to reduce a working set to before starting the
; outswap.
;
        PARAMETER       ADDRESS=SWP$GL_SWPPGCNT,-        ;
                        DEFAULT=60,-     ;
                        MIN=0,- ;
                        NAME=SWPOUTPGCNT,-       ;
                        SIZE=LONG,-      ;
                        TYPE=<SYS,DYNAMIC>,-     ;
                        UNIT=Pages       ;
;
; Swap file allocation increment value.  The size in blocks to use to backup
; swap file space allocation in the swap or page file.  Space in the file will
; be allocated multiples of this unit up to wsquota to guarantee swap space.
;
        PARAMETER       ADDRESS=SWP$GW_SWPINC,- ;
                        DEFAULT=96,-             ;
                        MIN=16,-                 ;
                        NAME=SWPALLOCINC,-       ;
                        SIZE=WORD,-              ;
                        TYPE=<SPECIAL>,-         ;
```

```
                        UNIT=Blocks                 ;
;
;           I/O time allowance.  This parameter sets the number of 10 millisecond
;           units to charge the current residence quantum for each voluntary wait.
;           The correct value approximates the cost of a disk I/O neglecting wait tim
;
            PARAMETER           ADDRESS=SCH$GW_IOTA,-    ;
                                DEFAULT=2,-      ;
                                MIN=0,- ;
                                MAX=32767,-         ;
                                NAME=IOTA,-        ;
                                SIZE=WORD,-        ;
                                TYPE=<SPECIAL,DYNAMIC>,-        ;
                                UNIT=10Ms         ;
;
;           Elapsed realtime to cause a HIB or LEF process look like it is in
;           longwait.  This parameter sets the number of 10 millisecond
;           units that need to have elapsed.  Longwait processes are the most
;           eligible to attempt to recover pages from when a shortage is detected.
;
            PARAMETER           ADDRESS=SCH$GW_LONGWAIT,-        ;
                                DEFAULT=700,-      ;
                                MIN=40,-           ;
                                MAX=32767,-        ;
                                NAME=LONGWAIT,- ;
                                SIZE=WORD,-        ;
                                TYPE=<SYS,DYNAMIC>,-     ;
                                UNIT=6.6Ms        ;
;
;           Swap fail count. This parameter sets the number of consecutive swap
;           schedule failures to occur before the swap schedule algorithm changes
;           to ignore the swap quantum protection.
;
            PARAMETER           ADDRESS=SCH$GW_SWPFAIL,-         ;
                                DEFAULT=20,-      ;
                                MIN=0,- ;
                                MAX=32767,-        ;
                                NAME=SWPFAIL,- ;
                                SIZE=WORD,-        ;
                                TYPE=<SPECIAL,DYNAMIC>  ;
;
;
;           These are reserved parameters for undefined use by either Digital
;           or user written system services.
;
;
;           This is the start of the Digital reserved parameters.
;
            PARAMETER           ADDRESS=SGN$GL_VMSD1,-  ;
                                DEFAULT=0,-        ;
                                MIN=0,- ;
                                NAME=VMSD1,-       ;
                                SIZE=LONG,-        ;
                                TYPE=<SPECIAL,DYNAMIC>  ;
;
            PARAMETER           ADDRESS=SGN$GL_VMSD2,-  ;
                                DEFAULT=0,-        ;
                                MIN=0,- ;
                                NAME=VMSD2,-       ;
                                SIZE=LONG,-        ;
```

```
                        TYPE=<SPECIAL,DYNAMIC>  ;
;
        PARAMETER       ADDRESS=SGN$GL_VMSD3,-  ;
                        DEFAULT=0,-             ;
                        MIN=0,- ;
                        NAME=VMSD3,-            ;
                        SIZE=LONG,-             ;
                        TYPE=<SPECIAL,DYNAMIC>  ;
;
        PARAMETER       ADDRESS=SGN$GL_VMSD4,-  ;
                        DEFAULT=0,-             ;
                        MIN=0,- ;
                        NAME=VMSD4,-            ;
                        SIZE=LONG,-             ;
                        TYPE=<SPECIAL,DYNAMIC>  ;
;
        PARAMETER       ADDRESS=SGN$GL_VMS5,-   ;
                        DEFAULT=0,-             ;
                        MIN=0,- ;
                        NAME=VMS5,-             ;
                        SIZE=LONG,-             ;
                        TYPE=<SPECIAL>  ;
;
        PARAMETER       ADDRESS=SGN$GL_VMS6,-   ;
                        DEFAULT=0,-             ;
                        MIN=0,- ;
                        NAME=VMS6,-             ;
                        SIZE=LONG,-             ;
                        TYPE=<SPECIAL>  ;
;
        PARAMETER       ADDRESS=SGN$GL_VMS7,-   ;
                        DEFAULT=0,-             ;
                        MIN=0,- ;
                        NAME=VMS7,-             ;
                        SIZE=LONG,-             ;
                        TYPE=<SPECIAL>  ;
;
        PARAMETER       ADDRESS=SGN$GL_VMS8,-   ;
                        DEFAULT=0,-             ;
                        MIN=0,- ;
                        NAME=VMS8,-             ;
                        SIZE=LONG,-             ;
                        TYPE=<SPECIAL>  ;


;
;       This is the start of the user reserved sysgen parameters.
;
        PARAMETER       ADDRESS=SGN$GL_USERD1,- ;
                        DEFAULT=0,-             ;
                        MIN=0,- ;
                        NAME=USERD1,-           ;
                        SIZE=LONG,-             ;
                        TYPE=<DYNAMIC>  ;
;
        PARAMETER       ADDRESS=SGN$GL_USERD2,- ;
                        DEFAULT=0,-             ;
                        MIN=0,- ;
                        NAME=USERD2,-           ;
                        SIZE=LONG,-             ;
                        TYPE=<DYNAMIC>  ;
;
```

```
        PARAMETER          ADDRESS=SGN$GL_USER3,-  ;
                           DEFAULT=0,-        ;
                           MIN=0,- ;
                           NAME=USER3,-       ;
                           SIZE=LONG,-        ;
                           TYPE=<>            ;
;
        PARAMETER          ADDRESS=SGN$GL_USER4,-  ;
                           DEFAULT=0,-        ;
                           MIN=0,- ;
                           NAME=USER4,-       ;
                           SIZE=LONG,-        ;
                           TYPE=<>            ;

;
;       Extra CPU time.  This parameter sets the number of 10 millisecond
;       units to be allowed as an extension when CPU time expires.  One
;       extension is allowed for each access mode.
;
        PARAMETER          ADDRESS=SGN$GL_EXTRACPU,-       ;
                           DEFAULT=1000,-  ; 10 Seconds
                           MIN=0,-            ;
                           NAME=EXTRACPU,- ;
                           SIZE=LONG,-        ;
                           TYPE=<SYS,DYNAMIC>,-     ;
                           UNIT=10Ms          ;

;
; Maximum group code for system UIC
;
        PARAMETER          ADDRESS=EXE$GL_SYSUIC,- ;
                           DEFAULT=8,-        ;
                           MIN=1,-            ;
                           MAX=32768,-        ;
                           NAME=MAXSYSGROUP,-       ;
                           SIZE=LONG,-        ;
                           TYPE=<SYS,DYNAMIC>,-     ;
                           UNIT=<UIC Group>
;
; Maximum time for a device to languish in mount verification before giving up.
;
        PARAMETER          ADDRESS=IOC$GW_MVTIMEOUT,-
                           DEFAULT=600,-                    ; 10 minute default
                           MIN=1,-
                           MAX=64000,-                      ;
                           NAME=MVTIMEOUT,-                 ;
                           SIZE=WORD,-
                           TYPE=<SYS,DYNAMIC>,-
                           UNIT=Seconds
;
; Maximum allowable buffered I/O request size
;
        PARAMETER          ADDRESS=IOC$GW_MAXBUF,- ;
                           DEFAULT=1056,-  ;
                           MIN=512,-          ;
                           MAX=64000,-        ;
                           NAME=MAXBUF,-   ;
                           SIZE=WORD,-        ;
                           TYPE=<SYS,DYNAMIC>,-     ;
                           UNIT=Bytes
;
```

```
;  Default buffer quota for Mailbox creation
;
        PARAMETER          ADDRESS=IOC$GW_MBXBFQUO,-        ;
                           DEFAULT=1056,-   ;
                           MIN=256,-        ;
                           MAX=64000,-      ;
                           NAME=DEFMBXBUFQUO,-      ;
                           SIZE=WORD,-      ;
                           TYPE=<SYS,DYNAMIC>,-     ;
                           UNIT=Bytes
;
;  Default maximum message size for Mailbox creation
;
        PARAMETER          ADDRESS=IOC$GW_MBXMXMSG,-        ;
                           DEFAULT=256,-    ;
                           MIN=64,-         ;
                           MAX=64000,-      ;
                           NAME=DEFMBXMXMSG,-       ;
                           SIZE=WORD,-      ;
                           TYPE=<SYS,DYNAMIC>,-     ;
                           UNIT=Bytes
;
;  Default number of messages for Mailbox creation
;
        PARAMETER          ADDRESS=IOC$GW_MBXNMMSG,-        ;
                           DEFAULT=16,-     ;
                           MIN=1,-          ;
                           NAME=DEFMBXNUMMSG,-      ;
                           SIZE=WORD,-      ;
                           TYPE=<SYS,DYNAMIC>,-     ;
                           UNIT=Messages
;
;       DESIRED FREE LIST LENGTH - SPECIFIES THE NUMBER OF FREE PAGES TO
;                       BE MAINTAINED AVAILABLE BY THE SWAPPER.
;
        PARAMETER          ADDRESS=SGN$GL_FREELIM,-         ;
                           DEFAULT=32,-     ;
                           MIN=16,-         ;
                           NAME=FREELIM,-   ;
                           SIZE=LONG,-      ;
                           TYPE=<SYS,SYSGEN,MAJOR>,-        ;
                           UNIT=Pages
;
;       Target free list length - specifies the number of free pages
;                       that the swapper will attempt to make available
;                       when correcting for free list < FREELIM.
;
        PARAMETER          ADDRESS=SGN$GL_FREEGOAL,-        ;
                           DEFAULT=200,-    ;
                           MIN=16,-         ;
                           NAME=FREEGOAL,-  ;
                           SIZE=LONG,-      ;
                           TYPE=<SYS,MAJOR>,-       ;
                           UNIT=Pages
;
;       DESIRED FREE LIST LENGTH THAT MUST EXIST TO ALLOW PROCESSES
;                       TO GROW PAST WSQUOTA.
;
        PARAMETER          ADDRESS=SCH$GL_GROWLIM,-;
                           DEFAULT=63,-     ;
                           MIN=0,-          ;
```

```
                              NAME=GROWLIM,-                   ;
                              SIZE=LONG,-                      ;
                              TYPE=<SYS,DYNAMIC,MAJOR>,-            ;
                              UNIT=Pages
;
;          DESIRED FREE LIST LENGTH THAT MUST EXIST TO ALLOW PROCESSES
;                      TO GROW PAST WSQUOTA.
;
        PARAMETER             ADDRESS=SCH$GL_BORROWLIM,-        ;
                              DEFAULT=300,-                    ;
                              MIN=0,-                          ;
                              NAME=BORROWLIM,-                 ;
                              SIZE=LONG,-                      ;
                              TYPE=<SYS,DYNAMIC,MAJOR>,-           ;
                              UNIT=Pages
;
; NUMBER OF RETRIES TO PERFORM WHEN TRYING TO LOCK A MULTI-PROCESSOR
; DATA STRUCTURE
;
        PARAMETER             ADDRESS=EXE$GL_LOCKRTRY,-            ;
                              DEFAULT=100000,-                 ;
                              MIN=1,-                          ;
                              NAME=LOCKRETRY,-                 ;
                              SIZE=LONG,-                      ;
                              TYPE=<SPECIAL,DYNAMIC>,-;
                              UNIT=Retries
;
; Maximum DR32 data rate
;
        PARAMETER             ADDRESS=IOC$GW_XFMXRATE,-            ;
                              DEFAULT=236,-                    ;
                              MIN=0,-                          ;
                              MAX=255,-                        ;
                              NAME=XFMAXRATE,-                 ;
                              SIZE=WORD,-                      ;
                              TYPE=<SYS,DYNAMIC>,-             ;
                              UNIT=Special
;
; Number of Unibus map registers to preallocate for LPA11
;
        PARAMETER             ADDRESS=IOC$GW_LAMAPREG,-            ;
                              DEFAULT=0,-                      ;
                              MIN=0,-                          ;
                              MAX=255,-                        ;
                              NAME=LAMAPREGS,-                 ;
                              SIZE=WORD,-                      ;
                              TYPE=<SYS,SYSGEN>,-                  ;
                              UNIT=Mapregs


;
; Number of SPT entries to preallocate for use by real time processes
; connecting to devices via the connect to interrupt driver.
;
        PARAMETER             ADDRESS=EXE$GL_RTIMESPT,-
                              DEFAULT=0,-
                              MIN=0,-
                              NAME=REALTIME_SPTS,-
                              SIZE=LONG,-
                              TYPE=<SYS,SYSGEN>,-
                              UNIT=Pages
```

```
;
; Number of pages created for command interpreter symbol table.
;

        PARAMETER            ADDRESS=EXE$GL_CLITABL,-
                             DEFAULT=40,-
                             MIN=10,-
                             MAX=128,-
                             NAME=CLISYMTBL,-
                             SIZE=LONG,-
                             TYPE=<SYS,SYSGEN,DYNAMIC>,-
                             UNIT=Pages


;
; Size of lock id table.
;

        PARAMETER            ADDRESS=LCK$GL_IDTBLSIZ,-
                             DEFAULT=128,-
                             MIN=16,-
                             MAX=16000,-
                             NAME=LOCKIDTBL,-
                             SIZE=LONG,-
                             TYPE=<SYS,SYSGEN,MAJOR>,-
                             UNIT=Entries


;
; Size of resource hash table.
;

        PARAMETER            ADDRESS=LCK$GL_HTBLSIZ,-
                             DEFAULT=32,-
                             MIN=1,-
                             MAX=8192,-
                             NAME=RESHASHTBL,-
                             SIZE=LONG,-
                             TYPE=<SYS,SYSGEN,MAJOR>,-
                             UNIT=Entries


;
; Deadlock detection timeout period
;

        PARAMETER            ADDRESS=LCK$GL_WAITTIME,-
                             DEFAULT=10,-
                             MIN=0,-
                             NAME=DEADLOCK_WAIT,-
                             SIZE=LONG,-
                             TYPE=<SYS,DYNAMIC>,-
                             UNIT=Seconds


;
; SCS allocation counts - Buffer Descriptor Table entries
;
        PARAMETER            ADDRESS=SCS$GW_BDTCNT,-
                             DEFAULT=10,-
                             MIN=0,-
                             MAX=32767,-
                             NAME=SCSBUFFCNT,-
                             SIZE=WORD,-
```

```
                                TYPE=<SYSGEN,SCS>,-
                                UNIT=Entries

;
; SCS allocation counts - Connect Descriptor Table entries
;
        PARAMETER               ADDRESS=SCS$GW_CDTCNT,-
                                DEFAULT=18,-
                                MIN=2,-
                                MAX=32767,-
                                NAME=SCSCONNCNT,-
                                SIZE=WORD,-
                                TYPE=<SYSGEN,SCS>,-
                                UNIT=Entries

;
; SCS allocation counts - Response Descriptor Table entries
;
        PARAMETER               ADDRESS=SCS$GW_RDTCNT,-
                                DEFAULT=20,-
                                MIN=0,-
                                MAX=32767,-
                                NAME=SCSRESPCNT,-
                                SIZE=WORD,-
                                TYPE=<SYSGEN,SCS>,-
                                UNIT=Entries

;
; SCS maximum datagram size
;
        PARAMETER               ADDRESS=SCS$GW_MAXDG,-
                                DEFAULT=576,-
                                MIN=28,-
                                MAX=985,-
                                NAME=SCSMAXDG,-
                                SIZE=WORD,-
                                TYPE=<SYSGEN,SCS>,-
                                UNIT=Bytes

;
; SCS maximum sequenced message size
;
        PARAMETER               ADDRESS=SCS$GW_MAXMSG,-
                                DEFAULT=96,-
                                MIN=52,-
                                MAX=985,-
                                NAME=SCSMAXMSG,-
                                SIZE=WORD,-
                                TYPE=<SYSGEN,SCS>,-
                                UNIT=Bytes

;
; SCS flow control cushion
;
        PARAMETER               ADDRESS=SCS$GW_FLOWCUSH,-
                                DEFAULT=0,-
                                MIN=0,-
                                MAX=16,-
```

```
                        NAME=SCSFLOWCUSH,-
                        SIZE=WORD,-
                        TYPE=<SCS,DYNAMIC>,-
                        UNIT=Credits


;
; SCS system id (unique 48 bit number per system)
;

        PARAMETER       ADDRESS=SCS$GB_SYSTEMID,-
                        DEFAULT=1,-
                        MIN=1,-
                        MAX=255,-
                        NAME=SCSSYSTEMID,-
                        SIZE=BYTE,-
                        TYPE=<SYSGEN,SCS>,-
                        UNIT=Pure-number
        .BYTE   0,0,0,0,0,0,0                   ; *** TEMP ***


;
; CI port - number of times to try START handshake
;

        PARAMETER       ADDRESS=SCS$GW_PASTRTRY,-
                        DEFAULT=4,-
                        MIN=0,-
                        MAX=32767,-
                        NAME=PASTRETRY,-
                        SIZE=WORD,-
                        TYPE=<SCS,DYNAMIC>,-
                        UNIT=Retries


;
; CI port - timeout for START/STACK sequence, also basic driver wakeup interval
;

        PARAMETER       ADDRESS=SCS$GW_PASTMOUT,-
                        DEFAULT=5,-
                        MIN=2,-
                        MAX=100,-
                        NAME=PASTIMOUT,-
                        SIZE=WORD,-
                        TYPE=<SCS,DYNAMIC>,-
                        UNIT=Seconds


;
; CI port - number of DG buffers to queue for START handshake
;

        PARAMETER       ADDRESS=SCS$GW_PAPPDDG,-
                        DEFAULT=4,-
                        MIN=1,-
                        MAX=16,-
                        NAME=PASTDGBUF,-
                        SIZE=WORD,-
                        TYPE=<SCS>,-
                        UNIT=Buffers


;
; CI port - number of ports to poll each interval (for future expansion)
;
```

```
                PARAMETER          ADDRESS=SCS$GB_PANPOLL,-
                                   DEFAULT=16,-
                                   MIN=1,-
                                   MAX=244,-
                                   NAME=PANUMPOLL,-
                                   SIZE=BYTE,-
                                   TYPE=<SPECIAL>,-
                                   UNIT=Ports

;
; CI port - time between poll initiates
;

                PARAMETER          ADDRESS=SCS$GW_PAPOLINT,-
                                   DEFAULT=15,-
                                   MIN=2,-
                                   MAX=32767,-
                                   NAME=PAPOLLINTERVAL,-
                                   SIZE=WORD,-
                                   TYPE=<SCS,DYNAMIC>,-
                                   UNIT=Seconds

;
; CI port - time between check for SYSAP's waiting for pool
;

                PARAMETER          ADDRESS=SCS$GW_PAPOOLIN,-
                                   DEFAULT=15,-
                                   MIN=2,-
                                   MAX=32767,-
                                   NAME=PAPOOLINTERVAL,-
                                   SIZE=WORD,-
                                   TYPE=<SCS,DYNAMIC>,-
                                   UNIT=Seconds

;
;       Time prompt timeout - this parameter sets the amount of time to wait
;       for the time of day to be entered when booting.  The default value
;       of -1 gives the behavior of V2 and earlier.
;
                PARAMETER          ADDRESS=SGN$GW_TPWAIT,-
                                   DEFAULT=-1,-
                                   MIN=0,-
                                   NAME=TIMEPROMPTWAIT,-
                                   SIZE=WORD,-
                                   TYPE=<SYS>,-
                                   UNIT=uFortnights          ; Close enough to seconds

;
; UDA port - UDABURSTRATE is one less than the maximum number of longwords
;               the host is willing to allow per NPR transfer.  Zero implies
;               the port should use its own default.  Both the port's
;               default and the maximum the port will accept are Controller
;               dependent.
;

                PARAMETER          ADDRESS=SCS$GB_UDABURS1,-
                                   DEFAULT=0,-
                                   MIN=0,-
                                   MAX=31,-
```

```
                        NAME=UDABURSTRATE,-
                        SIZE=BYTE,-
                        TYPE=<SYSGEN,SCS>,-
                        UNIT=Longwords


;
; NOTE: The following three entries must be contiguous and in order!!!!
;
; Size of SYSTEM logical name hash table.
;

        PARAMETER       ADDRESS=LOG$GL_HTBLSIZ,-
                        DEFAULT=128,-
                        MIN=1,-
                        MAX=16383,-
                        NAME=LOGSHASHTBL,-
                        SIZE=LONG,-
                        TYPE=<SYS,SYSGEN>,-
                        UNIT=Entries


;
; Size of GROUP logical name hash table.
;

        PARAMETER       ADDRESS=LOG$GL_HTBLSIZG,-
                        DEFAULT=32,-
                        MIN=1,-
                        MAX=16383,-
                        NAME=LOGGHASHTBL,-
                        SIZE=LONG,-
                        TYPE=<SYS,SYSGEN>,-
                        UNIT=Entries


;
; Size of PROCESS logical name hash table.
;

        PARAMETER       ADDRESS=LOG$GL_HTBLSIZP,-
                        DEFAULT=128,-
                        MIN=1,-
                        MAX=16383,-
                        NAME=LOGPHASHTBL,-
                        SIZE=LONG,-
                        TYPE=<SYS,SYSGEN>,-
                        UNIT=Entries

;
;       PERMANENT DEFAULT SYSTEM FLAGS
;
        .ALIGN  LONG                            ;
        .IF     NDF,PRMSW                       ;
EXE$GL_DEFFLAGS::                               ;
        .ENDC                                   ;
        .LONG   <1@EXE$V_SYSPAGING>-            ; ENABLE SYSTEM CODE PAGING
                !<1@EXE$V_POOLPGING>-           ; ENABLE SYSTEM POOL PAGING
                !<1@EXE$V_SBIERR>-              ; SBI ERROR DETECTION
                !<1@EXE$V_BUGREBOOT>-           ; AUTOMATIC REBOOT ON BUGCHECK
                !<1@EXE$V_CRDENABL>-            ; ENABLE CRD ERROR DETECTION
                !<1@EXE$V_BUGDUMP>-             ; SYSTEM DUMP ON BUGCHECK
                !<1@EXE$V_CONCEALED>-           ; ENABLE USE OF CONCEALED DEVICES
                !<1@EXE$V_JOBQUEUES>-           ; Enable job controller queues
```

```
                    !<1@EXE$V_SHRF11ACP>    ; SHARE F11ACP
;
;           BUGCHECK REBOOT - ENABLES AUTOMATIC REBOOT ON BUGCHECK
;
            .LIST   ME
            .NLIST  CND
            PARAMETER           ADDRESS=EXE$GL_DEFFLAGS,-           ;
                                DEFAULT=1,-        ;
                                MAX=1,-           ;
                                MIN=0,-           ;
                                NAME=BUGREBOOT,-;
                                BIT=EXE$V_BUGREBOOT,-    ;
                                TYPE=<DYNAMIC,SYS>,-    ;
                                UNIT=Boolean
            .NLIST  ME
            .LIST   CND
;
;           CRD ERROR ENABLE - ENABLES DETECTION AND LOGGING OF MEMORY CRD ERRORS
;
            PARAMETER           ADDRESS=EXE$GL_DEFFLAGS,-           ;
                                DEFAULT=1,-        ;
                                MAX=1,-           ;
                                MIN=0,-           ;
                                NAME=CRDENABLE,-;
                                BIT=EXE$V_CRDENABL,-;
                                TYPE=<SYS,SYSGEN>,-;
                                UNIT=Boolean
;
;           BUGCHECK DUMP ENABLE - ENABLE SYSTEM DUMP ON BUGCHECK
;
            PARAMETER           ADDRESS=EXE$GL_DEFFLAGS,-           ;
                                DEFAULT=1,-        ;
                                MAX=1,-           ;
                                MIN=0,-           ;
                                NAME=DUMPBUG,-   ;
                                BIT=EXE$V_BUGDUMP,-      ;
                                TYPE=<SYS>,-
                                UNIT=Boolean
;
;           FATAL BUGCHECK - TURNS ALL CONTINUABLE BUGCHECKS INTO FATAL BUGCHECKS
;
            PARAMETER           ADDRESS=EXE$GL_DEFFLAGS,-           ;
                                DEFAULT=0,-       ;
                                MAX=1,-           ;
                                MIN=0,-           ;
                                NAME=BUGCHECKFATAL,-;
                                BIT=EXE$V_FATAL_BUG,-    ;
                                TYPE=<SYS,DYNAMIC>,-;
                                UNIT=Boolean
;
;           MULTIPLE ACP - SPECIFIES THAT SEPARATE ACPS ARE TO BE CREATED FOR
;                          EACH CLASS OF DISK.
;
            PARAMETER           ADDRESS=EXE$GL_DEFFLAGS,-;
                                DEFAULT=1,-       ;
                                MAX=1,-           ;
                                MIN=0,-           ;
                                NAME=ACP_MULTIPLE,-      ;
                                BIT=EXE$V_MULTACP,-      ;
                                TYPE=<ACP,DYNAMIC>,-     ;
                                UNIT=Boolean
```

```
;
;       AUTO CONFIGURATION INHIBIT - INHIBITS THE AUTOMATIC CONFIGURATION
;               OF DEVICES.
;
        PARAMETER       ADDRESS=EXE$GL_DEFFLAGS,-;
                        DEFAULT=0,-     ;
                        MAX=1,-         ;
                        MIN=0,-         ;
                        NAME=NOAUTOCONFIG,-
                        BIT=EXE$V_NOAUTOCNF,-   ;
                        TYPE=<SPECIAL,DYNAMIC>,-;
                        UNIT=Boolean
;
;       NO CLOCK - INHIBITS THE STARTING OF THE INTERVAL TIMER FOR DEBUGGING
;               PURPOSES.
;
        PARAMETER       ADDRESS=EXE$GL_DEFFLAGS,-        ;
                        DEFAULT=0,-     ;
                        MAX=1,-         ;
                        MIN=0,-         ;
                        NAME=NOCLOCK,-  ;
                        BIT=EXE$V_NOCLOCK,-     ;
                        TYPE=<SPECIAL>,-        ;
                        UNIT=Boolean
;
;       CLUSTERING INHIBIT - INHIBITS ALL PAGE READ CLUSTERING
;
        PARAMETER       ADDRESS=EXE$GL_DEFFLAGS,-        ;
                        DEFAULT=0,-     ;
                        MAX=1,-         ;
                        MIN=0,-         ;
                        NAME=NOCLUSTER,-        ;
                        BIT=EXE$V_NOCLUSTER,-   ;
                        TYPE=<SPECIAL>,-        ;
                        UNIT=Boolean
;
;       ENABLE PAGING OF PAGED DYNAMIC POOL
;
        PARAMETER       ADDRESS=EXE$GL_DEFFLAGS,-        ;
                        DEFAULT=1,-     ;
                        MAX=1,-         ;
                        MIN=0,-         ;
                        NAME=POOLPAGING,-       ;
                        BIT=EXE$V_POOLPGING,-   ;
                        TYPE=<SPECIAL>,-;
                        UNIT=Boolean
;
;       SBI ERROR DETECTION ENABLE
;
        PARAMETER       ADDRESS=EXE$GL_DEFFLAGS,-        ;
                        DEFAULT=1,-     ;
                        MAX=1,-         ;
                        MIN=0,-         ;
                        NAME=SBIERRENABLE,-     ;
                        BIT=EXE$V_SBIERR,-      ;
                        TYPE=<SPECIAL>,-        ;
                        UNIT=Boolean
;
;       FORCE ENTRY OF TIME AT SYSTEM BOOT
;
        PARAMETER       ADDRESS=EXE$GL_DEFFLAGS,-        ;
```

```
                        DEFAULT=0,-         ;
                        MAX=1,-             ;
                        MIN=0,-             ;
                        NAME=SETTIME,-      ;
                        BIT=EXE$V_SETTIME,-      ;
                        TYPE=<SYS,SYSGEN>,-;
                        UNIT=Boolean
;
;       ENABLE SHARING OF F11ACP
;
        PARAMETER       ADDRESS=EXE$GL_DEFFLAGS,-        ;
                        DEFAULT=1,-        ;
                        MAX=1,-            ;
                        MIN=0,-            ;
                        NAME=ACP_SHARE,-;
                        BIT=EXE$V_SHRF11ACP,-    ;
                        TYPE=<ACP>,-;
                        UNIT=Boolean
;
;       ENABLE PAGING OF SYSTEM CODE
;
        PARAMETER       ADDRESS=EXE$GL_DEFFLAGS,-;
                        DEFAULT=1,-        ;
                        MAX=1,-            ;
                        MIN=0,-            ;
                        NAME=SYSPAGING,-;
                        BIT=EXE$V_SYSPAGING,-    ;
                        TYPE=<SPECIAL>,-        ;
                        UNIT=Boolean
;
;       SELECT ALTERNATE AUTHORIZATION FILE - CAUSES SYSINIT TO MAKE A LOGICAL
;            NAME REDIRECTING SYSUAF TO SYSUAFALT.
;
        PARAMETER       ADDRESS=EXE$GL_DEFFLAGS,-        ;
                        DEFAULT=0,-        ;
                        MAX=1,-            ;
                        MIN=0,-            ;
                        NAME=UAFALTERNATE,-      ;
                        BIT=EXE$V_SYSUAFALT,-    ;
                        TYPE=<SYS,SYSGEN>,-      ;
                        UNIT=Boolean
;
;       LEAVE SYSTEM WRITABLE - FOR DEBUGGING PURPOSES LEAVES SYSTEM CODE
;            WRITABLE.
        PARAMETER       ADDRESS=EXE$GL_DEFFLAGS,-        ;
                        DEFAULT=0,-        ;
                        MAX=1,-            ;
                        MIN=0,-            ;
                        NAME=WRITABLESYS,-;
                        BIT=EXE$V_SYSWRTABL,-;
                        TYPE=<SPECIAL>,-         ;
                        UNIT=Boolean
;
;
;       Enable resource allocation checking
;
        PARAMETER       ADDRESS=EXE$GL_DEFFLAGS,-        ;
                        DEFAULT=0,-                      ;
                        MAX=1,-                          ;
                        MIN=0,-                          ;
```

```
                        NAME=RESALLOC,-                          ;
                        BIT=EXE$V_RESALLOC,-                     ;
                        TYPE=<SPECIAL>,-                         ;
                        UNIT=Boolean


;
;       SET TO INHIBIT SYSTEM SERVICES ON A PER PROCESS BASIS
;
        PARAMETER       ADDRESS=EXE$GL_DEFFLAGS,-                ;
                        DEFAULT=0,-         ;
                        MAX=1,-             ;
                        MIN=0,-             ;
                        NAME=SSINHIBIT,-;
                        BIT=EXE$V_SSINHIBIT,-;
                        TYPE=<SPECIAL>,-                         ;
                        UNIT=Boolean


;
;       RESET TO DISABLE THE USE OF CONCEALED DEVICES
;
        PARAMETER       ADDRESS=EXE$GL_DEFFLAGS,-                ;
                        DEFAULT=1,-         ;
                        MAX=1,-             ;
                        MIN=0,-             ;
                        NAME=CONCEAL_DEVICES,-;
                        BIT=EXE$V_CONCEALED,-;
                        TYPE=<SPECIAL>,-                         ;
                        UNIT=Boolean

;
;       SAVEDUMP - IF THE DUMP IS IN THE PAGE FILE, SAVE IT UNTIL IT IS
;               ANALYZED AND COPIED.
;
        PARAMETER       ADDRESS=EXE$GL_DEFFLAGS,-                ;
                        DEFAULT=0,-         ;
                        MAX=1,-             ;
                        MIN=0,-             ;
                        NAME=SAVEDUMP,- ;
                        BIT=EXE$V_SAVEDUMP,-        ;
                        TYPE=<SPECIAL>,-                ;
                        UNIT=Boolean

;
;       JOBQUEUES - Enable initialization of the job controller queues.
;
        PARAMETER       ADDRESS=EXE$GL_DEFFLAGS,-                ;
                        DEFAULT=1,-         ;
                        MAX=1,-             ;
                        MIN=0,-             ;
                        NAME=JOBQUEUES,-;
                        BIT=EXE$V_JOBQUEUES,-       ;
                        TYPE=<JBC,DYNAMIC>,-        ;
                        UNIT=Boolean

;
;       REINITQUE - Force recreation of the JBCSYSQUE.EXE file.  An existing
;               JBCSYSQUE.EXE file is ignored.
;
        PARAMETER       ADDRESS=EXE$GL_DEFFLAGS,-                ;
                        DEFAULT=0,-         ;
                        MAX=1,-             ;
                        MIN=0,-             ;
                        NAME=REINITQUE,-;
                        BIT=EXE$V_REINITQUE,-       ;
```

```
                        TYPE=<JBC,DYNAMIC>,-        ;
                        UNIT=Boolean
        .PAGE
        .SBTTL   SYSTEM MESSAGE PARAMETERS
;
; DEFINE THE CONTROL BITS IN EXE$GL_MSGFLAGS
;
        $GBLINI GLOBAL
        $VIELD  EXE,0,<-
                MOUNTMSG,-              ; ENABLE MOUNT NOTIFICATION
                DISMOUMSG,-            ; ENABLE DISMOUNT NOTIFICATION
        >


;
; DEFINE THE EXE$GL_MSGFLAGS LONGWORD AND ITS INITIAL VALUE.
;
        .ALIGN  LONG                      ;
        .IF     NDF,PRMSW                  ;
EXE$GL_MSGFLAGS::                          ;
        .ENDC                             ;
        .LONG   0


;
;       MOUNTMSG - CONTROLS OPERATOR NOTIFICATION OF VOLUME MOUNTING
;
        PARAMETER          ADDRESS=EXE$GL_MSGFLAGS,-        ;
                           DEFAULT=0,-       ;
                           MAX=1,-           ;
                           MIN=0,-           ;
                           NAME=MOUNTMSG,- ;
                           BIT=EXE$V_MOUNTMSG,-    ;
                           TYPE=<SYS,DYNAMIC>,-    ;
                           UNIT=Boolean
;
;       DISMOUMSG - Controls operator notification of volume dismounting
;
        PARAMETER          ADDRESS=EXE$GL_MSGFLAGS,-        ;
                           DEFAULT=0,-       ;
                           MAX=1,-           ;
                           MIN=0,-           ;
                           NAME=DISMOUMSG,-        ;
                           BIT=EXE$V_DISMOUMSG,-   ;
                           TYPE=<SYS,DYNAMIC>,-    ;
                           UNIT=Boolean
        .PAGE
        .SBTTL   TERMINAL DRIVER SYSTEM PARAMETERS
;
;       DIALUP SUPPORT CONTROL PARAMETERS
;
; DELTA TIME FOR DIALUP TIMER SCAN
;
        PARAMETER          ADDRESS=TTY$GL_DELTA,-  ;
                           DEFAULT=<100000*100>,-  ;
                           MIN=100000,-            ;
                           NAME=TTY_SCANDELTA,-    ;
                           SIZE=LONG,-             ;
                           TYPE=<TTY>,-            ;
                           UNIT=100Ns              ;
;
; FLAGS FOR DIALUP
;
```

```
;       BIT 0 is 0 => NORMAL, 1 => UNITED KINGDOM
;       BIT 1 SPECIFIES ALTERNATE MODEM PROTOCOL
;
        PARAMETER           ADDRESS=TTY$GB_DIALTYP,-            ;
                            DEFAULT=0,-            ;
                            MIN=0,-               ;
                            MAX=<^XOFF>,-         ;
                            NAME=TTY_DIALTYPE,-   ;
                            TYPE=<TTY>,-          ;
                            SIZE=BYTE,-           ;
                            UNIT=Bit-Encoded      ;
;
; NOTE ALIGNMENT!
;
; TERMINAL CANONICAL CHARACTERISTICS
;
;
;       DEFAULT SPEED FOR TERMINALS
;
        PARAMETER           ADDRESS=TTY$GB_DEFSPEED,-; DEFAULT SPEED FOR TERMINALS AI
                            DEFAULT=TT$C_BAUD_9600,-; 9600 BAUD - NO PARITY
                            MIN=1,-               ;
                            MAX=16,-              ;
                            NAME=TTY_SPEED,-      ;
                            SIZE=BYTE,-           ;
                            TYPE=<TTY>,-          ;
                            UNIT=Special          ; TT$C_BAUD VALUES
;
;       DEFAULT RECEIVE SPEED
;
        PARAMETER           ADDRESS=TTY$GB_RSPEED,- ;THE RECEIVE SPEED FOR A TERMINAI
                            DEFAULT=0,-            ;USE THE DEFAULT SPEED
                            MIN=0,-               ;
                            MAX=16,-              ;
                            NAME=TTY_RSPEED,-     ;
                            SIZE=BYTE,-           ;
                            TYPE=<TTY>,-          ;
                            UNIT=Special          ; TT$C_BAUD VALUES AND 0
;
;       DEFAULT PARITY
;
        PARAMETER           ADDRESS=TTY$GB_PARITY,- ;THE PARITY OF THE TERMINALS
                            DEFAULT=24,-          ;NO PARITY EIGHT BITS.
                            MIN=0,-               ;
                            NAME=TTY_PARITY,-     ;
                            SIZE=BYTE,-           ;
                            TYPE=<TTY>,-          ;
                            UNIT=Special          ;
;
;       DEFAULT TERMINAL LINE WIDTH
;
        PARAMETER           ADDRESS=TTY$GW_DEFBUF,- ; DEFAULT BUFFER SIZE
                            DEFAULT=80,-      ;
                            MIN=0,-           ;
                            MAX=65535,-       ;
                            NAME=TTY_BUF,-    ;
                            SIZE=WORD,-       ;
                            TYPE=<TTY>,-      ;
                            UNIT=Characters
;
;       DEFAULT TERMINAL CHARACTERISTICS
```

```
;
          PARAMETER         ADDRESS=TTY$GL_DEFCHAR,-; DEFAULT CHARACTERISTICS
          DEFAULT=<<24@TT$V_PAGE>+TT$M_TTSYNC+TT$M_WRAP+TT$M_LOWER+TT$M_SCOPE>,-
                            MIN=0,-                     ;
                            NAME=TTY_DEFCHAR,-          ;
                            SIZE=LONG,-                 ;
                            TYPE=<TTY>,-                ;
                            UNIT=Bit-Encoded
;
; Device characteristics second word.
;
          PARAMETER         ADDRESS=TTY$GL_DEFCHAR2,-;
                            DEFAULT=TT2$M_AUTOBAUD,-; SET AUTOBAUD FOR DEFAULT
                            MIN=0,-
                            NAME=TTY_DEFCHAR2,-
                            SIZE=LONG,-
                            TYPE=<TTY>,-
                            UNIT=Bit-Encoded


;
; SIZE OF TYPEAHEAD BUFFER
;
          PARAMETER         ADDRESS=TTY$GW_TYPAHDSZ,-            ;
                            DEFAULT=78,-                        ;
                            MIN=0,-                             ;
                            NAME=TTY_TYPAHDSZ,-                 ;
                            SIZE=WORD,-                         ;
                            TYPE=<TTY>,-                        ;
                            UNIT=Bytes
;
; Alternate Typeahead size.
;
          PARAMETER         ADDRESS=TTY$GW_ALTYPAHD,-           ;
                            DEFAULT=200,-                       ;
                            MIN=0,-
                            NAME=TTY_ALTYPAHD,-
                            SIZE=WORD,-
                            TYPE=<TTY>,-
                            UNIT=Bytes
;
; Alternate Typehaead buffer alarm size.
;
          PARAMETER         ADDRESS=TTY$GW_ALTALARM,-           ;
                            DEFAULT=64,-                        ;ASSUME WORST CASE
                            MIN=0,-
                            NAME=TTY_ALTALARM,-
                            SIZE=WORD,-
                            TYPE=<TTY>,-
                            UNIT=Bytes
;
; DMA size
;
          PARAMETER         ADDRESS=TTY$GW_DMASIZE,-            ;
                            DEFAULT=64,-
                            MIN=0,-
                            NAME=TTY_DMASIZE,-
                            SIZE=WORD,-
                            TYPE=<TTY,DYNAMIC>,-
                            UNIT=Bytes


;
```

```
;   DEFAULT TERMINAL ALLOCATION PROTECTION
;

        PARAMETER           ADDRESS=TTY$GW_PROT,-              ; PROTECTION CLASSES
                            DEFAULT=<^X0FFF0>,-               ; SYSTEM ONLY
                            MIN=0,-                           ;
                            NAME=TTY_PROT,-                   ;
                            SIZE=WORD,-                       ;
                            TYPE=<TTY>,-                      ;
                            UNIT=Protection                   ;

        PARAMETER           ADDRESS=TTY$GL_OWNUIC,-            ; OWNER UIC
                            DEFAULT=<^X00010004>,-            ; SYSTEM OWNER
                            MIN=0,-                           ;
                            NAME=TTY_OWNER,-                  ;
                            SIZE=LONG,-                       ;
                            TYPE=<TTY>-                       ;
                            UNIT=UIC                          ;
;
;       DEFAULT TERMINAL CLASS NAME PREFIX
;

        PARAMETER           ADDRESS=TTY$GW_CLASSNAM,-         ;
                            DEFAULT=<^A/TT/>,-       ;
                            MIN=<^A/AA/>,-           ;
                            MAX=<^A/ZZ/>,-           ;
                            NAME=TTY_CLASSNAME,-     ;
                            SIZE=WORD,-              ;
                            TYPE=<TTY>,-             ;
                            UNIT=Ascii
;
;       DEFAULT SILO TIMEOUT VALUE FOR DMF32
;

        PARAMETER           ADDRESS=TTY$GB_SILOTIME,-         ;
                            DEFAULT=8,-        ;
                            MIN=0,-            ;
                            MAX=255,-          ;
                            NAME=TTY_SILOTIME,-      ;
                            SIZE=BYTE,-        ;
                            TYPE=<TTY>,-       ;
                            UNIT=Ms


;
; END OF TERMINAL SYSTEM PARAMETERS
;
;
        .PAGE
        .SBTTL   RMS DEFAULT PARAMETERS
;
;  RMS DEFAULT PARAMETERS
;
        PARAMETER           ADDRESS=SYS$GB_DFMBC,-  ;
                            DEFAULT=16,-     ; DEFAULT MULTI-BLOCK COUNT
                            MIN=1,-                  ;
                            MAX=127,-                ;
                            NAME=RMS_DFMBC,-         ;
                            SIZE=BYTE,-              ;
                            TYPE=<RMS,DYNAMIC>,-     ;
                            UNIT=Blocks
;
; DEFAULT MULTI-BUFFER COUNT FOR SEQUENTIAL . DISK
;
        PARAMETER           ADDRESS=SYS$GB_DFMBFSDK,-         ;
```

```
                          DEFAULT=0,-              ;
                          MIN=0,-                  ;
                          MAX=127,-                ;
                          NAME=RMS_DFMBFSDK,-       ;
                          SIZE=BYTE,-              ;
                          TYPE=<RMS,DYNAMIC>,-      ;
                          UNIT=Blocks
;
; DEFAULT MULTI_BUFFER COUNT FOR MAGTAPE
;
        PARAMETER         ADDRESS=SYS$GB_DFMBFSMT,-         ;
                          DEFAULT=0,-              ;
                          MIN=0,-                  ;
                          MAX=127,-                ;
                          NAME=RMS_DFMBFSMT,-       ;
                          SIZE=BYTE,-              ;
                          TYPE=<RMS,DYNAMIC>,-      ;
                          UNIT=Blocks
;
;       DEFAULT MULTI-BUFFER COUNT FOR UNIT RECORD DEVICES.
;
        PARAMETER         ADDRESS=SYS$GB_DFMBFSUR,-         ;
                          DEFAULT=0,-              ;
                          MIN=0,-                  ;
                          MAX=127,-                ;
                          NAME=RMS_DFMBFSUR,-       ;
                          SIZE=BYTE,-              ;
                          TYPE=<RMS,DYNAMIC>,-      ;
                          UNIT=Buffers
;
; DEFAULT MULTI-BUFFER COUNT FOR RELATIVE FILES
;
        PARAMETER         ADDRESS=SYS$GB_DFMBFREL,-         ;
                          DEFAULT=0,-              ;
                          MIN=0,-                  ;
                          MAX=127,-                ;
                          NAME=RMS_DFMBFREL,-       ;
                          SIZE=BYTE,-              ;
                          TYPE=<RMS,DYNAMIC>,-      ;
                          UNIT=Buffers
;
; DEFAULT MULTI-BUFFER COUNT INDEXED FILES
;
        PARAMETER         ADDRESS=SYS$GB_DFMBFIDX,-         ;
                          DEFAULT=0,-              ;
                          MIN=0,-                  ;
                          MAX=127,-                ;
                          NAME=RMS_DFMBFIDX,-       ;
                          SIZE=BYTE,-              ;
                          TYPE=<RMS,DYNAMIC>,-      ;
                          UNIT=Buffers
;
; DEFAULT MULTI-BUFFER COUNT HASHED
;
        PARAMETER         ADDRESS=SYS$GB_DFMBFHSH,-         ;
                          DEFAULT=0,-              ;
                          MIN=0,-                  ;
                          MAX=127,-                ;
                          NAME=RMS_DFMBFHSH,-       ;
                          SIZE=BYTE,-              ;
                          TYPE=<RMS,DYNAMIC>,-      ;
```

UNIT=Buffers

;
; Default rms Prologue
;
        PARAMETER   ADDRESS = SYS$GB_RMSPROLOG,-
                            DEFAULT = 0,-   ; 0, 2 and 3 are valid, only
                            MIN = 0,-
                            MAX = 3,-
                            NAME = RMS_PROLOGUE,-
                            SIZE = BYTE,-
                            TYPE = <RMS,DYNAMIC>,-
                            UNIT = Prolog-Lvl

;
; Default file extend quantity
;
        PARAMETER   ADDRESS = SYS$GW_RMSEXTEND,-
                            DEFAULT = 80,-
                            MIN = 0,-
                            MAX = 65535,-
                            NAME = RMS_EXTEND_SIZE,-
                            SIZE = WORD,-
                            TYPE = <RMS,DYNAMIC>,-
                            UNIT = Blocks

;
; Default file protection
;
        PARAMETER   ADDRESS = SYS$GW_FILEPROT,-
                            DEFAULT = <^XFA00>,-
                            MIN = 0,-
                            MAX = <^XFFFF>,-
                            NAME = RMS_FILEPROT,-
                            SIZE = WORD,-
                            TYPE = RMS,-
                            UNIT = Prot-mask

        .ALIGN   LONG

;
;   END OF RMS DEFAULT PARAMETERS
;
        .PAGE
        .SBTTL   PROCESS QUOTA DEFAULTS AND MINIMA
        .=.-4   ;
        DEFINE   PQL$AL_DEFAULT   ;
        .=.+4   ;
        .BLKL   PQL$_LENGTH   ;
        .=.-4   ;
        DEFINE   PQL$AL_MIN   ;
        .=.+4   ;
        .BLKL   PQL$_LENGTH   ;
        .=.-1   ;
        DEFINE   PQL$AB_FLAG   ;
        .=.+1   ;
        .BLKB   PQL$_LENGTH   ;

;
;   DEFINE PROCESS QUOTA DEFAULTS AND MINIMA
;

```
        PQL     ASTLM,-                         ; AST LIMIT
                DEFLT=6,-                       ;
                MINIM=2,-                       ;
                UNT=Ast                         ;

        PQL     BIOLM,-                         ; BUFFERED I/O LIMIT
                DEFLT=6,-                       ;
                MINIM=2,-                       ;
                UNT=I/O                         ;

        PQL     BYTLM,-                         ; BUFFERED I/O BYTE COUNT LIMIT
                DEFLT=8192,-                    ;
                FLAG=DEDUCTIBLE,-               ;
                MINIM=1024,-        ;
                UNT=Bytes                       ;

        PQL     CPULM,-                         ; CPU TIME LIMIT
                DEFLT=0,-                       ;
                FLAG=DEDUCTIBLE,-               ;
                MINIM=0,-                       ;
                UNT=10Ms                        ;

        PQL     DIOLM,-                         ; DIRECT I/O LIMIT
                DEFLT=6,-                       ;
                MINIM=2,-                       ;
                UNT=I/O                         ;

        PQL     FILLM,-                         ; OPEN FILE LIMIT
                DEFLT=16,-                      ;
                FLAG=DEDUCTIBLE,-               ;
                MINIM=2,-                       ;
                UNT=Files                       ;

        PQL     PGFLQUOTA,-                     ; PAGING FILE QUOTA
                DEFLT=2048,-                    ;
                FLAG=DEDUCTIBLE,-               ;
                MINIM=256,-                     ;
                UNT=Pages                       ;

        PQL     PRCLM,-                         ; SUB-PROCESS LIMIT
                DEFLT=8,-                       ;
                FLAG=DEDUCTIBLE,-               ;
                MINIM=0,-                       ;
                UNT=Processes

        PQL     TQELM,-                         ; TIMER QUEUE ENTRY LIMIT
                DEFLT=8,-                       ;
                FLAG=DEDUCTIBLE,-               ;
                MINIM=0,-                       ;
                UNT=Timers

        PQL     WSDEFAULT,-                     ; WORKING SET DEFAULT SIZE
                DEFLT=100,-                     ;
                MINIM=10,-                      ;
                UNT=Pages,-                     ;
                DYNAMIC_FLAG=STATIC

;
; DEFAULT WORKING SET SIZE - SIZE OF SHELL WORKING SET
;
        .IF     NDF,PRMSW                       ;
```

```
SGN$GW_DFWSCNT==PQL$GDWSDEFAULT                ; SYNONYM
        .ENDC                                  ;
        PQL     WSQUOTA,-                       ; WORKING SET QUOTA
                DEFLT=200,-                     ;
                MINIM=10,-                      ;
                UNT=Pages                       ;

        PQL     WSEXTENT,-                      ; WORKING SET EXTENT
                DEFLT=200,-                     ;
                MINIM=10,-                      ;
                UNT=Pages                       ;

        PQL     ENQLM,-                         ; ENQUEUE LIMIT
                DEFLT=20,-                      ;
                FLAG=DEDUCTIBLE,-               ;
                MINIM=2,-                       ;
                UNT=Locks                       ;

        .PAGE
        .SBTTL  FILE ACP CONFIGURATION DATA

;+
;
; File ACP configuration data. These parameters are used whenever an ACP is
; started up (or, in the case of per volume data, when a volume is mounted).
;
;-


;
; Number of blocks in bitmap cache.
;
        PARAMETER         ADDRESS=ACP$GW_MAPCACHE,-          ;
                          DEFAULT=8,-      ;
                          MIN=1,-          ;
                          NAME=ACP_MAPCACHE,-      ;
                          SIZE=WORD,-      ;
                          TYPE=<ACP,DYNAMIC>,-     ;
                          UNIT=Pages       ;
;
; Number of blocks in file header cache.
;
        PARAMETER         ADDRESS=ACP$GW_HDRCACHE,-          ;
                          DEFAULT=128,-    ;
                          MIN=2,-          ;
                          NAME=ACP_HDRCACHE,-      ;
                          SIZE=WORD,-      ;
                          TYPE=<ACP,DYNAMIC>,-     ;
                          UNIT=Pages       ;
;
; Number of blocks in file directory cache.
;
        PARAMETER         ADDRESS=ACP$GW_DIRCACHE,-          ;
                          DEFAULT=80,-     ;
                          MIN=2,-          ;
                          NAME=ACP_DIRCACHE,-      ;
                          SIZE=WORD,-      ;
                          TYPE=<ACP,DYNAMIC>,-     ;
                          UNIT=Pages       ;
;
; ACP working set in pages (0 means maximal)
;
```

```
        PARAMETER        ADDRESS=ACP$GW_WORKSET,-        ;
                         DEFAULT=0,-        ;
                         MIN=0,-        ;
                         NAME=ACP_WORKSET,-        ;
                         SIZE=WORD,-        ;
                         TYPE=<ACP,DYNAMIC>,-        ;
                         UNIT=Pages        ;
;
; The following parameters are applied on a per volume basis.
;
;
; Number of cached index file slots
;
        PARAMETER        ADDRESS=ACP$GW_FIDCACHE,-        ;
                         DEFAULT=64,-        ;
                         MIN=0,-        ;
                         NAME=ACP_FIDCACHE,-        ;
                         SIZE=WORD,-        ;
                         TYPE=<ACP,DYNAMIC>,-        ;
                         UNIT=File-Ids        ;
;
; Number of cached disk extents
;
        PARAMETER        ADDRESS=ACP$GW_EXTCACHE,-        ;
                         DEFAULT=64,-        ;
                         MIN=0,-        ;
                         NAME=ACP_EXTCACHE,-        ;
                         SIZE=WORD,-        ;
                         TYPE=<ACP,DYNAMIC>,-        ;
                         UNIT=Extents        ;
;
; Maximum fraction of disk to cache in tenths of percent
;
        PARAMETER        ADDRESS=ACP$GW_EXTLIMIT,-        ;
                         DEFAULT=300,-        ;
                         MIN=0,-        ;
                         MAX=1000,-        ;
                         NAME=ACP_EXTLIMIT,-        ;
                         SIZE=WORD,-        ;
                         TYPE=<ACP,DYNAMIC>,-        ;
                         UNIT=<Percent/10>        ;

;
; Number of quota file entries to cache
;
        PARAMETER        ADDRESS=ACP$GW_QUOCACHE,-
                         DEFAULT=64,-
                         MIN=0,-
                         MAX=-1,-
                         NAME=ACP_QUOCACHE,-
                         SIZE=WORD,-
                         TYPE=<ACP,DYNAMIC>,-
                         UNIT=Users
;
; Default access for system volumes
;
        PARAMETER        ADDRESS=ACP$GW_SYSACC,-  ;
                         DEFAULT=8,-        ;
                         MIN=0,-        ;
                         NAME=ACP_SYSACC,-        ;
                         SIZE=WORD,-        ;
```

```
                        TYPE=<ACP,DYNAMIC>,-      ;
                        UNIT=Directories
;
; Maximum number of blocks to read at once for directories.
;
        PARAMETER       ADDRESS=ACP$GB_MAXREAD,-          ;
                        DEFAULT=32,-     ;
                        MIN=1,-          ;
                        MAX=64,-         ;
                        NAME=ACP_MAXREAD,-       ;
                        SIZE=BYTE,-      ;
                        TYPE=<ACP,DYNAMIC>,-     ;
                        UNIT=Blocks      ;
;
; Default window size for system volumes.
;
        PARAMETER       ADDRESS=ACP$GB_WINDOW,- ;
                        DEFAULT=7,-      ;
                        MIN=1,-          ;
                        NAME=ACP_WINDOW,-        ;
                        SIZE=BYTE,-      ;
                        TYPE=<ACP,DYNAMIC>,-     ;
                        UNIT=Pointers    ;
;
; Deferred cache writeback enable.
;
        PARAMETER       ADDRESS=ACP$GB_WRITBACK,-
                        DEFAULT=1,-
                        MIN=0,-
                        MAX=1,-
                        NAME=ACP_WRITEBACK,-
                        SIZE=BYTE,-
                        TYPE=<ACP,DYNAMIC>,-
                        UNIT=Boolean
;
; ACP datacheck enable flags.
;
        PARAMETER       ADDRESS=ACP$GB_DATACHK,-
                        DEFAULT=2,-
                        MIN=0,-
                        MAX=3,-
                        NAME=ACP_DATACHECK,-
                        SIZE=BYTE,-
                        TYPE=<ACP,DYNAMIC>,-
                        UNIT=Boolean
;
; Containing the following flags:
;
        .IF     NDF,PRMSW                       ; Only for exec version of sysparam
        $GBLINI GLOBAL
        $VIELD  ACP,0,<-
                <READCHK>-                      ; do datachecks on reads
                <WRITECHK>-                     ; do datachecks on writes
                >
        .ENDC                                   ;
;
; The following parameters apply per ACP.
;
;
; ACP base priority
;
```

```
                PARAMETER        ADDRESS=ACP$GB_BASEPRIO,-        ;
                                 DEFAULT=8,-       ;
                                 MIN=4,-           ;
                                 MAX=31,-          ;
                                 NAME=ACP_BASEPRIO,-      ;
                                 SIZE=BYTE,-       ;
                                 TYPE=<ACP,DYNAMIC>,-     ;
                                 UNIT=Priority
;
; ACP Swap flags
;
                PARAMETER        ADDRESS=ACP$GB_SWAPFLGS,-        ;
                                 DEFAULT=<^B1111>,-       ;.
                                 MIN=0,-           ;
                                 MAX=15,-          ;
                                 NAME=ACP_SWAPFLGS,-      ;
                                 SIZE=BYTE,-       ;
                                 TYPE=<ACP,DYNAMIC>-      ;
                                 UNIT=Boolean
                                               ; swappable, as follows:
                .IF      NDF,PRMSW             ; Only for exec version of sysparam
                $GBLINI GLOBAL
                $VIELD   ACP,0,<-
                         <SWAPSYS>-            ; /SYSTEM
                         <SWAPGRP>-            ; /GROUP
                         <SWAPPRV>-            ; other (private mount)
                         <SWAPMAG>-            ; magtape
                         >
                .ENDC                         ;

                .ALIGN   LONG

                .PAGE
                .SBTTL   Job Controller Parameters
;
; Maximum number of print symbionts
;
                PARAMETER        ADDRESS=SYS$GB_MXPRTSYM,-        ;
                                 DEFAULT=3,-       ;
                                 MIN=1,-           ;
                                 MAX=32,-          ;
                                 NAME=MAXPRINTSYMB,-      ;
                                 SIZE=BYTE,-       ;
                                 TYPE=<JBC,DYNAMIC>,-     ;
                                 UNIT=Processes
;
; Default Priority for Job Initiations
;
                PARAMETER        SYS$GB_DEFPRI,- ;
                                 DEFAULT=4,-       ;
                                 MIN=1,-           ;
                                 MAX=31,-          ;
                                 NAME=DEFPRI,-     ;
                                 SIZE=BYTE,-       ;
                                 TYPE=<SYS,JBC,DYNAMIC>,-         ;
                                 UNIT=Priority
;
; Limit for Interactive Jobs
;
                PARAMETER        ADDRESS=SYS$GW_IJOBLIM,-         ;
                                 DEFAULT=64,-      ;
```

```
                        MIN=1,-           ;
                        MAX=1024,-        ;
                        NAME=IJOBLIM,-    ;
                        SIZE=WORD,-       ;
                        TYPE=<JBC,DYNAMIC>,-      ;
                        UNIT=Jobs
;
; Limit for batch Jobs
;
        PARAMETER       ADDRESS=SYS$GW_BJOBLIM,-          ;
                        DEFAULT=16,-      ;
                        MIN=0,-           ;
                        MAX=1024,-        ;
                        NAME=BJOBLIM,-    ;
                        SIZE=WORD,-       ;
                        TYPE=<JBC,DYNAMIC>,-      ;
                        UNIT=Jobs


;
; Limit for network Jobs
;
        PARAMETER       ADDRESS=SYS$GW_NJOBLIM,-          ;
                        DEFAULT=16,-      ;
                        MIN=0,-           ;
                        MAX=1024,-        ;
                        NAME=NJOBLIM,-    ;
                        SIZE=WORD,-       ;
                        TYPE=<JBC,DYNAMIC>,-      ;
                        UNIT=Jobs
;
; Limit for Remote Terminal Jobs
;
        PARAMETER       ADDRESS=SYS$GW_RJOBLIM,-          ;
                        DEFAULT=16,-      ;
                        MIN=0,-           ;
                        MAX=254,-         ;
                        NAME=RJOBLIM,-    ;
                        SIZE=WORD,-       ;
                        TYPE=<JBC,DYNAMIC>,-      ;
                        UNIT=Jobs

        .PAGE
        .SBTTL  COMPUTED VALUES
        .ALIGN  LONG                    ;
        DEFINE  SWP$GL_SHELLSIZ         ; PAGES REQUIRED FOR SHELL
        .LONG   0                       ;

        DEFINE  SWP$GW_BAKPTE           ; PHD PAGES FOR BAK+WSLX+LCK+VAL
        .WORD   0                       ;

        DEFINE  SWP$GW_EMPTPTE          ; EMPTY PHDPAGES
        .WORD   0                       ;

        DEFINE  SWP$GW_WSLPTE           ; PHD PAGES FOR FIXED+WSL+PST
        .WORD   0                       ;

        DEFINE  SWP$GB_SHLP1PT          ; P1 PAGE TABLES REQUIRED FOR SHELL
        .BYTE   0                       ;

        .BYTE   0                       ; SPARE
```

```
        DEFINE  SWP$GL_BSLOTSZ              ; SIZE OF BALANCE SLOT
        .LONG   0                           ;

        DEFINE  SWP$GL_MAP                  ; SWAPPER MAP POINTER
        .LONG   0                           ;

        DEFINE  SWP$GL_PHDBASVA             ; BASE ADDRESS OF PHD WINDOW
        .LONG   0                           ;

        DEFINE  SGN$GL_PHDAPCNT             ; TOTAL SHELL HEADER PAGES
        .LONG   0                           ;

        DEFINE  SGN$GL_PHDLWCNT             ; COUNT OF LONGWORDS IN PHD
        .LONG   0                           ;

        DEFINE  SGN$GL_P1LWCNT              ; COUNT OF LW TO END OF P1 PAGETABLE
        .LONG   0                           ;

        DEFINE  SGN$GL_PHDPAGCT             ; TOTAL PHD PAGES LESS PAGE TABLES
        .LONG   0                           ;

        DEFINE  SGN$GL_PTPAGCNT             ; TOTAL PAGE TABLE COUNT
        .LONG   0                           ;

        DEFINE  MMG$GL_CTLBASVA             ; BASE ADDRESS IN CONTROL REGION
        .LONG   0                           ;
;
;       THE FOLLOWING TWO CELLS MUST BE ADJACENT
;
        DEFINE  EXE$AL_STACKS              ; ARRAY OF KERNEL MODE SYSTEM SPACE STACI
        .LONG   SWP$A_KSTK                 ; SWAPPER STACK (ADJACENT TO NULL STACK)
        DEFINE  EXE$GL_INTSTK              ; BASE OF INTERRUPT STACK
        .LONG   0                          ;
;
;       THE PRECEDING TWO LONG WORDS MUST BE ADJACENT.
;
        DEFINE  MMG$GL_GPTBASE             ; GLOBAL PAGE TABLE BASE ADDRESS
        .LONG   0                          ;

        DEFINE  MMG$GL_GPTE                ; BASE ADDRESS OF SPT PTES FOR GPT
        .LONG   0                          ; PAGES

        DEFINE  MMG$GL_MAXGPTE             ; HIGHEST GPTE ADDRESS
        .LONG   0                          ;

        DEFINE  MMG$GL_MAXSYSVA            ; HIGHEST SYSTEM VA (+1)
        DEFINE  MMG$GL_FRESVA              ; SYNONYM
        .LONG   0                          ;

        DEFINE  MMG$GL_SPTBASE             ; BASE ADDRESS OF SPT (VIRTUAL)
        .LONG   0                          ;

        DEFINE  MMG$GL_SPTLEN              ; LENGTH OF SYSTEM PAGE TABLE
        .LONG   0                          ;

        DEFINE  MMG$GL_SYSPHD              ; VA OF SYSTEM PHD
        .LONG   0                          ;

        DEFINE  MMG$GL_SYSPHDLN            ; SIZE OF SYSTEM PHD IN BYTES
```

```
        .LONG   0                               ;

        DEFINE  SWP$GL_BALBASE                  ; BASE VA OF BALANCE SLOTS FOR
        .LONG   0                               ; PROCESS HEADERS

        DEFINE  SWP$GL_BALSPT                   ; BASE VA IN SPT FOR MAPPING BALANCE
        .LONG   0                               ; SLOTS

        DEFINE  MMG$GL_SBR                      ; SYSTEM BASE REGISTER
        .LONG   0                               ;

        DEFINE  MMG$GL_NPAGEDYN                 ; VA OF NON-PAGED POOL
        .LONG   0                               ;

        DEFINE  MMG$GL_NPAGNEXT                 ; NEXT VA FOR NON-PAGED POOL EXTENSION
        .LONG   0                               ;

        DEFINE  MMG$GL_IRPNEXT                  ; NEXT VA FOR IRP LIST EXTENSION
        .LONG   0                               ;

        DEFINE  MMG$GL_LRPNEXT                  ; NEXT VA FOR LRP LIST EXTENSION
        .LONG   0                               ;

        DEFINE  MMG$GL_SRPNEXT                  ; NEXT VA FOR SRP LIST EXTENSION
        .LONG   0                               ;

        DEFINE  MMG$GL_PAGEDYN                  ; VA OF PAGED POOL
        .LONG   0                               ;

        DEFINE  MMG$GL_MAXPFN                   ; MAXIMUM PFN FOR SYSTEM
        .LONG   0                               ;

        .IF     NDF,PRMSW                       ; SIZE OF PFN DATA BASE IN BYTES
        MMG$GW_BIGPFN == MMG$GL_MAXPFN + 2 ; NONZERO IN UPPER WORD INDICATES
                                                ;   LONGWORD BLINK AND FLINK ARRAYS
        .ENDC                                   ;

        DEFINE  MMG$GL_MINPFN                   ; MINIUMUM PFN IN PFN DATABASE
        .LONG   0                               ;

        DEFINE  EXE$GL_RPB                      ; VIRTUAL ADDRESS OF RESTART PARAMETER B
        .LONG   0                               ;

        DEFINE  BOO$GL_SPTFREL                  ; LOWER VPN OF SPT FREE AREA
        .LONG   0                               ;

        DEFINE  BOO$GL_SPTFREH                  ; HIGHER VPN OF SPT FREE AREA
        .LONG   0                               ;

        DEFINE  EXE$GL_SCB                      ; VIRTUAL ADDRESS OF SCB
        .LONG   0                               ;

        DEFINE  EXE$GB_CPUDATA                  ; 16 BYTES OF DATA ABOUT THE CPU
        .LONG   0,0,0,0                         ; 4 BYTES FOR SID, REST CPU SPECIFIC

        DEFINE  EXE$GB_CPUTYPE                  ; CPU TYPE READ FROM SID
        .BYTE   0                               ;

        .IF     NDF,PRMSW                       ; SIZE OF PFN DATA BASE IN BYTES
        PFN$C_WORD_LEN == 18                    ;  ... with word length FLINK and BLINK
        PFN$C_LONG_LEN == 22                    ;  ... with longword length FLINK and BL.
```

```
        .ENDC                                   ;

        DEFINE   PFN$GB_LENGTH              ; Number of bytes per page in PFN data b₁
        .BYTE    PFN$C_WORD_LEN             ; Defaults to word length FLINK and BLINI

        DEFINE   EXE$GW_PGFL_FID            ; FILE ID OF PAGEFILE.SYS
        .WORD    0,0,0                      ; IF FILE IS IN PAGE FILE

        .ALIGN   LONG                       ; LONWORD ALIGN POINTERS
        DEFINE   PFN$A_BASE                 ; BASE OF PFN POINTERS
        PFNALC   L,PTE                      ; ADDRESS OF PAGE TABLE ENTRY
        PFNALC   L,BAK                      ; BACKING STORE ADDRESS
        PFNALC   W,REFCNT                   ; REFERENCE COUNT
        PFNALC   X,<FLINK,-                 ; FORWARD LINK
                 SHRCNT>                    ; ALSO USED AS GLOBAL SHARE COUNT
        PFNALC   X,<BLINK,-                 ; BACK LINK
                 WSLX>                      ; ALSO USED AS WORKING SET LIST INDEX
        PFNALC   W,SWPVBN                   ; SWAP IMAGE VIRTUAL BLOCK OFFSET
        PFNALC   B,STATE                    ; STATE OF PAGE
        PFNALC   B,TYPE                     ; TYPE OF PAGE

        DEFINE   EXE$GT_STARTUP             ; NAME OF STARTUP COMMAND FILE
        .ASCIC   /SYS$SYSTEM:STARTUP.COM/;  ; DEFAULT VALUE
        .BLKB    <32-<.-EXE$GT_STARTUP>>    ; ALLOW FOR 31 BYTES + COUNT
        .IF      NDF,PRMSW                  ; IF EXEC VERSION
EXE$C_SYSPARSZ==.-EXE$A_SYSPARAM            ; SIZE OF SYSTEM PARAMETERS
        .IFF                               ;
        .PSECT   $$$918,LONG               ;
        .LONG    0                          ; FLAG TO MARK END
        .ENDC                              ;

        .PAGE
        .SUBTITLE       MMG$GL_PGDCOD    Boundary of pageable exec
;-
;  The cells in this module between the definition of EXE$C_SYSPARSZ and
;  the definition of BOO$C_SYSPARSZ are used for communication between
;  SYSBOOT and SYS.EXE without interference from the SYSGEN USE and WRITE
;  commands. SYSBOOT uses BOO$C_SYSPARSZ as the size of the parameter area.
;  SYSGEN uses EXE$C_SYSPARSZ as its size constant and so SYSGEN commands
;  do not affect the contents of cells that follow the definition of
;  EXE$C_SYSPARSZ.
;
;  The cell called MMG$GL_PGDCOD contains the address of the boundary
;  between the nonpaged and pageable exec routines. This cell is used by
;  both INIT and SYSBOOT. It is initialized in this module to point to the
;  beginning of the second page of patch area that lies between nonpaged
;  and pageable exec routines. If it is necessary to add another page of
;  nonpaged patch space, then this cell and the first longword of the
;  descriptor for the nonpaged read-only patch area must have 512 added to
;  their contents.
;-

        .IF      NDF,PRMSW
        .PSECT   $$$917
        .IFF
        .PSECT   $$$917A
        .ENDC

        DEFINE            MMG$GL_PGDCOD    ; CELL THAT CONTAINS BOUNDARY
        DEFINE            PAT$GL_EXP_NPG2  ; (SYNONYM)
```

```
        .IF     NDF,PRMSW
        .ADDRESS        MMG$AL_PGDCOD

BOO$C_SYSPARSZ==.-EXE$A_SYSPARAM          ; SIZE OF PARAMETER AREA READ BY SYSBOOT

;
;   Bound pagable exec code to page boundary and define
;   starting virtual address of this region.
;

        .PSECT  Y$$$BEGIN_PAGEDCODE,PAGE
MMG$AL_PGDCOD:

        .IFF
        .LONG   0                         ; PRESERVE ALIGNMENT
        .ENDC

        .END                              ;
```

SYS.MAP

8

```
+------------------------------+
| Object Module Synopsis |
+------------------------------+
```

Module Name	Ident	Bytes	File	Creation Date	Creator
MDAT	V03-001	3616	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:39	VAX-11 Macro V03-00
PDAT	V03-000	2008	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:52	VAX-11 Macro V03-00
PMSDAT	V03-000	557	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:54	VAX-11 Macro V03-00
SHELL	V03-001	4100	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:01	VAX-11 Macro V03-00
SDAT	V03-001	729	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:01	VAX-11 Macro V03-00
SYSCOMMON	V03-003	672	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:08	VAX-11 Macro V03-00
SYSLOAVEC	V03-000	149	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:08	VAX-11 Macro V03-00
SCSVEC	V03-001	144	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:00	VAX-11 Macro V03-00
ACCOUNT	V03-000	608	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:07	VAX-11 Macro V03-00
ALLOCPFN	V03-001	730	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:07	VAX-11 Macro V03-00
ASTDEL	V03-000	661	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:08	VAX-11 Macro V03-00
BOOPARAM	V03-000	96	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:09	VAX-11 Macro V03-00
BUFFERCTL	V03-000	129	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:09	VAX-11 Macro V03-00
BUGCHECK	V03-001	1743	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:55	VAX-11 Macro V03-00
BUGCHKMSG	V03-001	8700	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:56	VAX-11 Macro V03-00
IOPERFORM	V03-000	333	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:30	VAX-11 Macro V03-00
CONSOLIO	V03-000	168	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:10	VAX-11 Macro V03-00
CMODSSDSP	V03-001	3080	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:11	VAX-11 Macro V03-00
CVT_ATB	V03-000	122	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:13	VAX-11 Macro V03-00
CVTFILNAM	V03-000	211	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:14	VAX-11 Macro V03-00
DEADLOCK	V03-000	532	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:14	VAX-11 Macro V03-00
DISMOUNT	V03-002	417	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:16	VAX-11 Macro V03-00
ERRORLOG	V03-001	1967	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:17	VAX-11 Macro V03-00
EXCEPTION	V03-000	1700	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:19	VAX-11 Macro V03-00
EXCEPTMSG	V03-000	607	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:20	VAX-11 Macro V03-00
EXSUBROUT	V03-001	584	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:21	VAX-11 Macro V03-00
FILEREAD	V03-000	2171	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:21	VAX-11 Macro V03-00
FILERWIO	V03-000	49	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:23	VAX-11 Macro V03-00
FORKCNTRL	V03-000	124	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:23	VAX-11 Macro V03-00
GLOBALS	V03-000	0	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:24	VAX-11 Macro V03-00
IMGACTSUB	V03-000	635	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:24	VAX-11 Macro V03-00
INIT	V03-003	4428	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:25	VAX-11 Macro V03-00
INITVEC	V03-000	6	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:27	VAX-11 Macro V03-00
RELOCDRV	V03-000	234	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:57	VAX-11 Macro V03-00
IOCIOPOST	V03-001	1616	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:27	VAX-11 Macro V03-00
IOLOCK	V03-001	631	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:29	VAX-11 Macro V03-00
IOSUBNPAG	V03-000	1763	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:30	VAX-11 Macro V03-00
IOSUBPAGD	V03-000	769	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:32	VAX-11 Macro V03-00
IOSUBRAMS	V03-000	413	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:33	VAX-11 Macro V03-00
LOADMREG	V03-000	400	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:35	VAX-11 Macro V03-00
LOGNAMSUB	V03-000	500	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:36	VAX-11 Macro V03-00
MEMORYALC	V03-001	1107	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:40	VAX-11 Macro V03-00
MOUNTVER	V03-001	1099	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:41	VAX-11 Macro V03-00
IPCONTROL	V03-002	626	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:34	VAX-11 Macro V03-00
MUTEX	V03-000	284	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:43	VAX-11 Macro V03-00
NULLPROC	V03-000	2	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:44	VAX-11 Macro V03-00
OSWPSCHED	V03-002	527	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:44	VAX-11 Macro V03-00
PAGEFAULT	V03-003	3161	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:46	VAX-11 Macro V03-00
PAGEFILE	V03-002	814	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:48	VAX-11 Macro V03-00

Module Name	Ident	Bytes	File	Creation Date	Creator
PHDUTL	V03-001	1007	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:52	VAX-11 Macro V03-00
POSTEF	V03-001	355	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:54	VAX-11 Macro V03-00
POWERFAIL	V03-001	777	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:55	VAX-11 Macro V03-00
PROCSTRT	V03-001	1242	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:56	VAX-11 Macro V03-00
RMSRESET	V03-000	65	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:57	VAX-11 Macro V03-00
RSE	V03-000	746	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:59	VAX-11 Macro V03-00
SCHED	V03-001	119	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:00	VAX-11 Macro V03-00
SVAPTE	V03-000	112	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:06	VAX-11 Macro V03-00
SWAPPER	V03-003	3173	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:06	VAX-11 Macro V03-00
SYSPARAM	V03-009	820	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:08	VAX-11 Macro V03-00
TIMESCHDL	V03-001	605	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:11	VAX-11 Macro V03-00
WRTMFYPAG	V03-000	1072	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:12	VAX-11 Macro V03-00
XDELTA	V03-002	2664	_DRA7:[SYSOBJ]DELTA.OLB;1	26-APR-1982 18:04	VAX-11 Macro V03-00
LIB$INS_DECODE	V03-000	1719	_DRA7:[SYSOBJ]SDA.OLB;1	26-Apr-1982 23:45	VAX-11 Bliss-32 V3-713
LIB$VAX_INST	V03-000	4096	_DRA7:[SYSOBJ]SDA.OLB;1	26-Apr-1982 23:47	VAX-11 Bliss-32 V3-713
SYSADJWSL	V03-001	416	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:14	VAX-11 Macro V03-00
SYSADJSTK	V03-000	107	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:14	VAX-11 Macro V03-00
SYSACPFDT	V03-000	986	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:13	VAX-11 Macro V03-00
SYSASCEFC	V03-000	1383	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:15	VAX-11 Macro V03-00
SYSASSIGN	V03-000	577	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:16	VAX-11 Macro V03-00
SYSASTCON	V03-000	96	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:17	VAX-11 Macro V03-00
SYSBRDCST	V03-001	996	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:18	VAX-11 Macro V03-00
SYSCANCEL	V03-000	303	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:19	VAX-11 Macro V03-00
SYSCANEVT	V03-000	61	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:20	VAX-11 Macro V03-00
SYSCHGMOD	V03-000	49	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:20	VAX-11 Macro V03-00
SYSCREDEL	V03-001	1871	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:21	VAX-11 Macro V03-00
SYSCREPRC	V03-001	1462	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:22	VAX-11 Macro V03-00
SYSCRMPSC	V03-001	2892	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:23	VAX-11 Macro V03-00
SYSCVRTIM	V03-001	1100	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:25	VAX-11 Macro V03-00
SYSDASSGN	V03-000	272	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:25	VAX-11 Macro V03-00
SYSDCLCMH	V03-000	67	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:26	VAX-11 Macro V03-00
SYSDCLEXH	V03-000	116	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:26	VAX-11 Macro V03-00
SYSDELPRC	V03-001	1163	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:27	VAX-11 Macro V03-00
SYSDERLMB	V03-000	58	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:28	VAX-11 Macro V03-00
SYSDEVALC	V03-001	454	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:28	VAX-11 Macro V03-00
SYSDGBLSC	V03-001	936	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:29	VAX-11 Macro V03-00
SYSENQDEQ	V03-002	2549	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:30	VAX-11 Macro V03-00
SYSEVTSRV	V03-000	159	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:31	VAX-11 Macro V03-00
SYSEXIT	V03-000	116	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:32	VAX-11 Macro V03-00
SYSFAO	V03-000	921	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:32	VAX-11 Macro V03-00
SYSFORCEX	V03-000	69	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:33	VAX-11 Macro V03-00
SYSGETDEV	V03-000	1210	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:33	VAX-11 Macro V03-00
SYSGETMSG	V03-004	814	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:34	VAX-11 Macro V03-00
SYSGETJPI	V03-005	1882	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:35	VAX-11 Macro V03-00
SYSGETPTI	V03-000	218	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:36	VAX-11 Macro V03-00
SYSGETSYI	V03-006	327	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:37	VAX-11 Macro V03-00
SYSGETTIM	V03-001	45	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:37	VAX-11 Macro V03-00
SYSIMGACT	V03-006	5934	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:37	VAX-11 Macro V03-00
SYSIMGSTA	V03-000	439	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:40	VAX-11 Macro V03-00
SYSLKWSET	V03-001	675	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:40	VAX-11 Macro V03-00
SYSLOGNAM	V03-000	485	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:41	VAX-11 Macro V03-00
SYSMAILBX	V03-002	1124	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:42	VAX-11 Macro V03-00

Module Name	Ident	Bytes	File	Creation Date	Creator
SYSPCNTRL	V03-001	461	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:43	VAX-11 Macro V03-00
SYSPURGWS	V03-000	264	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:43	VAX-11 Macro V03-00
SYSPUTMSG	V03-000	596	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:44	VAX-11 Macro V03-00
OPENMSG	V03-000	562	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:44	VAX-11 Macro V03-00
SYSQIOFDT	V03-001	647	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:44	VAX-11 Macro V03-00
SYSRUNDWN	V03-003	571	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:46	VAX-11 Macro V03-00
SYSSCHEVT	V03-000	358	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:47	VAX-11 Macro V03-00
SYSQIOREQ	V03-000	920	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:45	VAX-11 Macro V03-00
SYSSETEXV	V03-000	67	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:48	VAX-11 Macro V03-00
SYSSETMOD	V03-000	53	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:49	VAX-11 Macro V03-00
SYSSETPFM	V03-000	784	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:48	VAX-11 Macro V03-00
SYSSETPRA	V03-000	165	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:49	VAX-11 Macro V03-00
SYSSETPRI	V03-000	130	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:50	VAX-11 Macro V03-00
SYSSETPRT	V03-000	338	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:51	VAX-11 Macro V03-00
SYSSETPRV	V03-000	222	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:51	VAX-11 Macro V03-00
SYSSETSSF	V03-000	29	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:52	VAX-11 Macro V03-00
SYSSETSTK	V03-000	82	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:52	VAX-11 Macro V03-00
SYSSNDMSG	V03-001	613	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:52	VAX-11 Macro V03-00
SYSUNWIND	V03-000	322	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:53	VAX-11 Macro V03-00
SYSUPDSEC	V03-000	1235	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:53	VAX-11 Macro V03-00
SYSWAIT	V03-000	228	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:55	VAX-11 Macro V03-00
SYSSETIME	V03-002	668	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:48	VAX-11 Macro V03-00
SHMGSDRTN	V03-002	2476	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:04	VAX-11 Macro V03-00
DRINTHAND	V03-000	29	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:17	VAX-11 Macro V03-00
MBAINTDSP	V03-000	168	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:37	VAX-11 Macro V03-00
MBDRIVER	V03-001	1088	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:38	VAX-11 Macro V03-00
NLDRIVER	V03-000	153	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:43	VAX-11 Macro V03-00
MTFDT	V03-000	33	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:42	VAX-11 Macro V03-00
CONINTDSP	V03-001	731	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:09	VAX-11 Macro V03-00
COMDRVSUB	V03-001	753	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:12	VAX-11 Macro V03-00
MAHANDLER	V03-001	799	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:36	VAX-11 Macro V03-00
XDSTRING	V03-000	496	_DRA7:[SYSOBJ]DELTA.OLB;1	26-APR-1982 18:06	VAX-11 Macro V03-00
VERSION	X1JY	47	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 02:12	VAX-11 Macro V03-00
DEVICEDAT	V03-000	1564	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:15	VAX-11 Macro V03-00
MDAT_END	V03-000	108	_DRA7:[SYS.OBJ]SYS.OLB;1	27-APR-1982 01:39	VAX-11 Macro V03-00
SYSSIODEF	V03-000	0	_DRA7:[SYSLIB]STARLET.OLB;2	27-APR-1982 01:28	VAX-11 Macro V03-00
LIBSMSGDEF	1-003	0	_DRA7:[SYSLIB]STARLET.OLB;2	26-APR-1982 19:34	VAX-11 Macro V03-00
SYSSPRDEF	V03-000	0	_DRA7:[SYSLIB]STARLET.OLB;2	27-APR-1982 01:55	VAX-11 Macro V03-00
RMSSGLOBALS	V03-001	0	_DRA7:[SYSLIB]STARLET.OLB;2	26-APR-1982 22:23	VAX-11 Macro V03-00
SYSSSSDEF	V03-000	0	_DRA7:[SYSLIB]STARLET.OLB;2	27-APR-1982 02:05	VAX-11 Macro V03-00
SYSSP1_VECTOR	V03-001	0	_DRA7:[SYSLIB]STARLET.OLB;2	27-APR-1982 01:45	VAX-11 Macro V03-00

```
                                              +---------------------------+
                                              | Image Section Synopsis |
                                              +---------------------------+

      Cluster           Type Pages    Base Addr   Disk VBN PFC Protection and Paging          Global Sec. Name    Match      Majorid    Minorid
      -------           ---- -----    ---------   -------- --- ----------------------         ----------------    -----      -------    -------

DEFAULT_CLUSTER      0   245    80000000              2   0 READ ONLY


           Key for special characters above:
                 +---------------------+
                 | R  - Relocatable |
                 | P  - Protected    |
                 +---------------------+
```

```
                                              +------------------------------+
                                              | Program Section Synopsis |
                                              +------------------------------+
```

Psect Name	Module Name	Base	End	Length		Align	Attributes			
SSS000		80000000 800007FF 00000800 (			2048.)	QUAD 3	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	CMODSSDSP	80000000 800007FF 00000800 (			2048.)	QUAD 3				
SSS000ENDVEC		80000800 80000800 00000000 (			0.)	PAGE 9	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	MDAT	80000800 80000800 00000000 (			0.)	PAGE 9				
SSS000PMS		80000800 8000094B 0000014C (			332.)	PAGE 9	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	PMSDAT	80000800 8000094B 0000014C (			332.)	PAGE 9				
SSS000_STACKS		80000950 80000C4F 00000300 (			768.)	QUAD 3	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	PDAT	80000950 80000C4F 00000300 (			768.)	QUAD 3				
SSS025		80000C50 80000C57 00000008 (			8.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	BUGCHECK	80000C50 80000C57 00000008 (			8.)	BYTE 0				
SSS100		80000C58 80001273 0000061C (			1564.)	QUAD 3	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	DEVICEDAT	80000C58 80001273 0000061C (			1564.)	QUAD 3				
SSS105_PROLOGUE		80001274 8000131E 000000AB (			171.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	MBDRIVER	80001274 800012AC 00000039 (			57.)	BYTE 0				
	NLDRIVER	800012AD 800012E5 00000039 (			57.)	BYTE 0				
	CONINTDSP	800012E6 8000131E 00000039 (			57.)	BYTE 0				
SSS110_BEGDRIVE		80001320 80001320 00000000 (			0.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	MDAT	80001320 80001320 00000000 (			0.)	LONG 2				
SSS115_DRIVER		80001320 80001DD4 00000AB5 (			2741.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	DRINTHAND	80001320 8000133C 0000001D (			29.)	BYTE 0				
	MBAINTDSP	8000133D 800013E4 000000A8 (			168.)	BYTE 0				
	MBDRIVER	800013E8 800017EE 00000407 (			1031.)	LONG 2				
	NLDRIVER	800017F0 8000184F 00000060 (			96.)	LONG 2				
	CONINTDSP	80001850 80001AB5 00000266 (			614.)	LONG 2				
	MAHANDLER	80001AB6 80001DD4 0000031F (			799.)	BYTE 0				
SSS120_ENDDRIVE		80001DD8 80001DD8 00000000 (			0.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	MDAT	80001DD8 80001DD8 00000000 (			0.)	LONG 2				
SSS210		80001DD8 80001E73 0000009C (			156.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	ALLOCPFN	80001DD8 80001E1F 00000048 (			72.)	LONG 2				
	PAGEFAULT	80001E20 80001E5F 00000040 (			64.)	LONG 2				
	WRTMFYPAG	80001E60 80001E6B 0000000C (			12.)	LONG 2				
	SYSIMGACT	80001E6C 80001E6F 00000004 (			4.)	LONG 2				
	SYSLKWSET	80001E70 80001E73 00000004 (			4.)	LONG 2				
SSS215		80001E74 80001E7F 0000000C (			12.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	SYSSETPFM	80001E74 80001E7F 0000000C (			12.)	LONG 2				
SSS220		80001E80 800021B3 00000334 (			820.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC

Psect Name	Module Name	Base	End	Length		Align	Attributes
$$$220		80001E80	800021B3	00000334 (	820.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	SDAT	80001E80	80002158	000002D9 (	729.)	LONG 2	
	OSWPSCHED	8000215C	8000215F	00000004 (	4.)	LONG 2	
	PAGEFILE	80002160	8000218D	0000002E (	46.)	LONG 2	
	POWERFAIL	80002190	80002197	00000008 (	8.)	LONG 2	
	SWAPPER	80002198	800021B3	0000001C (	28.)	LONG 2	
$$$222		800021B4	800021D3	00000020 (	32.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	MDAT	800021B4	800021D3	00000020 (	32.)	LONG 2	
$$$230		800021D8	800026AF	000004D8 (	1240.)	QUAD 3	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	PDAT	800021D8	800026AF	000004D8 (	1240.)	QUAD 3	
$$$250		800026B0	800026EB	0000003C (	60.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	CONINTDSP	800026B0	800026EB	0000003C (	60.)	LONG 2	
$$$260		800026F0	80002DA3	000006B4 (	1716.)	QUAD 3	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	SYSCOMMON	800026F0	8000298F	000002A0 (	672.)	QUAD 3	
	ERRORLOG	80002990	80002DA3	00000414 (	1044.)	QUAD 3	
$$$270NP		80002DA4	80002E84	000000E1 (	225.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	PMSDAT	80002DA4	80002E84	000000E1 (	225.)	LONG 2	
$$$500		80002E88	80002FAF	00000128 (	296.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	SYSLOAVEC	80002E88	80002F1C	00000095 (	149.)	LONG 2	
	SCSVEC	80002F20	80002FAF	00000090 (	144.)	LONG 2	
$$$890_PATCH_NONPGD_DATA		80002FB0	800031AF	00000200 (	512.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	MDAT	80002FB0	800031AF	00000200 (	512.)	LONG 2	
$$$900		80003200	80003200	00000000 (	0.)	PAGE 9	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	MDAT	80003200	80003200	00000000 (	0.)	PAGE 9	
$$$917		80003200	80003533	00000334 (	820.)	PAGE 9	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	SYSPARAM	80003200	80003533	00000334 (	820.)	PAGE 9	
$$$999		80003600	80003600	00000000 (	0.)	PAGE 9	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	MDAT	80003600	80003600	00000000 (	0.)	PAGE 9	
$AAEXENONPAGED		80003600	80003890	00000291 (	657.)	PAGE 9	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	POWERFAIL	80003600	80003890	00000291 (	657.)	PAGE 9	
$AEXENONPAGED		80003894	80005007	00001774 (	6004.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	BUGCHECK	80003894	80003A26	00000193 (	403.)	BYTE 0	
	IOPERFORM	80003A27	80003B73	0000014D (	333.)	BYTE 0	
	CONSOLIO	80003B74	80003B83	00000010 (	16.)	BYTE 0	
	ERRORLOG	80003B84	80003C42	000000BF (	191.)	LONG 2	
	EXCEPTION	80003C44	80003E67	00000224 (	548.)	LONG 2	
	INIT	80003E68	80003E6E	00000007 (	7.)	LONG 2	
	IOCIOPOST	80003E70	800044BF	00000650 (	1616.)	LONG 2	
	POWERFAIL	800044C0	8000452F	00000070 (	112.)	LONG 2	
	SWAPPER	80004530	80005007	00000AD8 (	2776.)	BYTE 0	

Psect Name	Module Name	Base	End	Length	Align	Attributes
MMGCOD		80005008	80005BEA	000000BE3 (	3043.) LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	PAGEFAULT	80005008	80005BEA	000000BE3 (	3043.) LONG 2	
$MMGCOD		80005BEB	80007861	00001C77 (	7287.) BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	ALLOCPFN	80005BEB	80005E34	0000024A (	586.) BYTE 0	
	IOLOCK	80005E35	800060AB	00000277 (	631.) BYTE 0	
	PAGEFILE	800060AC	80006377	000002CC (	716.) BYTE 0	
	PHDUTL	80006378	800064E6	0000016F (	367.) BYTE 0	
	SVAPTE	800064E7	80006556	00000070 (	112.) BYTE 0	
	WRTMFYPAG	80006557	80006968	00000412 (	1042.) BYTE 0	
	SYSADJWSL	80006969	80006A29	000000C1 (	193.) BYTE 0	
	SYSCREDEL	80006A2A	80006D96	0000036D (	877.) BYTE 0	
	SYSDGBLSC	80006D97	80006E75	000000DF (	223.) BYTE 0	
	SYSGETPTI	80006E76	80006F2F	000000BA (	186.) BYTE 0	
	SYSIMGACT	80006F30	80006FE3	000000B4 (	180.) BYTE 0	
	SYSLKWSET	80006FE4	800071D7	000001F4 (	500.) BYTE 0	
	SYSPURGWS	800071D8	8000729F	000000C8 (	200.) BYTE 0	
	SYSSETPRT	800072A0	800073B0	00000111 (	273.) BYTE 0	
	SYSUPDSEC	800073B1	80007711	00000361 (	865.) BYTE 0	
	$MMGSDRTN	80007712	80007861	00000150 (	336.) BYTE 0	
$OSWPSCHED		80007862	80007A6C	0000020B (	523.) BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	OSWPSCHED	80007862	80007A6C	0000020B (	523.) BYTE 0	
$ZBUGFATAL		80007A6E	80007A6E	00000000 (	0.) WORD 1	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	BUGCHECK	80007A6E	80007A6E	00000000 (	0.) WORD 1	
. BLANK .		80007A6E	80008A2B	00000FBE (	4030.) BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	MDAT	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	PDAT	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	PMSDAT	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	SHELL	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	SDAT	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	SYSCOMMON	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	SYSLOAVEC	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	SCSVEC	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	ACCOUNT	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	ALLOCPFN	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	ASTDEL	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	BOOPARAM	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	BUFFERCTL	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	BUGCHECK	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	BUGCHKMSG	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	IOPERFORM	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	CONSOLIO	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	CMODSSDSP	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	CVT_ATB	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	CVTFILNAM	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	DEADLOCK	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	DISMOUNT	80007A6E	80007A6E	00000000 (	0.) BYTE 0	
	ERRORLOG	80007A6E	80007A6E	00000000 (	0.) BYTE 0	

Psect Name	Module Name	Base	End	Length	Align		Attributes
. BLANK .		80007A6E	80008A2B	00000FBE (	4030.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	EXCEPTION	80007A6E	80007A6E	00000000 (	0.)	BYTE 0	
	EXCEPTMSG	80007A6E	80007A6E	00000000 (	0.)	BYTE 0	
	EXSUBROUT	80007A6E	80007B05	00000098 (	152.)	BYTE 0	
	FILEREAD	80007B06	80007B06	00000000 (	0.)	BYTE 0	
	FILERWIO	80007B06	80007B06	00000000 (	0.)	BYTE 0	
	FORKCNTRL	80007B06	80007B06	00000000 (	0.)	BYTE 0	
	GLOBALS	80007B06	80007B06	00000000 (	0.)	BYTE 0	
	IMGACTSUB	80007B06	80007B06	00000000 (	0.)	BYTE 0	
	INIT	80007B06	80007B06	00000000 (	0.)	BYTE 0	
	INITVEC	80007B06	80007B06	00000000 (	0.)	BYTE 0	
	RELOCDRV	80007B06	80007B06	00000000 (	0.)	BYTE 0	
	IOCIOPOST	80007B06	80007B06	00000000 (	0.)	BYTE 0	
	IOLOCK	80007B06	80007B06	00000000 (	0.)	BYTE 0	
	IOSUBNPAG	80007B06	80007B06	00000000 (	0.)	BYTE 0	
	IOSUBPAGD	80007B06	80007B06	00000000 (	0.)	BYTE 0	
	IOSUBRAMS	80007B06	80007B06	00000000 (	0.)	BYTE 0	
	LOADMREG	80007B06	80007B06	00000000 (	0.)	BYTE 0	
	LOGNAMSUB	80007B06	80007B06	00000000 (	0.)	BYTE 0	
	MEMORYALC	80007B06	80007B06	00000000 (	0.)	BYTE 0	
	MOUNTVER	80007B06	80007B06	00000000 (	0.)	BYTE 0	
	IPCONTROL	80007B06	80007B06	00000000 (	0.)	BYTE 0	
	MUTEX	80007B06	80007B06	00000000 (	0.)	BYTE 0	
	NULLPROC	80007B06	80007B07	00000002 (	2.)	BYTE 0	
	OSWPSCHED	80007B08	80007B08	00000000 (	0.)	BYTE 0	
	PAGEFAULT	80007B08	80007B08	00000000 (	0.)	BYTE 0	
	PAGEFILE	80007B08	80007B08	00000000 (	0.)	BYTE 0	
	PHDUTL	80007B08	80007B08	00000000 (	0.)	BYTE 0	
	POSTEF	80007B08	80007B08	00000000 (	0.)	BYTE 0	
	POWERFAIL	80007B08	80007B08	00000000 (	0.)	BYTE 0	
	PROCSTRT	80007B08	80007B08	00000000 (	0.)	BYTE 0	
	RMSRESET	80007B08	80007B08	00000000 (	0.)	BYTE 0	
	RSE	80007B08	80007B08	00000000 (	0.)	BYTE 0	
	SCHED	80007B08	80007B08	00000000 (	0.)	BYTE 0	
	SVAPTE	80007B08	80007B08	00000000 (	0.)	BYTE 0	
	SWAPPER	80007B08	80007B08	00000000 (	0.)	BYTE 0	
	SYSPARAM	80007B08	80007B08	00000000 (	0.)	BYTE 0	
	TIMESCHDL	80007B08	80007B08	00000000 (	0.)	BYTE 0	
	WRTMFYPAG	80007B08	80007B08	00000000 (	0.)	BYTE 0	
	XDELTA	80007B08	80007B08	00000000 (	0.)	BYTE 0	
	SYSADJWSL	80007B08	80007B08	00000000 (	0.)	BYTE 0	
	SYSADJSTK	80007B08	80007B08	00000000 (	0.)	BYTE 0	
	SYSACPFDT	80007B08	80007EE1	000003DA (	986.)	BYTE 0	
	SYSASCEFC	80007EE2	80007EFF	0000001E (	30.)	BYTE 0	
	SYSASSIGN	80007F00	80007F00	00000000 (	0.)	BYTE 0	
	SYSASTCON	80007F00	80007F00	00000000 (	0.)	BYTE 0	
	SYSBRDCST	80007F00	80007F00	00000000 (	0.)	BYTE 0	
	SYSCANCEL	80007F00	8000802E	0000012F (	303.)	BYTE 0	
	SYSCANEVT	8000802F	8000806B	0000003D (	61.)	BYTE 0	
	SYSCHGMOD	8000806C	8000809C	00000031 (	49.)	BYTE 0	
	SYSCREDEL	8000809D	8000809D	00000000 (	0.)	BYTE 0	
	SYSCREPRC	8000809D	8000809D	00000000 (	0.)	BYTE 0	

Psect Name	Module Name	Base	End	Length		Align	Attributes
. BLANK .		80007A6E	80008A2B	00000FBE (	4030.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	SYSCRMPSC	8000809D	8000809D	00000000 (	0.)	BYTE 0	
	SYSCVRTIM	8000809D	8000809D	00000000 (	0.)	BYTE 0	
	SYSDASSGN	8000809D	800081AC	00000110 (	272.)	BYTE 0	
	SYSDCLCMH	800081AD	800081AD	00000000 (	0.)	BYTE 0	
	SYSDCLEXH	800081AD	800081AD	00000000 (	0.)	BYTE 0	
	SYSDELPRC	800081AD	800081AD	00000000 (	0.)	BYTE 0	
	SYSDERLMB	800081AD	800081E6	0000003A (	58.)	BYTE 0	
	SYSDEVALC	800081E7	800081E7	00000000 (	0.)	BYTE 0	
	SYSDGBLSC	800081E7	800081E7	00000000 (	0.)	BYTE 0	
	SYSENQDEQ	800081E7	800081E7	00000000 (	0.)	BYTE 0	
	SYSEVTSRV	800081E7	800081E7	00000000 (	0.)	BYTE 0	
	SYSEXIT	800081E7	800081E7	00000000 (	0.)	BYTE 0	
	SYSFAO	800081E7	800081E7	00000000 (	0.)	BYTE 0	
	SYSFORCEX	800081E7	80008228	00000045 (	69.)	BYTE 0	
	SYSGETDEV	8000822C	8000822C	00000000 (	0.)	BYTE 0	
	SYSGETMSG	8000822C	8000822C	00000000 (	0.)	BYTE 0	
	SYSGETJPI	8000822C	8000822C	00000000 (	0.)	BYTE 0	
	SYSGETPTI	8000822C	8000822C	00000000 (	0.)	BYTE 0	
	SYSGETSYI	8000822C	8000822C	00000000 (	0.)	BYTE 0	
	SYSGETTIM	8000822C	8000822C	00000000 (	0.)	BYTE 0	
	SYSIMGACT	8000822C	8000822C	00000000 (	0.)	BYTE 0	
	SYSIMGSTA	8000822C	8000822C	00000000 (	0.)	BYTE 0	
	SYSLKWSET	8000822C	8000822C	00000000 (	0.)	BYTE 0	
	SYSLOGNAM	8000822C	8000822C	00000000 (	0.)	BYTE 0	
	SYSMAILBX	8000822C	8000822C	00000000 (	0.)	BYTE 0	
	SYSPCNTRL	8000822C	8000822C	00000000 (	0.)	BYTE 0	
	SYSPURGWS	8000822C	8000822C	00000000 (	0.)	BYTE 0	
	SYSPUTMSG	8000822C	8000822C	00000000 (	0.)	BYTE 0	
	OPENMSG	8000822C	8000822C	00000000 (	0.)	BYTE 0	
	SYSQIOFDT	8000822C	8000848A	0000025F (	607.)	BYTE 0	
	SYSRUNDWN	8000848B	8000848B	00000000 (	0.)	BYTE 0	
	SYSSCHEVT	8000848B	800085F0	00000166 (	358.)	BYTE 0	
	SYSQIOREQ	800085F1	80008988	00000398 (	920.)	BYTE 0	
	SYSSETEXV	80008989	80008989	00000000 (	0.)	BYTE 0	
	SYSSETMOD	80008989	80008989	00000000 (	0.)	BYTE 0	
	SYSSETPFM	80008989	80008989	00000000 (	0.)	BYTE 0	
	SYSSETPRA	80008989	80008989	00000000 (	0.)	BYTE 0	
	SYSSETPRI	80008989	80008A0A	00000082 (	130.)	BYTE 0	
	SYSSETPRT	80008A0B	80008A0B	00000000 (	0.)	BYTE 0	
	SYSSETPRV	80008A0B	80008A0B	00000000 (	0.)	BYTE 0	
	SYSSETSSF	80008A0B	80008A0B	00000000 (	0.)	BYTE 0	
	SYSSETSTK	80008A0B	80008A0B	00000000 (	0.)	BYTE 0	
	SYSSNDMSG	80008A0B	80008A0B	00000000 (	0.)	BYTE 0	
	SYSUNWIND	80008A0B	80008A0B	00000000 (	0.)	BYTE 0	
	SYSUPDSEC	80008A0B	80008A0B	00000000 (	0.)	BYTE 0	
	SYSWAIT	80008A0B	80008A0B	00000000 (	0.)	BYTE 0	
	SYSSETIME	80008A0B	80008A0B	00000000 (	0.)	BYTE 0	
	SHMGSDRTN	80008A0B	80008A0B	00000000 (	0.)	BYTE 0	
	DRINTHAND	80008A0B	80008A0B	00000000 (	0.)	BYTE 0	
	MBAINTDSP	80008A0B	80008A0B	00000000 (	0.)	BYTE 0	
	MBDRIVER	80008A0B	80008A0B	00000000 (	0.)	BYTE 0	

Psect Name	Module Name	Base	End	Length	Align	Attributes
. BLANK .		80007A6E	80008A2B	00000FBE (	4030.) BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	NLDRIVER	80008A0B	80008A0B	00000000 (	0.) BYTE 0	
	MTFDT	80008A0B	80008A2B	00000021 (	33.) BYTE 0	
	CONINTDSP	80008A2C	80008A2C	00000000 (	0.) BYTE 0	
	COMDRVSUB	80008A2C	80008A2C	00000000 (	0.) BYTE 0	
	MAHANDLER	80008A2C	80008A2C	00000000 (	0.) BYTE 0	
	XDSTRING	80008A2C	80008A2C	00000000 (	0.) BYTE 0	
	VERSION	80008A2C	80008A2C	00000000 (	0.) BYTE 0	
	DEVICEDAT	80008A2C	80008A2C	00000000 (	0.) BYTE 0	
	MDAT_END	80008A2C	80008A2C	00000000 (	0.) BYTE 0	
	SYSSIODEF	80008A2C	80008A2C	00000000 (	0.) BYTE 0	
	LIB$MSGDEF	80008A2C	80008A2C	00000000 (	0.) BYTE 0	
	SYSSPRDEF	80008A2C	80008A2C	00000000 (	0.) BYTE 0	
	RMS$GLOBALS	80008A2C	80008A2C	00000000 (	0.) BYTE 0	
	SYS$$SDEF	80008A2C	80008A2C	00000000 (	0.) BYTE 0	
	SYSSP1_VECTOR	80008A2C	80008A2C	00000000 (	0.) BYTE 0	
A$EXENONPAGED		80008A2C	80008F9C	00000571 (	1393.) LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	ASTDEL	80008A2C	80008CC0	00000295 (	661.) LONG 2	
	FORKCNTRL	80008CC4	80008D3F	0000007C (	124.) LONG 2	
	TIMESCHDL	80008D40	80008F9C	0000025D (	605.) LONG 2	
AES1		80008F9D	8000925A	000002BE (	702.) BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	RSE	80008F9D	8000925A	000002BE (	702.) BYTE 0	
AES2		8000925B	80009286	0000002C (	44.) BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	RSE	8000925B	80009286	0000002C (	44.) BYTE 0	
AEXENONPAGED		80009288	8000A32A	000010A3 (	4259.) LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	SHELL	80009288	8000928B	00000004 (	4.) BYTE 0	
	EXSUBROUT	8000928C	8000936D	000000E2 (	226.) BYTE 0	
	MEMORYALC	8000936E	800097C0	00000453 (	1107.) BYTE 0	
	MUTEX	800097C1	800098DC	0000011C (	284.) BYTE 0	
	POSTEF	800098DD	80009A3F	00000163 (	355.) BYTE 0	
	PROCSTRT	80009A40	80009A50	00000011 (	17.) BYTE 0	
	SCHED	80009A54	80009ACA	00000077 (	119.) LONG 2	
	SYSASCEFC	80009ACB	80009B17	0000004D (	77.) BYTE 0	
	SYSBRDCST	80009B18	80009EFB	000003E4 (	996.) BYTE 0	
	SYSDELPRC	80009EFC	80009F49	0000004E (	78.) BYTE 0	
	SYSEVTSRV	80009F4A	80009FE8	0000009F (	159.) BYTE 0	
	SYSGETJPI	80009FE9	80009FEF	00000007 (	7.) BYTE 0	
	SYSPCNTRL	80009FF0	8000A1BC	000001CD (	461.) BYTE 0	
	SYSSETPFM	8000A1C0	8000A246	00000087 (	135.) LONG 2	
	SYSWAIT	8000A247	8000A32A	000000E4 (	228.) BYTE 0	
LOCKMGR		8000A32C	8000AC96	0000096B (	2411.) LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	DEADLOCK	8000A32C	8000A53F	00000214 (	532.) BYTE 0	
	SYSENQDEQ	8000A540	8000AC96	00000757 (	1879.) LONG 2	
WIONONPAGED		8000AC98	8000C2A9	00001612 (	5650.) LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	BUFFERCTL	8000AC98	8000AD18	00000081 (	129.) BYTE 0	
	ERRORLOG	8000AD19	8000AFF4	000002DC (	732.) BYTE 0	

Psect Name	Module Name	Base	End	Length		Align	Attributes			
WIONONPAGED		8000AC98	8000C2A9	00001612 (	5650.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	IOSUBNPAG	8000AFF5	8000B6D7	000006E3 (	1763.)	BYTE 0				
	IOSUBRAMS	8000B6D8	8000B874	0000019D (	413.)	BYTE 0				
	LOADMREG	8000B875	8000BA04	00000190 (	400.)	BYTE 0				
	MOUNTVER	8000BA05	8000BD6E	0000036A (	874.)	BYTE 0				
	IPCONTROL	8000BD70	8000BF70	00000201 (	513.)	LONG 2				
	SYSDEVALC	8000BF71	8000BFB8	00000048 (	72.)	BYTE 0				
	COMDRVSUB	8000BFB9	8000C2A9	000002F1 (	753.)	BYTE 0				
WMOUNTVERMSG		8000C2AA	8000C3FB	00000152 (	338.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	MOUNTVER	8000C2AA	8000C38A	000000E1 (	225.)	BYTE 0				
	IPCONTROL	8000C38B	8000C3FB	00000071 (	113.)	BYTE 0				
XDELTA		8000C3FC	8000C451	00000056 (	86.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	INIT	8000C3FC	8000C451	00000056 (	86.)	BYTE 0				
X_PATCH_NONPGD_CODE		8000C452	8000C651	00000200 (	512.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	MDAT	8000C452	8000C651	00000200 (	512.)	BYTE 0				
YSSSBEGIN_PAGEDCODE		8000C800	8000C800	00000000 (	0.)	PAGE 9	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	SYSPARAM	8000C800	8000C800	00000000 (	0.)	PAGE 9				
YSSSPATCH_EXTEND_CODE		8000C800	8000CDFF	00000600 (	1536.)	PAGE 9	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	MDAT	8000C800	8000CDFF	00000600 (	1536.)	PAGE 9				
YSCMODE		8000CE00	8000CEF8	000000F9 (	249.)	QUAD 3	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	CMODSSDSP	8000CE00	8000CEF8	000000F9 (	249.)	QUAD 3				
YSCMODEN		8000CEF9	8000CF20	00000028 (	40.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	CMODSSDSP	8000CEF9	8000CF20	00000028 (	40.)	BYTE 0				
YSCMODEX		8000CF21	8000CF48	00000028 (	40.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	CMODSSDSP	8000CF21	8000CF48	00000028 (	40.)	BYTE 0				
YSCMODK		8000CF50	8000D167	00000218 (	536.)	QUAD 3	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	CMODSSDSP	8000CF50	8000D167	00000218 (	536.)	QUAD 3				
YSCMODKN		8000D168	8000D1BA	00000053 (	83.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	CMODSSDSP	8000D168	8000D1BA	00000053 (	83.)	BYTE 0				
YSCMODKX		8000D1BB	8000D20E	00000054 (	84.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	CMODSSDSP	8000D1BB	8000D20E	00000054 (	84.)	BYTE 0				
YSDISMOUNT		8000D20F	8000D3AF	000001A1 (	417.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	DISMOUNT	8000D20F	8000D3AF	000001A1 (	417.)	BYTE 0				
YSEXEPAGED		8000D3B0	80011979	000045CA (	17866.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	EXSUBROUT	8000D3B0	8000D47D	000000CE (	206.)	BYTE 0				
	IMGACTSUB	8000D47E	8000D4AC	0000002F (	47.)	BYTE 0				
	IOSUBPAGD	8000D4AD	8000D7AD	00000301 (	769.)	BYTE 0				
	LOGNAMSUB	8000D7AE	8000D9A1	000001F4 (	500.)	BYTE 0				
	PHDUTL	8000D9A2	8000DC1B	0000027A (	634.)	BYTE 0				

Psect Name	Module Name	Base	End	Length		Align	Attributes
YSEXEPAGED		8000D3B0	80011979	000045CA	(17866.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	RMSRESET	8000DC1C	8000DC5C	00000041	(65.)	BYTE 0	
	SYSADJWSL	8000DC5D	8000DD3B	000000DF	(223.)	BYTE 0	
	SYSADJSTK	8000DD3C	8000DDA6	0000006B	(107.)	BYTE 0	
	SYSASCEFC	8000DDA7	8000E2A2	000004FC	(1276.)	BYTE 0	
	SYSASSIGN	8000E2A3	8000E4E3	00000241	(577.)	BYTE 0	
	SYSASTCON	8000E4E4	8000E543	00000060	(96.)	BYTE 0	
	SYSCREDEL	8000E544	8000E913	000003D0	(976.)	BYTE 0	
	SYSCREPRC	8000E914	8000EEC9	000005B6	(1462.)	BYTE 0	
	SYSCRMPSC	8000EECA	8000EED3	0000000A	(10.)	BYTE 0	
	SYSCVRTIM	8000EED4	8000F31F	0000044C	(1100.)	BYTE 0	
	SYSDCLCMH	8000F320	8000F362	00000043	(67.)	BYTE 0	
	SYSDCLEXH	8000F363	8000F3D6	00000074	(116.)	BYTE 0	
	SYSDELPRC	8000F3D7	8000F813	0000043D	(1085.)	BYTE 0	
	SYSDEVALC	8000F814	8000F991	0000017E	(382.)	BYTE 0	
	SYSDGBLSC	8000F992	8000FC5A	000002C9	(713.)	BYTE 0	
	SYSFAO	8000FC5B	8000FFF3	00000399	(921.)	BYTE 0	
	SYSGETDEV	8000FFF4	800104AD	000004BA	(1210.)	BYTE 0	
	SYSGETPTI	800104AE	800104CD	00000020	(32.)	BYTE 0	
	SYSIMGACT	800104CE	800104D2	00000005	(5.)	BYTE 0	
	SYSLKWSET	800104D3	8001055F	0000008D	(141.)	BYTE 0	
	SYSLOGNAM	80010560	80010744	000001E5	(485.)	BYTE 0	
	SYSMAILBX	80010745	80010BA8	00000464	(1124.)	BYTE 0	
	SYSPURGWS	80010BA9	80010BE8	00000040	(64.)	BYTE 0	
	SYSSETEXV	80010BE9	80010C2B	00000043	(67.)	BYTE 0	
	SYSSETMOD	80010C2C	80010C60	00000035	(53.)	BYTE 0	
	SYSSETPRA	80010C61	80010D05	000000A5	(165.)	BYTE 0	
	SYSSETPRT	80010D06	80010D46	00000041	(65.)	BYTE 0	
	SYSSNDMSG	80010D47	80010FAB	00000265	(613.)	BYTE 0	
	SYSUPDSEC	80010FAC	8001111D	00000172	(370.)	BYTE 0	
	SHMGSDRTN	8001111E	80011979	0000085C	(2140.)	BYTE 0	
YSLOWUSE		8001197A	800119AD	00000034	(52.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	PAGEFILE	8001197A	800119AD	00000034	(52.)	BYTE 0	
YCVTATB		800119AE	80011A27	0000007A	(122.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	CVT_ATB	800119AE	80011A27	0000007A	(122.)	BYTE 0	
YEXEPAGED		80011A28	80012E17	000013F0	(5104.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	SYSENQDEQ	80011A28	80011CC5	0000029E	(670.)	BYTE 0	
	SYSEXIT	80011CC6	80011D39	00000074	(116.)	BYTE 0	
	SYSGETMSG	80011D3A	80012067	0000032E	(814.)	BYTE 0	
	SYSGETJPI	80012068	8001206C	00000005	(5.)	BYTE 0	
	SYSGETSYI	8001206D	800121B3	00000147	(327.)	BYTE 0	
	SYSGETTIM	800121B4	800121E0	0000002D	(45.)	BYTE 0	
	SYSPUTMSG	800121E1	80012434	00000254	(596.)	BYTE 0	
	SYSRUNDWN	80012435	8001266F	00000238	(571.)	BYTE 0	
	SYSSETPFM	80012670	800128EC	0000027D	(637.)	LONG 2	
	SYSSETPRV	800128ED	800129CA	000000DE	(222.)	BYTE 0	
	SYSSETSSF	800129CB	800129E7	0000001D	(29.)	BYTE 0	
	SYSSETSTK	800129E8	80012A39	00000052	(82.)	BYTE 0	
	SYSUNWIND	80012A3A	80012B7B	00000142	(322.)	BYTE 0	

Psect Name	Module Name	Base	End	Length		Align	Attributes			
YEXEPAGED		80011A28	80012E17	000013F0 (	5104.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	SYSSETIME	80012B7C	80012E17	0000029C (	668.)	BYTE 0				
YEXEPAGED1		80012E18	80013297	00000480 (	1152.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	EXCEPTION	80012E18	80013297	00000480 (	1152.)	LONG 2				
YEXEPAGED2		80013298	80013BF1	0000095A (	2394.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	EXCEPTMSG	80013298	800134F6	0000025F (	607.)	BYTE 0				
	PROCSTRT	800134F7	800139BF	000004C9 (	1225.)	BYTE 0				
	OPENMSG	800139C0	80013BF1	00000232 (	562.)	BYTE 0				
YFSSPATCH_PAGED_CODE		80013BF4	80013FF3	00000400 (	1024.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	MDAT	80013BF4	80013FF3	00000400 (	1024.)	LONG 2				
YFSSSYSCRMPSC		80013FF4	80014835	00000B42 (	2882.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	SYSCRMPSC	80013FF4	80014835	00000B42 (	2882.)	BYTE 0				
YFSSYSGETJPI		80014836	80015283	0000074E (	1870.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	SYSGETJPI	80014836	80015283	0000074E (	1870.)	BYTE 0				
YFSSSYSIMGACT		80015284	800166D6	00001453 (	5203.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	IMGACTSUB	80015284	800154CF	0000024C (	588.)	BYTE 0				
	SYSIMGACT	800154D0	800166D6	00001207 (	4615.)	BYTE 0				
YFSSSYSIMGSTA		800166D7	8001688D	000001B7 (	439.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	SYSIMGSTA	800166D7	8001688D	000001B7 (	439.)	BYTE 0				
YFSLOWUSE		8001688E	80016EE8	0000065B (	1627.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	ACCOUNT	8001688E	80016AED	00000260 (	608.)	BYTE 0				
	SWAPPER	80016AEE	80016C0A	0000011D (	285.)	BYTE 0				
	SYSIMGACT	80016C0B	80016EE8	000002DE (	734.)	BYTE 0				
YFILEREAD		80016EE9	800179F3	00000B0B (	2827.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	CVTFILNAM	80016EE9	80016FBB	000000D3 (	211.)	BYTE 0				
	FILEREAD	80016FBC	80017836	0000087B (	2171.)	BYTE 0				
	FILERWIO	80017837	80017867	00000031 (	49.)	BYTE 0				
	SYSIMGACT	80017868	800179F3	0000018C (	396.)	BYTE 0				
YYSHELLPAGED		80017A00	800189FF	00001000 (	4096.)	PAGE 9	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	SHELL	80017A00	800189FF	00001000 (	4096.)	PAGE 9				
YZ99SPAGEDEND		80018A00	80018A00	00000000 (	0.)	PAGE 9	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	MDAT	80018A00	80018A00	00000000 (	0.)	PAGE 9				
ZSDEBUGA		80018A00	80018A00	00000000 (	0.)	PAGE 9	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	INIT	80018A00	80018A00	00000000 (	0.)	PAGE 9				
ZSDEBUGXDSTR		80018A00	80018BEF	000001F0 (	496.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	XDSTRING	80018A00	80018BEF	000001F0 (	496.)	BYTE 0				
ZSDEBUG_CODE		80018BF0	8001AD0F	00002120 (	8480.)	LONG 2	PIC,USR,CON,REL,LCL,NOSHR,	EXE,	RD,	WRT,NOVEC
	XDELTA	80018BF0	80019657	00000A68 (	2664.)	LONG 2				

Psect Name	Module Name	Base	End	Length		Align	Attributes
ZSDEBUG.CODE		80018BF0	8001AD0F	00002120 (	8480.)	LONG 2	PIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	LIBSINS.DECODE	80019658	80019D0E	000006B7 (	1719.)	LONG 2	
	LIBSVAX.INST	80019D10	8001AD0F	00001000 (	4096.)	LONG 2	
ZSINIT		8001AE00	8001BEEE	000010EF (	4335.)	PAGE 9	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	INIT	8001AE00	8001BEEE	000010EF (	4335.)	PAGE 9	
ZSINITSPFN.FIXUP.TABLE		8001BEEF	8001C074	00000186 (	390.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	MDAT	8001BEEF	8001BEEF	00000000 (	0.)	BYTE 0	
	ALLOCPFN	8001BEEF	8001BF36	00000048 (	72.)	BYTE 0	
	PAGEFAULT	8001BF37	8001BF6C	00000036 (	54.)	BYTE 0	
	PHDUTL	8001BF6D	8001BF72	00000006 (	6.)	BYTE 0	
	SWAPPER	8001BF73	8001BFC6	00000054 (	84.)	BYTE 0	
	WRTMFYPAG	8001BFC7	8001BFD8	00000012 (	18.)	BYTE 0	
	SYSCREDEL	8001BFD9	8001BFEA	00000012 (	18.)	BYTE 0	
	SYSLKWSET	8001BFEB	8001C008	0000001E (	30.)	BYTE 0	
	MDAT.END	8001C009	8001C074	0000006C (	108.)	BYTE 0	
ZSINIT00		8001C075	8001C07A	00000006 (	6.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	INITVEC	8001C075	8001C07A	00000006 (	6.)	BYTE 0	
ZSINIT000		8001C07C	8001C07C	00000000 (	0.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	INIT	8001C07C	8001C07C	00000000 (	0.)	LONG 2	
ZSINIT001		8001C07C	8001C0DB	00000060 (	96.)	LONG 2	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	BOOPARAM	8001C07C	8001C0DB	00000060 (	96.)	LONG 2	
ZSINITX		8001C0DC	8001C10A	0000002F (	47.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	VERSION	8001C0DC	8001C10A	0000002F (	47.)	BYTE 0	
ZSINIT.DRIVER		8001C10B	8001C1F4	000000EA (	234.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	RELOCDRV	8001C10B	8001C1F4	000000EA (	234.)	BYTE 0	
ZSINIT..BUGA		8001C200	8001C5CA	000003CB (	971.)	PAGE 9	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	BUGCHECK	8001C200	8001C5CA	000003CB (	971.)	PAGE 9	
ZSINIT..BUGC		8001C5CB	8001C7CB	00000201 (	513.)	BYTE 0	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	BUGCHECK	8001C5CB	8001C733	00000169 (	361.)	BYTE 0	
	CONSOLIO	8001C734	8001C7CB	00000098 (	152.)	BYTE 0	
ZSINIT..BUGMSG		8001C7CC	8001E9C7	000021FC (	8700.)	WORD 1	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	BUGCHKMSG	8001C7CC	8001E9C7	000021FC (	8700.)	WORD 1	
ZSINIT..BUGZEND		8001E9C8	8001E9C8	00000000 (	0.)	WORD 1	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	BUGCHECK	8001E9C8	8001E9C8	00000000 (	0.)	WORD 1	
.Z.SYSSEND		8001EA00	8001EA00	00000000 (	0.)	PAGE 9	NOPIC,USR,CON,REL,LCL,NOSHR, EXE, RD, WRT,NOVEC
	MDAT.END	8001EA00	8001EA00	00000000 (	0.)	PAGE 9	

```
                                        +-----------------------------+
                                        | Symbol Cross Reference |
                                        +-----------------------------+
```

Symbol	Value	Defined By	Referenced By ...
ACP$ACCESS	80007B0B-R	SYSACPFDT	
ACP$ACCESSNET	80007B10-R	SYSACPFDT	
ACP$DEACCESS	80007B3C-R	SYSACPFDT	
ACP$GB␣BASEPRIO	80003434-R	SYSPARAM	
ACP$GB␣DATACHK	80003433-R	SYSPARAM	
ACP$GB␣MAXREAD	80003430-R	SYSPARAM	
ACP$GB␣SWAPFLGS	80003435-R	SYSPARAM	
ACP$GB␣WINDOW	80003431-R	SYSPARAM	
ACP$GB␣WRITBACK	80003432-R	SYSPARAM	
ACP$GW␣DIRCACHE	80003422-R	SYSPARAM	
ACP$GW␣EXTCACHE	80003428-R	SYSPARAM	
ACP$GW␣EXTLIMIT	8000342A-R	SYSPARAM	
ACP$GW␣FIDCACHE	80003426-R	SYSPARAM	
ACP$GW␣HDRCACHE	80003420-R	SYSPARAM	
ACP$GW␣MAPCACHE	8000341E-R	SYSPARAM	
ACP$GW␣QUOCACHE	8000342C-R	SYSPARAM	
ACP$GW␣SYSACC	8000342E-R	SYSPARAM	
ACP$GW␣WORKSET	80003424-R	SYSPARAM	
ACP$MODIFY	80007B91-R	SYSACPFDT	
ACP$MOUNT	80007B99-R	SYSACPFDT	
ACP$READBLK	80007BB9-R	SYSACPFDT	
ACP$V␣READCHK	00000000	SYSPARAM	
ACP$V␣SWAPGRP	00000001	SYSPARAM	
ACP$V␣SWAPMAG	00000003	SYSPARAM	
ACP$V␣SWAPPRV	00000002	SYSPARAM	
ACP$V␣SWAPSYS	00000000	SYSPARAM	
ACP$V␣WRITECHK	00000001	SYSPARAM	
ACP$WRITEBLK	80007BE8-R	SYSACPFDT	
ATS␣UBA	00000001	SYS$IODEF	CONINTDSP MBDRIVER NLDRIVER
			POWERFAIL
BOO$A␣BOOPARAM	8001C07C-R	BOOPARAM	
BOO$C␣BOOPARSZ	00000060	BOOPARAM	
BOO$C␣SYSPARSZ	00000334	SYSPARAM	
BOO$GB␣SYSTEMID	8001C0CA-R	BOOPARAM	INIT
BOO$GL␣BOOTCB	8001C0BC-R	BOOPARAM	INIT
BOO$GL␣DSKDRV	8001C07C-R	BOOPARAM	INIT
BOO$GL␣IRPCNT	8001C098-R	BOOPARAM	
BOO$GL␣LRPCNT	8001C0A8-R	BOOPARAM	
BOO$GL␣LRPMIN	8001C0A0-R	BOOPARAM	INIT
BOO$GL␣LRPSIZE	8001C09C-R	BOOPARAM	INIT
BOO$GL␣LRPSPLIT	8001C0A4-R	BOOPARAM	INIT
BOO$GL␣NPAGEDYN	8001C090-R	BOOPARAM	INIT
BOO$GL␣PRTDRV	8001C0D0-R	BOOPARAM	INIT
BOO$GL␣SCSLOA	8001C0D8-R	BOOPARAM	INIT
BOO$GL␣SPLITADR	8001C094-R	BOOPARAM	INIT
BOO$GL␣SPTFREH	800034D0-R	SYSPARAM	INIT IOSUBNPAG
BOO$GL␣SPTFREL	800034CC-R	SYSPARAM	INIT IOSUBNPAG
BOO$GL␣SRPCNT	8001C0B0-R	BOOPARAM	
BOO$GL␣SRPSPLIT	8001C0AC-R	BOOPARAM	INIT

Symbol	Value	Defined By	Referenced By ...
BOO$GL_SYSLOA	8001C080-R	BOOPARAM	INIT
BOO$GL_TRMDRV	8001C084-R	BOOPARAM	INIT
BOO$GL_UCODE	8001C0D4-R	BOOPARAM	INIT
BOO$GQ_FILCACHE	8001C0B4-R	BOOPARAM	INIT
BOO$GQ_INILOA	8001C088-R	BOOPARAM	INIT
BOO$GT_TOPSYS	8001C0C0-R	BOOPARAM	INIT
BUG$A_PAGED	8001C200-R	BUGCHECK	
BUG$A_PAGEDEND	8001E9C8-R	BUGCHECK	
BUG$FATAL	80007A6E-R	BUGCHECK	
BUG$T_MESSAGES	8001C7CC-R	BUGCHKMSG	BUGCHECK
BUG$_ACPMBFAIL	00000008	BUGCHKMSG	
BUG$_ACPRECURS	000004B8	BUGCHKMSG	
BUG$_ACPUNSTAK	000004C0	BUGCHKMSG	
BUG$_ACPVAFAIL	00000010	BUGCHKMSG	
BUG$_ALCPHD	00000018	BUGCHKMSG	PHDUTL
BUG$_ALCSMBCLR	00000020	BUGCHKMSG	
BUG$_APTREFHIGH	00000028	BUGCHKMSG	SWAPPER
BUG$_APTWRTERR	00000030	BUGCHKMSG	SWAPPER
BUG$_ASYNCWRTER	00000038	BUGCHKMSG	
BUG$_BADALORQSZ	00000040	BUGCHKMSG	MEMORYALC
BUG$_BADBOOTCB	000000F0	BUGCHKMSG	SYSSETIME
BUG$_BADBUFADR	00000048	BUGCHKMSG	
BUG$_BADBUFTYP	00000050	BUGCHKMSG	
BUG$_BADDALRQSZ	00000058	BUGCHKMSG	COMDRVSUB	MEMORYALC
BUG$_BADFID	00000060	BUGCHKMSG	
BUG$_BADFORKIPL	00000068	BUGCHKMSG	
BUG$_BADLCKWSLE	00000070	BUGCHKMSG	PAGEFAULT
BUG$_BADMCKCOD	00000078	BUGCHKMSG	
BUG$_BADPAGFILA	00000080	BUGCHKMSG	PAGEFILE
BUG$_BADPAGFILD	00000088	BUGCHKMSG	PAGEFILE
BUG$_BADPAGTYPE	00000090	BUGCHKMSG	WRTMFYPAG
BUG$_BADQHDR	00000478	BUGCHKMSG	MAHANDLER	MEMORYALC
BUG$_BADRSEIPL	00000098	BUGCHKMSG	RSE
BUG$_BADRVNWCB	000004C8	BUGCHKMSG	
BUG$_BADSBMBLK	000000A0	BUGCHKMSG	
BUG$_BADSWPVBN	000000A8	BUGCHKMSG	WRTMFYPAG
BUG$_BADWCBPT	00000080	BUGCHKMSG	
BUG$_BDPPURGERR	00000488	BUGCHKMSG	
BUG$_BRDMSGLOST	000004A0	BUGCHKMSG	SYSBRDCST
BUG$_CEBREFNEG	00000498	BUGCHKMSG	SYSASCEFC
BUG$_CHMONIS	000000B8	BUGCHKMSG	POWERFAIL
BUG$_CHMVEC	000004F0	BUGCHKMSG	POWERFAIL
BUG$_CIPORT	000005E8	BUGCHKMSG	
BUG$_CONTRACT	000000C0	BUGCHKMSG	SYSCREDEL
BUG$_DBLERR	000000C8	BUGCHKMSG	POWERFAIL
BUG$_DECPTREF	000000D0	BUGCHKMSG	PAGEFAULT
BUG$_DELCONPFN	000000D8	BUGCHKMSG	ALLOCPFN
BUG$_DELGBLSEC	000000E0	BUGCHKMSG	SYSDGBLSC
BUG$_DELGBLWCB	000000E8	BUGCHKMSG	
BUG$_DELWSLEX	000000F8	BUGCHKMSG	PAGEFAULT
BUG$_DEQSUBLCKS	00000508	BUGCHKMSG	DEADLOCK	SYSENQDEQ
BUG$_DIRENTRY	00000100	BUGCHKMSG	

Symbol	Value	Defined By	Referenced By ...	
BUG$_DISKCLASS	000005E0	BUGCHKMSG		
BUG$_DOUBLDALOC	00000108	BUGCHKMSG		
BUG$_DOUBLDEALO	00000110	BUGCHKMSG	MEMORYALC	
BUG$_ERRCACHFUL	000004D0	BUGCHKMSG		
BUG$_ERRHALT	00000118	BUGCHKMSG	POWERFAIL	
BUG$_EXHFUL	00000120	BUGCHKMSG		
BUG$_EXPANDPHD	00000128	BUGCHKMSG	PHDUTL	
BUG$_EXTCACHIV	000004D8	BUGCHKMSG		
BUG$_FATALEXCPT	00000130	BUGCHKMSG	EXCEPTION	
BUG$_FILCNTNONZ	000004F8	BUGCHKMSG	SYSDELPRC	SYSRUNDWN
BUG$_FREEPAGREF	00000138	BUGCHKMSG	ALLOCPFN	
BUG$_FREWSLX	00000140	BUGCHKMSG	PAGEFAULT	
BUG$_GBLPAGSZRO	00000148	BUGCHKMSG	SWAPPER	
BUG$_GBLWSLXERR	00000150	BUGCHKMSG	SYSLKWSET	
BUG$_GPGNULPGFL	00000158	BUGCHKMSG		
BUG$_HALT	00000160	BUGCHKMSG	POWERFAIL	
BUG$_HDRNOTMAP	00000168	BUGCHKMSG		
BUG$_ICONPFNDAT	00000170	BUGCHKMSG		
BUG$_ICPAGELOC	00000178	BUGCHKMSG	SWAPPER	
BUG$_IFREPAGCNT	00000180	BUGCHKMSG		
BUG$_ILLEVTNUM	00000188	BUGCHKMSG	RSE	
BUG$_ILLVEC	00000190	BUGCHKMSG	POWERFAIL	
BUG$_INCONSTATE	00000198	BUGCHKMSG	IOSUBNPAG	
BUG$_INCPTREF	000001A0	BUGCHKMSG	PAGEFAULT	
BUG$_INSNFREPAG	000001A8	BUGCHKMSG	SWAPPER	
BUG$_INSSWPFIL	000001B0	BUGCHKMSG	PHDUTL	SWAPPER
BUG$_INSWAPERR	000001B8	BUGCHKMSG	SWAPPER	
BUG$_INVCHAN	000001C0	BUGCHKMSG		
BUG$_INVEXCEPTN	000001C8	BUGCHKMSG	EXCEPTION	
BUG$_INVPTEFMT	000001D0	BUGCHKMSG	LOADMREG	
BUG$_INVRSPID	000005C0	BUGCHKMSG		
BUG$_INVTQEFMT	000001D8	BUGCHKMSG	TIMESCHDL	
BUG$_IVBAKADIO	000001E0	BUGCHKMSG	PAGEFAULT	WRTMFYPAG
BUG$_IVGBLTYP	000001E8	BUGCHKMSG	SYSCREDEL	
BUG$_IVLISTK	000001F0	BUGCHKMSG	POWERFAIL	
BUG$_IVSSRVRQST	000001F8	BUGCHKMSG	SYSDCLCMH	SYSDCLEXH
BUG$_IVWSETLIST	00000200	BUGCHKMSG	SWAPPER	
BUG$_KRNLSTAKNV	00000208	BUGCHKMSG	EXCEPTION	
BUG$_LKBGRANTED	000005B0	BUGCHKMSG	DEADLOCK	
BUG$_LKBREFNEG	00000510	BUGCHKMSG	SYSENQDEQ	
BUG$_MACHINECHK	00000210	BUGCHKMSG		
BUG$_MAKEWSLE	00000218	BUGCHKMSG	PAGEFAULT	
BUG$_MAPCNTZER	000004E0	BUGCHKMSG		
BUG$_MBACBHUNG	000004A8	BUGCHKMSG	MBAINTDSP	
BUG$_MFYNULPGFL	00000228	BUGCHKMSG	PAGEFAULT	
BUG$_MODRELNBAK	00000220	BUGCHKMSG	WRTMFYPAG	
BUG$_MPASYNCWRT	00000548	BUGCHKMSG		
BUG$_MPBADMCK	00000538	BUGCHKMSG		
BUG$_MPCHMONIS	00000588	BUGCHKMSG		
BUG$_MPCHMVEC	00000590	BUGCHKMSG		
BUG$_MPDBLERR	00000560	BUGCHKMSG		
BUG$_MPERRHALT	00000580	BUGCHKMSG		

Symbol	Value	Defined By	Referenced By ...	
------	-----	----------	-----------------	
BUGS_MPHALT	00000568	BUGCHKMSG		
BUGS_MPILLVEC	00000570	BUGCHKMSG		
BUGS_MPIVLISTK	00000558	BUGCHKMSG		
BUGS_MPKNLSTKNV	000005A0	BUGCHKMSG		
BUGS_MPMCHECK	00000540	BUGCHKMSG		
BUGS_MPNOUSRWCS	00000578	BUGCHKMSG		
BUGS_MPSCBRDERR	00000598	BUGCHKMSG		
BUGS_MPUNEXPINT	000005A8	BUGCHKMSG		
BUGS_MPUNKRSTRT	00000550	BUGCHKMSG		
BUGS_MPWALCIRP	00000230	BUGCHKMSG	WRTMFYPAG	
BUGS_MTXCNTNONZ	00000238	BUGCHKMSG	CMODSSDSP	
BUGS_NEGSHBREF	00000480	BUGCHKMSG	SHMGSDRTN	
BUGS_NETNOBUF	00000240	BUGCHKMSG		
BUGS_NETNOSTATE	00000248	BUGCHKMSG		
BUGS_NETRCVPKT	00000250	BUGCHKMSG		
BUGS_NETSYSSRV	00000258	BUGCHKMSG		
BUGS_NETTRANCNT	00000260	BUGCHKMSG		
BUGS_NOACPCHAN	00000268	BUGCHKMSG		
BUGS_NOACPMAIL	00000270	BUGCHKMSG		
BUGS_NOAQBACP	00000278	BUGCHKMSG		
BUGS_NOBUFPCKT	00000280	BUGCHKMSG		
BUGS_NOBVPVCB	00000288	BUGCHKMSG		
BUGS_NOMULTBK	00000290	BUGCHKMSG		
BUGS_NONEXSTACP	00000298	BUGCHKMSG	IOCIOPOST	SYSQIOREQ
BUGS_NORCVBUF	000002A0	BUGCHKMSG		
BUGS_NOSHMGSD	00000490	BUGCHKMSG	SHMGSDRTN	SYSCREDEL
BUGS_NOTDDBDDB	000002A8	BUGCHKMSG		
BUGS_NOTFCBFCB	000002B0	BUGCHKMSG		
BUGS_NOTFCBWCB	000002B8	BUGCHKMSG		
BUGS_NOTFCPWCB	000002C0	BUGCHKMSG	IOCIOPOST	
BUGS_NOTIRPAQB	000002C8	BUGCHKMSG		
BUGS_NOTLKB	000005B8	BUGCHKMSG	DEADLOCK	
BUGS_NOTMTLMTL	000002D0	BUGCHKMSG		
BUGS_NOTPCB	000002D8	BUGCHKMSG	MUTEX	
BUGS_NOTRVTVCB	000002E0	BUGCHKMSG		
BUGS_NOTUCBIRP	000002E8	BUGCHKMSG		
BUGS_NOTUCBRVT	000002F0	BUGCHKMSG		
BUGS_NOTUCBUCB	000002F8	BUGCHKMSG		
BUGS_NOTUCBWCB	000004E8	BUGCHKMSG		
BUGS_NOTVCBUCB	00000300	BUGCHKMSG		
BUGS_NOTVVPVCB	00000308	BUGCHKMSG		
BUGS_NOTWCBIRP	00000310	BUGCHKMSG		
BUGS_NOTWCBWCB	000005D0	BUGCHKMSG		
BUGS_NOUSRWCS	00000318	BUGCHKMSG	POWERFAIL	
BUGS_OPERATOR	00000470	BUGCHKMSG	BUGCHECK	
BUGS_OUTSWPERR	00000320	BUGCHKMSG	SWAPPER	
BUGS_PAGEREDERR	00000328	BUGCHKMSG		
BUGS_PAGEWRTERR	00000330	BUGCHKMSG		
BUGS_PAGNTRNVAL	00000338	BUGCHKMSG	ALLOCPFN	
BUGS_PFNLISTCNT	00000340	BUGCHKMSG	ALLOCPFN	
BUGS_PFNREFNZRO	00000348	BUGCHKMSG	ALLOCPFN	
BUGS_PGFGBLBAD	00000350	BUGCHKMSG	PAGEFAULT	

Symbol	Value	Defined By	Referenced By ...		
BUG$_PGFIPLHI	00000358	BUGCHKMSG	PAGEFAULT		
BUG$_PGFLOCBAD	00000360	BUGCHKMSG	PAGEFAULT		
BUG$_PROCGONE	00000368	BUGCHKMSG	WRTMFYPAG		
BUG$_PTELENVIOL	00000370	BUGCHKMSG	SVAPTE		
BUG$_PTRCNT	00000378	BUGCHKMSG			
BUG$_PURGWSSCN	00000380	BUGCHKMSG	SYSPURGWS		
BUG$_QUEUEMPTY	00000388	BUGCHKMSG	SCHED	SWAPPER	
BUG$_RDSNONRES	00000390	BUGCHKMSG			
BUG$_REFCNTNEG	00000398	BUGCHKMSG	IOLOCK	SHMGSDRTN	
BUG$_RMSBUG	000003A0	BUGCHKMSG			
BUG$_RSBREFNEG	00000518	BUGCHKMSG	SYSENQDEQ		
BUG$_RSBREFNZRO	00000520	BUGCHKMSG	SYSENQDEQ		
BUG$_SCANDEADPT	000003A8	BUGCHKMSG	PAGEFAULT	SYSUPDSEC	
BUG$_SCBRDERR	00000528	BUGCHKMSG	POWERFAIL		
BUG$_SECREFNEG	000003B0	BUGCHKMSG	PHDUTL		
BUG$_SHRCNTNEG	000003B8	BUGCHKMSG	IOLOCK		
BUG$_SSRVEXCEPT	000003C0	BUGCHKMSG	CMODSSDSP		
BUG$_STATENTSVD	00000530	BUGCHKMSG	POWERFAIL		
BUG$_STRNOTWCB	000003C8	BUGCHKMSG	IOSUBRAMS		
BUG$_SWAPWSLE	000003D0	BUGCHKMSG	SYSLKWSET		
BUG$_SYSADJWSL	000003D8	BUGCHKMSG			
BUG$_SYSTRMERR	000003E0	BUGCHKMSG			
BUG$_TIPCUFLOW	000003E8	BUGCHKMSG			
BUG$_UBMAPEXCED	000003F0	BUGCHKMSG	LOADMREG		
BUG$_UDAPORT	000005D8	BUGCHKMSG			
BUG$_UNABLCREVA	000003F8	BUGCHKMSG	EXCEPTION	PROCSTRT	
BUG$_UNEXUBAINT	00000400	BUGCHKMSG			
BUG$_UNKNPRQ	00000480	BUGCHKMSG	MAHANDLER		
BUG$_UNKRSTRT	00000408	BUGCHKMSG	POWERFAIL		
BUG$_UNXINTEXC	00000410	BUGCHKMSG	ERRORLOG		
BUG$_UNXSIGNAL	00000418	BUGCHKMSG			
BUG$_V8NMAPFAIL	00000420	BUGCHKMSG			
BUG$_WACKQEMPTY	00000428	BUGCHKMSG			
BUG$_WCBFCBMNG	000005C8	BUGCHKMSG			
BUG$_WRTINVBUF	00000430	BUGCHKMSG			
BUG$_WRTINVHDR	00000438	BUGCHKMSG			
BUG$_WRTPGSBAK	00000440	BUGCHKMSG	SYSUPDSEC		
BUG$_WSLENOVAL	00000448	BUGCHKMSG	PAGEFAULT		
BUG$_WSLPAGCNT	00000450	BUGCHKMSG	SYSPURGWS		
BUG$_WSLVANVAL	00000458	BUGCHKMSG	PAGEFAULT		
BUG$_WSLXVANMAT	00000460	BUGCHKMSG	SYSCREDEL		
BUG$_WSSIZEERR	00000500	BUGCHKMSG	PAGEFAULT	RSE	
BUG$_ZEROPAGE	00000468	BUGCHKMSG	SWAPPER		
CISINITIAL	80002EFA-R	SYSLOAVEC			
CISINT	80002F00-R	SYSLOAVEC			
COM$DELATTNAST	8000BFB9-R	COMDRVSUB	MBDRIVER		
COM$DELCTRLAST	8000C0C3-R	COMDRVSUB			
COM$DRVDEALMEM	8000C02D-R	COMDRVSUB	IOSUBNPAG	MBDRIVER	MOUNTVER
COM$FLUSHATTNS	8000BFEC-R	COMDRVSUB	MBDRIVER		
COM$FLUSHCTRLS	8000C147-R	COMDRVSUB			
COM$POST	8000C01F-R	COMDRVSUB	MBDRIVER		
COM$SETATTNAST	8000C056-R	COMDRVSUB	MBDRIVER		

Symbol	Value	Defined By	Referenced By ...		
COM$SETCTRLAST	8000C194-R	COMDRVSUB			
CON$DISCON	80001893-R	CONINTDSP	DEVICEDAT		
CON$INITIAL	80001850-R	CONINTDSP	DEVICEDAT		
CON$INITLINE	80001866-R	CONINTDSP	DEVICEDAT		
CON$INTDISI	80000F34-R	DEVICEDAT			
CON$INTDISO	80000F58-R	DEVICEDAT			
CON$INTINP	80001894-R	CONINTDSP	DEVICEDAT		
CON$INTOUT	8000191F-R	CONINTDSP	DEVICEDAT		
CON$STARTIO	800018CE-R	CONINTDSP	DEVICEDAT		
CTL$AG_CLIDATA	7FFE7C10	SHELL			
CTL$AG_CLIMAGE	7FFE7C08	SHELL			
CTL$AG_CMEDATA	7FFE1600	SHELL	SYSIMGACT		
CTL$AL_CLICALBK	7FFE7C00	SHELL	CMOD$SDSP	PROCSTRT	
CTL$AL_CMCNTX	7FFE1600	SHELL	EXCEPTION		
CTL$AL_FINALEXC	7FFEFF28	SHELL	EXCEPTION	SYSGETJPI	SYSRUNDWN
			SYSSETEXV		
CTL$AL_IPASTVEC	7FFEFF68	SHELL	ASTDEL	SYSRUNDWN	
CTL$AL_STACK	7FFEFE10	SHELL	BUGCHECK	EXCEPTION	SYSDELPRC
			SYSIMGACT	SYSSETSTK	SYS$NDMSG
CTL$AL_STACKLIM	7FFEFE6C	SHELL	BUGCHECK	EXCEPTION	SYSSETSTK
CTL$AQ_EXCVEC	7FFEFE34	SHELL	EXCEPTION	SYSGETJPI	SYSRUNDWN
			SYSSETEXV		
CTL$A_COMMON	7FFE0E00	SHELL			
CTL$A_DISPVEC	7FFEA000	SHELL	PROCSTRT	SYSIMGACT	SYSRUNDWN
CTL$A_PRCALLREG	7FFE2000	SHELL			
CTL$C_CLIDATASZ	00000BF0	SHELL			
CTL$C_PRCALLSIZ	0000002E	SHELL			
CTL$GB_DEFLANG	7FFEFF51	SHELL			
CTL$GB_MSGMASK	7FFEFF50	SHELL	PROCSTRT	SYSCREPRC	SYSGETMSG
			SYSPUTMSG		
CTL$GB_PWRMODE	7FFEFF24	SHELL	SYSSETPRA		
CTL$GB_SSFILTER	7FFEFF25	SHELL	CMOD$SDSP	EXCEPTION	PROCSTRT
			SYSSETSSF		
CTL$GL_CCBBASE	7FFEFF38	SHELL	IOCIOPOST	IOSUBPAGD	PROCSTRT
			SYSDELPRC	SYSQIOREQ	SYSRUNDWN
CTL$GL_CLINTOWN	7FFE1804	SHELL			
CTL$GL_CMCNTX	7FFEFF88	SHELL			
CTL$GL_CMHANDLR	7FFEFE30	SHELL	EXCEPTION	SYSRUNDWN	
CTL$GL_CMSUPR	7FFEFE28	SHELL	EXCEPTION	SYSDCLCMH	SYSRUNDWN
CTL$GL_CMUSER	7FFEFE2C	SHELL	EXCEPTION		
CTL$GL_CTLBASVA	7FFEFE7C	SHELL	PHDUTL	PROCSTRT	SYSIMGACT
CTL$GL_DCLPRSOWN	7FFE1800	SHELL			
CTL$GL_FINALSTS	7FFEFEB8	SHELL	ACCOUNT	SYSDELPRC	SYSEXIT
CTL$GL_FIXUPLNK	7FFE1E08	SHELL	IMGACTSUB	SYSGETMSG	SYSIMGACT
CTL$GL_GETMSG	7FFEFE68	SHELL	PROCSTRT	SYSGETMSG	
CTL$GL_IAFEXE	7FFE1E10	SHELL	IMGACTSUB		
CTL$GL_IAFLAST	7FFE1E04	SHELL	IMGACTSUB	PROCSTRT	SYSIMGACT
CTL$GL_IAFLINK	7FFE1E00	SHELL	IMGACTSUB	PROCSTRT	
CTL$GL_IAFLNKPTR	7FFEFF8C	SHELL			
CTL$GL_IAFPERM	7FFE1E10	SHELL	IMGACTSUB	PROCSTRT	
CTL$GL_IBIOCNT	7FFEFEE8	SHELL	ACCOUNT		
CTL$GL_ICPUTIM	7FFEFED0	SHELL	ACCOUNT	SYSIMGACT	

Symbol	Value	Defined By	Referenced By ...		
CTLSGL_IDIOCNT	7FFEFEE4	SHELL	ACCOUNT	SYSIMGACT	
CTLSGL_IFAULTIO	7FFEFED8	SHELL	ACCOUNT	SYSIMGACT	
CTLSGL_IFAULTS	7FFEFED4	SHELL	ACCOUNT	SYSIMGACT	
CTLSGL_IMGHDRBF	7FFEFE80	SHELL	PHDUTL	SYSGETJPI	SYSIMGACT
CTLSGL_IPAGEFL	7FFEFEE0	SHELL	SYSCREDEL		
CTLSGL_IVOLUMES	7FFEFEEC	SHELL	ACCOUNT	SYSIMGACT	
CTLSGL_IWSPEAK	7FFEFEDC	SHELL	ACCOUNT	PAGEFAULT	SYSADJWSL
			SYSIMGACT		
CTLSGL_KNOWNFIL	7FFEFF64	SHELL			
CTLSGL_KSPINI	7FFEAE00	SHELL			
CTLSGL_KSTKBAS	7FFEA800	SHELL			
CTLSGL_LOGTBL	7FFEFE20	SHELL	PROCSTRT	SYSCOMMON	
CTLSGL_P1MERGE	7FFE1E0C	SHELL			
CTLSGL_PCB	7FFEFF58	SHELL	CMODSSDSP	EXCEPTION	IOSUBPAGD
			PROCSTRT	SYSCHGMOD	SYSGETDEV
			SYSGETSYI	SYSSNDMSG	
CTLSGL_PHD	7FFEFE88	SHELL	ACCOUNT	EXCEPTION	IOCIOPOST
			IOLOCK	PAGEFAULT	PHDUTL
			PROCSTRT	RSE	SYSADJWSL
			SYSCREDEL	SYSCREPRC	SYSCRMPSC
			SYSDELPRC	SYSDGBLSC	SYSGETJPI
			SYSIMGACT	SYSIMGSTA	SYSLKWSET
			SYSQIOREQ	SYSRUNDWN	SYSSETPFM
			SYSSETPRI	SYSSETPRV	SYSUPDSEC
CTLSGL_POWERAST	7FFEFF20	SHELL	SYSRUNDWN	SYSSETPRA	
CTLSGL_PPMSG	7FFEFF48	SHELL	SYSGETMSG		
CTLSGL_RMSBASE	7FFEFF44	SHELL	CMODSSDSP	PROCSTRT	SYSIMGACT
			SYSRUNDWN		
CTLSGL_RMSIP	7FFEFE08	SHELL			
CTLSGL_RMSPP	7FFEFE04	SHELL			
CTLSGL_RUF	7FFEFF5C	SHELL			
CTLSGL_RUNDNFLG	7FFEFE84	SHELL	SYSIMGACT		
CTLSGL_SITESPEC	7FFEFF60	SHELL	SYSGETJPI		
CTLSGL_THEXEC	7FFEFE54	SHELL	SYSDCLEXH	SYSRUNDWN	
CTLSGL_THSUPR	7FFEFE58	SHELL	SYSEXIT		
CTLSGL_USRCHME	7FFEFF1C	SHELL	CMODSSDSP	PROCSTRT	
CTLSGL_USRCHMK	7FFEFF18	SHELL	CMODSSDSP	PROCSTRT	
CTLSGL_USRUNDWN	7FFEFF54	SHELL	PROCSTRT	SYSDELPRC	SYSRUNDWN
CTLSGL_VECTORS	7FFEFE00	SHELL			
CTLSGL_VIRTPEAK	7FFEFEC0	SHELL	SYSCREDEL	SYSGETJPI	
CTLSGL_VOLUMES	7FFEFEC4	SHELL	ACCOUNT	SYSDELPRC	SYSGETJPI
			SYSIMGACT		
CTLSGL_WSPEAK	7FFEFEBC	SHELL	ACCOUNT	PAGEFAULT	SYSADJWSL
			SYSDELPRC	SYSGETJPI	
CTLSGQ_ALLOCREG	7FFEFE8C	SHELL	DISMOUNT	LOGNAMSUB	PROCSTRT
			SYSLOGNAM		
CTLSGQ_COMMON	7FFEFE60	SHELL	CMODSSDSP		
CTLSGQ_DBGAREA	7FFEFF3C	SHELL			
CTLSGQ_ISTART	7FFEFEC8	SHELL	ACCOUNT	SYSIMGACT	SYSRUNDWN
CTLSGQ_LOGIN	7FFEFEB0	SHELL	ACCOUNT	PROCSTRT	SYSDELPRC
			SYSGETJPI		
CTLSGQ_MOUNTLST	7FFEFE94	SHELL	SYSDELPRC	SYSGETDEV	

Symbol	Value	Defined By	Referenced By ...		
CTL$GQ_PROCPRIV	7FFEFF10	SHELL	PHDUTL	PROCSTRT	SYSGETJPI
			SYSIMGACT	SYSSETPRV	
CTL$GW_CHINDX	7FFEFE02	SHELL	IOSUBPAGD	SYSDELPRC	SYSQIOREQ
			SYSRUNDWN		
CTL$GW_NMIOCH	7FFEFE00	SHELL	IOSUBPAGD	PROCSTRT	SYSDELPRC
CTL$GW_PPMSGCHN	7FFEFF52	SHELL			
CTL$T_ACCOUNT	7FFEFEA8	SHELL	ACCOUNT	PROCSTRT	SYSCREPRC
			SYSDELPRC		
CTL$T_NODEADDR	7FFEFEF0	SHELL	ACCOUNT		
CTL$T_NODENAME	7FFEFEF7	SHELL	ACCOUNT		
CTL$T_REMOTEID	7FFEFEFE	SHELL	ACCOUNT		
CTL$T_USERNAME	7FFEFE9C	SHELL	ACCOUNT	PROCSTRT	SYSACPFDT
			SYSCREPRC	SYSDELPRC	SYSSNDMSG
DCS_DISK	00000001	SYS$IODEF	IOSUBNPAG		
DEV$M_DMT	00200000	SYS$IODEF	SYSDASSGN		
DEV$M_FOR	01000000	SYS$IODEF	SYSDASSGN		
DEV$M_MBX	00100000	SYS$IODEF	SYSDASSGN		
DEV$M_MNT	00080000	SYS$IODEF	SYSDASSGN		
DEV$M_RCK	40000000	SYS$IODEF	SYSDASSGN		
DEV$M_SWL	02000000	SYS$IODEF	SYSDASSGN		
DEV$M_TRM	00000004	SYS$IODEF	SYSDASSGN		
DEV$M_WCK	80000000	SYS$IODEF	SYSDASSGN		
DEV$V_ALL	00000017	SYS$IODEF	SYSDASSGN		
DEV$V_DMT	00000015	SYS$IODEF	SYSDASSGN		
DEV$V_FOD	0000000E	SYS$IODEF	SYSASSIGN		
DEV$V_FOR	00000018	SYS$IODEF	SYSDASSGN	SYSGETDEV	
DEV$V_MBX	00000014	SYS$IODEF	POWERFAIL	SYSASSIGN	SYSDASSGN
DEV$V_MNT	00000013	SYS$IODEF	SYSGETDEV		
DEV$V_NET	0000000D	SYS$IODEF	SYSASSIGN		
DEV$V_OPR	00000007	SYS$IODEF	SYSDASSGN		
DEV$V_SHR	00000010	SYS$IODEF	SYSASSIGN	SYSGETDEV	
DEV$V_SPL	00000006	SYS$IODEF	SYSASSIGN	SYSGETDEV	
DEV$V_SQD	00000005	SYS$IODEF	IOCIOPOST		
DRSINITIAL	80001337-R	DRINTHAND			
DRSINT	80001320-R	DRINTHAND			
DYNSC_ACB	00000002	GLOBALS			
DYNSC_ADP	00000001	GLOBALS			
DYNSC_AQB	00000003	GLOBALS			
DYNSC_BCB	00000033	GLOBALS			
DYNSC_BOOTCB	00000006	GLOBALS			
DYNSC_BRDCST	0000001A	GLOBALS			
DYNSC_BUFIO	00000013	GLOBALS			
DYNSC_CDB	00000034	GLOBALS			
DYNSC_CDRP	0000003B	GLOBALS			
DYNSC_CD_BBRPG	00000002	GLOBALS			
DYNSC_CD_CDDB	00000001	GLOBALS			
DYNSC_CEB	00000004	GLOBALS			
DYNSC_CI	00000061	GLOBALS			
DYNSC_CIDG	0000003E	GLOBALS			
DYNSC_CIMSG	0000003F	GLOBALS			
DYNSC_CI_BDT	00000001	GLOBALS			
DYNSC_CI_FQDT	00000002	GLOBALS			

Symbol	Value	Defined By	Referenced By ...
DYNSC_CLASSDRV	00000064	GLOBALS	
DYNSC_CONF	00000007	GLOBALS	
DYNSC_CRB	00000005	GLOBALS	
DYNSC_CXB	0000001B	GLOBALS	
DYNSC_DDB	00000006	GLOBALS	
DYNSC_DPT	0000001E	GLOBALS	CONINTDSP NLDRIVER
DYNSC_ERP	0000003D	GLOBALS	
DYNSC_EXTGSD	00000028	GLOBALS	
DYNSC_FCB	00000007	GLOBALS	
DYNSC_FRK	00000008	GLOBALS	
DYNSC_GSD	00000015	GLOBALS	
DYNSC_IDB	00000009	GLOBALS	
DYNSC_INIT	00000063	GLOBALS	
DYNSC_IRP	0000000A	GLOBALS	
DYNSC_IRPE	0000002C	GLOBALS	
DYNSC_JIB	0000002F	GLOBALS	
DYNSC_JMT	00000036	GLOBALS	
DYNSC_JPB	0000001F	GLOBALS	
DYNSC_KFH	00000026	GLOBALS	
DYNSC_KFI	00000018	GLOBALS	
DYNSC_LC_MP	00000001	GLOBALS	
DYNSC_LC_SCS	00000002	GLOBALS	
DYNSC_LKB	00000037	GLOBALS	
DYNSC_LKID	00000039	GLOBALS	
DYNSC_LOADCODE	00000062	GLOBALS	
DYNSC_LOG	0000000B	GLOBALS	
DYNSC_LPD	00000035	GLOBALS	
DYNSC_MBX	0000002B	GLOBALS	
DYNSC_MPWMAP	00000004	GLOBALS	
DYNSC_MTL	00000019	GLOBALS	
DYNSC_MVL	00000016	GLOBALS	
DYNSC_NDB	0000001C	GLOBALS	
DYNSC_NET	00000017	GLOBALS	
DYNSC_PBH	00000020	GLOBALS	
DYNSC_PCB	0000000C	GLOBALS	
DYNSC_PCBVEC	00000001	GLOBALS	
DYNSC_PDB	00000021	GLOBALS	
DYNSC_PFL	00000023	GLOBALS	PAGEFILE
DYNSC_PHVEC	00000002	GLOBALS	
DYNSC_PIB	00000022	GLOBALS	
DYNSC_PQB	0000000D	GLOBALS	
DYNSC_PRCMAP	00000005	GLOBALS	
DYNSC_PTR	00000025	GLOBALS	
DYNSC_RBM	00000031	GLOBALS	
DYNSC_RSB	00000038	GLOBALS	
DYNSC_RSHT	0000003A	GLOBALS	PROCSTRT
DYNSC_RUL	0000003C	GLOBALS	
DYNSC_RVT	0000000E	GLOBALS	
DYNSC_RVX	00000027	GLOBALS	
DYNSC_SCS	00000060	GLOBALS	
DYNSC_SCS_CDL	00000001	GLOBALS	
DYNSC_SCS_CDT	00000002	GLOBALS	

Symbol	Value	Defined By	Referenced By ...
DYNSC_SCS_DIR	00000003	GLOBALS	
DYNSC_SCS_PB	00000004	GLOBALS	
DYNSC_SCS_PDT	00000005	GLOBALS	
DYNSC_SCS_RDT	00000006	GLOBALS	
DYNSC_SCS_SB	00000007	GLOBALS	
DYNSC_SHB	0000002A	GLOBALS	
DYNSC_SHMCEB	0000002E	GLOBALS	
DYNSC_SHMGSD	00000029	GLOBALS	
DYNSC_SHRBUFIO	00000080	GLOBALS	
DYNSC_SLAVCEB	0000002D	GLOBALS	
DYNSC_SPECIAL	00000080	GLOBALS	
DYNSC_SSB	0000001D	GLOBALS	
DYNSC_SUBTYPE	00000060	GLOBALS	
DYNSC_SWPMAP	00000003	GLOBALS	
DYNSC_TQE	0000000F	GLOBALS	
DYNSC_TWP	00000030	GLOBALS	
DYNSC_TYPAHD	00000014	GLOBALS	
DYNSC_UCB	00000010	GLOBALS	
DYNSC_UNUSED	00000024	GLOBALS	
DYNSC_VCA	00000032	GLOBALS	
DYNSC_VCB	00000011	GLOBALS	
DYNSC_WCB	00000012	GLOBALS	
ECCSREENABLE	80002EBE-R	SYSLOAVEC	TIMESCHDL
ERLSALLOCEMB	8000AF0A-R	ERRORLOG	BUGCHECK DISMOUNT SYSSNDMSG
ERLSAL_BUFADDR	80002D90-R	ERRORLOG	BUGCHECK
ERLSCOLDSTART	8000AEEE-R	ERRORLOG	
ERLSDEVICEATTN	8000ADAA-R	ERRORLOG	
ERLSDEVICERR	8000AD19-R	ERRORLOG	
ERLSDEVICTMO	8000AD1D-R	ERRORLOG	
ERLSGB_BUFFLAG	80002D99-R	ERRORLOG	TIMESCHDL
ERLSGB_BUFIND	80002D98-R	ERRORLOG	
ERLSGB_BUFPTR	80002D9A-R	ERRORLOG	
ERLSGB_BUFTIM	80002D9B-R	ERRORLOG	
ERLSGL_ERLPID	80002D9C-R	ERRORLOG	
ERLSGL_SEQUENCE	80002DA0-R	ERRORLOG	BUGCHECK
ERLSLOGMESSAGE	8000AE95-R	ERRORLOG	
ERLSLOGSTATUS	8000AE23-R	ERRORLOG	
ERLSRELEASEMB	8000AFAA-R	ERRORLOG	BUGCHECK DISMOUNT IOSUBNPAG
SYSSNDMSG
ERLSUNEXP	80003C34-R	ERRORLOG	
ERLSVEC0	80003C34-R	ERRORLOG	
ERLSVEC100	80003C34-R	ERRORLOG	
ERLSVEC104	80003C34-R	ERRORLOG	
ERLSVEC108	80003C34-R	ERRORLOG	
ERLSVEC112	80003C34-R	ERRORLOG	
ERLSVEC116	80003C34-R	ERRORLOG	
ERLSVEC12	80003C34-R	ERRORLOG	
ERLSVEC120	80003C34-R	ERRORLOG	
ERLSVEC124	80003C34-R	ERRORLOG	
ERLSVEC128	80003C34-R	ERRORLOG	
ERLSVEC132	80003C34-R	ERRORLOG	
ERLSVEC136	80003C34-R	ERRORLOG	

Symbol	Value	Defined By	Referenced By ...
ERL$VEC140	80003C34-R	ERRORLOG	
ERL$VEC144	80003C34-R	ERRORLOG	
ERL$VEC148	80003C34-R	ERRORLOG	
ERL$VEC152	80003C34-R	ERRORLOG	
ERL$VEC156	80003C34-R	ERRORLOG	
ERL$VEC16	80003C34-R	ERRORLOG	
ERL$VEC160	80003C34-R	ERRORLOG	
ERL$VEC164	80003C34-R	ERRORLOG	
ERL$VEC168	80003C34-R	ERRORLOG	
ERL$VEC172	80003C34-R	ERRORLOG	
ERL$VEC176	80003C34-R	ERRORLOG	
ERL$VEC180	80003C34-R	ERRORLOG	
ERL$VEC184	80003C34-R	ERRORLOG	
ERL$VEC188	80003C34-R	ERRORLOG	
ERL$VEC192	80003C34-R	ERRORLOG	
ERL$VEC196	80003C34-R	ERRORLOG	
ERL$VEC20	80003C34-R	ERRORLOG	
ERL$VEC200	80003C34-R	ERRORLOG	
ERL$VEC204	80003C34-R	ERRORLOG	
ERL$VEC208	80003C34-R	ERRORLOG	
ERL$VEC212	80003C34-R	ERRORLOG	
ERL$VEC216	80003C34-R	ERRORLOG	
ERL$VEC220	80003C34-R	ERRORLOG	
ERL$VEC224	80003C34-R	ERRORLOG	
ERL$VEC228	80003C34-R	ERRORLOG	
ERL$VEC232	80003C34-R	ERRORLOG	
ERL$VEC236	80003C34-R	ERRORLOG	
ERL$VEC24	80003C34-R	ERRORLOG	
ERL$VEC240	80003C34-R	ERRORLOG	
ERL$VEC244	80003C34-R	ERRORLOG	
ERL$VEC248	80003C34-R	ERRORLOG	
ERL$VEC252	80003C34-R	ERRORLOG	
ERL$VEC256	80003B84-R	ERRORLOG	
ERL$VEC260	80003B88-R	ERRORLOG	
ERL$VEC264	80003B8C-R	ERRORLOG	
ERL$VEC268	80003B90-R	ERRORLOG	
ERL$VEC272	80003B94-R	ERRORLOG	
ERL$VEC276	80003B98-R	ERRORLOG	
ERL$VEC28	80003C34-R	ERRORLOG	
ERL$VEC280	80003B9C-R	ERRORLOG	
ERL$VEC284	80003BA0-R	ERRORLOG	
ERL$VEC288	80003BA4-R	ERRORLOG	
ERL$VEC292	80003BA8-R	ERRORLOG	
ERL$VEC296	80003BAC-R	ERRORLOG	
ERL$VEC300	80003BB0-R	ERRORLOG	
ERL$VEC304	80003BB4-R	ERRORLOG	
ERL$VEC308	80003BB8-R	ERRORLOG	
ERL$VEC312	80003BBC-R	ERRORLOG	
ERL$VEC316	80003BC0-R	ERRORLOG	
ERL$VEC32	80003C34-R	ERRORLOG	
ERL$VEC320	80003B84-R	ERRORLOG	
ERL$VEC324	80003B88-R	ERRORLOG	

Symbol	Value	Defined By	Referenced By ...
ERL$VEC328	80003B8C-R	ERRORLOG	
ERL$VEC332	80003B90-R	ERRORLOG	
ERL$VEC336	80003B94-R	ERRORLOG	
ERL$VEC340	80003B98-R	ERRORLOG	
ERL$VEC344	80003B9C-R	ERRORLOG	
ERL$VEC348	80003BA0-R	ERRORLOG	
ERL$VEC352	80003BA4-R	ERRORLOG	
ERL$VEC356	80003BA8-R	ERRORLOG	
ERL$VEC36	80003C34-R	ERRORLOG	
ERL$VEC360	80003BAC-R	ERRORLOG	
ERL$VEC364	80003BB0-R	ERRORLOG	
ERL$VEC368	80003BB4-R	ERRORLOG	
ERL$VEC372	80003BB8-R	ERRORLOG	
ERL$VEC376	80003BBC-R	ERRORLOG	
ERL$VEC380	80003BC0-R	ERRORLOG	
ERL$VEC384	80003B84-R	ERRORLOG	
ERL$VEC388	80003B88-R	ERRORLOG	
ERL$VEC392	80003B8C-R	ERRORLOG	
ERL$VEC396	80003B90-R	ERRORLOG	
ERL$VEC4	80003C34-R	ERRORLOG	
ERL$VEC40	80003C34-R	ERRORLOG	
ERL$VEC400	80003B94-R	ERRORLOG	
ERL$VEC404	80003B98-R	ERRORLOG	
ERL$VEC408	80003B9C-R	ERRORLOG	
ERL$VEC412	80003BA0-R	ERRORLOG	
ERL$VEC416	80003BA4-R	ERRORLOG	
ERL$VEC420	80003BA8-R	ERRORLOG	
ERL$VEC424	80003BAC-R	ERRORLOG	
ERL$VEC428	80003BB0-R	ERRORLOG	
ERL$VEC432	80003BB4-R	ERRORLOG	
ERL$VEC436	80003BB8-R	ERRORLOG	
ERL$VEC44	80003C34-R	ERRORLOG	
ERL$VEC440	80003BBC-R	ERRORLOG	
ERL$VEC444	80003BC0-R	ERRORLOG	
ERL$VEC448	80003B84-R	ERRORLOG	
ERL$VEC452	80003B88-R	ERRORLOG	
ERL$VEC456	80003B8C-R	ERRORLOG	
ERL$VEC460	80003B90-R	ERRORLOG	
ERL$VEC464	80003B94-R	ERRORLOG	
ERL$VEC468	80003B98-R	ERRORLOG	
ERL$VEC472	80003B9C-R	ERRORLOG	
ERL$VEC476	80003BA0-R	ERRORLOG	
ERL$VEC48	80003C34-R	ERRORLOG	
ERL$VEC480	80003BA4-R	ERRORLOG	
ERL$VEC484	80003BA8-R	ERRORLOG	
ERL$VEC488	80003BAC-R	ERRORLOG	
ERL$VEC492	80003BB0-R	ERRORLOG	
ERL$VEC496	80003BB4-R	ERRORLOG	
ERL$VEC500	80003BB8-R	ERRORLOG	
ERL$VEC504	80003BBC-R	ERRORLOG	
ERL$VEC508	80003BC0-R	ERRORLOG	
ERL$VEC52	80003C34-R	ERRORLOG	

Symbol	Value	Defined By	Referenced By ...		
ERLSVEC56	80003C34-R	ERRORLOG			
ERLSVEC60	80003C34-R	ERRORLOG			
ERLSVEC64	80003C34-R	ERRORLOG			
ERLSVEC68	80003C34-R	ERRORLOG			
ERLSVEC72	80003C34-R	ERRORLOG			
ERLSVEC76	80003C34-R	ERRORLOG			
ERLSVEC8	80003C34-R	ERRORLOG			
ERLSVEC80	80003C34-R	ERRORLOG			
ERLSVEC84	80003C34-R	ERRORLOG			
ERLSVEC88	80003C34-R	ERRORLOG			
ERLSVEC92	80003C34-R	ERRORLOG			
ERLSVEC96	80003C34-R	ERRORLOG			
ERLSVEC_RETURN	80003C3C-R	ERRORLOG			
ERLSWAKE	8000AFD4-R	ERRORLOG	TIMESCHDL		
ERLSWARMSTART	8000AEF3-R	ERRORLOG	POWERFAIL		
EVTS_AST	00000000	RSE	ASTDEL	SYSWAIT	
EVTS_COLPGA	00000000	RSE	IOCIOPOST		
EVTS_EVENT	00000001	RSE	POSTEF		
EVTS_FPGA	00000004	RSE	ALLOCPFN		
EVTS_PFCOM	00000007	RSE	IOCIOPOST	SHMGSDRTN	WRTMFYPAG
EVTS_RESUME	00000006	RSE	SYSPCNTRL		
EVTS_SETPRI	00000008	RSE	SYSSETPRI		
EVTS_SWPOUT	00000009	RSE	OSWPSCHED		
EVTS_WAKE	00000005	RSE			
EXESABORTIO	800088FD-R	SYSQIOREQ	COMDRVSUB	MBDRIVER	MTFDT
			SYSACPFDT	SYSQIOFDT	
EXESAB_HEXTAB	80003B74-R	CONSOLIO	EXCEPTMSG		
EXESACVIOLAT	80003C44-R	EXCEPTION	BUGCHECK	INIT	PAGEFAULT
			XDELTA		
EXESADJSTK	8000DD3C-R	SYSADJSTK	CMODSSDSP		
EXESADJWSL	8000DC5D-R	SYSADJWSL	CMODSSDSP	IOLOCK	SYSCREDEL
EXESALLOC	8000F814-R	SYSDEVALC	CMODSSDSP		
EXESALLOCATE	800094C6-R	MEMORYALC	PROCSTRT	SYSCRMPSC	SYSLOGNAM
EXESALLOCBUF	8000936E-R	MEMORYALC	COMDRVSUB	SYSACPFDT	SYSBRDCST
			SYSENQDEQ	SYSQIOREQ	SYSSETPFM
			SYSUPDSEC		
EXESALLOCCEB	80009372-R	MEMORYALC	SYSASCEFC		
EXESALLOCIRP	80009384-R	MEMORYALC	SWAPPER	SYSASTCON	SYSBRDCST
			SYSDELPRC	SYSFORCEX	SYSPCNTRL
			SYSQIOREQ	SYSSETPRA	WRTMFYPAG
EXESALLOCJIB	8000937B-R	MEMORYALC	SYSCREPRC		
EXESALLOCPCB	8000938C-R	MEMORYALC	SYSCREPRC		
EXESALLOCPQB	80009394-R	MEMORYALC	SYSCREPRC		
EXESALLOCTQE	8000939D-R	MEMORYALC	SYSSCHEVT		
EXESALONONPAGED	8000941A-R	MEMORYALC	INIT	IOSUBNPAG	IOSUBPAGD
			MBDRIVER	MOUNTVER	PAGEFAULT
			POSTEF	RSE	SHMGSDRTN
			SYSCANCEL	SYSCREDEL	SYSGETJPI
			SYSIMGACT	SYSSETPFM	
			SYSENQDEQ		
EXESALONPAGWAIT	800093DD-R	MEMORYALC			
EXESALOPAGED	8000948E-R	MEMORYALC	SWAPPER	SYSCRMPSC	SYSIMGACT
			SYSLOGNAM	SYSMAILBX	

Symbol	Value	Defined By	Referenced By ...		
EXE$ALOSHARED	800095D6-R	MEMORYALC			
EXE$ALTQUEPKT	80008924-R	SYSQIOREQ	IOSUBNPAG	SYSBRDCST	
EXE$AL_LOAVEC	80002E88-R	SYSLOAVEC	INIT		
EXE$AL_STACKS	80003474-R	SYSPARAM	BUGCHECK		
EXE$AL_TQENOREPT	800028A0-R	SYSCOMMON			
EXE$ARITH	80003C6C-R	EXCEPTION			
EXE$ASCEFC	8000DDCE-R	SYSASCEFC	CMODSSDSP		
EXE$ASCTIM	8000EF39-R	SYSCVRTIM	CMODSSDSP		
EXE$ASSIGN	8000E2A7-R	SYSASSIGN	CMODSSDSP		
EXE$ASTDEL	80008AF7-R	ASTDEL	EXCEPTION		
EXE$ASTFLT	80003C77-R	EXCEPTION	ASTDEL		
EXE$ASTRET	80008AFA-R	ASTDEL	CMODSSDSP	SYSUNWIND	
EXE$A_BOOPARAM	8001C07C-R	INIT			
EXE$A_SYSPARAM	80003200-R	SYSPARAM	SYSSETIME		
EXE$BINTIM	8000EFDA-R	SYSCVRTIM	CMODSSDSP		
EXE$BLDPKTGSR	8000887E-R	SYSQIOREQ	SHMGSDRTN		
EXE$BLDPKTGSW	80008886-R	SYSQIOREQ	SHMGSDRTN		
EXE$BLDPKTSWPR	8000888E-R	SYSQIOREQ	SWAPPER		
EXE$BLDPKTSWPW	80008896-R	SYSQIOREQ	SWAPPER	WRTMFYPAG	
EXE$BOOTCB_CHK	80003A0C-R	BUGCHECK	INIT	SYSSETIME	
EXE$BRDCST	80009B3A-R	SYSBRDCST	CMODSSDSP		
EXE$BRDCSTCOM	80009E28-R	SYSBRDCST			
EXE$BREAK	80003C8C-R	EXCEPTION	INIT	XDELTA	
EXE$BUFFRQUOTA	8000928C-R	EXSUBROUT	SYSACPFDT	SYSBRDCST	SYSGETJPI
EXE$BUFQUOPRC	80009298-R	EXSUBROUT			
EXE$BUG_CHECK	80003BA9-R	BUGCHECK	EXCEPTION		
EXE$BUILDPKTR	800088A6-R	SYSQIOREQ	PAGEFAULT		
EXE$BUILDPKTW	8000889E-R	SYSQIOREQ	SYSUPDSEC		
EXE$CANCEL	80007F0F-R	SYSCANCEL	CMODSSDSP		
EXE$CANCELN	80007F00-R	SYSCANCEL	SYSDASSGN		
EXE$CANEXH	8000F363-R	SYSDCLEXH	CMODSSDSP		
EXE$CANTIM	8000802F-R	SYSCANEVT	CMODSSDSP		
EXE$CANWAK	8000804D-R	SYSCANEVT	CMODSSDSP		
EXE$CARRIAGE	80008443-R	SYSQIOFDT	SYSBRDCST		
EXE$CATCH_ALL	800138CE-R	PROCSTRT			
EXE$CHKCREACCES	8000D404-R	EXSUBROUT			
EXE$CHKDELACCES	8000D3FD-R	EXSUBROUT			
EXE$CHKLOGACCES	8000D3FD-R	EXSUBROUT	SYSQIOREQ		
EXE$CHKPHYACCES	8000D404-R	EXSUBROUT	SYSQIOREQ		
EXE$CHKRDACCES	8000D40B-R	EXSUBROUT	MBDRIVER	SYSACPFDT	SYSASSIGN
			SYSCRMPSC	SYSDEVALC	SYSIMGACT
			SYSSNDMSG		
			MAHANDLER		
EXE$CHKWAIT2	800099C4-R	POSTEF			
EXE$CHKWRTACCES	8000D412-R	EXSUBROUT	MBDRIVER	MTFDT	SYSACPFDT
			SYSCRMPSC	SYSSNDMSG	
EXE$CLI_UTILSRV	800138B7-R	PROCSTRT			
EXE$CLOSE_MSG	80013B63-R	OPENMSG	SYSPUTMSG		
EXE$CLREF	80009F4A-R	SYSEVTSRV	CMODSSDSP		
EXE$CMEXEC	8000806C-R	SYSCHGMOD	CMODSSDSP		
EXE$CMKRNL	8000807C-R	SYSCHGMOD	CMODSSDSP		
EXE$CMODEXEC	8000CE58-R	CMODSSDSP			
EXE$CMODEXECX	8000CE30-R	CMODSSDSP	INIT		

Symbol	Value	Defined By	Referenced By ...
EXE$CMODKRNL	8000D020-R	CMODSSDSP	
EXE$CMODKRNLX	8000CFF8-R	CMODSSDSP	INIT
EXE$CMODSUPR	80003C94-R	EXCEPTION	
EXE$CMODUSER	80003CA4-R	EXCEPTION	
EXE$CNTREG	8000E5D7-R	SYSCREDEL	CMODSSDSP
EXE$COMPAT	80003CBC-R	EXCEPTION	
EXE$CRELOG	80010560-R	SYSLOGNAM	CMODSSDSP
EXE$CREMBX	80010745-R	SYSMAILBX	CMODSSDSP
EXE$CREPRC	8000E92C-R	SYSCREPRC	CMODSSDSP
EXE$CRETVA	8000E5AE-R	SYSCREDEL	CMODSSDSP
EXE$CRMPSC	8000EECA-R	SYSCRMPSC	CMODSSDSP
EXE$C_ALCGRNMSK	0000000F	MEMORYALC	

Symbol	Value	Defined By			
EXE$C_CMSTKSZ	00000014	CMODSSDSP	MEMORYALC SYSEVTSRV SYSWAIT	SYSCHGMOD SYSEXIT	SYSENQDEQ SYSQIOFDT

Symbol	Value	Defined By	Referenced By ...
EXE$C_SYSPARSZ	00000330	SYSPARAM	
EXE$DACEFC	8000DDA7-R	SYSASCEFC	CMODSSDSP
EXE$DALLOC	8000F8F7-R	SYSDEVALC	CMODSSDSP
EXE$DASSGN	8000809D-R	SYSDASSGN	CMODSSDSP
EXE$DCLAST	8000E506-R	SYSASTCON	CMODSSDSP
EXE$DCLCMH	8000F320-R	SYSDCLCMH	CMODSSDSP
EXE$DCLEXH	8000F395-R	SYSDCLEXH	CMODSSDSP
EXE$DEALLOCATE	80009596-R	MEMORYALC	DISMOUNT	INIT	LOGNAMSUB
			SYSDGBLSC		

Symbol	Value	Defined By			
EXE$DEANONPAGED	80009501-R	MEMORYALC	ACCOUNT EXSUBROUT MBDRIVER PROCSTRT SYSASCEFC SYSDASSGN SYSGETJPI SYSRUNDWN SYSUPDSEC	ASTDEL IOCIOPOST PAGEFAULT SHMGSDRTN SYSBRDCST SYSDELPRC SYSPCNTRL SYSSCHEVT TIMESCHDL	COMDRVSUB IOSUBNPAG POSTEF SWAPPER SYSCREPRC SYSENQDEQ SYSQIOFDT SYSSETPFM WRTMFYPAG

Symbol	Value	Defined By			
EXE$DEANONPGDSIZ	8000950D-R	MEMORYALC			
EXE$DEAPAGED	8000954B-R	MEMORYALC	DISMOUNT SYSDGBLSC	LOGNAMSUB SYSIMGACT	SYSCRMPSC SYSMAILBX

Symbol	Value	Defined By	Referenced By ...
EXE$DEASHARED	800095F3-R	MEMORYALC	
EXE$DELLOG	800105F5-R	SYSLOGNAM	CMODSSDSP
EXE$DELMBX	80010B7B-R	SYSMAILBX	CMODSSDSP
EXE$DELPRC	80009EFC-R	SYSDELPRC	CMODSSDSP
EXE$DELTVA	8000E662-R	SYSCREDEL	CMODSSDSP
EXE$DEQ	80011BC0-R	SYSENQDEQ	CMODSSDSP
EXE$DERLMB	800081AD-R	SYSDERLMB	CMODSSDSP
EXE$DGBLSC	8000FA0C-R	SYSDGBLSC	CMODSSDSP
EXE$DLCEFC	8000DFB7-R	SYSASCEFC	CMODSSDSP
EXE$DUMPCPUREG	80002ECA-R	SYSLOAVEC	BUGCHECK
EXE$DW780_INT	80002EEE-R	SYSLOAVEC	
EXE$ENQ	80011A32-R	SYSENQDEQ	CMODSSDSP
EXE$EXCEPTABLE	800121E1-R	SYSPUTMSG	PROCSTRT
EXE$EXCEPTION	80003D7F-R	EXCEPTION	
EXE$EXCMSG	80013398-R	EXCEPTMSG	CMODSSDSP	EXCEPTION	PROCSTRT
EXE$EXCPTN	8000CFEA-R	CMODSSDSP	SHELL

Symbol	Value	Defined By	Referenced By ...		
EXE$EXCPTNE	8000CE0D-R	CMODSSDSP	SHELL		
EXE$EXIT	80011CC6-R	SYSEXIT	CMODSSDSP		
EXE$EXIT_IMAGE	800138C1-R	PROCSTRT			
EXE$EXPANDSTK	80013222-R	EXCEPTION	ASTDEL	SYSADJSTK	
EXE$EXPREG	8000E54A-R	SYSCREDEL	CMODSSDSP		
EXE$EXTENDPOOL	80009631-R	MEMORYALC			
EXE$FAILURE	8000D129-R	CMODSSDSP			
EXE$FAO	8000FC98-R	SYSFAO	CMODSSDSP		
EXE$FAOL	8000FCA5-R	SYSFAO	CMODSSDSP		
EXE$FINISHIO	8000890C-R	SYSQIOREQ	IOSUBRAMS	SYSQIOFDT	
EXE$FINISHIOC	8000890A-R	SYSQIOREQ	MBDRIVER	NLDRIVER	SYSACPFDT
EXE$FORCEX	800081E7-R	SYSFORCEX	CMODSSDSP		
EXE$FORK	80008CC8-R	FORKCNTRL	COMDRVSUB	MAHANDLER	MEMORYALC
			MOUNTVER		
EXE$FORKDSPTH	80008D1C-R	FORKCNTRL			
EXE$FRKIPL10DSP	80008CFC-R	FORKCNTRL			
EXE$FRKIPL11DSP	80008D08-R	FORKCNTRL			
EXE$FRKIPL6DSP	80008CE4-R	FORKCNTRL			
EXE$FRKIPL8DSP	80008D14-R	FORKCNTRL			
EXE$FRKIPL9DSP	80008CF0-R	FORKCNTRL			
EXE$GB_CPUDATA	800034D8-R	SYSPARAM			
EXE$GB_CPUTYPE	800034E8-R	SYSPARAM	INIT	XDELTA	
EXE$GETACCESS	8000D3B0-R	EXSUBROUT			
EXE$GETCHN	8001008B-R	SYSGETDEV	CMODSSDSP		
EXE$GETDEV	80010094-R	SYSGETDEV	CMODSSDSP		
EXE$GETDVI	800101A9-R	SYSGETDEV	CMODSSDSP		
EXE$GETJPI	80012068-R	SYSGETJPI	CMODSSDSP		
EXE$GETMSG	80011D72-R	SYSGETMSG	CMODSSDSP		
EXE$GETPTI	8001042E-R	SYSGETPTI	CMODSSDSP		
EXE$GETSYI	8001206F-R	SYSGETSYI	CMODSSDSP		
EXE$GETTIM	800121B4-R	SYSGETTIM	CMODSSDSP		
EXE$GL_ABSTIM	80002858-R	SYSCOMMON	CONINTDSP	IOSUBNPAG	MOUNTVER
			SYSENQDEQ	TIMESCHDL	
EXE$GL_ACMFLAGS	80002980-R	SYSCOMMON	ACCOUNT	SYSADJWSL	SYSIMGACT
			SYSRUNDWN		
EXE$GL_BLAKHOLE	80002940-R	SYSCOMMON	INIT		
EXE$GL_BOOTCB	80002780-R	SYSCOMMON	BUGCHECK	INIT	
EXE$GL_BUGCHECK	80000C54-R	BUGCHECK			
EXE$GL_CEBMTX	800028C4-R	SYSCOMMON	SYSASCEFC		
EXE$GL_CLITABL	80003324-R	SYSPARAM			
EXE$GL_CONFREG	800021BC-R	MDAT	ERRORLOG		
EXE$GL_DEFFLAGS	80003364-R	SYSPARAM	INIT	MAHANDLER	
EXE$GL_ENQMTX	800028D8-R	SYSCOMMON			
EXE$GL_FLAGS	800026F0-R	SYSCOMMON	BUGCHECK	INIT	PAGEFAULT
			PAGEFILE	SYSIMGACT	
EXE$GL_GPT	800028E8-R	SYSCOMMON	INIT	SYSCRMPSC	SYSDGBLSC
EXE$GL_GSDDELBL	8000282C-R	SYSCOMMON			
EXE$GL_GSDDELFL	80002828-R	SYSCOMMON	SYSDGBLSC		
EXE$GL_GSDFREBL	80002824-R	SYSCOMMON	SYSDGBLSC		
EXE$GL_GSDFREFL	80002820-R	SYSCOMMON	SYSCRMPSC		
EXE$GL_GSDGRPBL	80002814-R	SYSCOMMON			
EXE$GL_GSDGRPFL	80002810-R	SYSCOMMON	SHMGSDRTN	SYSCRMPSC	

Symbol	Value	Defined By	Referenced By ...		
EXE$GL_GSDMTX	800028CC-R	SYSCOMMON	PHDUTL	SYSCRMPSC	SYSDGBLSC
EXE$GL_GSDSYSBL	8000281C-R	SYSCOMMON			
EXE$GL_GSDSYSFL	80002818-R	SYSCOMMON			
EXE$GL_INTSTK	80003478-R	SYSPARAM	INIT	SYSCREPRC	
EXE$GL_INTSTKLM	80002954-R	SYSCOMMON	DEADLOCK	INIT	
EXE$GL_KFIMTX	800028DC-R	SYSCOMMON	SYSIMGACT		
EXE$GL_KNOWNFIL	800028E0-R	SYSCOMMON	SYSIMGACT		
EXE$GL_LOCKRTRY	80003318-R	SYSPARAM	MAHANDLER	MEMORYALC	SHMGSDRTN
			SYSASCEFC	SYSMAILBX	
EXE$GL_MCHKERRS	80002934-R	SYSCOMMON			
EXE$GL_MEMERRS	80002938-R	SYSCOMMON			
EXE$GL_MP	8000294C-R	SYSCOMMON			
EXE$GL_MSGFLAGS	80003368-R	SYSPARAM			
EXE$GL_NONPAGED	80002908-R	SYSCOMMON	INIT	MEMORYALC	
EXE$GL_NUMNEXUS	800021C4-R	MDAT			
EXE$GL_PAGED	80002918-R	SYSCOMMON	INIT	MEMORYALC	SWAPPER
EXE$GL_PFAILTIM	80002868-R	SYSCOMMON	POWERFAIL		
EXE$GL_PFATIM	8000286C-R	SYSCOMMON	POWERFAIL	RSE	SWAPPER
			SYSSETPRA		
EXE$GL_PGDYNMTX	800028C8-R	SYSCOMMON	MEMORYALC		
EXE$GL_PWRDONE	80002190-R	POWERFAIL			
EXE$GL_PWRINTVL	80002194-R	POWERFAIL			
EXE$GL_RPB	800034C8-R	SYSPARAM	BUGCHECK	INIT	POWERFAIL
EXE$GL_RTBITMAP	80002928-R	SYSCOMMON	INIT		
EXE$GL_RTIMESPT	80003320-R	SYSPARAM	INIT		
EXE$GL_SAVEDUMP	80002784-R	SYSCOMMON			
EXE$GL_SCB	800034D4-R	SYSPARAM	INIT	XDELTA	
EXE$GL_SHBLIST	80002924-R	SYSCOMMON	MEMORYALC	SHMGSDRTN	SYSASCEFC
			SYSMAILBX		
EXE$GL_SHMGSMTX	800028D0-R	SYSCOMMON	SHMGSDRTN		
EXE$GL_SHMRMTX	800028D4-R	SYSCOMMON	SYSMAILBX		
EXE$GL_SITESPEC	80002950-R	SYSCOMMON			
EXE$GL_SPLITADR	80002914-R	SYSCOMMON	INIT	MEMORYALC	
EXE$GL_SVAPTE	80002984-R	SYSCOMMON	INIT	MOUNTVER	
EXE$GL_SYSFLAGS	8000297C-R	SYSCOMMON	MOUNTVER		
EXE$GL_SYSMSG	80002900-R	SYSCOMMON	SYSGETMSG		
EXE$GL_SYSUCB	80002758-R	SYSCOMMON	INIT		
EXE$GL_SYSUIC	800032F8-R	SYSPARAM	EXSUBROUT		
EXE$GL_SYSWCBBL	8000283C-R	SYSCOMMON			
EXE$GL_SYSWCBFL	80002838-R	SYSCOMMON	SYSIMGACT		
EXE$GL_TENUSEC	80002948-R	SYSCOMMON	INIT		
EXE$GL_TODR	80003208-R	SYSPARAM	POWERFAIL	SYSSETIME	
EXE$GL_TQFL	80002870-R	SYSCOMMON	EXSUBROUT	POWERFAIL	SYSSETIME
			TIMESCHDL		
EXE$GL_USRCHME	80002700-R	SYSCOMMON	CMODSSDSP		
EXE$GL_USRCHMK	800026FC-R	SYSCOMMON	CMODSSDSP		
EXE$GL_USRUNDWN	80002904-R	SYSCOMMON	SYSDELPRC	SYSRUNDWN	
EXE$GL_WCBDELBL	80002834-R	SYSCOMMON			
EXE$GL_WCBDELFL	80002830-R	SYSCOMMON	SHMGSDRTN	SYSDGBLSC	
EXE$GL_BLKHOLWQ	80002988-R	SYSCOMMON	MOUNTVER		
EXE$GQ_BOOTCB_D	8000277C-R	SYSCOMMON	BUGCHECK	INIT	
EXE$GQ_ERLMBX	800026F4-R	SYSCOMMON	SYSDERLMB	SYSRUNDWN	

Symbol	Value	Defined By	Referenced By ...		
EXE$GQ_SYSDISK	80013539-R	PROCSTRT	SYSCREPRC		
EXE$GQ_SYSTIME	80002860-R	SYSCOMMON	ACCOUNT	BUGCHECK	ERRORLOG
			IOPERFORM	IOSUBNPAG	OSWPSCHED
			POWERFAIL	PROCSTRT	SYSCVRTIM
			SYSDELPRC	SYSGETTIM	SYSIMGACT
			SYSSCHEVT	SYSSETIME	SYSSNDMSG
			SYSWAIT	TIMESCHDL	
			POWERFAIL	SYSSETIME	
EXE$GQ_TODCBASE	80003200-R	SYSPARAM			
EXE$GT_STARTUP	80003510-R	SYSPARAM			
EXE$GW_PGFL_FID	800034EA-R	SYSPARAM			
EXE$GW_SCANPIX	800028FE-R	SYSCOMMON	TIMESCHDL		
EXE$HIBER	8000A05B-R	SYSPCNTRL	CMODSSDSP		
EXE$HWCLKINT	80008D40-R	TIMESCHDL			
EXE$IMGACT	800104CE-R	SYSIMGACT	CMODSSDSP		
EXE$IMGDELMSG	80016897-R	ACCOUNT	SYSRUNDWN		
EXE$IMGFIX	8000D47E-R	IMGACTSUB	CMODSSDSP		
EXE$IMGPURMSG	8001688E-R	ACCOUNT			
EXE$IMGSTA	800166D7-R	SYSIMGSTA	CMODSSDSP		
EXE$INIBOOTADP	80002EC4-R	SYSLOAVEC	BUGCHECK		
EXE$INIPROCREG	80002EDC-R	SYSLOAVEC	INIT	POWERFAIL	
EXE$INIT	8001B06C-R	INIT			
EXE$INIT_DEVICE	800037B4-R	POWERFAIL	INIT		
EXE$INSERTIRP	80008972-R	SYSQIOREQ	IOCIOPOST		
EXE$INSIOQ	80008957-R	SYSQIOREQ	IOCIOPOST		
EXE$INSTIMQ	80007A6E-R	EXSUBROUT	SYSSCHEVT	SYSSETIME	TIMESCHDL
EXE$INT54	80002E90-R	SYSLOAVEC			
EXE$INT58	80002E98-R	SYSLOAVEC			
EXE$INT5C	80002EA0-R	SYSLOAVEC			
EXE$INT60	80002EA8-R	SYSLOAVEC			
EXE$IOFORK	80008CC4-R	FORKCNTRL			
EXE$IORSNWAIT	8000822C-R	SYSQIOFDT	MBDRIVER		
EXE$IPAPBKAST	80008BC3-R	ASTDEL			
EXE$IPCONTROL	80008D70-R	IPCONTROL			
EXE$KERSTKNV	80003CFC-R	EXCEPTION			
EXE$LCKPAG	800104F1-R	SYSLKWSET	CMODSSDSP		
EXE$LKWSET	800104EA-R	SYSLKWSET	CMODSSDSP		
EXE$LOAD_ERROR	80002F1C-R	SYSLOAVEC	INITVEC	SCSVEC	
EXE$MAXACMODE	8000D426-R	EXSUBROUT	COMDRVSUB	SYSASSIGN	SYSASTCON
			SYSCANEVT	SYSCREDEL	SYSDEVALC
			SYSDGBLSC	SYSENQDEQ	SYSLOGNAM
			SYSMAILBX	SYSRUNDWN	SYSSETEXV
			SYSSETPRA	SYSSETSTK	
EXE$MCHECK	80003D00-R	EXCEPTION			
EXE$MCHK	80002E88-R	SYSLOAVEC			
EXE$MCHK_BUGCHK	80003E0B-R	EXCEPTION			
EXE$MCHK_ERRCNT	80002F18-R	SYSLOAVEC			
EXE$MCHK_PRTCT	80003DE3-R	EXCEPTION	ERRORLOG		
EXE$MCHK_TEST	80003E4D-R	EXCEPTION			
EXE$MGBLSC	8000EECF-R	SYSCRMPSC	CMODSSDSP		
EXE$MODIFY	8000825E-R	SYSQIOFDT			
EXE$MODIFYLOCK	80008296-R	SYSQIOFDT			
EXE$MODIFYLOCKR	80008299-R	SYSQIOFDT			

DRA7:[SYS.OBJ]SYS.EXE;1   27-APR-1982 03:46   VAX-11 Linker V03-16   Page 33

Symbol	Value	Defined By	Referenced By ...		
EXE$MOUNTVER	8000BA2D-R	MOUNTVER	IOSUBNPAG		
EXE$MULTIQUOTA	80009280-R	EXSUBROUT			
EXE$NAMPID	8000A080-R	SYSPCNTRL	SYSCANEVT	SYSDELPRC	SYSFORCEX
			SYSGETJPI	SYSSCHEVT	SYSSETPRI
EXE$NETSNDERL	80010EF9-R	SYSSNDMSG			
EXE$NULLPROC	80007B06-R	NULLPROC	PDAT		
EXE$NUMTIM	8000F1FE-R	SYSCVRTIM	CMODSSDSP		
EXE$ONEPARM	80008252-R	SYSQIOFDT			
EXE$OPCCUS	80003D08-R	EXCEPTION			
EXE$OPCDEC	80003D10-R	EXCEPTION			
EXE$OPEN_MSG	800139E5-R	OPENMSG	EXCEPTMSG	SYSPUTMSG	
EXE$OPRSNDERL	80010EF3-R	SYSSNDMSG			
EXE$OUTBLANK	8001C74E-R	CONSOLIO	BUGCHECK		
EXE$OUTCHAR	8001C753-R	CONSOLIO	BUGCHECK		
EXE$OUTCRLF	8001C7AE-R	CONSOLIO	BUGCHECK		
EXE$OUTCSTRING	8001C788-R	CONSOLIO	BUGCHECK		
EXE$OUTHEX	8001C734-R	CONSOLIO	BUGCHECK		
EXE$OUTZSTRING	8001C78D-R	CONSOLIO	BUGCHECK	INIT	
EXE$PAGRDERR	80003D42-R	EXCEPTION	PAGEFAULT		
EXE$POWERAST	80010C95-R	SYSSETPRA	SWAPPER		
EXE$POWERFAIL	800044D8-R	POWERFAIL			
EXE$PRCDELMSG	800169A7-R	ACCOUNT	SYSDELPRC		
EXE$PRCPURMSG	8001699E-R	ACCOUNT			
EXE$PROBER	800092E4-R	EXSUBROUT	CMODSSDSP	SYSGETMSG	
EXE$PROBER_DSC	8000D435-R	EXSUBROUT	SYSBRDCST	SYSSNDMSG	
EXE$PROBEW	8000932D-R	EXSUBROUT	EXCEPTION	IOCIOPOST	SYSACPFDT
			SYSGETJPI	SYSGETSYI	
EXE$PROBEW_DSC	8000D439-R	EXSUBROUT	SYSGETDEV		
EXE$PROCIMGACT	800137F3-R	PROCSTRT			
EXE$PROCSTRT	80009A40-R	PROCSTRT	SHELL		
EXE$PURGWS	80010BA9-R	SYSPURGWS	CMODSSDSP		
EXE$PUTMSG	80012236-R	SYSPUTMSG	CMODSSDSP		
EXE$PWRTIMCHK	80003882-R	POWERFAIL			
EXE$QIO	80008624-R	SYSQIOREQ	CMODSSDSP		
EXE$QIOACPPKT	80008936-R	SYSQIOREQ	SYSACPFDT	SYSCANCEL	
EXE$QIODRVPKT	80008920-R	SYSQIOREQ	MBDRIVER	SYSACPFDT	SYSQIOFDT
EXE$QIORETURN	80008950-R	SYSQIOREQ	MBDRIVER	SYSACPFDT	
EXE$RADRMOD	80003D4C-R	EXCEPTION			
EXE$READ	80008264-R	SYSQIOFDT			
EXE$READCHK	80008324-R	SYSQIOFDT	MBDRIVER		
EXE$READCHKR	80008338-R	SYSQIOFDT			
EXE$READEF	80009FA9-R	SYSEVTSRV	CMODSSDSP		
EXE$READLOCK	80008290-R	SYSQIOFDT	SYSACPFDT		
EXE$READLOCKR	800082A3-R	SYSQIOFDT			
EXE$REFLECT	80012E8E-R	EXCEPTION	CMODSSDSP		
EXE$REGRESTOR	80002ED0-R	SYSLOAVEC	POWERFAIL		
EXE$REGSAVE	80002ED6-R	SYSLOAVEC	POWERFAIL		
EXE$RESTART	80003600-R	POWERFAIL	INIT		
EXE$RESUME	8000A046-R	SYSPCNTRL	CMODSSDSP		
EXE$RH780_INT	80002EF4-R	SYSLOAVEC	MBAINTDSP		
EXE$RMSEXH	8001396E-R	PROCSTRT			
EXE$RMVTIMQ	80007A95-R	EXSUBROUT	SYSCANEVT		

Symbol	Value	Defined By	Referenced By ...		
EXE$ROPRAND	80003D54-R	EXCEPTION	INIT	XDELTA	
EXE$RUNDWN	80012435-R	SYSRUNDWN	CMODSSDSP		
EXE$SCHDWK	8000848B-R	SYSSCHEVT	CMODSSDSP		
EXE$SENDMSG	80010E95-R	SYSSNDMSG	ACCOUNT		
EXE$SENSEMODE	8000841B-R	SYSQIOFDT			
EXE$SETAST	8000E4E4-R	SYSASTCON	CMODSSDSP		
EXE$SETCHAR	800083E7-R	SYSQIOFDT			
EXE$SETEF	80009FCD-R	SYSEVTSRV	CMODSSDSP		
EXE$SETEXV	80010BE9-R	SYSSETEXV	CMODSSDSP		
EXE$SETIME	80012B8F-R	SYSSETIME	CMODSSDSP		
EXE$SETIMR	800084ED-R	SYSSCHEVT	CMODSSDSP		
EXE$SETMODE	80008405-R	SYSQIOFDT			
EXE$SETOPR	80010F45-R	SYSSNDMSG			
EXE$SETPFM	800126CC-R	SYSSETPFM	CMODSSDSP		
EXE$SETPRA	80010C61-R	SYSSETPRA	CMODSSDSP		
EXE$SETPRI	80008989-R	SYSSETPRI	CMODSSDSP		
EXE$SETPRN	8000A14B-R	SYSPCNTRL	CMODSSDSP		
EXE$SETPRT	80010D06-R	SYSSETPRT	CMODSSDSP		
EXE$SETPRV	800128ED-R	SYSSETPRV	CMODSSDSP		
EXE$SETRWM	80010C2C-R	SYSSETMOD	CMODSSDSP		
EXE$SETSFM	80010C33-R	SYSSETMOD	CMODSSDSP		
EXE$SETSSF	800129CB-R	SYSSETSSF	CMODSSDSP		
EXE$SETSTK	800129E8-R	SYSSETSTK	CMODSSDSP		
EXE$SETSWM	80010C41-R	SYSSETMOD	CMODSSDSP		
EXE$SHM_DELETE	80009ACB-R	SYSASCEFC			
EXE$SHUTDWNADP	80002F12-R	SYSLOAVEC	BUGCHECK		
EXE$SIGTORET	800131F9-R	EXCEPTION	SYSFAO	SYSGETMSG	SYSUNWIND
EXE$SNDACC	80010D47-R	SYSSNDMSG	CMODSSDSP		
EXE$SNDERR	80010EFF-R	SYSSNDMSG	CMODSSDSP		
EXE$SNDEVMSG	8000144E-R	MBDRIVER	MOUNTVER		
EXE$SNDOPR	80010D6D-R	SYSSNDMSG	CMODSSDSP		
EXE$SNDSMB	80010D5A-R	SYSSNDMSG	CMODSSDSP		
EXE$SNGLEQUOTA	800092AD-R	EXSUBROUT	SYSQIOREQ	SYSUPDSEC	
EXE$SRCHANDLER	8001300C-R	EXCEPTION	CMODSSDSP		
EXE$SSFAIL	80003D70-R	EXCEPTION	CMODSSDSP		
EXE$SUCCESS	8000D131-R	CMODSSDSP	MDAT		
EXE$SUSPND	80009FF0-R	SYSPCNTRL	CMODSSDSP		
EXE$SWAPINIT	80016B50-R	SWAPPER	PDAT		
EXE$SWTIMINT	80008DA0-R	TIMESCHDL			
EXE$TBIT	80003D5C-R	EXCEPTION	INIT	XDELTA	
EXE$TEST_CSR	80002EE2-R	SYSLOAVEC	POWERFAIL		
EXE$TIMEOUT	80008E69-R	TIMESCHDL	SYSCOMMON		
EXE$TRNLOG	801006D7-R	SYSLOGNAM	CMODSSDSP		
EXE$ULKPAG	800104DA-R	SYSLKWSET	CMODSSDSP		
EXE$ULWSET	800104D3-R	SYSLKWSET	CMODSSDSP		
EXE$UNWIND	80012A3A-R	SYSUNWIND	CMODSSDSP		
EXE$UPDSEC	80010FAC-R	SYSUPDSEC	CMODSSDSP		
EXE$V_BLKHOLBSY	00000000	SYSCOMMON	MOUNTVER		
EXE$V_BUGDUMP	00000010	SYSPARAM	BUGCHECK		
EXE$V_BUGREBOOT	0000000D	SYSPARAM	BUGCHECK		
EXE$V_CONCEALED	00000012	SYSPARAM	INIT		
EXE$V_CRDENABL	00000006	SYSPARAM	MAHANDLER		

Symbol	Value	Defined By	Referenced By ...
EXE$V_DISMOUMSG	00000001	SYSPARAM	
EXE$V_EXPLICITP	00000014	SYSPARAM	
EXE$V_EXPLICITS	00000015	SYSPARAM	
EXE$V_FATAL_BUG	0000000A	SYSPARAM	BUGCHECK
EXE$V_INIT	00000008	SYSPARAM	SYSIMGACT
EXE$V_JOBQUEUES	0000001B	SYSPARAM	
EXE$V_MOUNTMSG	00000000	SYSPARAM	
EXE$V_MULTACP	0000000B	SYSPARAM	
EXE$V_NOAUTOCNF	00000001	SYSPARAM	
EXE$V_NOCLOCK	00000005	SYSPARAM	
EXE$V_NOCLUSTER	0000000C	SYSPARAM	PAGEFAULT
EXE$V_PAGFILDMP	00000019	SYSPARAM	
EXE$V_PGFLCRIT	00000017	SYSPARAM	PAGEFILE
EXE$V_PGFLFRAG	00000016	SYSPARAM	PAGEFILE
EXE$V_POOLPGING	00000003	SYSPARAM	INIT
EXE$V_REINITQUE	0000001C	SYSPARAM	
EXE$V_RESALLOC	00000011	SYSPARAM	
EXE$V_SAVEDUMP	0000001A	SYSPARAM	
EXE$V_SBIERR	00000007	SYSPARAM	
EXE$V_SETTIME	00000009	SYSPARAM	
EXE$V_SHRF11ACP	0000000F	SYSPARAM	
EXE$V_SIMULATOR	00000004	SYSPARAM	
EXE$V_SBINHIBIT	00000013	SYSPARAM	INIT
EXE$V_SYSPAGING	00000002	SYSPARAM	INIT
EXE$V_SYSUAFALT	0000000E	SYSPARAM	
EXE$V_SYSWRTABL	00000000	SYSPARAM	BUGCHECK INIT
EXE$V_TBCHK	00000018	SYSPARAM	PAGEFAULT
EXE$WAITFR	8000A258-R	SYSWAIT	CMODSSDSP
EXE$WAKE	8000A06F-R	SYSPCNTRL	CMODSSDSP
EXE$WFLAND	8000A247-R	SYSWAIT	CMODSSDSP
EXE$WFLOR	8000A24E-R	SYSWAIT	CMODSSDSP
EXE$WRITE	8000826D-R	SYSQIOFDT	
EXE$WRITECHK	8000832A-R	SYSQIOFDT	MBDRIVER
EXE$WRITECHKR	80008396-R	SYSQIOFDT	
EXE$WRITELOCK	80008293-R	SYSQIOFDT	SYSACPFDT
EXE$WRITELOCKR	800082AA-R	SYSQIOFDT	
EXE$WRTMAILBOX	8000147E-R	MBDRIVER	SYSBRDCST SYSSNDMSG
EXE$ZEROPARM	80008258-R	SYSQIOFDT	
FCB$B_DIRIDX	00000048	GLOBALS	
FCB$B_FID_NMX	00000025	GLOBALS	
FCB$B_FID_RVN	00000024	GLOBALS	
FCB$B_TYPE	0000000A	GLOBALS	
FCB$C_LENGTH	00000048	GLOBALS	
FCB$K_LENGTH	00000048	GLOBALS	
FCB$L_EFBLK	00000040	GLOBALS	
FCB$L_EXFCB	0000000C	GLOBALS	
FCB$L_FCBBL	00000004	GLOBALS	
FCB$L_FCBFL	00000000	GLOBALS	
FCB$L_FILEOWNER	00000038	GLOBALS	
FCB$L_FILESIZE	00000034	GLOBALS	
FCB$L_HDLBN	00000030	GLOBALS	
FCB$L_STLBN	0000002C	GLOBALS	

Symbol	Value	Defined By	Referenced By ...
FCBSL_STVBN	00000028	GLOBALS	
FCBSL_WLBL	00000014	GLOBALS	
FCBSL_WLFL	00000010	GLOBALS	
FCBSS_DIRIDX	00000018	GLOBALS	
FCBSS_FID	00000006	GLOBALS	
FCBSV_BADBLK	00000002	GLOBALS	
FCBSV_DIR	00000000	GLOBALS	
FCBSV_EXCL	00000003	GLOBALS	
FCBSV_MARKDEL	00000001	GLOBALS	
FCBSV_RMSLOCK	00000005	GLOBALS	
FCBSV_SPOOL	00000004	GLOBALS	
FCBSW_ACNT	00000018	GLOBALS	
FCBSW_DIRSEQ	00000044	GLOBALS	
FCBSW_FID	00000020	GLOBALS	
FCBSW_FID_NUM	00000020	GLOBALS	
FCBSW_FID_RVN	00000024	GLOBALS	
FCBSW_FID_SEQ	00000022	GLOBALS	
FCBSW_FILEPROT	0000003C	GLOBALS	
FCBSW_LCNT	0000001A	GLOBALS	
FCBSW_SEGN	00000026	GLOBALS	
FCBSW_SIZE	00000008	GLOBALS	
FCBSW_STATUS	0000001E	GLOBALS	
FCBSW_TCNT	00000046	GLOBALS	
FCBSW_UICGROUP	0000003A	GLOBALS	
FCBSW_UICMEMBER	00000038	GLOBALS	
FCBSW_VERSIONS	0000003E	GLOBALS	
FCBSW_WCNT	0000001C	GLOBALS	
FILSCACHE_INIT	800170EA-R	FILEREAD	
FILSCACHE_TRUNC	8001715E-R	FILEREAD	
FILSCVTFILNAM	80016EE9-R	CVTFILNAM	FILEREAD
FILSC_DIR_SIZE	00000024	FILEREAD	
FILSC_SIZE	00000218	FILEREAD	
FILSFINDFILID	800172D3-R	FILEREAD	
FILSGQ_CACHE	80002774-R	SYSCOMMON	WK-FILEREAD	INIT
FILSGT_DDDEV	8000275C-R	SYSCOMMON	WK-FILEREAD
FILSGT_DDSTRING	7FFD8E30	SHELL	FILEREAD
FILSGT_TOPSYS	8000276A-R	SYSCOMMON	WK-FILEREAD	INIT
FILSMOUNT	80017243-R	FILEREAD	
FILSOPENFILE	80016FC8-R	FILEREAD	SYSIMGACT
FILSRDCHKFILHDR	8001750A-R	FILEREAD	
FILSRDWRTLBN	80017837-R	FILERWIO	FILEREAD
FILSREADVBN	800176B9-R	FILEREAD	
FILSSTATBLK	80017770-R	FILEREAD	
FILSWRITEVBN	800176B2-R	FILEREAD	
IACSAL_VECADDR	7FFE1E58	SHELL	
IACSAL_VECOPCOD	7FFE1E68	SHELL	
IACSAW_VECRESET	7FFE1E6C	SHELL	PROCSTRT	SYSRUNDWN
IACSCLRIACLOCK	80006FB6-R	SYSIMGACT	PHDUTL
IACSFIXUP_ADDR	80015383-R	IMGACTSUB	
IACSFIXUP_IAF	80015284-R	IMGACTSUB	
IACSGL_IMAGCTX	7FFE1E50	SHELL	IMGACTSUB	SYSIMGACT
IACSGL_PROCCTX	7FFE1E54	SHELL	

Symbol	Value	Defined By	Referenced By ...		
IACSPRVSHRIMG	80015459-R	IMGACTSUB	SYSIMGACT		
IACSRESET_IAF	80015497-R	IMGACTSUB	SYSIMGACT		
IACSSRCH_SHL_C	800152C3-R	IMGACTSUB			
IACSSRCH_SHL_D	800152CF-R	IMGACTSUB	SYSIMGACT		
INISALONONPAGED	8001BE5C-R	INIT			
INI?A_INILOAVEC	8001C075-R	INITVEC	INIT		
INISBRK	8000C3FC-R	INIT	BUGCHECK	IPCONTROL	XDELTA
INISIOMAP	8001C075-R	INITVEC	INIT		
INISMASTERWAKE	80003E68-R	INIT			
INISMPMADP	80002F0C-R	SYSLOAVEC			
INISRDONLY	8000C405-R	INIT	XDELTA		
INISWRITABLE	8000C3FE-R	INIT	BUGCHECK	XDELTA	
IOSGL_SCB_INT0	80002944-R	SYSCOMMON	ERRORLOG		
IOSGL_UBA_INT0	8000293C-R	SYSCOMMON			
IOSV_INCLUDE	0000000B	SYSSIODEF	COMDRVSUB		
IOS_ACPCONTROL	00000038	SYSSIODEF	SYSCRMPSC		
IOS_READLBLK	00000021	SYSSIODEF	BUGCHECK		
IOS_READVBLK	00000031	SYSSIODEF	SYSIMGACT		
IOS_WRITELBLK	00000020	SYSSIODEF	BUGCHECK	SYSSETIME	
IOCSALLOSPT	800085E4-R	IOSUBNPAG			
IOCSALOUBAMAP	8000B315-R	IOSUBNPAG			
IOCSALOUBAMAPN	8000B30E-R	IOSUBNPAG			
IOCSALOUBAMAPSP	8000B37A-R	IOSUBNPAG			
IOCSALOUBMAPRM	8000B41B-R	IOSUBNPAG			
IOCSALOUBMAPRMN	8000B414-R	IOSUBNPAG			
IOCSALTREQCOM	8000B150-R	IOSUBNPAG			
IOCSAPPLYECC	8000B6D8-R	IOSUBRAMS			
IOCSBROADCAST	8000B667-R	IOSUBNPAG	MOUNTVER	PAGEFILE	
IOCSCANCELIO	8000AFF5-R	IOSUBNPAG			
IOCSCREATE_UCB	8000D4AD-R	IOSUBPAGD	SYSASSIGN	SYSMAILBX	
IOCSCVTLOGPHY	8000B74C-R	IOSUBRAMS	IOCIOPOST	MOUNTVER	SYSACPFDT
IOCSCVTLOGPHYU	8000B755-R	IOSUBRAMS			
IOCSCVT_DEVNAM	8000B60B-R	IOSUBNPAG	DISMOUNT	MOUNTVER	SYSDEVALC
			SYSGETDEV	SYSMAILBX	
IOCSDELMBX	8000B00C-R	IOSUBNPAG	SYSASSIGN	SYSDASSGN	
IOCSDIAGBUFILL	8000B095-R	IOSUBNPAG			
IOCSDIRPOST1	8000440D-R	IOCIOPOST	SYSUPDSEC		
IOCSDISMOUNT	8000D20F-R	DISMOUNT	SYSDELPRC		
IOCSFFCHAN	8000D531-R	IOSUBPAGD	SYSASSIGN	SYSDGBLSC	SYSMAILBX
IOCSFILSPT	8000ACF1-R	BUFFERCTL			
IOCSGETBYTE	8000AC98-R	BUFFERCTL			
IOCSGL_ADPLIST	80000C5C-R	DEVICEDAT	INIT	POWERFAIL	
IOCSGL_AQBLIST	800027F8-R	SYSCOMMON			
IOCSGL_CRBTMOUT	8000280C-R	SYSCOMMON	TIMESCHDL		
IOCSGL_DEVLIST	80000C58-R	DEVICEDAT	INIT	IOSUBPAGD	IPCONTROL
			POWERFAIL	SYSBRDCST	SYSCOMMON
			SYSDEVALC	SYSMAILBX	
IOCSGL_DPTLIST	80000C60-R	DEVICEDAT	INIT		
IOCSGL_IRPBL	80002794-R	SYSCOMMON	INIT	MEMORYALC	
IOCSGL_IRPCNT	8000279C-R	SYSCOMMON	INIT	MEMORYALC	
IOCSGL_IRPFL	80002790-R	SYSCOMMON	MEMORYALC	PAGEFAULT	SWAPPER
			SYSCREDEL	SYSQIOREQ	WRTMFYPAG

Symbol	Value	Defined By	Referenced By ...		
IOC$GL_IRPMIN	800027A0-R	SYSCOMMON	INIT	MEMORYALC	
IOC$GL_IRPREM	80002798-R	SYSCOMMON	INIT	MEMORYALC	
IOC$GL_LRPBL	800027C4-R	SYSCOMMON	INIT	MEMORYALC	
IOC$GL_LRPCNT	800027D8-R	SYSCOMMON	INIT	MEMORYALC	
IOC$GL_LRPFL	800027C0-R	SYSCOMMON	MEMORYALC		
IOC$GL_LRPMIN	800027CC-R	SYSCOMMON	INIT	MEMORYALC	
IOC$GL_LRPREM	800027D4-R	SYSCOMMON	INIT	MEMORYALC	
IOC$GL_LRPSIZE	800027C8-R	SYSCOMMON	INIT	MEMORYALC	
IOC$GL_LRPSPLIT	800027D0-R	SYSCOMMON	INIT	MEMORYALC	
IOC$GL_MUTEX	800028C0-R	SYSCOMMON	MUTEX		
IOC$GL_PFKBINT	800027F4-R	SYSCOMMON	MEMORYALC		
IOC$GL_POOLFKB	800027DC-R	SYSCOMMON	MEMORYALC		
IOC$GL_PSBL	8000278C-R	SYSCOMMON	COMDRVSUB	IOCIOPOST	IOSUBNPAG
			SYSCANCEL	SYSQIOREQ	
IOC$GL_PSFL	80002788-R	SYSCOMMON	IOCIOPOST		
IOC$GL_SRPBL	800027A8-R	SYSCOMMON	INIT	MEMORYALC	
IOC$GL_SRPCNT	800027BC-R	SYSCOMMON	INIT	MEMORYALC	
IOC$GL_SRPFL	800027A4-R	SYSCOMMON	MEMORYALC	SYSENQDEQ	
IOC$GL_SRPMIN	800027B0-R	SYSCOMMON	INIT		
IOC$GL_SRPREM	800027B8-R	SYSCOMMON	INIT	MEMORYALC	
IOC$GL_SRPSIZE	800027AC-R	SYSCOMMON	INIT	MEMORYALC	SYSENQDEQ
IOC$GL_SRPSPLIT	800027B4-R	SYSCOMMON	INIT	MEMORYALC	
IOC$GQ_BRDCST	80002804-R	SYSCOMMON	SYSBRDCST		
IOC$GQ_MOUNTLST	800027FC-R	SYSCOMMON	SYSGETDEV		
IOC$GW_LAMAPREG	8000331E-R	SYSPARAM			
IOC$GW_MAXBUF	800032FE-R	SYSPARAM	EXSUBROUT	SYSSNDMSG	
IOC$GW_MBXBFQUO	80003300-R	SYSPARAM	SYSMAILBX		
IOC$GW_MBXMXMSG	80003302-R	SYSPARAM	SYSMAILBX		
IOC$GW_MBXNMMSG	80003304-R	SYSPARAM			
IOC$GW_MVTIMEOUT	800032FC-R	SYSPARAM	MOUNTVER		
IOC$GW_XFMXRATE	8000331C-R	SYSPARAM			
IOC$INITBUFWIND	8000ACBA-R	BUFFERCTL			
IOC$INITDRV	8001C118-R	RELOCDRV	INIT		
IOC$INITIATE	8000B1E3-R	IOSUBNPAG	MOUNTVER	SYSQIOREQ	
IOC$IOPOST	80003E74-R	IOCIOPOST			
IOC$LOADMBAMAP	8000B875-R	LOADMREG			
IOC$LOADUBAMAP	8000B8D6-R	LOADMREG			
IOC$LOADUBAMAPA	8000B8BF-R	LOADMREG			
IOC$LOADUBAMAPN	8000B95D-R	LOADMREG			
IOC$LUBAUDAMAP	8000B99C-R	LOADMREG			
IOC$MAPVBLK	8000B777-R	IOSUBRAMS	IOCIOPOST	SYSACPFDT	
IOC$MNTVER	8000B1DA-R	IOSUBNPAG	MBDRIVER	NLDRIVER	
IOC$MOVFRUSER	8000ACC1-R	BUFFERCTL			
IOC$MOVFRUSER1	8000ACD2-R	BUFFERCTL			
IOC$MOVFRUSER2	8000ACC5-R	BUFFERCTL			
IOC$MOVTOUSER	8000ACD9-R	BUFFERCTL			
IOC$MOVTOUSER1	8000ACEA-R	BUFFERCTL			
IOC$MOVTOUSER2	8000ACDD-R	BUFFERCTL			
IOC$PTETOPFN	8000B949-R	LOADMREG	BUFFERCTL	IOLOCK	IOSUBRAMS
IOC$PURGDATAP	80002EE8-R	SYSLOAVEC			
IOC$PUTBYTE	8000ACA9-R	BUFFERCTL			
IOC$QNXTSEG	80004242-R	IOCIOPOST			

Symbol	Value	Defined By	Referenced By ...		
IOC$QNXTSEG1	8000424E-R	IOCIOPOST	SYSQIOREQ		
IOC$REINITDRV	8001C11E-R	RELOCDRV			
IOC$RELCHAN	8000B0C2-R	IOSUBNPAG			
IOC$RELDATAP	8000B26C-R	IOSUBNPAG			
IOC$RELDATAPUDA	8000B25E-R	IOSUBNPAG			
IOC$RELMAPREG	8000B4E5-R	IOSUBNPAG			
IOC$RELMAPUDA	8000B4C3-R	IOSUBNPAG			
IOC$RELOC_DDT	8001C1B9-R	RELOCDRV	POWERFAIL		
IOC$RELSCHAN	8000B0B8-R	IOSUBNPAG			
IOC$REQCOM	8000B175-R	IOSUBNPAG	MBDRIVER		
IOC$REQDATAP	8000B20C-R	IOSUBNPAG			
IOC$REQDATAPNW	8000B21E-R	IOSUBNPAG			
IOC$REQDATAPUDA	8000B22C-R	IOSUBNPAG			
IOC$REQMAPREG	8000B2D2-R	IOSUBNPAG			
IOC$REQMAPREGN	8000B2CE-R	IOSUBNPAG			
IOC$REQMAPUDA	8000B2B9-R	IOSUBNPAG			
IOC$REQPCHANH	8000B119-R	IOSUBNPAG			
IOC$REQPCHANL	8000B122-R	IOSUBNPAG			
IOC$REQSCHANH	8000B105-R	IOSUBNPAG			
IOC$REQSCHANL	8000B10F-R	IOSUBNPAG			
IOC$RETURN	8000B59D-R	IOSUBNPAG	CONINTDSP	MBDRIVER	NLDRIVER
			POWERFAIL	SYSASSIGN	
IOC$SEARCHALC	8000D57A-R	IOSUBPAGD	SYSDEVALC		
IOC$SEARCHDEV	8000D57F-R	IOSUBPAGD	SYSASSIGN	SYSBRDCST	SYSDEVALC
			SYSGETDEV	SYSSNDMSG	
IOC$SEARCHGEN	8000D575-R	IOSUBPAGD	SYSDEVALC		
IOC$SENSEDISK	8000B86A-R	IOSUBRAMS			
IOC$THREADCRB	80002F92-R	SCSVEC			
IOC$UNLOCK	8000D765-R	IOSUBPAGD	SYSASSIGN	SYSDASSGN	SYSDEVALC
			SYSGETDEV	SYSMAILBX	
IOC$UPDATRANSP	8000B82E-R	IOSUBRAMS			
IOC$VERIFYCHAN	8000D777-R	IOSUBPAGD	SYSCANCEL	SYSCRMPSC	SYSDASSGN
			SYSGETDEV	SYSIMGACT	SYSMAILBX
			SYSSNDMSG		
IOC$WAKACP	800042A5-R	IOCIOPOST			
IOC$WFIKPCH	8000B59E-R	IOSUBNPAG			
IOC$WFIRLCH	8000B5C0-R	IOSUBNPAG			
IPL$_ASTDEL	00000002	GLOBALS			
IPL$_HWCLK	00000018	GLOBALS			
IPL$_IOPOST	00000004	GLOBALS			
IPL$_MAILBOX	0000000B	GLOBALS			
IPL$_POWER	0000001F	GLOBALS			
IPL$_QUEUEAST	00000006	GLOBALS			
IPL$_SCHED	00000003	GLOBALS			
IPL$_SCS	00000008	GLOBALS			
IPL$_SYNCH	00000007	GLOBALS			
IPL$_TIMER	00000007	GLOBALS	SYSCANEVT		
KFI$GL_F11AACP	800028E4-R	SYSCOMMON	SYSIMGACT		
LCK$COMPAT_TBL	8000A540-R	SYSENQDEQ	DEADLOCK		
LCK$DEQLOCK	8000AB54-R	SYSENQDEQ	DEADLOCK		
LCK$GB_MAXDEPTH	80002978-R	SYSCOMMON	INIT	SYSENQDEQ	
LCK$GL_EXTRASTK	8000322C-R	SYSPARAM	DEADLOCK	INIT	

Symbol	Value	Defined By	Referenced By ...		
LCKSGL_HASHTBL	80002964-R	SYSCOMMON	INIT	SYSENQDEQ	
LCKSGL_HTBLCNT	80002968-R	SYSCOMMON	INIT	SYSENQDEQ	
LCKSGL_HTBLSIZ	8000332C-R	SYSPARAM	INIT		
LCKSGL_IDTBL	80002958-R	SYSCOMMON	INIT	SYSENQDEQ	
LCKSGL_IDTBLSIZ	80003328-R	SYSPARAM	INIT		
LCKSGL_MAXID	80002960-R	SYSCOMMON	INIT	SYSENQDEQ	
LCKSGL_NXTID	8000295C-R	SYSCOMMON	INIT	SYSENQDEQ	
LCKSGL_PRCMAP	80002974-R	SYSCOMMON	DEADLOCK	INIT	
LCKSGL_TIMOUTQ	8000296C-R	SYSCOMMON	SYSENQDEQ	TIMESCHDL	
LCKSGL_WAITTIME	80003330-R	SYSPARAM	INIT	SYSENQDEQ	
LCK$GRANTCVTS	8000AAB9-R	SYSENQDEQ	DEADLOCK		
LCK$GRANTWTRS	8000AAF1-R	SYSENQDEQ			
LCK$REGRANTLOCK	8000A8A5-R	SYSENQDEQ	DEADLOCK		
LCK$SEARCHDLCK	8000A32C-R	DEADLOCK	TIMESCHDL		
LIB$CVT_DTB	80011987-R	CVT_ATB	CVTFILNAM	FILEREAD	
LIB$CVT_HTB	800119C5-R	CVT_ATB			
LIB$CVT_OTB	800119BE-R	CVT_ATB			
LIB$GB_OPINFO	00000000	LIBSVAX_INST	LIBSINS_DECODE		
LIB$GB_OPINFO1	80019D10-R	LIBSVAX_INST	LIBSINS_DECODE	LIBSVAX_INST	
LIB$GB_OPINFO2	8001A510-R	LIBSVAX_INST	LIBSINS_DECODE	LIBSVAX_INST	
LIB$INS_DECODE	80019676-R	LIBSINS_DECODE	WK-XDELTA		
LIB$_ATTCONSTO	0015827C	LIBSMSGDEF	EXCEPTION		
LOG$AB_HTBLCNT	8000274C-R	SYSCOMMON	LOGNAMSUB	SWAPPER	
LOG$AL_DISKLOG	8001AE00-R	INIT			
LOG$AL_LOGTBL	80002738-R	SYSCOMMON	INIT	LOGNAMSUB	SWAPPER
			SYSLOGNAM		
LOG$AL_MUTEX	80002750-R	SYSCOMMON	LOGNAMSUB		
LOG$DELETE	8000D7AE-R	LOGNAMSUB	DISMOUNT	IOSUBNPAG	SYSLOGNAM
LOG$GL_HTBLSIZ	80003358-R	SYSPARAM	SWAPPER		
LOG$GL_HTBLSIZG	8000335C-R	SYSPARAM			
LOG$GL_HTBLSIZP	80003360-R	SYSPARAM	PROCSTRT		
LOG$HASH	8000D8B8-R	LOGNAMSUB			
LOG$INSLOGN	8000D7DC-R	LOGNAMSUB	SWAPPER	SYSLOGNAM	
LOG$INSLOGN_LCK	8000D7E2-R	LOGNAMSUB	SYSMAILBX		
LOG$LOCKR	8000D82E-R	LOGNAMSUB	SYSGETDEV		
LOG$LOCKW	8000D834-R	LOGNAMSUB	DISMOUNT	IOSUBNPAG	SYSLOGNAM
			SYSMAILBX		
LOG$SEARCHLOG	8000D84F-R	LOGNAMSUB	SYSLOGNAM		
LOG$TRANSLATE	8000D912-R	LOGNAMSUB	IOSUBPAGD		
LOG$TRNSLOGNAME	8000D8F4-R	LOGNAMSUB	SHMGSDRTN	SYSASSIGN	SYSLOGNAM
LOG$UNLOCK	8000D83A-R	LOGNAMSUB	DISMOUNT	IOSUBNPAG	SYSGETDEV
			SYSLOGNAM	SYSMAILBX	
MAS$INITIAL	80001CE1-R	MAHANDLER	POWERFAIL		
MAS$INT	8000188C-R	MAHANDLER			
MAS$RAVAIL	80001B51-R	MAHANDLER	MEMORYALC		
MAS$REQUEST	80001AB6-R	MAHANDLER	POSTEF		
MB$DDT	800013E8-R	MBDRIVER	DEVICEDAT		
MB$DPT	80001274-R	MBDRIVER	INIT		
MB$GL_DDB	80000F84-R	DEVICEDAT			
MB$GL_UCB1	8000103C-R	DEVICEDAT			
MB$GL_UCB2	800010C0-R	DEVICEDAT			
MB$UCB0	80000F88-R	DEVICEDAT	SYSMAILBX		

Symbol	Value	Defined By	Referenced By ...		
MBA$INITIAL	800013DC-R	MBAINTDSP	POWERFAIL		
MBA$INT	8000133D-R	MBAINTDSP			
MCHK$GL_MASK	8000292C-R	SYSCOMMON	EXCEPTION		
MCHK$GL_SP	80002930-R	SYSCOMMON	EXCEPTION		
MMG$ALCPHD	8000DB82-R	PHDUTL	SYSADJWSL		
MMG$ALCSTX	8000DB59-R	PHDUTL	SYSCRMPSC		
MMG$ALC_PGFLVBN	8001197A-R	PAGEFILE			
MMG$ALLOCPAGFIL1	800060E4-R	PAGEFILE	WRTMFYPAG		
MMG$ALLOCPAGFIL2	8000624D-R	PAGEFILE	WRTMFYPAG		
MMG$ALLOCPFN	80005BEB-R	ALLOCPFN	INIT	MEMORYALC	PAGEFAULT
			SWAPPER		
MMG$ALLOCSWPAREA	800060AC-R	PAGEFILE	PAGEFAULT	PHDUTL	SYSCREPRC
MMG$ALOSHMGSD	80011292-R	SHMGSDRTN	SYSCRMPSC		
MMG$ALOSHMPAG	80011186-R	SHMGSDRTN	SYSCRMPSC		
MMG$AL_BEGDRIVE	80001320-R	MDAT	INIT		
MMG$AL_ENDDRIVE	80001DD8-R	MDAT	INIT		
MMG$AL_FIXUPTBL	8A01BEEF-R	MDAT	INIT		
MMG$AL_PGDCODEN	80018A00-R	MDAT	INIT		
MMG$AL_SYSPCB	80002608-R	PDAT	BUGCHECK	INIT	IOLOCK
			PAGEFAULT	SWAPPER	
MMG$A_ENDVEC	80000800-R	MDAT			
MMG$A_SYSPARAM	80003200-R	MDAT			
MMG$A_SYS_END	8001EA00-R	MDAT_END	INIT		
MMG$CALCSWAPSIZE	800063CC-R	PHDUTL	SYSCREPRC		
MMG$CEFTRNLOG	80011459-R	SHMGSDRTN	SYSASCEFC		
MMG$CLR_BITMAP	80011127-R	SHMGSDRTN			
MMG$CRECOM1	8000E5C9-R	SYSCREDEL	SYSGETPTI	SYSLKWSET	SYSSETPRT
MMG$CRECOM2	8000E5D1-R	SYSCREDEL	SYSCRMPSC	SYSPURGWS	SYSUPDSEC
MMG$CREPAG	8000E74A-R	SYSCREDEL	SYSCRMPSC		
MMG$CRETVA	8000E5A6-R	SYSCREDEL	PAGEFAULT	SYSIMGACT	
MMG$DALCBAKSTORE	80005D4B-R	ALLOCPFN	PAGEFAULT		
MMG$DALCPAGFIL	800062D8-R	PAGEFILE	ALLOCPFN	SWAPPER	SYSCREDEL
			SYSDGBLSC		
MMG$DALCSTX	8000DB42-R	PHDUTL	SHMGSDRTN	SYSCRMPSC	SYSDGBLSC
MMG$DALCSTXSCN	8000DABF-R	PHDUTL	SYSCREDEL	SYSCRMPSC	SYSDGBLSC
MMG$DALCSTXSCN1	8000DAB8-R	PHDUTL	SYSCRMPSC		
MMG$DALLOCPFN	80005DAF-R	ALLOCPFN	INIT		
MMG$DEALLOCPAGFIL	800062E1-R	PAGEFILE	SYSCREPRC	SYSDELPRC	WRTMFYPAG
MMG$DECPHDREF	80005B8A-R	PAGEFAULT			
MMG$DECPHDREF1	80005B8E-R	PAGEFAULT	ALLOCPFN	IOCIOPOST	WRTMFYPAG
MMG$DECPTREF	80005B23-R	PAGEFAULT	ALLOCPFN	IOLOCK	SWAPPER
			SYSDGBLSC		
MMG$DECSECREF	8000640F-R	PHDUTL	IOLOCK	SYSCREDEL	SYSCRMPSC
			SYSSETPRT		
MMG$DECSHMREF	80007788-R	SHMGSDRTN	SYSCRMPSC	SYSDGBLSC	
MMG$DELCONPFN	80005C00-R	ALLOCPFN	SWAPPER	SYSDELPRC	
MMG$DELGBLSEC	80006D9B-R	SYSDGBLSC	PHDUTL		
MMG$DELGBLWCB	8000FC03-R	SYSDGBLSC	PHDUTL	SYSCRMPSC	
MMG$DELPAG	80006AB8-R	SYSCREDEL	SYSCRMPSC		
MMG$DELPFNLST	80005CF9-R	ALLOCPFN	SYSCREDEL	SYSDGBLSC	
MMG$DELSHMGS	800118D2-R	SHMGSDRTN	PHDUTL		
MMG$DELWSLEPPG	80005A13-R	PAGEFAULT	SYSCREDEL		

Symbol	Value	Defined By	Referenced By ...		
MMG$DELWSLEX	800059EF-R	PAGEFAULT	SWAPPER		
MMG$DGBLSC1	8000FA05-R	SYSDGBLSC	SYSIMGACT		
MMG$EXTRADYNWS	80006A01-R	SYSADJWSL	OSWPSCHED	PHDUTL	SYSCREDEL
			SYSLKWSET		
MMG$FIND1STGSD	80011389-R	SHMGSDRTN	SYSDGBLSC		
MMG$FINDGSDPFN	80007712-R	SHMGSDRTN	SYSCREDEL	SYSUPDSEC	
MMG$FINDGSNOTRN	800117DB-R	SHMGSDRTN	SYSCRMPSC	SYSDGBLSC	
MMG$FINDSHB	800113B1-R	SHMGSDRTN	SYSASCEFC		
MMG$FINDSHD	80007825-R	SHMGSDRTN	SYSUPDSEC		
MMG$FREEGSD	8001131D-R	SHMGSDRTN			
MMG$FREWSLE	8000586B-R	PAGEFAULT	IOLOCK	SYSADJWSL	
MMG$FREWSLX	800058FF-R	PAGEFAULT	SYSPURGWS		
MMG$FRE_TRYSKIP	8000592C-R	PAGEFAULT			
MMG$FRSTRONLY	80003600-R	MDAT	INIT		
MMG$GB_FREWFLGS	8000211A-R	SDAT	OSWPSCHED	PAGEFAULT	SWAPPER
MMG$GETGSNAM	800113E6-R	SHMGSDRTN	SYSDGBLSC		
MMG$GETNXTGSD	800077AE-R	SHMGSDRTN	SYSDGBLSC		
MMG$GETPTIPAG	80006E76-R	SYSGETPTI			
MMG$GL_CTLBASVA	80003470-R	SYSPARAM	PROCSTRT		
MMG$GL_FRESVA	80003488-R	SYSPARAM	SVAPTE		
MMG$GL_GBLPAGFIL	800021D0-R	MDAT	INIT	SYSCRMPSC	SYSDGBLSC
MMG$GL_GBLSECFND	800021CC-R	MDAT	SYSCREDEL		
MMG$GL_GPTBASE	8000347C-R	SYSPARAM	LOADMREG	PAGEFAULT	SWAPPER
			SYSCREDEL	SYSCRMPSC	SYSDGBLSC
			SYSGETPTI	SYSSETPRT	SYSUPDSEC
MMG$GL_GPTE	80003480-R	SYSPARAM	INIT		
MMG$GL_IACLOCK	80001E6C-R	SYSIMGACT			
MMG$GL_IRPNEXT	80003480-R	SYSPARAM	MEMORYALC		
MMG$GL_LRPNEXT	80003484-R	SYSPARAM	MEMORYALC		
MMG$GL_MAXGPTE	80003484-R	SYSPARAM	PAGEFAULT		
MMG$GL_MAXPFIDX	80002188-R	PAGEFILE	SHELL		
MMG$GL_MAXPFN	800034C0-R	SYSPARAM	INIT	IOCIOPOST	IOLOCK
			PAGEFAULT	SYSCREDEL	SYSLKWSET
			SYSSETPRT	SYSUPDSEC	WRTMFYPAG
MMG$GL_MAXSYSVA	80003488-R	SYSPARAM			
MMG$GL_MINPFN	800034C4-R	SYSPARAM	INIT		
MMG$GL_NPAGEDYN	800034A8-R	SYSPARAM	INIT	MEMORYALC	SYSCREPRC
MMG$GL_NPAGNEXT	800034AC-R	SYSPARAM	MEMORYALC		
MMG$GL_NULLPFL	80002160-R	PAGEFILE	INIT		
MMG$GL_PAGEDYN	8000348C-R	SYSPARAM	INIT		
MMG$GL_PAGSWPVC	80002184-R	PAGEFILE	INIT	PAGEFAULT	SHELL
			SWAPPER	SYSCREPRC	SYSDELPRC
			WRTMFYPAG		
MMG$GL_PFNLOCK	80001E70-R	SYSLKWSET			
MMG$GL_PGDCOD	80003530-R	SYSPARAM	INIT		
MMG$GL_PHYPGCNT	80003294-R	SYSPARAM			
MMG$GL_RMSBASE	800021C8-R	MDAT	PROCSTRT	SYSRUNDWN	
MMG$GL_SBICONF	800021C0-R	MDAT	ERRORLOG		
MMG$GL_SBR	800034A4-R	SYSPARAM			
MMG$GL_SPTBASE	8000348C-R	SYSPARAM	BUFFERCTL	INIT	IOSUBNPAG
			IOSUBRAMS	LOADMREG	MEMORYALC
			MOUNTVER	PAGEFAULT	PHDUTL

Symbol	Value	Defined By	Referenced By ...		
			SHELL	SVAPTE	SWAPPER
			SYSUPDSEC	WRTMFYPAG	
MMG$GL_SPTLEN	80003490-R	SYSPARAM			
MMG$GL_SRPNEXT	80003488-R	SYSPARAM	MEMORYALC		
MMG$GL_SYSPHD	80003494-R	SYSPARAM	INIT	IOCIOPOST	PAGEFAULT
			PHDUTL	SHMGSDRTN	SYSCREDEL
			SYSCRMPSC	SYSDGBLSC	SYSUPDSEC
			WRTMFYPAG		
MMG$GL_SYSPHDLN	80003498-R	SYSPARAM	SVAPTE		
MMG$GSDMTXULK	8000F9EC-R	SYSDGBLSC	PHDUTL	SYSCRMPSC	
MMG$GSDSCN	8000FB19-R	SYSDGBLSC	SHMGSDRTN	SYSCRMPSC	
MMG$GSDTRNLOG	8001146B-R	SHMGSDRTN	SYSIMGACT		
MMG$GW_BIGPFN	800034C2-R	SYSPARAM	INIT	SHELL	
MMG$GW_MINPFIDX	8000218C-R	PAGEFILE	SHELL		
MMG$IMGACTBUF	7FFE8800	SHELL	SYSIMGACT		
MMG$IMGHDRBUF	7FFEA400	SHELL	ACCOUNT	BUGCHECK	PROCSTRT
MMG$IMGRESET	8000D9A2-R	PHDUTL	PROCSTRT	SYSRUNDWN	
MMG$INADRINI	8000E623-R	SYSCREDEL	SYSCRMPSC	SYSUPDSEC	
MMG$INCPTREF	80005AE5-R	PAGEFAULT	SYSCRMPSC		
MMG$INCSHMREF	80007788-R	SHMGSDRTN	SYSCRMPSC		
MMG$INIBLDPKT	80005B99-R	PAGEFAULT	SYSUPDSEC	WRTMFYPAG	
MMG$ININEWPFN	80005A39-R	PAGEFAULT	IOLOCK		
MMG$INIWCB	80017964-R	SYSIMGACT			
MMG$INSPFNH	80005D73-R	ALLOCPFN	SWAPPER	SYSDELPRC	
MMG$INSPFNT	80005DB1-R	ALLOCPFN	IOCIOPOST	SWAPPER	WRTMFYPAG
MMG$IOLOCK	80005E35-R	IOLOCK	SYSQIOFDT		
MMG$IOLOCKPAG	80005F34-R	IOLOCK	SWAPPER		
MMG$LCKULKPAG	80006FF5-R	SYSLKWSET	SYSCREDEL		
MMG$LOCKPGTB	80005ADF-R	PAGEFAULT	IOLOCK		
MMG$MAKEWSLE	80005A7B-R	PAGEFAULT	IOLOCK		
MMG$MBXTRNLOG	80011462-R	SHMGSDRTN	SYSMAILBX		
MMG$MPWCHECK	80007A4A-R	OSWPSCHED			
MMG$M_NOLASTUPD	00000001	SDAT	OSWPSCHED		
MMG$M_NOWAIT	00000002	SDAT	OSWPSCHED	SWAPPER	
MMG$PAGEFAULT	80005078-R	PAGEFAULT	INIT	XDELTA	
MMG$PAGETYPE	80006D71-R	SYSCREDEL	SYSGETPTI	SYSSETPRT	
MMG$PGFLTWAIT	800053BF-R	PAGEFAULT	SYSCREDEL		
MMG$PTEADRCHK	80006500-R	SVAPTE	PHDUTL		
MMG$PTEINDX	80006521-R	SVAPTE	BUGCHECK	EXCEPTION	SYSUPDSEC
MMG$PTEINDXCHK	8000651B-R	SVAPTE			
MMG$PTEREF	80006509-R	SVAPTE	PAGEFAULT	SYSCREDEL	SYSGETPTI
			SYSSETPRT		
MMG$PURGWSSCN	800071DB-R	SYSPURGWS	SYSCREDEL		
MMG$READ_GSD	8001161D-R	SHMGSDRTN	SYSCRMPSC		
MMG$REFCNTNEG	800060A4-R	IOLOCK	IOCIOPOST	PAGEFAULT	SWAPPER
			SYSCREDEL	SYSDELPRC	WRTMFYPAG
MMG$RELPFN	80005D01-R	ALLOCPFN	IOCIOPOST	IOLOCK	PAGEFAULT
			SWAPPER	SYSCREDEL	WRTMFYPAG
MMG$REMPFN	80005C8D-R	ALLOCPFN	IOLOCK	PAGEFAULT	SWAPPER
			SYSUPDSEC	WRTMFYPAG	
MMG$REMPFNH	80005C82-R	ALLOCPFN			
MMG$RESRCWAIT	800053A4-R	PAGEFAULT	SYSCREDEL		

Symbol	Value	Defined By	Referenced By ...		
MMG$RETADRINI	8000E632-R	SYSCREDEL	SYSCRMPSC		
MMG$RET_BYT_QUOTA	80014AEB-R	SYSCRMPSC	SYSIMGACT		
MMG$RLPFNSAVPTE	80005CE4-R	ALLOCPFN	PAGEFAULT		
MMG$SCNWSLX	8000719F-R	SYSLKWSET	PAGEFAULT		
MMG$SETPRTPAG	800072A0-R	SYSSETPRT			
MMG$SET_BITMAP	8001111E-R	SHMGSDRTN	SYSCRMPSC		
MMG$SHMTXLK	80011874-R	SHMGSDRTN	SYSCRMPSC		
MMG$SHMTXULK	800118B1-R	SHMGSDRTN	SYSCRMPSC		
MMG$SHRCNTNEG	800060A8-R	IOLOCK	PAGEFAULT	SWAPPER	
MMG$SHRINKWS	800069A2-R	SYSADJWSL	OSWPSCHED		
MMG$SUBSECREF	80006402-R	PHDUTL	IOCIOPOST		
MMG$SVAPTECHK	800064E7-R	SVAPTE	PAGEFAULT	PHDUTL	SHELL
			SWAPPER	SYSDELPRC	SYSLKWSET
			SYSPURGWS		
MMG$SVPCTX	80005376-R	PAGEFAULT	SYSCREDEL		
MMG$SWAPWSLE	80007163-R	SYSLKWSET	PHDUTL		
MMG$ULKGBLWSLE	80006FE4-R	SYSLKWSET	SYSPURGWS		
MMG$UNIQUEGSD	8001181B-R	SHMGSDRTN	SYSCRMPSC		
MMG$UNLOCK	80006051-R	IOLOCK	IOCIOPOST	SWAPPER	
MMG$UPDSECAST	800110AB-R	SYSUPDSEC	IOCIOPOST		
MMG$VALIDATEGSD	800077AA-R	SHMGSDRTN			
MMG$VFYSECFLG	8000F992-R	SYSDGBLSC	SYSCRMPSC		
MMG$V_NOLASTUPD	00000000	SDAT			
MMG$V_NOWAIT	00000001	SDAT	PAGEFAULT		
MMG$WRITE_GSD	80011614-R	SHMGSDRTN			
MMG$WRTMFYPAG	80006668-R	WRTMFYPAG	SWAPPER		
MMG$WRTPGSBAK	8000741F-R	SYSUPDSEC	SYSCREDEL		
MMG$WSLEPFN	800057A4-R	PAGEFAULT	SYSLKWSET		
MMG$WSPEAKCHK	8000DD11-R	SYSADJWSL	PHDUTL		
MPH$ASTDELCONT	80008A46-R	ASTDEL			
MPH$ASTDELHK	80008A40-R	ASTDEL			
MPH$BUGCHKHK	8000397A-R	BUGCHECK			
MPH$INVALIDHK	80005924-R	PAGEFAULT			
MPH$NEWLVLHK	80008CA9-R	ASTDEL			
MPH$QAST	80008BE8-R	ASTDEL			
MPH$QEMPTYCONT	80008A5A-R	ASTDEL			
MPH$RESCHED	80009A54-R	SCHED			
MPH$SCHED	80009A74-R	SCHED			
MPW$AL_PTE	80001E60-R	WRTMFYPAG	INIT		
MPW$AW_INITVAL	8000327E-R	SYSPARAM			
MPW$AW_PHVINDEX	80001E64-R	WRTMFYPAG	INIT		
MPW$GB_PRIO	80003284-R	SYSPARAM	WRTMFYPAG		
MPW$GL_BADPAGTOTAL	80001E68-R	WRTMFYPAG			
MPW$GL_THRESH	80003288-R	SYSPARAM	OSWPSCHED		
MPW$GL_WAITLIM	8000328C-R	SYSPARAM	PAGEFAULT		
MPW$GW_HILIM	80003280-R	SYSPARAM	INIT		
MPW$GW_LOLIM	80003282-R	SYSPARAM	INIT	MEMORYALC	
MPW$GW_MPWPFC	8000327E-R	SYSPARAM	INIT	PAGEFILE	SYSUPDSEC
			WRTMFYPAG		
MTCHECK_ACCESS	80008A0B-R	MTFDT			
NET$WCB	800011FC-R	DEVICEDAT			
NLSDDT	800017F0-R	NLDRIVER	DEVICEDAT		

Symbol	Value	Defined By	Referenced By ...		
NLSDPT	800012AD-R	NLDRIVER	INIT		
NLSGL_DDB	80001144-R	DEVICEDAT			
NLSGL_UCB0	80001178-R	DEVICEDAT			
OPSDPT	800012E6-R	CONINTDSP	INIT		
OPASCRB	80000F10-R	DEVICEDAT	INIT		
OPASGL_DDB	80000D9C-R	DEVICEDAT	INIT		
OPASUCB0	80000DD0-R	DEVICEDAT	INIT	MOUNTVER	PAGEFILE
P1SYSVECTORS	7FFEDE00	SHELL	SWAPPER	SYSDELPRC	
PATSA_NONPGD_CODE	8000C452-R	MDAT			
PATSA_NONPGD_DATA	80002FB0-R	MDAT			
PATSA_PAGED_CODE	80013BF4-R	MDAT			
PATSA_PFN_FIXUP	8001C06D-R	MDAT_END			
PATSGL_EXP_NPG1	8000C452-R	MDAT			
PATSGL_EXP_NPG2	80003530-R	SYSPARAM			
PCBSB_ASTACT	0000000C	GLOBALS			
PCBSB_ASTEN	0000000D	GLOBALS			
PCBSB_PRI	0000000B	GLOBALS			
PCBSB_PRIB	0000002F	GLOBALS			
PCBSB_PRIBSAV	00000029	GLOBALS			
PCBSB_PRISAV	00000028	GLOBALS			
PCBSB_TYPE	0000000A	GLOBALS			
PCBSB_WEFC	0000002E	GLOBALS			
PCBSC_LENGTH	0000009C	GLOBALS			
PCBSK_LENGTH	0000009C	GLOBALS			
PCBSL_ARB	00000084	GLOBALS			
PCBSL_ASTQBL	00000014	GLOBALS			
PCBSL_ASTQFL	00000010	GLOBALS			
PCBSL_DLCKPRI	00000094	GLOBALS			
PCBSL_EFC2P	00000058	GLOBALS			
PCBSL_EFC3P	0000005C	GLOBALS			
PCBSL_EFCS	00000050	GLOBALS			
PCBSL_EFCU	00000054	GLOBALS			
PCBSL_EFWM	0000004C	GLOBALS			
PCBSL_IPAST	00000098	GLOBALS			
PCBSL_JIB	00000078	GLOBALS	SYSSETPRT		
PCBSL_LOCKQBL	00000090	GLOBALS			
PCBSL_LOCKQFL	0000008C	GLOBALS			
PCBSL_OWNER	0000001C	GLOBALS			
PCBSL_PHD	00000064	GLOBALS	SYSSETIME		
PCBSL_PHYPCB	00000018	GLOBALS			
PCBSL_PID	00000060	GLOBALS	SYSGETDEV		
PCBSL_PQB	0000004C	GLOBALS			
PCBSL_SQBL	00000004	GLOBALS			
PCBSL_SQFL	00000000	GLOBALS			
PCBSL_STS	00000024	GLOBALS			
PCBSL_UIC	00000088	GLOBALS			
PCBSL_WSSWP	00000020	GLOBALS			
PCBSL_WTIME	00000028	GLOBALS			
PCBSQ_PRIV	0000007C	GLOBALS			
PCBSS_LNAME	00000010	GLOBALS			
PCBSS_PRIV	00000008	GLOBALS			
PCBSS_TERMINAL	00000008	GLOBALS			

Symbol	Value	Defined By	Referenced By ...
PCBST_LNAME	00000068	GLOBALS	
PCBST_TERMINAL	00000044	GLOBALS	
PCB$V_ASTPEN	00000011	GLOBALS	
PCB$V_BATCH	0000000E	GLOBALS	
PCB$V_DELPEN	00000001	GLOBALS	
PCB$V_DISAWS	00000018	GLOBALS	
PCB$V_FORCPEN	00000002	GLOBALS	
PCB$V_HIBER	00000013	GLOBALS	
PCB$V_INQUAN	00000003	GLOBALS	
PCB$V_LOGIN	00000014	GLOBALS	
PCB$V_NETWRK	00000015	GLOBALS	
PCB$V_NOACNT	0000000F	GLOBALS	
PCB$V_NODELET	00000017	GLOBALS	
PCB$V_PHDRES	00000012	GLOBALS	
PCB$V_PSWAPM	00000004	GLOBALS	
PCB$V_PWRAST	00000016	GLOBALS	
PCB$V_RES	00000000	GLOBALS	
PCB$V_RESPEN	00000005	GLOBALS	
PCB$V_SSFEXC	00000006	GLOBALS	
PCB$V_SSFEXCE	00000007	GLOBALS	
PCB$V_SSFEXCS	00000008	GLOBALS	
PCB$V_SSFEXCU	00000009	GLOBALS	
PCB$V_SSRWAIT	0000000A	GLOBALS	
PCB$V_SUSPEN	0000000B	GLOBALS	
PCB$V_SWPVBN	00000010	GLOBALS	
PCB$V_WAKEPEN	0000000C	GLOBALS	
PCB$V_WALL	0000000D	GLOBALS	
PCB$W_APTCNT	00000030	GLOBALS	
PCB$W_ASTCNT	00000038	GLOBALS	SYSGETDEV
PCB$W_BIOCNT	0000003A	GLOBALS	
PCB$W_BIOLM	0000003C	GLOBALS	
PCB$W_DIOCNT	0000003E	GLOBALS	
PCB$W_DIOLM	00000040	GLOBALS	
PCB$W_GPGCNT	00000034	GLOBALS	
PCB$W_GRP	0000008A	GLOBALS	
PCB$W_MEM	00000088	GLOBALS	
PCB$W_MTXCNT	0000000E	GLOBALS	
PCB$W_PPGCNT	00000036	GLOBALS	
PCB$W_PRCCNT	00000042	GLOBALS	
PCB$W_SIZE	00000008	GLOBALS	
PCB$W_STATE	0000002C	GLOBALS	
PCB$W_TMBU	00000032	GLOBALS	
PFM$GL_PMBLST	80001E78-R	SYSSETPFM	
PFM$GL_SIZE	80001E74-R	SYSSETPFM	
PFM$MON	8000A1C0-R	SYSSETPFM	PAGEFAULT
PFM$PURGE	80012861-R	SYSSETPFM	

Symbol	Value	Defined By	Referenced By ...		
PFN$AB_STATE	80003508-R	SYSPARAM	ALLOCPFN	BUGCHECK	INIT
			IOCIOPOST	IOLOCK	PAGEFAULT
			SHELL	SWAPPER	SYSCREDEL
			SYSDELPRC	SYSDGBLSC	SYSUPDSEC
			WRTMFYPAG	XDELTA	
PFN$AB_TYPE	8000350C-R	SYSPARAM	ALLOCPFN	INIT	IOCIOPOST

Symbol	Value	Defined By	Referenced By ...		
			PAGEFAULT	SHELL	SWAPPER
			SYSCREDEL	SYSLKWSET	SYSSETPRT
			SYSUPDSEC	WRTMFYPAG	XDELTA
PFN$AL_BAK	800034F4-R	SYSPARAM	ALLOCPFN	IOCIOPOST	IOLOCK
			PAGEFAULT	SHELL	SWAPPER
			SYSCREDEL	SYSSETPRT	SYSUPDSEC
			WRTMFYPAG	XDELTA	
PFN$AL_HEAD	80001DD8-R	ALLOCPFN	SWAPPER		
PFN$AL_HILIMIT	80001E00-R	ALLOCPFN			
PFN$AL_LOLIMIT	80001E0C-R	ALLOCPFN			
PFN$AL_MFYLSTHD	80001DDC-R	ALLOCPFN	WRTMFYPAG		
PFN$AL_PTE	800034F0-R	SYSPARAM	ALLOCPFN	INIT	PAGEFAULT
			SHELL	SWAPPER	SYSUPDSEC
			WRTMFYPAG	XDELTA	
PFN$AW_REFCNT	800034F8-R	SYSPARAM	ALLOCPFN	INIT	IOCIOPOST
			IOLOCK	PAGEFAULT	SWAPPER
			SYSCREDEL	SYSDELPRC	SYSUPDSEC
			WRTMFYPAG	XDELTA	
PFN$AW_SWPVBN	80003504-R	SYSPARAM	ALLOCPFN	IOCIOPOST	SWAPPER
			WRTMFYPAG	XDELTA	
PFN$AX_BLINK	80003500-R	SYSPARAM	ALLOCPFN	WRTMFYPAG	XDELTA
PFN$AX_FLINK	800034FC-R	SYSPARAM	ALLOCPFN	SWAPPER	WRTMFYPAG
			XDELTA		
PFN$AX_SHRCNT	800034FC-R	SYSPARAM	PAGEFAULT	SWAPPER	SYSCREDEL
PFN$AX_WSLX	80003500-R	SYSPARAM	PAGEFAULT	PHDUTL	SHELL
			SWAPPER	SYSCREDEL	SYSLKWSET
PFN$A_BASE	800034F0-R	SYSPARAM			
PFN$C_LONG_LEN	00000016	SYSPARAM			
PFN$C_WORD_LEN	00000012	SYSPARAM			
PFN$GB_LENGTH	800034E9-R	SYSPARAM			
PFN$GL_PHYPGCNT	80001DFC-R	ALLOCPFN	INIT	MEMORYALC	PROCSTRT
			SYSADJWSL		
PHV$GL_PIXBAS	800021B4-R	MDAT	INIT	SWAPPER	SYSDELPRC
			WRTMFYPAG		
PHV$GL_REFCBAS	800021B8-R	MDAT	INIT	PAGEFAULT	SWAPPER
			WRTMFYPAG		
			PROCSTRT		
PIO$AL_RMSEXH	7FFD8FC0	SHELL			
PIO$C_SEGSIZ	00007800	SHELL			
PIO$GB_DFMBC	7FFD8E24	SHELL			
PIO$GB_DFMBFHSH	7FFD8E2A	SHELL			
PIO$GB_DFMBFIDX	7FFD8E29	SHELL			
PIO$GB_DFMBFREL	7FFD8E28	SHELL			
PIO$GB_DFMBFSDK	7FFD8E25	SHELL			
PIO$GB_DFMBFSMT	7FFD8E26	SHELL			
PIO$GB_DFMBFSUR	7FFD8E27	SHELL			
PIO$GB_RMSCOMPAT	7FFD8E2B	SHELL			
PIO$GB_RMSPROLOG	7FFD8E2C	SHELL			
PIO$GL_DIRCACHE	7FFD8E84	SHELL			
PIO$GL_DIRCFRLH	7FFD8E8C	SHELL			
PIO$GL_FMLH	7FFD8E00	SHELL			
PIO$GL_IIOFSPLH	7FFD8E08	SHELL	RMSRESET		
PIO$GT_DDSTRING	7FFD8E30	SHELL	PROCSTRT	SYSCREPRC	

Symbol	Value	Defined By	Referenced By ...		
PIO$GT_ENDSTR	7FFD8E12	SHELL			
PIO$GW_DFPROT	7FFD8E22	SHELL	PROCSTRT	SYSCREPRC	
PIO$GW_IIOIMPA	7FFD8F1C	SHELL	RMSRESET	SYSIMGACT	
PIO$GW_PIOIMPA	7FFD8E90	SHELL			
PIO$GW_RMSEXTEND	7FFD8E2D	SHELL			
PIO$GW_STATUS	7FFD8E10	SHELL			
PMS$AL_READTBL	80002E08-R	PMSDAT			
PMS$AL_TRANSFLT	80001E38-R	PAGEFAULT			
PMS$AL_WRITETBL	80002E30-R	PMSDAT			
PMS$END_IO	80003A27-R	IOPERFORM	IOSUBNPAG	MOUNTVER	
PMS$END_RQ	80003A47-R	IOPERFORM	IOCIOPOST	MOUNTVER	
PMS$GB_PROMPT	80002E80-R	PMSDAT			
PMS$GL_ARRLOCPK	80002DC8-R	PMSDAT			
PMS$GL_ARRTRAPK	80002DD0-R	PMSDAT			
PMS$GL_BUFIO	80002DA8-R	PMSDAT			
PMS$GL_CHME	80002DFC-R	PMSDAT			
PMS$GL_CHMK	80002DF8-R	PMSDAT			
PMS$GL_COMPAT	80002854-R	SYSCOMMON			
PMS$GL_DEPLOCPK	80002DCC-R	PMSDAT			
PMS$GL_DEQ	80002DE4-R	PMSDAT	SYSENQDEQ		
PMS$GL_DIRHIT	80000924-R	PMSDAT			
PMS$GL_DIRIO	80002DA4-R	PMSDAT	IOCIOPOST		
PMS$GL_DIRMISS	80000928-R	PMSDAT			
PMS$GL_DLCKFND	80002DF4-R	PMSDAT	DEADLOCK		
PMS$GL_DLCKSRCH	80002DF0-R	PMSDAT	DEADLOCK		
PMS$GL_DOSTATS	80002E84-R	PMSDAT			
PMS$GL_DPTSCN	80001E58-R	PAGEFAULT			
PMS$GL_DZROFLTS	80001E34-R	PAGEFAULT			
PMS$GL_ENQCVT	80002DE0-R	PMSDAT	SYSENQDEQ		
PMS$GL_ENQNEW	80002DDC-R	PMSDAT	SYSENQDEQ		
PMS$GL_ENQNOTQD	80002DEC-R	PMSDAT	SYSENQDEQ		
PMS$GL_ENQWAIT	80002DE8-R	PMSDAT	SYSENQDEQ		
PMS$GL_EXTHIT	8000093C-R	PMSDAT			
PMS$GL_EXTMISS	80000940-R	PMSDAT			
PMS$GL_FAULTS	80001E20-R	PAGEFAULT			
PMS$GL_FCP	80000800-R	PMSDAT			
PMS$GL_FCP2	80000800-R	PMSDAT			
PMS$GL_FIDHIT	80000934-R	PMSDAT			
PMS$GL_FIDMISS	80000938-R	PMSDAT			
PMS$GL_GVALID	80001E5C-R	PAGEFAULT			
PMS$GL_HIT	80000920-R	PMSDAT	IOSUBRAMS		
PMS$GL_IOPFMPDB	80002DC0-R	PMSDAT	IOPERFORM	IOSUBNPAG	SYSQIOREQ
PMS$GL_IOPFMSEQ	80002DC4-R	PMSDAT	IOPERFORM	SYSQIOREQ	
PMS$GL_KERNEL	80002840-R	SYSCOMMON	TIMESCHDL		
PMS$GL_LDPCTX	80002E78-R	PMSDAT			
PMS$GL_LOGNAM	80002DAC-R	PMSDAT	LOGNAMSUB		
PMS$GL_LRGRWP	80002E68-R	PMSDAT			
PMS$GL_MBREADS	80002DB0-R	PMSDAT	MBDRIVER		
PMS$GL_MBWRITES	80002DB4-R	PMSDAT	MBDRIVER		
PMS$GL_NOSTDTRM	80002E70-R	PMSDAT			
PMS$GL_OPEN	80000944-R	PMSDAT			
PMS$GL_OPENS	80000948-R	PMSDAT			

Symbol	Value	Defined By	Referenced By ...		
PMS$GL_PAGES	80002E00-R	PMSDAT			
PMS$GL_PASSALL	80002E60-R	PMSDAT			
PMS$GL_PREADIO	80001E28-R	PAGEFAULT			
PMS$GL_PREADS	80001E24-R	PAGEFAULT			
PMS$GL_PWRITES	80001E2C-R	PAGEFAULT	SYSUPDSEC	WRTMFYPAG	
PMS$GL_PWRITIO	80001E30-R	PAGEFAULT	SYSUPDSEC	WRTMFYPAG	
PMS$GL_QUOHIT	8000092C-R	PMSDAT			
PMS$GL_QUOMISS	80000930-R	PMSDAT			
PMS$GL_RCVBUFFL	80002DD8-R	PMSDAT			
PMS$GL_RDFLTS	80001E24-R	PAGEFAULT			
PMS$GL_READCNT	80002E58-R	PMSDAT			
PMS$GL_RWP	80002E64-R	PMSDAT			
PMS$GL_RWPNOSTD	80002E74-R	PMSDAT			
PMS$GL_RWPSUM	80002E6C-R	PMSDAT			
PMS$GL_SPLIT	8000091C-R	PMSDAT	IOCIOPOST		
PMS$GL_SWITCH	80002E7C-R	PMSDAT			
PMS$GL_TRCNGLOS	80002DD4-R	PMSDAT			
PMS$GL_TREADS	80002DB8-R	PMSDAT			
PMS$GL_TURN	80000918-R	PMSDAT			
PMS$GL_TWRITES	80002DBC-R	PMSDAT			
PMS$GL_WRTCNT	80002E5C-R	PMSDAT			
PMS$GW_BATCH	80002E04-R	PMSDAT			
PMS$GW_INTJOBS	80002E06-R	PMSDAT			
PMS$START_IO	80003A75-R	IOPERFORM	IOSUBNPAG		
PMS$START_RQ	80003A98-R	IOPERFORM	IOCIOPOST	MOUNTVER	SYSCANCEL
			SYSQIOREQ		
PQL$AB_FLAG	8000340F-R	SYSPARAM			
PQL$AB_SYSPQL	80016B0E-R	SWAPPER			
PQL$AL_DEFAULT	8000339C-R	SYSPARAM	SYSCREPRC		
PQL$AL_MIN	800033D4-R	SYSPARAM	SYSCREPRC		
PQL$C_SYSPQLLEN	00000041	SWAPPER			
PQL$GDASTLM	800033A0-R	SYSPARAM			
PQL$GDBIOLM	800033A4-R	SYSPARAM			
PQL$GDBYTLM	800033A8-R	SYSPARAM			
PQL$GDCPULM	800033AC-R	SYSPARAM			
PQL$GDDIOLM	800033B0-R	SYSPARAM			
PQL$GDENQLM	800033CC-R	SYSPARAM			
PQL$GDFILLM	800033B4-R	SYSPARAM			
PQL$GDPGFLQUOTA	800033B8-R	SYSPARAM			
PQL$GDPRCLM	800033BC-R	SYSPARAM			
PQL$GDTQELM	800033C0-R	SYSPARAM			
PQL$GDWSDEFAULT	800033C8-R	SYSPARAM			
PQL$GDWSEXTENT	800033D0-R	SYSPARAM			
PQL$GDWSQUOTA	800033C4-R	SYSPARAM			
PQL$GMASTLM	800033D8-R	SYSPARAM			
PQL$GMBIOLM	800033DC-R	SYSPARAM			
PQL$GMBYTLM	800033E0-R	SYSPARAM			
PQL$GMCPULM	800033E4-R	SYSPARAM			
PQL$GMDIOLM	800033E8-R	SYSPARAM			
PQL$GMENQLM	80003404-R	SYSPARAM			
PQL$GMFILLM	800033EC-R	SYSPARAM			
PQL$GMPGFLQUOTA	800033F0-R	SYSPARAM			

Symbol	Value	Defined By	Referenced By ...		
PQLSGMPRCLM	800033F4-R	SYSPARAM			
PQLSGMTQELM	800033F8-R	SYSPARAM			
PQLSGMWSDEFAULT	80003400-R	SYSPARAM			
PQLSGMWSEXTENT	80003408-R	SYSPARAM			
PQLSGMWSQUOTA	800033FC-R	SYSPARAM			
PRS_IPL	00000012	SYSSPRDEF	ACCOUNT	MOUNTVER	POSTEF
			SYSENQDEQ	SYSGETDEV	SYSIMGACT
			SYSLOGNAM	SYSSNDMSG	
PRS_TBIA	00000039	SYSSPRDEF	SHELL		
PRS_USP	00000003	SYSSPRDEF	SYSIMGACT		
PRTSC_EW	00000005	SYSSPRDEF	PAGEFAULT		
PRVSV_ACNT	00000009	GLOBALS			
PRVSV_ALLSPOOL	00000004	GLOBALS			
PRVSV_ALTPRI	0000000D	GLOBALS			
PRVSV_BUGCHK	00000017	GLOBALS			
PRVSV_BYPASS	0000001D	GLOBALS	EXSUBROUT	MBDRIVER	
PRVSV_CMEXEC	00000001	GLOBALS	SYSIMGACT		
PRVSV_CMKRNL	00000000	GLOBALS	SYSIMGACT		
PRVSV_DETACH	00000005	GLOBALS			
PRVSV_DIAGNOSE	00000006	GLOBALS			
PRVSV_EXQUOTA	00000013	GLOBALS			
PRVSV_GROUP	00000008	GLOBALS			
PRVSV_GRPNAM	00000003	GLOBALS			
PRVSV_LOG_IO	00000007	GLOBALS	SYSSETIME		
PRVSV_MOUNT	00000011	GLOBALS			
PRVSV_NETMBX	00000014	GLOBALS			
PRVSV_NOACNT	00000009	GLOBALS			
PRVSV_OPER	00000012	GLOBALS	SYSSETIME		
PRVSV_PFNMAP	0000001A	GLOBALS			
PRVSV_PHY_IO	00000016	GLOBALS			
PRVSV_PRMCEB	0000000A	GLOBALS			
PRVSV_PRMGBL	00000018	GLOBALS			
PRVSV_PRMMBX	0000000B	GLOBALS			
PRVSV_PSWAPM	0000000C	GLOBALS			
PRVSV_SETPRI	0000000D	GLOBALS			
PRVSV_SETPRV	0000000E	GLOBALS			
PRVSV_SHMEM	0000001B	GLOBALS			
PRVSV_SYSGBL	00000019	GLOBALS			
PRVSV_SYSLCK	0000001E	GLOBALS			
PRVSV_SYSNAM	00000002	GLOBALS			
PRVSV_SYSPRV	0000001C	GLOBALS	EXSUBROUT		
PRVSV_TMPMBX	0000000F	GLOBALS			
PRVSV_VOLPRO	00000015	GLOBALS			
PRVSV_WORLD	00000010	GLOBALS			
PSLSC_EXEC	00000001	GLOBALS			
PSLSC_KERNEL	00000000	GLOBALS			
PSLSC_SUPER	00000002	GLOBALS			
PSLSC_USER	00000003	GLOBALS			
PSLSM_C	00000001	GLOBALS			
PSLSM_CM	80000000	GLOBALS	SYSUNWIND		
PSLSM_CURMOD	03000000	GLOBALS			
PSLSM_DV	00000080	GLOBALS			

Symbol	Value	Defined By	Referenced By ...	
PSL$M_FPD	08000000	GLOBALS	SYSUNWIND	
PSL$M_FU	00000040	GLOBALS		
PSL$M_IPL	001F0000	GLOBALS		
PSL$M_IS	04000000	GLOBALS		
PSL$M_IV	00000020	GLOBALS		
PSL$M_N	00000008	GLOBALS		
PSL$M_PRVMOD	00C00000	GLOBALS		
PSL$M_SAFBITS	000037FF	GLOBALS		
PSL$M_TBIT	00000010	GLOBALS		
PSL$M_TP	40000000	GLOBALS		
PSL$M_V	00000002	GLOBALS		
PSL$M_Z	00000004	GLOBALS		
PSL$S_CURMOD	00000002	GLOBALS		
PSL$S_IPL	00000005	GLOBALS		
PSL$S_PRVMOD	00000002	GLOBALS	SYSGETDEV	
PSL$V_C	00000000	GLOBALS		
PSL$V_CM	0000001F	GLOBALS		
PSL$V_CURMOD	00000018	GLOBALS		
PSL$V_DV	00000007	GLOBALS		
PSL$V_FPD	0000001B	GLOBALS		
PSL$V_FU	00000006	GLOBALS		
PSL$V_IPL	00000010	GLOBALS		
PSL$V_IS	0000001A	GLOBALS		
PSL$V_IV	00000005	GLOBALS		
PSL$V_N	00000003	GLOBALS		
PSL$V_PRVMOD	00000016	GLOBALS	SYSGETDEV	
PSL$V_TBIT	00000004	GLOBALS		
PSL$V_TP	0000001E	GLOBALS		
PSL$V_V	00000001	GLOBALS		
PSL$V_Z	00000002	GLOBALS		
RMSRESET	8000DC1C-R	RMSRESET	PHDUTL	SYSIMGACT
RMS$GL_SFDBASE	80002920-R	SYSCOMMON		
RMS$_STALL	00018001	RMS$GLOBALS	CMODSSDSP	
RMS$_STR	000187BC	RMS$GLOBALS	CMODSSDSP	
RND$V_IACLOCK	00000000	SHELL	SYSIMGACT	
RSN$_ASTWAIT	00000001	GLOBALS		
RSN$_BRKTHRU	00000006	GLOBALS		
RSN$_IACLOCK	00000007	GLOBALS	SYSIMGACT	
RSN$_JQUOTA	00000008	GLOBALS		
RSN$_LOCKID	00000009	GLOBALS		
RSN$_MAILBOX	00000002	GLOBALS		
RSN$_MAX	0000000D	GLOBALS		
RSN$_MPLEMPTY	0000000B	GLOBALS	WRTMFYPAG	
RSN$_MPWBUSY	0000000C	GLOBALS	WRTMFYPAG	
RSN$_NPDYNMEM	00000003	GLOBALS		
RSN$_PGDYNMEM	00000005	GLOBALS		
RSN$_PGFILE	00000004	GLOBALS		
RSN$_SWPFILE	0000000A	GLOBALS		
SCH$AQ_COMH	80001E88-R	SDAT	SCHED	
SCH$AQ_COMOH	80001F88-R	SDAT	OSWPSCHED	SWAPPER
SCH$AQ_COMOT	80001F8C-R	SDAT		
SCH$AQ_COMT	80001E8C-R	SDAT	RSE	SCHED

Symbol	Value	Defined By	Referenced By ...		
SCH$AQ_WQHDR	8000207C-R	SDAT	OSWPSCHED	RSE	
SCH$ASTDEL	80008A2C-R	ASTDEL			
SCH$CHSE	8000901C-R	RSE	INIT	MUTEX	SYSCREPRC
SCH$CHSEP	80009038-R	RSE	SWAPPER	SYSGETJPI	TIMESCHDL
SCH$CLREF	80009F9B-R	SYSEVTSRV	SYSGETDEV	SYSGETJPI	SYSGETSYI
			SYSQIOREQ	SYS$CHEVT	SYSUPDSEC
			SYSENQDEQ		
SCH$CLREFR	80009F95-R	SYSEVTSRV			
SCH$C_MAXPIX	0000003F	PDAT			
SCH$FORCEDEXIT	8000910B-R	RSE			
SCH$GB_PRI	80002158-R	SDAT	MUTEX	RSE	SCHED
			TIMESCHDL		
SCH$GB_RESCAN	80002119-R	SDAT	ALLOCPFN	OSWPSCHED	
SCH$GB_SIP	80002118-R	SDAT	ALLOCPFN	RSE	SWAPPER
			WRTMFYPAG		
SCH$GETEFC	80009F5A-R	SYSEVTSRV	SYSENQDEQ		
SCH$GL_AWSTIME	80003280-R	SYSPARAM	RSE		
SCH$GL_BORROWLIM	80003314-R	SYSPARAM	RSE		
SCH$GL_COMOQS	80002114-R	SDAT	RSE	SWAPPER	
SCH$GL_COMQS	80002110-R	SDAT	MUTEX	RSE	SCHED
			TIMESCHDL		
SCH$GL_CURPCB	8000210C-R	SDAT	ASTDEL	BUGCHECK	CMODSSDSP
			MBDRIVER	MEMORYALC	PAGEFAULT
			PROCSTRT	SCHED	SHMGSDRTN
			SWAPPER	SYSCREDEL	SYSCREPRC
			SYSCRMPSC	SYSDELPRC	SYSDGBLSC
			SYSENQDEQ	SYSGETJPI	SYS$CHEVT
			SYSSETPFM	SYSSETPRI	SYSSNDMSG
			TIMESCHDL	WRTMFYPAG	XDELTA
SCH$GL_FREECNT	80001DF0-R	ALLOCPFN	INIT	OSWPSCHED	PAGEFAULT
			RSE	SWAPPER	
SCH$GL_FREELIM	80001E0C-R	ALLOCPFN	INIT	PROCSTRT	RSE
			SWAPPER	SYSADJWSL	
SCH$GL_FREEREQ	80001E00-R	ALLOCPFN			
SCH$GL_GROWLIM	80003310-R	SYSPARAM	PAGEFAULT		
SCH$GL_MAXPIX	800026A8-R	PDAT	INIT	SYSCREPRC	SYSDELPRC
			SYSGETJPI	SYSPCNTRL	SYSSETPRA
			TIMESCHDL		
SCH$GL_MFYCNT	80001DF4-R	ALLOCPFN	OSWPSCHED	PAGEFAULT	RSE
			SWAPPER	WRTMFYPAG	
SCH$GL_MFYLIM	80001E04-R	ALLOCPFN	INIT	OSWPSCHED	PAGEFAULT
			RSE	SWAPPER	SYSDGBLSC
			WRTMFYPAG		
SCH$GL_MFYLIMSV	80001E18-R	ALLOCPFN	INIT	WRTMFYPAG	
SCH$GL_MFYLOLIM	80001E10-R	ALLOCPFN	INIT	OSWPSCHED	PAGEFAULT
			SWAPPER	SYSDGBLSC	WRTMFYPAG
SCH$GL_MFYLOSV	80001E1C-R	ALLOCPFN	INIT	WRTMFYPAG	
SCH$GL_NULLPCB	80002350-R	PDAT	INIT	SDAT	SYSCREPRC
			SYSDELPRC	SYSGETJPI	
SCH$GL_PCBVEC	800026A4-R	PDAT	ASTDEL	COMDRVSUB	DEADLOCK
			EXSUBROUT	INIT	IOCIOPOST
			IOSUBNPAG	POSTEF	RSE
			SWAPPER	SYSASCEFC	SYSASSIGN

Symbol	Value	Defined By	Referenced By ...		
			SYSBRDCST	SYSCREPRC	SYSCRMPSC
			SYSDELPRC	SYSENQDEQ	SYSGETJPI
			SYSPCNTRL	SYSSETPRA	TIMESCHDL
			WRTMFYPAG	XDELTA	
SCH$GL_PFRATH	8000329C-R	SYSPARAM	RSE		
SCH$GL_PFRATL	80003298-R	SYSPARAM	RSE		
SCH$GL_PFRATS	800032A0-R	SYSPARAM			
SCH$GL_RESMASK	80002154-R	SDAT	MUTEX	PAGEFAULT	SYSADJWSL
			SYSQIOFDT	SYSQIOREQ	SYSSCHEVT
SCH$GL_SEQVEC	800026AC-R	PDAT	INIT	SYSCREPRC	
SCH$GL_SWPPCB	80002568-R	PDAT	INIT		
SCH$GL_SWPPID	800025C8-R	PDAT	RSE	SYSCREPRC	SYSDELPRC
			SYSGETJPI		
SCH$GL_SWPRATE	800032B4-R	SYSPARAM	SWAPPER		
SCH$GL_WSDEC	800032A8-R	SYSPARAM	RSE		
SCH$GL_WSINC	800032A4-R	SYSPARAM	RSE		
SCH$GQ_CEBHD	80002124-R	SDAT	OSWPSCHED	SYSASCEFC	
SCH$GQ_COLPGWQ	80002088-R	SDAT	IOCIOPOST	PAGEFAULT	SWAPPER
SCH$GQ_FPGWQ	80002100-R	SDAT	ALLOCPFN	PAGEFAULT	
SCH$GQ_HIBOWQ	800020DC-R	SDAT			
SCH$GQ_HIBWQ	800020D0-R	SDAT	SWAPPER	SYSPCNTRL	
SCH$GQ_LEFOWQ	800020C4-R	SDAT			
SCH$GQ_LEFWQ	800020B8-R	SDAT	SYSWAIT		
SCH$GQ_MWAIT	80002094-R	SDAT	MUTEX	PAGEFAULT	SYSADJWSL
			SYSQIOFDT	SYSQIOREQ	SYSSCHEVT
SCH$GQ_PFWQ	800020AC-R	SDAT	PAGEFAULT	SHMGSDRTN	SYSCREDEL
SCH$GQ_SUSP	800020E8-R	SDAT	SYSPCNTRL		
SCH$GQ_SUSPO	800020F4-R	SDAT			
SCH$GW_AWSMIN	800032AC-R	SYSPARAM	RSE		
SCH$GW_CEBCNT	8000212C-R	SDAT	SYSASCEFC		
SCH$GW_DELPHDCT	8000212E-R	SDAT	RSE	SWAPPER	SYSDELPRC
SCH$GW_IOTA	8000328E-R	SYSPARAM	SYSWAIT		
SCH$GW_LONGWAIT	800032C0-R	SYSPARAM	OSWPSCHED		
SCH$GW_PROCCNT	8000211C-R	SDAT	SYSCREPRC	SYSDELPRC	
SCH$GW_PROCLIM	8000211E-R	SDAT	INIT	SYSCREPRC	
SCH$GW_QUAN	8000327C-R	SYSPARAM	RSE	SWAPPER	
SCH$GW_SWPFAIL	800032C2-R	SYSPARAM	OSWPSCHED	SWAPPER	
SCH$GW_SWPFCNT	80002182-R	SWAPPER	OSWPSCHED		
SCH$IOLOCKR	800097FB-R	MUTEX	SYSGETDEV	SYSSNDMSG	
SCH$IOLOCKW	800097E1-R	MUTEX	DISMOUNT	SYSASSIGN	SYSBRDCST
			SYSDASSGN	SYSDEVALC	SYSMAILBX
SCH$IOUNLOCK	80009869-R	MUTEX	DISMOUNT	IOSUBPAGD	SYSASSIGN
			SYSBRDCST	SYSGETDEV	SYSSNDMSG
SCH$LOCKR	80009802-R	MUTEX	LOGNAMSUB	SYSIMGACT	
SCH$LOCKW	800097E8-R	MUTEX	LOGNAMSUB	MEMORYALC	PHDUTL
			SHMGSDRTN	SYSASCEFC	SYSCRMPSC
			SYSDGBLSC	SYSIMGACT	SYSMAILBX
SCH$LOCKWNOWAIT	800097C9-R	MUTEX	CMODSSDSP	SWAPPER	SYSASTCON
SCH$NEWLVL	80008C86-R	ASTDEL	SYSDELPRC	SYSRUNDWN	
SCH$OSWPSCHED	80007893-R	OSWPSCHED	SWAPPER		
SCH$POSTEF	800098DD-R	POSTEF	IOCIOPOST	SYSENQDEQ	SYSEVTSRV

Symbol	Value	Defined By	Referenced By ...		
			SYSGETDEV	SYSGETJPI	SYSGETSYI
			SYSQIOREQ	SYSUPDSEC	TIMESCHDL
SCH$QAST	80008BE8-R	ASTDEL	COMDRVSUB	IOCIOPOST	RSE
			SYSASTCON	SYSDELPRC	SYSENQDEQ
			SYSFORCEX	SYSGETJPI	SYSPCNTRL
			SYSSETPRA	TIMESCHDL	
SCH$QEND	800090AE-R	RSE	TIMESCHDL		
SCH$RAVAIL	8000985B-R	MUTEX	IOCIOPOST	MAHANDLER	MBDRIVER
			MEMORYALC	PAGEFILE	SYSBRDCST
			SYSDELPRC	SYSENQDEQ	SYSIMGACT
			TIMESCHDL	WRTMFYPAG	
SCH$REMOVACB	80008CBD-R	ASTDEL	SYSENQDEQ		
SCH$RESCHED	80009A54-R	SCHED			
SCH$RSE	80008F9D-R	RSE	ALLOCPFN	ASTDEL	IOCIOPOST
			OSWPSCHED	POSTEF	SHMGSDRTN
			SYSPCNTRL	SYSSETPRI	SYSWAIT
			WRTMFYPAG		
SCH$RWAIT	800097C1-R	MUTEX	EXSUBROUT	MEMORYALC	SYSBRDCST
			SYSCANCEL	SYSDASSGN	SYSDELPRC
			SYSENQDEQ	SYSGETJPI	SYSIMGACT
			SYSSNDMSG		
SCH$SCHED	80009A74-R	SCHED	INIT	SYSDELPRC	SYSWAIT
SCH$SWAPACBS	80008CBA-R	ASTDEL	SYSENQDEQ		
SCH$SWPWAKE	80009225-R	RSE	ALLOCPFN	PAGEFAULT	SYSDELPRC
			SYSWAIT	TIMESCHDL	
SCH$UNLOCK	80009870-R	MUTEX	LOGNAMSUB	MEMORYALC	SHMGSDRTN
			SYSASCEFC	SYSDGBLSC	SYSIMGACT
			SYSMAILBX		
SCH$UNWAIT	80008FEA-R	RSE			
SCH$V_MPW	00000002	SDAT	ALLOCPFN	SWAPPER	WRTMFYPAG
SCH$V_REORD	00000000	SDAT	ALLOCPFN	OSWPSCHED	
SCH$V_SIP	00000000	SDAT	SWAPPER	WRTMFYPAG	
SCH$WAIT	8000A2C9-R	SYSWAIT	SYSADJWSL	SYSPCNTRL	SYSQIOFDT
			SYSQIOREQ	SYSSCHEVT	
SCH$WAITK	8000A2E4-R	SYSWAIT	SHMGSDRTN	SWAPPER	SYSPCNTRL
SCH$WAITL	8000A2EF-R	SYSWAIT	MUTEX		
SCH$WAITM	8000A2F0-R	SYSWAIT	PAGEFAULT		
SCH$WAKE	80009200-R	RSE	ERRORLOG	IOCIOPOST	IOPERFORM
			SYSPCNTRL	SYSQIOREQ	SYSSETPFM
			TIMESCHDL		
SCS$ACCEPT	80002F44-R	SCSVEC			
SCS$ALLOC_CDT	80002F4A-R	SCSVEC			
SCS$ALLOC_RSPID	80002F50-R	SCSVEC			
SCS$AL_LOAVEC	80002F44-R	SCSVEC	INIT		
SCS$CONFIG_PTH	80002F56-R	SCSVEC			
SCS$CONFIG_SYS	80002F5C-R	SCSVEC			
SCS$CONNECT	80002F62-R	SCSVEC			
SCS$DEALL_CDT	80002F68-R	SCSVEC			
SCS$DEALL_RSPID	80002F6E-R	SCSVEC			
SCS$DISCONNECT	80002F74-R	SCSVEC			
SCS$ENTER	80002F7A-R	SCSVEC			
SCS$GB_PANPOLL	8000334E-R	SYSPARAM			

Symbol	Value	Defined By	Referenced By ...
SCS$GB_SYSTEMID	80003340-R	SYSPARAM	
SCS$GB_UDABURST	80003356-R	SYSPARAM	
SCS$GL_BDT	80002F30-R	SCSVEC	
SCS$GL_CDL	80002F34-R	SCSVEC	
SCS$GL_MCADR	80002F40-R	SCSVEC	INIT
SCS$GL_MCLEN	80002F3C-R	SCSVEC	
SCS$GL_RDT	80002F38-R	SCSVEC	
SCS$GQ_CONFIG	80002F20-R	SCSVEC	
SCS$GQ_DIRECT	80002F28-R	SCSVEC	
SCS$GW_BDTCNT	80003334-R	SYSPARAM	
SCS$GW_CDTCNT	80003336-R	SYSPARAM	
SCS$GW_FLOWCUSH	8000333E-R	SYSPARAM	
SCS$GW_MAXDG	8000333A-R	SYSPARAM	
SCS$GW_MAXMSG	8000333C-R	SYSPARAM	
SCS$GW_PAPOLINT	80003350-R	SYSPARAM	
SCS$GW_PAPOOLIN	80003352-R	SYSPARAM	
SCS$GW_PAPPDDG	8000334C-R	SYSPARAM	
SCS$GW_PASTMOUT	8000334A-R	SYSPARAM	
SCS$GW_PASTRTRY	80003348-R	SYSPARAM	
SCS$GW_RDTCNT	80003338-R	SYSPARAM	
SCS$LISTEN	80002F80-R	SCSVEC	
SCS$LKP_RDTCDRP	80002FA4-R	SCSVEC	
SCS$LKP_RDTWAIT	80002FAA-R	SCSVEC	
SCS$LOCLOOKUP	80002F86-R	SCSVEC	
SCS$REMOVE	80002F8C-R	SCSVEC	
SCS$RESUMEWAITR	80002F98-R	SCSVEC	IOSUBNPAG
SCS$UNSTALLUCB	80002F9E-R	SCSVEC	
SGN$C_BALSETCNT	00000018	PDAT	
SGN$C_DFWSCNT	00000064	PDAT	
SGN$C_DFWSQUOTA	00000078	PDAT	
SGN$C_GBLSECCNT	00000028	PDAT	
SGN$C_MAXGPGCNT	00000800	PDAT	
SGN$C_MAXPAGCNT	00004000	PDAT	
SGN$C_MAXPGFL	00001000	PDAT	
SGN$C_MAXPSTCNT	00000005	PDAT	
SGN$C_MAXVPGCNT	00002000	PDAT	
SGN$C_MAXWSCNT	00000400	PDAT	
SGN$C_MINWSCNT	0000000A	PDAT	
SGN$C_NPAGEDYN	00006800	PDAT	
SGN$C_NPROCS	00000040	PDAT	
SGN$C_PAGEDYN	00004000	PDAT	
SGN$C_PFNPATSIZ	00000010	MDAT_END	
SGN$C_PHYPAGCNT	00001000	PDAT	
SGN$C_SYSDWSCNT	00000028	PDAT	
SGN$C_SYSVECPGS	00000004	PDAT	
SGN$C_SYSWSCNT	00000060	PDAT	
SGN$GB_KFILSTCT	80003210-R	SYSPARAM	
SGN$GB_PGTBPFC	8000320E-R	SYSPARAM	SHELL
SGN$GB_SYSPFC	8000320F-R	SYSPARAM	INIT
SGN$GL_BALSETCT	80003230-R	SYSPARAM	INIT PAGEFAULT SWAPPER
SGN$GL_EXTRACPU	800032F4-R	SYSPARAM	RSE
SGN$GL_EXUSRSTK	80003254-R	SYSPARAM	SYSIMGACT

Symbol	Value	Defined By	Referenced By ...		
SGN$GL_FREEGOAL	8000330C-R	SYSPARAM	SWAPPER		
SGN$GL_FREELIM	80003308-R	SYSPARAM	INIT	MEMORYALC	
SGN$GL_GBLPAGFIL	80003218-R	SYSPARAM	INIT		
SGN$GL_IRPCNT	80003234-R	SYSPARAM			
SGN$GL_IRPCNTV	80003238-R	SYSPARAM	MEMORYALC		
SGN$GL_LRPCNT	80003258-R	SYSPARAM			
SGN$GL_LRPCNTV	8000325C-R	SYSPARAM	MEMORYALC		
SGN$GL_LRPMIN	80003264-R	SYSPARAM			
SGN$GL_LRPSIZE	80003260-R	SYSPARAM			
SGN$GL_MAXGPGCT	80003214-R	SYSPARAM			
SGN$GL_MAXVPGCT	8000324C-R	SYSPARAM			
SGN$GL_MAXWSCNT	8000323C-R	SYSPARAM	INIT	MEMORYALC	PROCSTRT
			SHELL	SYSADJWSL	SYSCREPRC
SGN$GL_NPAGEDYN	80003240-R	SYSPARAM			
SGN$GL_NPAGEVIR	80003244-R	SYSPARAM	MEMORYALC		
SGN$GL_P1LWCNT	80003464-R	SYSPARAM	SVAPTE	SYSCREDEL	
SGN$GL_PAGEDYN	80003248-R	SYSPARAM	INIT	SWAPPER	
SGN$GL_PHDAPCNT	8000345C-R	SYSPARAM	SHELL		
SGN$GL_PHDLWCNT	80003460-R	SYSPARAM	SVAPTE	SYSCREDEL	
SGN$GL_PHDPAGCT	80003468-R	SYSPARAM	INIT	SHELL	SWAPPER
SGN$GL_PTPAGCNT	8000346C-R	SYSPARAM	PAGEFAULT	PHDUTL	SHELL
			SYSCREDEL	SYSCRMPSC	SYSDELPRC
SGN$GL_SPTREQ	80003250-R	SYSPARAM			
SGN$GL_SRPCNT	80003268-R	SYSPARAM	INIT		
SGN$GL_SRPCNTV	8000326C-R	SYSPARAM	MEMORYALC		
SGN$GL_SRPMIN	80003274-R	SYSPARAM			
SGN$GL_SRPSIZE	80003270-R	SYSPARAM	INIT		
SGN$GL_USER3	800032EC-R	SYSPARAM			
SGN$GL_USER4	800032F0-R	SYSPARAM			
SGN$GL_USERD1	800032E4-R	SYSPARAM			
SGN$GL_USERD2	800032E8-R	SYSPARAM			
SGN$GL_VMS5	800032D4-R	SYSPARAM			
SGN$GL_VMS6	800032D8-R	SYSPARAM			
SGN$GL_VMS7	800032DC-R	SYSPARAM			
SGN$GL_VMS8	800032E0-R	SYSPARAM			
SGN$GL_VMSD1	800032C4-R	SYSPARAM			
SGN$GL_VMSD2	800032C8-R	SYSPARAM			
SGN$GL_VMSD3	800032CC-R	SYSPARAM			
SGN$GL_VMSD4	800032D0-R	SYSPARAM			
SGN$GW_DFPFC	8000320C-R	SYSPARAM	SHELL		
SGN$GW_DFWSCNT	800033C8-R	SYSPARAM	SHELL		
SGN$GW_GBLSECNT	80003212-R	SYSPARAM			
SGN$GW_IMGIOCNT	8000327A-R	SYSPARAM	SYSIMGACT		
SGN$GW_ISPPGCT	8000322A-R	SYSPARAM	INIT		
SGN$GW_MAXPRCCT	8000321C-R	SYSPARAM	INIT	SYSSETPFM	
SGN$GW_MAXPSTCT	80003220-R	SYSPARAM			
SGN$GW_MINWSCNT	80003222-R	SYSPARAM	INIT	SHELL	SYSADJWSL
SGN$GW_PAGFILCT	80003224-R	SYSPARAM	INIT		
SGN$GW_PCHANCNT	80003278-R	SYSPARAM	PROCSTRT		
SGN$GW_PIXSCAN	8000321E-R	SYSPARAM	TIMESCHDL		
SGN$GW_SWPFILCT	8000218C-R	PAGEFILE	INIT		
SGN$GW_SWPFILES	80003226-R	SYSPARAM	INIT		

Symbol	Value	Defined By	Referenced By ...		
SGNSGW_SYSDWSCT	80003228-R	SYSPARAM	INIT		
SGNSGW_TPWAIT	80003354-R	SYSPARAM			
SGNSGW_WSLMXSKP	80003290-R	SYSPARAM	PAGEFAULT		
SSS_ABORT	0000002C	SYSSSDEF	SYSENQDEQ		
SSS_ACCVIO	0000000C	SYSSSDEF	COMDRVSUB	IOCIOPOST	SYSACPFDT
			SYSENQDEQ	SYSSETIME	SYSSETPRV
SSS_BADPARAM	00000014	SYSSSDEF	COMDRVSUB	SYSACPFDT	SYSENQDEQ
SSS_CANCEL	00000830	SYSSSDEF	SYSCANCEL		
SSS_CVTUNGRANT	0000213C	SYSSSDEF	SYSENQDEQ		
SSS_DEADLOCK	00000E0A	SYSSSDEF	DEADLOCK		
SSS_DEVFOREIGN	00000064	SYSSSDEF	SYSACPFDT		
SSS_DEVNOTMOUNT	0000007C	SYSSSDEF	SYSACPFDT		
SSS_DIRFULL	00000860	SYSSSDEF	IMGACTSUB		
SSS_ENDOFFILE	00000870	SYSSSDEF	NLDRIVER	SYSACPFDT	
SSS_EXASTLM	00002A04	SYSSSDEF	SYSENQDEQ		
SSS_EXDEPTH	00000E1A	SYSSSDEF	SYSENQDEQ		
SSS_EXENQLM	00002A44	SYSSSDEF	SYSENQDEQ		
SSS_EXQUOTA	0000001C	SYSSSDEF	COMDRVSUB	SYSACPFDT	SYSCANCEL
SSS_FILALRACC	000000A4	SYSSSDEF	SYSACPFDT		
SSS_FILNOTACC	000000AC	SYSSSDEF	SYSACPFDT		
SSS_ILLBLKNUM	000000DC	SYSSSDEF	IOCIOPOST	SYSACPFDT	
SSS_INSFMEM	00000124	SYSSSDEF	COMDRVSUB	SYSCANCEL	
SSS_IVBUFLEN	0000034C	SYSSSDEF	SYSENQDEQ		
SSS_IVCHNLSEC	0000026C	SYSSSDEF	SYSACPFDT		
SSS_IVLOCKID	00002124	SYSSSDEF	SYSENQDEQ		
SSS_IVSTSFLG	0000017C	SYSSSDEF	SYSSETPRV		
SSS_IVTIME	00000184	SYSSSDEF	SYSSETIME		
SSS_NOLOCKID	00000E12	SYSSSDEF	SYSENQDEQ		
SSS_NOPRIV	00000024	SYSSSDEF	SYSACPFDT	SYSSETIME	
SSS_NORMAL	00000001	SYSSSDEF	COMDRVSUB	IMGACTSUB	NLDRIVER
			OPENMSG	SYSACPFDT	SYSCANCEL
			SYSENQDEQ	SYSSETIME	SYSSETPRV
SSS_NOSHRIMG	000021BC	SYSSSDEF	IMGACTSUB		
SSS_NOSYSLCK	000028F4	SYSSSDEF	SYSENQDEQ		
SSS_NOTALLPRIV	00000681	SYSSSDEF	SYSSETPRV		
SSS_NOTQUEUED	000009B8	SYSSSDEF	SYSENQDEQ		
SSS_PARNOTGRANT	00002134	SYSSSDEF	SYSENQDEQ		
SSS_RELINK	0000200C	SYSSSDEF	IMGACTSUB		
SSS_SUBLOCKS	0000212C	SYSSSDEF	SYSENQDEQ		
SSS_SYNCH	00000689	SYSSSDEF	SYSENQDEQ		
SSS_WRITLCK	0000025C	SYSSSDEF	SYSACPFDT		
SWISGL_FQBL	8000270C-R	SYSCOMMON			
SWISGL_FQFL	80002708-R	SYSCOMMON	FORKCNTRL		
SWPSAL_PTRPAG	00000600	SHELL			
SWPSA_KSTK	80000C50-R	PDAT	SYSPARAM		
SWPSC_DBGPTCNT	00000001	SHELL			
SWPSC_KSTACK	00000003	SHELL	INIT		
SWPSC_NDYN	00000002	SHELL			
SWPSC_SHELLPFIL	000000A2	SHELL	SYSCREPRC		
SWPSC_SHLFPTE	00000047	SHELL			
SWPSC_SHLP1PT	00000002	SHELL			
SWPSGB_ISWPRI	8000213E-R	SDAT	OSWPSCHED	SWAPPER	

Symbol	Value	Defined By	Referenced By ...		
SWP$GB_PRIO	80003285-R	SYSPARAM	SWAPPER		
SWP$GB_SHLP1PT	8000344E-R	SYSPARAM	INIT	SHELL	
SWP$GL_BALBASE	3000349C-R	SYSPARAM	INIT	IOLOCK	PAGEFAULT
			SWAPPER	WRTMFYPAG	
SWP$GL_BALSPT	800034A0-R	SYSPARAM	ALLOCPFN	INIT	SWAPPER
			WRTMFYPAG		
SWP$GL_BSLOTSZ	80003450-R	SYSPARAM	ALLOCPFN	PAGEFAULT	SWAPPER
			WRTMFYPAG		
SWP$GL_HISWPCNT	80002150-R	SDAT	SWAPPER		
SWP$GL_HOSWPCNT	8000214C-R	SDAT	SWAPPER		
SWP$GL_INPCB	80002134-R	SDAT	SWAPPER		
SWP$GL_ISPAGCNT	80002138-R	SDAT	SWAPPER		
SWP$GL_ISWPCNT	80002144-R	SDAT	SWAPPER		
SWP$GL_ISWPPAGES	80002140-R	SDAT	SWAPPER		
SWP$GL_MAP	80003454-R	SYSPARAM	INIT	SWAPPER	
SWP$GL_OSWPCNT	80002148-R	SDAT	SWAPPER		
SWP$GL_PHOBASVA	80003458-R	SYSPARAM	SWAPPER		
SWP$GL_SHELIO	80009288-R	SHELL	SWAPPER		
SWP$GL_SHELL	80002130-R	SDAT			
SWP$GL_SHELLBAS	80017A00-R	SHELL	INIT	SWAPPER	
SWP$GL_SHELLSIZ	80003444-R	SYSPARAM	SHELL	SYSCREPRC	
SWP$GL_SLOTCNT	80002120-R	SDAT			
SWP$GL_SWPPGCNT	800032B8-R	SYSPARAM	OSWPSCHED		
SWP$GL_SWTIME	8000215C-R	OSWPSCHED	SWAPPER		
SWP$GW_BAKPTE	80003448-R	SYSPARAM	SHELL		
SWP$GW_BALCNT	800021B0-R	SWAPPER	SYSDELPRC		
SWP$GW_EMPTPTE	8000344A-R	SYSPARAM	SHELL		
SWP$GW_IBALSETX	8000213C-R	SDAT	SHELL	SWAPPER	
SWP$GW_SWPINC	800032BC-R	SYSPARAM	INIT	PAGEFAULT	PHDUTL
SWP$GW_WSLPTE	8000344C-R	SYSPARAM	SHELL		
SWP$K_KSTKSZ	000000A0	PDAT			
SWP$SHELINIT	00000C00	SHELL	SWAPPER		
SYS$ADJSTK	7FFEDE20	SYS$P1_VECTOR	EXCEPTION		
SYS$ADJWSL	7FFEDE28	SYS$P1_VECTOR	PHDUTL	RSE	SYSLKWSET
SYS$ASCTIM	7FFEDE48	SYS$P1_VECTOR	SYSFAO	SYSSETIME	
SYS$ASSIGN	7FFEDE50	SYS$P1_VECTOR	DISMOUNT	FILEREAD	SYSASSIGN
			SYSDELPRC	SYSSETIME	
SYS$BINTIM	7FFEDE58	SYS$P1_VECTOR	SYSSETIME		
SYS$CALL_HANDL	80000010	SYS$P1_VECTOR	EXCEPTION	SYSUNWIND	
SYS$CANTIM	7FFEDE68	SYS$P1_VECTOR	SYSRUNDWN		
SYS$CANWAK	7FFEDE70	SYS$P1_VECTOR	SYSRUNDWN		
SYS$CLOSE	7FFEE1B8	SYS$P1_VECTOR	OPENMSG		
SYS$CLREF	7FFEDE98	SYS$P1_VECTOR	DISMOUNT	SYSASSIGN	SYSCRMPSC
			SYSIMGACT	SYSSETIME	
SYS$CMKRNL	7FFEDE90	SYS$P1_VECTOR	FILEREAD	SYSIMGACT	SYS$NDMSG
SYS$CONNECT	7FFEE1C0	SYS$P1_VECTOR	OPENMSG		
SYS$CREATE	7FFEE1C8	SYS$P1_VECTOR	OPENMSG		
SYS$CRELOG	7FFEDEB0	SYS$P1_VECTOR	OPENMSG	PROCSTRT	
SYS$CREMBX	7FFEDEB8	SYS$P1_VECTOR	SYSSETPFM		
SYS$CREPRC	7FFEDEC0	SYS$P1_VECTOR	SWAPPER	SYSSETPFM	
SYS$CRETVA	7FFEDEC8	SYS$P1_VECTOR	EXCEPTION	PROCSTRT	SYSIMGACT
SYS$CRMPSC	7FFEDE78	SYS$P1_VECTOR	SYSIMGACT		

Symbol	Value	Defined By	Referenced By ...		
SYS$C_JOBCTLMB	3141424D	DEVICEDAT			
SYS$C_MBXUCBSIZ	00000084	DEVICEDAT	MBDRIVER		
SYS$C_OPRMBX	3241424D	DEVICEDAT			
SYS$DACEFC	7FFEDED0	SYS$P1_VECTOR	SYSRUNDWN		
SYS$DALLOC	7FFEDED8	SYS$P1_VECTOR	SYSDELPRC	SYSRUNDWN	
SYS$DASSGN	7FFEDEE0	SYS$P1_VECTOR	DISMOUNT	SYSASSIGN	SYSDELPRC
			SYSDGBLSC	SYSIMGACT	SYSRUNDWN
			SYSSETIME	SYSSETPFM	
SYS$DCLAST	7FFEDEE8	SYS$P1_VECTOR	SYSGETDEV	SYSGETJPI	SYSGETSYI
SYS$DCLEXH	7FFEDEF0	SYS$P1_VECTOR	PROCSTRT		
SYS$DELLOG	7FFEDEF8	SYS$P1_VECTOR	OPENMSG	SYSRUNDWN	
SYS$DELPRC	7FFEDF08	SYS$P1_VECTOR	EXCEPTION	SYSDELPRC	SYSEXIT
SYS$DELTVA	7FFEDF10	SYS$P1_VECTOR	EXCEPTION	PHDUTL	SYSDELPRC
SYS$DEQ	7FFEE3C8	SYS$P1_VECTOR	SYSRUNDWN		
SYS$EXIT	7FFEDF40	SYS$P1_VECTOR	BUGCHECK	CMOD$SDSP	EXCEPTION
			PROCSTRT	RSE	SYSEXIT
			SYSFORCEX		
SYS$EXPREG	7FFEDF48	SYS$P1_VECTOR	SYSIMGACT		
SYS$FAO	7FFEDF50	SYS$P1_VECTOR	SYSBRDCST	SYSCVRTIM	SYSGETMSG
SYS$FAOL	7FFEDF58	SYS$P1_VECTOR	SYSPUTMSG		
SYS$FORCEX	7FFEDF60	SYS$P1_VECTOR	SYSSETPFM		
SYS$GB_DEFPRI	80003439-R	SYSPARAM	SWAPPER		
SYS$GB_DFMBC	80003393-R	SYSPARAM			
SYS$GB_DFMBFHSH	80003399-R	SYSPARAM			
SYS$GB_DFMBFIDX	80003398-R	SYSPARAM			
SYS$GB_DFMBFREL	80003397-R	SYSPARAM			
SYS$GB_DFMBFSDK	80003394-R	SYSPARAM			
SYS$GB_DFMBFSMT	80003395-R	SYSPARAM			
SYS$GB_DFMBFSUR	80003396-R	SYSPARAM			
SYS$GB_MXPRTSYM	80003438-R	SYSPARAM			
SYS$GB_RMSPROLOG	8000339A-R	SYSPARAM			
SYS$GETCHN	7FFEE0C8	SYS$P1_VECTOR	SYSSETPFM		
SYS$GETMSG	7FFEE0B0	SYS$P1_VECTOR	SYSPUTMSG		
SYS$GL_BOOTDDB	80000C6C-R	DEVICEDAT	INIT		
SYS$GL_BOOTUCB	80000CA0-R	DEVICEDAT			
SYS$GL_JOBCTLMB	8000103C-R	DEVICEDAT	ACCOUNT	SYSSNDMSG	
SYS$GL_OPRMBX	800010C0-R	DEVICEDAT	MOUNTVER	SYSSNDMSG	
SYS$GQ_VERSION	800028F0-R	SYSCOMMON	BUGCHECK	SYSGETSYI	
SYS$GT_ANNOUNCE	8001C0DC-R	VERSION	INIT		
SYS$GW_BJOBCNT	800028FC-R	SYSCOMMON			
SYS$GW_BJOBLIM	8000343C-R	SYSPARAM			
SYS$GW_FILEPROT	8000339E-R	SYSPARAM	SYSCREPRC		
SYS$GW_IJOBCNT	800028F8-R	SYSCOMMON			
SYS$GW_IJOBLIM	8000343A-R	SYSPARAM			
SYS$GW_NJOBCNT	800028FA-R	SYSCOMMON			
SYS$GW_NJOBLIM	8000343E-R	SYSPARAM			
SYS$GW_RJOBLIM	80003440-R	SYSPARAM			
SYS$GW_RMSEXTEND	8000339C-R	SYSPARAM			
SYS$HIBER	7FFEDF88	SYS$P1_VECTOR	PROCSTRT		
SYS$IMGACT	7FFEDF90	SYS$P1_VECTOR	IMGACTSUB	PROCSTRT	SYSGETMSG
			SYSIMGACT	SYSIMGSTA	
SYS$IMGFIX	7FFEE400	SYS$P1_VECTOR	PROCSTRT	SYSIMGSTA	

Symbol	Value	Defined By	Referenced By ...		
SYS$K_VERSION	594A3158	VERSION	BUGCHECK	SYSCOMMON	SYSIMGACT
SYS$MGBLSC	7FFEDFA8	SYS$P1_VECTOR	SYSIMGACT		
SYS$NUMTIM	7FFEDFB8	SYS$P1_VECTOR	SYSCVRTIM		
SYS$OPEN	7FFEE208	SYS$P1_VECTOR	SYSIMGACT		
SYS$PUT	7FFEE188	SYS$P1_VECTOR	EXCEPTMSG	SYSPUTMSG	
SYS$PUTMSG	7FFEE0E0	SYS$P1_VECTOR	PROCSTRT	SYSIMGSTA	
SYS$QIO	7FFEDFC8	SYS$P1_VECTOR	SYSASSIGN	SYSDELPRC	SYSSETIME
SYS$QIOW	7FFEDE00	SYS$P1_VECTOR	DISMOUNT	FILERWIO	SYSCRMPSC
			SYSDASSGN	SYSIMGACT	SYSSETPFM
SYS$RESUME	7FFEDFD8	SYS$P1_VECTOR	SYSDELPRC		
SYS$RMSRUNDWN	7FFEE268	SYS$P1_VECTOR	PROCSTRT	SYSDELPRC	
SYS$RUNDWN	7FFEDFE0	SYS$P1_VECTOR	SYSDELPRC		
SYS$SETEF	7FFEE000	SYS$P1_VECTOR	DISMOUNT	SYSSETIME	
SYS$SETEXV	7FFEE008	SYS$P1_VECTOR	PROCSTRT		
SYS$SETPRT	7FFEE030	SYS$P1_VECTOR	IMGACTSUB	PROCSTRT	SYSIMGACT
SYS$SETPRV	7FFEE100	SYS$P1_VECTOR	OPENMSG		
SYS$SETRWM	7FFEE038	SYS$P1_VECTOR	SYSRUNDWN		
SYS$SETSFM	7FFEE040	SYS$P1_VECTOR	EXCEPTION	PROCSTRT	
SYS$TRNLOG	7FFEE058	SYS$P1_VECTOR	OPENMSG	SHMGSDRTN	SYSCREPRC
			SYSIMGSTA		
SYS$UNWIND	7FFEE070	SYS$P1_VECTOR	EXCEPTION	SYSFAO	
SYS$WAIT	7FFEE1A8	SYS$P1_VECTOR	CMODSSDSP	SYSPUTMSG	
SYS$WAITFR	7FFEE078	SYS$P1_VECTOR	CMODSSDSP	DISMOUNT	SYSASSIGN
			SYSCRMPSC	SYSIMGACT	SYSSETIME
TTSM_HOSTSYNC	00000010	SYS$IODEF	CONINTDSP		
TTSM_READSYNC	00040000	SYS$IODEF	CONINTDSP		
TTSV_HOSTSYNC	00000004	SYS$IODEF	CONINTDSP		
TTY$GB_DEFSPEED	80003371-R	SYSPARAM			
TTY$GB_DIALTYP	80003370-R	SYSPARAM			
TTY$GB_PARITY	80003373-R	SYSPARAM			
TTY$GB_RSPEED	80003372-R	SYSPARAM			
TTY$GB_SILOTIME	80003392-R	SYSPARAM			
TTY$GL_DEFCHAR	80003378-R	SYSPARAM			
TTY$GL_DEFCHAR2	8000337C-R	SYSPARAM			
TTY$GL_DELTA	8000336C-R	SYSPARAM			
TTY$GL_DPT	80000C68-R	DEVICEDAT	INIT		
TTY$GL_OWNUIC	8000338C-R	SYSPARAM	CONINTDSP		
TTY$GW_ALTALARM	80003384-R	SYSPARAM			
TTY$GW_ALTYPAHD	80003382-R	SYSPARAM			
TTY$GW_CLASSNAM	80003390-R	SYSPARAM			
TTY$GW_DEFBUF	80003374-R	SYSPARAM			
TTY$GW_DMASIZE	80003386-R	SYSPARAM			
TTY$GW_PROT	80003388-R	SYSPARAM	CONINTDSP		
TTY$GW_TYPAHDSZ	8000338D-R	SYSPARAM			
UBA$INITIAL	80002F06-R	SYSLOAVEC	POWERFAIL		
UBA$INT0	80002EB0-R	SYSLOAVEC			
UBA$UNEXINT	80002EB8-R	SYSLOAVEC			
VASM_BYTE	000001FF	GLOBALS	EXSUBROUT		
VASM_P1	40000000	GLOBALS	SYSIMGACT		
VASM_SYSTEM	80000000	GLOBALS	SYSIMGACT		
VASM_VPG	FFFFFE00	GLOBALS			
VASM_VPN	3FFFFE00	GLOBALS			

Symbol	Value	Defined By	Referenced By ...
VASS_BYTE	00000009	GLOBALS	
VASS_VPG	00000017	GLOBALS	
VASS_VPN	00000015	GLOBALS	LOADMREG
VASV_BYTE	00000000	GLOBALS	
VASV_P1	0000001E	GLOBALS	SYSIMGACT
VASV_SYSTEM	0000001F	GLOBALS	
VASV_VPG	00000009	GLOBALS	
VASV_VPN	00000009	GLOBALS	LOADMREG
XDELBPT	80019508-R	XDELTA	INIT
XDELIBRK	80018CB8-R	XDELTA	
XDELTBIT	800195A0-R	XDELTA	INIT
XDEL_LOADBASE	80018D31-R	XDELTA	INIT
XDS$GL_XESTRING	80018D5D-R	XDELTA	INIT
XDS$GL_XFSTRING	80018D61-R	XDELTA	INIT
XDS$GT_LONG_PFN	80018AF8-R	XDSTRING	INIT
XDS$GT_WORD_PFN	80018A00-R	XDSTRING	INIT XDELTA

```
+---------------------+
| Symbols By Value |
+---------------------+
```

Value	Symbols...			
00000000	ACPSV_READCHK	ACPSV_SWAPSYS	EVT$_AST	EVT$_COLPGA	EXESV_BLKHOLBSY
	EXESV_MOUNTMSG	EXESV_SYSWRTABL	FCBSL_FCBFL	FCBSV_DIR	LIBSGB_OPINFO
	MMGSV_NOLASTUPD	PCBSL_SQFL	PCBSV_RES	PRVSV_CMKRNL	PSLSC_KERNEL
	PSLSV_C	RNDSV_IACLOCK	SCHSV_REORD	SCHSV_SIP	VASV_BYTE
00000001	ACPSV_SWAPGRP	ACPSV_WRITECHK	AT$_UBA	DCS_DISK	DYNSC_ADP
	DYNSC_CD_CDDB	DYNSC_CI_BDT	DYNSC_LC_MP	DYNSC_PCBVEC	DYNSC_SCS_CDL
	EVT$_EVENT	EXESV_DISMOUMSG	EXESV_NOAUTOCNF	FCBSV_MARKDEL	MMGSM_NOLASTUPD
	MMGSV_NOWAIT	PCBSV_DELPEN	PRVSV_CMEXEC	PSLSC_EXEC	PSLSM_C
	PSLSV_V	RSNS_ASTWAIT	SS$_NORMAL	SWPSC_DBGPTCNT	
00000002	ACPSV_SWAPPRV	DYNSC_ACB	DYNSC_CD_BBRPG	DYNSC_CI_FQDT	DYNSC_LC_SCS
	DYNSC_PHVEC	DYNSC_SCS_CDT	EXESV_SYSPAGING	FCBSV_BADBLK	IPL$_ASTDEL
	MMGSM_NOWAIT	PCBSV_FORCPEN	PRVSV_SYSNAM	PSLSC_SUPER	PSLSM_V
	PSLSS_CURMOD	PSLSS_PRVMOD	PSLSV_Z	RSNS_MAILBOX	SCHSV_MPW
	SWPSC_NDYN	SWPSC_SHLP1PT			
00000003	ACPSV_SWAPMAG	DYNSC_AQB	DYNSC_SCS_DIR	DYNSC_SWPMAP	EXESV_POOLPGING
	FCBSV_EXCL	IPL$_SCHED	PCBSV_INQUAN	PRS_USP	PRVSV_GRPNAM
	PSLSC_USER	PSLSV_N	RSNS_NPDYNMEM	SWPSC_KSTACK	
00000004	DEVSM_TRM	DYNSC_CEB	DYNSC_MPWMAP	DYNSC_SCS_PB	EVT$_FPGA
	EXESV_SIMULATOR	FCBSL_FCBBL	FCBSV_SPOOL	IPL$_IOPOST	PCBSL_SQBL
	PCBSV_PSWAPM	PRVSV_ALLSPOOL	PSLSM_Z	PSLSV_TBIT	RSNS_PGFILE
	SGNSC_SYSVECPGS	TT$V_HOSTSYNC			
00000005	DEVSV_SQD	DYN$C_CRB	DYNSC_PRCMAP	DYNSC_SCS_PDT	EVT$_WAKE
	EXESV_NOCLOCK	FCBSV_RMSLOCK	PCBSV_RESPEN	PRTSC_EW	PRVSV_DETACH
	PSLSS_IPL	PSLSV_IV	RSNS_PGDYNMEM	SGNSC_MAXPSTCNT	
00000006	DEVSV_SPL	DYNSC_BOOTCB	DYNSC_DDB	DYNSC_SCS_RDT	EVT$_RESUME
	EXESV_CRDENABL	FCB$S_FID	IPL$_QUEUEAST	PCBSV_SSFEXC	PRVSV_DIAGNOSE
	PSLSV_FU	RSNS_BRKTHRU			
00000007	DEVSV_OPR	DYNSC_CONF	DYNSC_FCB	DYNSC_SCS_SB	EVT$_PFCOM
	EXESV_SBIERR	IPL$_SYNCH	IPL$_TIMER	PCBSV_SSFEXCE	PRVSV_LOG_IO
	PSLSV_DV	RSNS_IACLOCK			
00000008	BUGS_ACPMBFAIL	DYNSC_FRK	EVT$_SETPRI	EXESV_INIT	FCBSW_SIZE
	IPL$_SCS	PCB$S_PRIV	PCB$S_TERMINAL	PCBSV_SSFEXCS	PCBSW_SIZE
	PRVSV_GROUP	PSLSM_N	RSNS_JQUOTA		
00000009	DYNSC_IDB	EVT$_SWPOUT	EXESV_SETTIME	PCBSV_SSFEXCU	PRVSV_ACNT
	PRVSV_NOACNT	RSNS_LOCKID	VASS_BYTE	VASV_VPG	VASV_VPN
0000000A	DYNSC_IRP	EXE$V_FATAL_BUG	FCBSB_TYPE	PCBSB_TYPE	PCBSV_SSRWAIT
	PRVSV_PRMCEB	RSNS_SWPFILE	SGNSC_MINWSCNT		
0000000B	DYNSC_LOG	EXESV_MULTACP	IO$V_INCLUDE	IPL$_MAILBOX	PCBSB_PRI
	PCBSV_SUSPEN	PRVSV_PRMMBX	RSNS_MPLEMPTY		
0000000C	DYNSC_PCB	EXESV_NOCLUSTER	FCBSL_EXFCB	PCBSB_ASTACT	PCBSV_WAKEPEN
	PRVSV_PSWAPM	RSNS_MPWBUSY	SS$_ACCVIO		
0000000D	DEVSV_NET	DYNSC_PQB	EXESV_BUGREBOOT	PCBSB_ASTEN	PCBSV_WALL
	PRVSV_ALTPRI	PRVSV_SETPRI	RSNS_MAX		
0000000E	DEVSV_FOD	DYNSC_RVT	EXESV_SYSUAFALT	PCBSV_BATCH	PCBSW_MTXCNT
	PRVSV_SETPRV				
0000000F	DYNSC_TQE	EXESC_ALCGRNMSK	EXESV_SHRF11ACP	PCBSV_NOACNT	PRVSV_TMPMBX
00000010	BUGS_ACPVAFAIL	DEVSV_SHR	DYNSC_UCB	EXESV_BUGDUMP	FCBSL_WLFL
	PCBSL_ASTQFL	PCB$S_LNAME	PCBSV_SWPVBN	PRVSV_WORLD	PSLSM_TBIT
	PSLSV_IPL	SGNSC_PFNPATSIZ	TTSM_HOSTSYNC		

Value

Symbols...

Value				
00000011	DYNSC_VCB	EXE$V_RESALLOC	PCB$V_ASTPEN	PRV$V_MOUNT
00000012	DYN$C_WCB	EXE$V_CONCEALED	PCB$V_PHDRES	PFN$C_WORD_LEN	PR$_IPL
	PRV$V_OPER				
00000013	DEV$V_MNT	DYN$C_BUFIO	EXE$V_SSINHIBIT	PCB$V_HIBER	PRV$V_EXQUOTA
00000014	DEV$V_MBX	DYN$C_TYPAHD	EXE$C_CMSTKSZ	EXE$V_EXPLICITP	FCB$L_WLBL
	PCB$L_ASTQBL	PCB$V_LOGIN	PRV$V_NETMBX	$SS_BADPARAM	
00000015	DEV$V_DMT	DYN$C_GSD	EXE$V_EXPLICITS	PCB$V_NETWRK	PRV$V_VOLPRO
	VA$$_VPN				
00000016	DYN$C_MVL	EXE$V_PGFLFRAG	PCB$V_PWRAST	PFN$C_LONG_LEN	PRV$V_PHY_IO
	PSL$V_PRVMOD				
00000017	DEV$V_ALL	DYN$C_NET	EXE$V_PGFLCRIT	PCB$V_NODELET	PRV$V_BUGCHK
	VA$$_VPG				
00000018	BUG$_ALCPHD	DEV$V_FOR	DYN$C_KFI	EXE$V_TBCHK	FCB$$_DIRIDX
	FCB$W_ACNT	IPL$_HWCLK	PCB$L_PHYPCB	PCB$V_DISAWS	PRV$V_PRMGBL
	PSL$V_CURMOD	SGN$C_BALSETCNT			
00000019	DYN$C_MTL	EXE$V_PAGFILDMP	PRV$V_SYSGBL		
0000001A	DYN$C_BRDCST	EXE$V_SAVEDUMP	FCB$W_LCNT	PRV$V_PFNMAP	PSL$V_IS
0000001B	DYN$C_CXB	EXE$V_JOBQUEUES	PRV$V_SHMEM	PSL$V_FPD	
0000001C	DYN$C_NDB	EXE$V_REINITQUE	FCB$W_WCNT	PCB$L_OWNER	PRV$V_SYSPRV
	$SS_EXQUOTA				
0000001D	DYN$C_SSB	PRV$V_BYPASS			
0000001E	DYN$C_DPT	FCB$W_STATUS	PRV$V_SYSLCK	PSL$V_TP	VA$V_P1
0000001F	DYN$C_JPB	IPL$_POWER	PSL$V_CM	VA$V_SYSTEM	
00000020	BUG$_ALCSMBCLR	DYN$C_PBH	FCB$W_FID	FCB$W_FID_NUM	IO$_WRITELBLK
	PCB$L_WSSWP	PSL$M_IV			
00000021	DYN$C_PDB	IO$_READLBLK			
00000022	DYN$C_PIB	FCB$W_FID_SEQ			
00000023	DYN$C_PFL				
00000024	DYN$C_UNUSED	FCB$B_FID_RVN	FCB$W_FID_RVN	FIL$C_DIR_SIZE	PCB$L_STS
	$SS_NOPRIV				
00000025	DYN$C_PTR	FCB$B_FID_NMX			
00000026	DYN$C_KFH	FCB$W_SEGN			
00000027	DYN$C_RVX				
00000028	BUG$_APTREFHIGH	DYN$C_EXTGSD	FCB$L_STVBN	PCB$B_PRISAV	PCB$L_WTIME
	SGN$C_GBLSECCNT	SGN$C_SYSDWSCNT			
00000029	DYN$C_SHMGSD	PCB$B_PRIBSAV			
0000002A	DYN$C_SHB				
0000002B	DYN$C_MBX				
0000002C	DYN$C_IRPE	FCB$L_STLBN	PCB$W_STATE	$SS_ABORT	
0000002D	DYN$C_SLAVCEB				
0000002E	CTL$C_PRCALLSIZ	DYN$C_SHMCEB	PCB$B_WEFC		
0000002F	DYN$C_JIB	PCB$B_PRIB			
00000030	BUG$_APTWRTERR	DYN$C_TWP	FCB$L_HDLBN	PCB$W_APTCNT	
00000031	DYN$C_RBM	IO$_READVBLK			
00000032	DYN$C_VCA	PCB$W_TMBU			
00000033	DYN$C_BCB				
00000034	DYN$C_CDB	FCB$L_FILESIZE	PCB$W_GPGCNT		
00000035	DYN$C_LPD				
00000036	DYN$C_JMT	PCB$W_PPGCNT			
00000037	DYN$C_LKB				
00000038	BUG$_ASYNCWRTER	DYN$C_RSB	FCB$L_FILEOWNER	FCB$W_UICMEMBER	IO$_ACPCONTROL
	PCB$W_ASTCNT				

Value   Symbols...
-----   ----------
00000039   DYNSC_LKID   PRS_TBIA
0000003A   DYNSC_RSHT   FCB$W_UICGROUP   PCBSW_BIOCNT
0000003B   DYNSC_CDRP
0000003C   DYNSC_RUL   FCB$W_FILEPROT   PCBSW_BIOLM
0000003D   DYNSC_ERP
0000003E   DYNSC_CIDG   FCB$W_VERSIONS   PCBSW_DIOCNT
0000003F   DYNSC_CIMSG   SCH$C_MAXPIX
00000040   BUG$_BADALORQSZ   FCB$L_EFBLK   PCBSW_DIOLM   PSLSM_FU   SGN$C_NPROCS
00000041   PQL$C_SYSPQLLEN
00000042   PCBSW_PRCCNT
00000044   FCBSW_DIRSEQ   PCB$T_TERMINAL
00000046   FCB$W_TCNT
00000047   SWP$C_SHLFPTE
00000048   BUG$_BADBUFADR   FCB$B_DIRIDX   FCB$C_LENGTH   FCB$K_LENGTH
0000004C   PCBSL_EFWM   PCBSL_PQB
00000050   BUG$_BADBUFTYP   PCB$L_EFCS
00000054   PCBSL_EFCU
00000058   BUG$_BADDALRQSZ   PCB$L_EFC2P
0000005C   PCB$L_EFC3P
00000060   BOO$C_BOOPARSZ   BUG$_BADFID   DYNSC_SCS   DYNSC_SUBTYPE   PCBSL_PID
                SGN$C_SYSWSCNT
00000061   DYNSC_CI
00000062   DYNSC_LOADCODE
00000063   DYNSC_INIT
00000064   DYNSC_CLASSDRV   PCBSL_PHD   SGN$C_DFWSCNT   SSS_DEVFOREIGN
00000068   BUG$_BADFORKIPL   PCB$T_LNAME
00000070   BUG$_BADLCKWSLE
00000078   BUG$_BADMCKCOD   PCBSL_JIB   SGN$C_DFWSQUOTA
0000007C   PCBSQ_PRIV   SSS_DEVNOTMOUNT
00000080   BUG$_BADPAGFILA   DYNSC_SHRBUFIO   DYNSC_SPECIAL   PSLSM_DV
00000084   PCBSL_ARB   SYS$C_MBXUCBSIZ
00000088   BUG$_BADPAGFILD   PCBSL_UIC   PCBSW_MEM
0000008A   PCBSW_GRP
0000008C   PCBSL_LOCKQFL
00000090   BUG$_BADPAGTYPE   PCBSL_LOCKQBL
00000094   PCBSL_DLCKPRI
00000098   BUG$_BADRSEIPL   PCBSL_IPAST
0000009C   PCBSC_LENGTH   PCB$K_LENGTH
000000A0   BUG$_BADSBMBLK   SWP$K_KSTKSZ
000000A2   SWPSC_SHELLPFIL
000000A4   SSS_FILALRACC
000000A8   BUG$_BADSWPVBN
000000AC   SSS_FILNOTACC
000000B0   BUG$_BADWCBPT
000000B8   BUG$_CHMONIS
000000C0   BUG$_CONTRACT
000000C8   BUG$_DBLERR
000000D0   BUG$_DECPTREF
000000D8   BUG$_DELCONPFN
000000DC   SSS_ILLBLKNUM
000000E0   BUG$_DELGBLSEC
000000E8   BUG$_DELGBLWCB

Value   Symbols...
-----   ----------
000000F0   BUGS_BADBOOTCB
000000F8   BUGS_DELWSLEX
00000100   BUGS_DIRENTRY
00000108   BUGS_DOUBLDALOC
00000110   BUGS_DOUBLDEALO
00000118   BUGS_ERRHALT
00000120   BUGS_EXHFUL
00000124   SSS_INSFMEM
00000128   BUGS_EXPANDPHD
00000130   BUGS_FATALEXCPT
00000138   BUGS_FREEPAGREF
00000140   BUGS_FREWSLX
00000148   BUGS_GBLPAGSZRO
00000150   BUGS_GBLWSLXERR
00000158   BUGS_GPGNULPGFL
00000160   BUGS_HALT
00000168   BUGS_HDRNOTMAP
00000170   BUGS_ICONPFNDAT
00000178   BUGS_ICPAGELOC
0000017C   SSS_IVSTSFLG
00000180   BUGS_IFREPAGCNT
00000184   SSS_IVTIME
00000188   BUGS_ILLEVTNUM
00000190   BUGS_ILLVEC
00000198   BUGS_INCONSTATE
000001A0   BUGS_INCPTREF
000001A8   BUGS_INSNFREPAG
000001B0   BUGS_INSSWPFIL
000001B8   BUGS_INSWAPERR
000001C0   BUGS_INVCHAN
000001C8   BUGS_INVEXCEPTN
000001D0   BUGS_INVPTEFMT
000001D8   BUGS_INVTQEFMT
000001E0   BUGS_IVBAKADIO
000001E8   BUGS_IVGBLTYP
000001F0   BUGS_IVLISTK
000001F8   BUGS_IVSSRVRQST
000001FF   VASM_BYTE
00000200   BUGS_IVWSETLIST
00000208   BUGS_KRNLSTAKNV
00000210   BUGS_MACHINECHK
00000218   BUGS_MAKEWSLE   FILSC_SIZE
00000220   BUGS_MODRELNBAK
00000228   BUGS_MFYNULPGFL
00000230   BUGS_MPWALCIRP
00000238   BUGS_MTXCNTNONZ
00000240   BUGS_NETNOBUF
00000248   BUGS_NETNOSTATE
00000250   BUGS_NETRCVPKT
00000258   BUGS_NETSYSSRV
0000025C   SSS_WRITLCK
00000260   BUGS_NETTRANCNT

Value   Symbols...
-----   ----------
00000268   BUGS_NOACPCHAN
0000026C   SSS_IVCHNLSEC
00000270   BUGS_NOACPMAIL
00000278   BUGS_NOAQBACP
00000280   BUGS_NOBUFPCKT
00000288   BUGS_NOBVPVCB
00000290   BUGS_NOMULTBK
00000298   BUGS_NONEXSTACP
000002A0   BUGS_NORCVBUF
000002A8   BUGS_NOTDDBDDB
000002B0   BUGS_NOTFCBFCB
000002B8   BUGS_NOTFCBWCB
000002C0   BUGS_NOTFCPWCB
000002C8   BUGS_NOTIRPAQB
000002D0   BUGS_NOTMTLMTL
000002D8   BUGS_NOTPCB
000002E0   BUGS_NOTRVTVCB
000002E8   BUGS_NOTUCBIRP
000002F0   BUGS_NOTUCBRVT
000002F8   BUGS_NOTUCBUCB
00000300   BUGS_NOTVCBUCB
00000308   BUGS_NOTVVPVCB
00000310   BUGS_NOTWCBIRP
00000318   BUGS_NOUSRWCS
00000320   BUGS_OUTSWPERR
00000328   BUGS_PAGEREDERR
00000330   BUGS_PAGEWRTERR   EXESC_SYSPARSZ
00000334   BOOSC_SYSPARSZ
00000338   BUGS_PAGNTRNVAL
00000340   BUGS_PFNLISTCNT
00000348   BUGS_PFNREFNZRO
0000034C   SSS_IVBUFLEN
00000350   BUGS_PGFGBLBAD
00000358   BUGS_PGFIPLHI
00000360   BUGS_PGFLOCBAD
00000368   BUGS_PROCGONE
00000370   BUGS_PTELENVIOL
00000378   BUGS_PTRCNT
00000380   BUGS_PURGWSSCN
00000388   BUGS_QUEUEMPTY
00000390   BUGS_RDSNONRES
00000398   BUGS_REFCNTNEG
000003A0   BUGS_RMSBUG
000003A8   BUGS_SCANDEADPT
000003B0   BUGS_SECREFNEG
000003B8   BUGS_SHRCNTNEG
000003C0   BUGS_SSRVEXCEPT
000003C8   BUGS_STRNOTWCB
000003D0   BUGS_SWAPWSLE
000003D8   BUGS_SYSADJWSL
000003E0   BUGS_SYSTRMERR
000003E8   BUGS_TIPCUFLOW

Value   Symbols...
-----   -----------
000003F0   BUGS_UBMAPEXCED
000003F8   BUGS_UNABLCREVA
00000400   BUGS_UNEXUBAINT   SGNSC_MAXWSCNT
00000408   BUGS_UNKRSTRT
00000410   BUGS_UNXINTEXC
00000418   BUGS_UNXSIGNAL
00000420   BUGS_VBNMAPFAIL
00000428   BUGS_WACKQEMPTY
00000430   BUGS_WRTINVBUF
00000438   BUGS_WRTINVHDR
00000440   BUGS_WRTPGSBAK
00000448   BUGS_WSLENOVAL
00000450   BUGS_WSLPAGCNT
00000458   BUGS_WSLVANVAL
00000460   BUGS_WSLXVANMAT
00000468   BUGS_ZEROPAGE
00000470   BUGS_OPERATOR
00000478   BUGS_BADQHDR
00000480   BUGS_UNKNPRQ
00000488   BUGS_BDPPURGERR
00000490   BUGS_NOSHMGSD
00000498   BUGS_CEBREFNEG
000004A0   BUGS_BRDMSGLOST
000004A8   BUGS_MBACBHUNG
000004B0   BUGS_NEGSHBREF
000004B8   BUGS_ACPRECURS
000004C0   BUGS_ACPUNSTAK
000004C8   BUGS_BADRVNWCB
000004D0   BUGS_ERRCACHFUL
000004D8   BUGS_EXTCACHIV
000004E0   BUGS_MAPCNTZER
000004E8   BUGS_NOTUCBWCB
000004F0   BUGS_CHMVEC
000004F8   BUGS_FILCNTNONZ
00000500   BUGS_WSSIZEERR
00000508   BUGS_DEQSUBLCKS
00000510   BUGS_LKBREFNEG
00000518   BUGS_RSBREFNEG
00000520   BUGS_RSBREFNZRO
00000528   BUGS_SCBRDERR
00000530   BUGS_STATENTSVD
00000538   BUGS_MPBADMCK
00000540   BUGS_MPMCHECK
00000548   BUGS_MPASYNCWRT
00000550   BUGS_MPUNKRSTRT
00000558   BUGS_MPIVLISTK
00000560   BUGS_MPDBLERR
00000568   BUGS_MPHALT
00000570   BUGS_MPILLVEC
00000578   BUGS_MPNOUSRWCS
00000580   BUGS_MPERRHALT
00000588   BUGS_MPCHMONIS

Value   Symbols...
-----   ----------
00000590   BUGS_MPCHMVEC
00000598   BUGS_MPSCBRDERR
000005A0   BUGS_MPKNLSTKNV
000005A8   BUGS_MPUNEXPINT
000005B0   BUGS_LKBGRANTED
000005B8   BUGS_NOTLKB
000005C0   BUGS_INVRSPID
000005C8   BUGS_WCBFCBMNG
000005D0   BUGS_NOTWCBWCB
000005D8   BUGS_UDAPORT
000005E0   BUGS_DISKCLASS
000005E8   BUGS_CIPORT
00000600   SWPSAL_PTRPAG
00000681   SSS_NOTALLPRIV
00000689   SSS_SYNCH
00000800   SGNSC_MAXGPGCNT
00000830   SSS_CANCEL
00000860   SSS_DIRFULL
00000870   SSS_ENDOFFILE
00000988   SSS_NOTQUEUED
000008F0   CTLSC_CLIDATASZ
00000C00   SWPSSHELINIT
00000E0A   SSS_DEADLOCK
00000E12   SSS_NOLOCKID
00000E1A   SSS_EXDEPTH
00001000   SGNSC_MAXPGFL   SGNSC_PHYPAGCNT
00002000   SGNSC_MAXVPGCNT
0000200C   SSS_RELINK
00002124   SSS_IVLOCKID
0000212C   SSS_SUBLOCKS
00002134   SSS_PARNOTGRANT
0000213C   SSS_CVTUNGRANT
000021BC   SSS_NOSHRIMG
000028F4   SSS_NOSYSLCK
00002A04   SSS_EXASTLM
00002A44   SSS_EXENQLM
000037FF   PSLSM_SAFBITS
00004000   SGNSC_MAXPAGCNT   SGNSC_PAGEDYN
00006800   SGNSC_NPAGEDYN
00007800   PIOSC_SEGSIZ
00018001   RMSS_STALL
000187BC   RMSS_STR
00040000   TTSM_READSYNC
00080000   DEVSM_MNT
00100000   DEVSM_MBX
0015827C   LIBS_ATTCONSTO
001F0000   PSLSM_IPL
00200000   DEVSM_DMT
00C00000   PSLSM_PRVMOD
01000000   DEVSM_FOR
02000000   DEVSM_SWL
03000000   PSLSM_CURMOD

Value   Symbols...
-----   ----------
04000000   PSLSM_IS
08000000   PSLSM_FPD
3141424D   SYSSC_JOBCTLMB
3241424D   SYSSC_OPRMBX
3FFFFE00   VASM_VPN
40000000   DEVSM_RCK   PSLSM_TP   VASM_P1
594A3158   SYSSK_VERSION
7FFD8E00   PIOSGL_FMLH
7FFD8E08   PIOSGL_IIOFSPLH
7FFD8E10   PIOSGW_STATUS
7FFD8E12   PIOSGT_ENDSTR
7FFD8E22   PIOSGW_DFPROT
7FFD8E24   PIOSGB_DFMBC
7FFD8E25   PIOSGB_DFMBFSDK
7FFD8E26   PIOSGB_DFMBFSMT
7FFD8E27   PIOSGB_DFMBFSUR
7FFD8E28   PIOSGB_DFMBFREL
7FFD8E29   PIOSGB_DFMBFIDX
7FFD8E2A   PIOSGB_DFMBFHSH
7FFD8E2B   PIOSGB_RMSCOMPAT
7FFD8E2C   PIOSGB_RMSPROLOG
7FFD8E2D   PIOSGW_RMSEXTEND
7FFD8E30   FILSGT_DDSTRING   PIOSGT_DDSTRING
7FFD8E84   PIOSGL_DIRCACHE
7FFD8E8C   PIOSGL_DIRCFRLH
7FFD8E90   PIOSGW_PIOIMPA
7FFD8F1C   PIOSGW_IIOIMPA
7FFD8FC0   PIOSAL_RMSEXH
7FFE0E00   CTLSA_COMMON
7FFE1600   CTLSAG_CMEDATA   CTLSAL_CMCNTX
7FFE1800   CTLSGL_DCLPRSOWN
7FFE1804   CTLSGL_CLINTOWN
7FFE1E00   CTLSGL_IAFLINK
7FFE1E04   CTLSGL_IAFLAST
7FFE1E08   CTLSGL_FIXUPLNK
7FFE1E0C   CTLSGL_P1MERGE
7FFE1E10   CTLSGL_IAFEXE   CTLSGL_IAFPERM
7FFE1E50   IACSGL_IMAGCTX
7FFE1E54   IACSGL_PROCCTX
7FFE1E58   IACSAL_VECADDR
7FFE1E68   IACSAL_VECOPCOD
7FFE1E6C   IACSAW_VECRESET
7FFE2000   CTLSA_PRCALLREG
7FFE7C00   CTLSAL_CLICALBK
7FFE7C08   CTLSAG_CLIMAGE
7FFE7C10   CTLSAG_CLIDATA
7FFE8800   MMGSIMGACTBUF
7FFEA000   CTLSA_DISPVEC
7FFEA400   MMGSIMGHDRBUF
7FFEA800   CTLSGL_KSTKBAS
7FFEAE00   CTLSGL_KSPINI
7FFEDE00   P1SYSVECTORS   SYSSQIOW

Value   Symbols...
-----   ----------
7FFEDE20   SYS$ADJSTK
7FFEDE28   SYS$ADJWSL
7FFEDE48   SYS$ASCTIM
7FFEDE50   SYS$ASSIGN
7FFEDE58   SYS$BINTIM
7FFEDE68   SYS$CANTIM
7FFEDE70   SYS$CANWAK
7FFEDE78   SYS$CRMPSC
7FFEDE90   SYS$CMKRNL
7FFEDE98   SYS$CLREF
7FFEDEB0   SYS$CRELOG
7FFEDEB8   SYS$CREMBX
7FFEDEC0   SYS$CREPRC
7FFEDEC8   SYS$CRETVA
7FFEDED0   SYS$DACEFC
7FFEDED8   SYS$DALLOC
7FFEDEE0   SYS$DASSGN
7FFEDEE8   SYS$DCLAST
7FFEDEF0   SYS$DCLEXH
7FFEDEF8   SYS$DELLOG
7FFEDF08   SYS$DELPRC
7FFEDF10   SYS$DELTVA
7FFEDF40   SYS$EXIT
7FFEDF48   SYS$EXPREG
7FFEDF50   SYS$FAO
7FFEDF58   SYS$FAOL
7FFEDF60   SYS$FORCEX
7FFEDF88   SYS$HIBER
7FFEDF90   SYS$IMGACT
7FFEDFA8   SYS$MGBLSC
7FFEDFB8   SYS$NUMTIM
7FFEDFC8   SYS$QIO
7FFEDFD8   SYS$RESUME
7FFEDFE0   SYS$RUNDWN
7FFEE000   SYS$SETEF
7FFEE008   SYS$SETEXV
7FFEE030   SYS$SETPRT
7FFEE038   SYS$SETRWM
7FFEE040   SYS$SETSFM
7FFEE058   SYS$TRNLOG
7FFEE070   SYS$UNWIND
7FFEE078   SYS$WAITFR
7FFEE0B0   SYS$GETMSG
7FFEE0C8   SYS$GETCHN
7FFEE0E0   SYS$PUTMSG
7FFEE100   SYS$SETPRV
7FFEE188   SYS$PUT
7FFEE1A8   SYS$WAIT
7FFEE1B8   SYS$CLOSE
7FFEE1C0   SYS$CONNECT
7FFEE1C8   SYS$CREATE
7FFEE208   SYS$OPEN

Value   Symbols...
-----   ----------
7FFEE268   SYS$RMSRUNDWN
7FFEE3C8   SYS$DEQ
7FFEE400   SYS$IMGFIX
7FFEFE00   CTL$GL_VECTORS   CTL$GW_NMIOCH
7FFEFE02   CTL$GW_CHINDX
7FFEFE04   CTL$GL_RMSPP
7FFEFE08   CTL$GL_RMSIP
7FFEFE10   CTL$AL_STACK
7FFEFE20   CTL$GL_LOGTBL
7FFEFE28   CTL$GL_CMSUPR
7FFEFE2C   CTL$GL_CMUSER
7FFEFE30   CTL$GL_CMHANDLR
7FFEFE34   CTL$AQ_EXCVEC
7FFEFE54   CTL$GL_THEXEC
7FFEFE58   CTL$GL_THSUPR
7FFEFE60   CTL$GQ_COMMON
7FFEFE68   CTL$GL_GETMSG
7FFEFE6C   CTL$AL_STACKLIM
7FFEFE7C   CTL$GL_CTLBASVA
7FFEFE80   CTL$GL_IMGHDRBF
7FFEFE84   CTL$GL_RUNDNFLG
7FFEFE88   CTL$GL_PHD
7FFEFE8C   CTL$GQ_ALLOCREG
7FFEFE94   CTL$GQ_MOUNTLST
7FFEFE9C   CTL$T_USERNAME
7FFEFEA8   CTL$T_ACCOUNT
7FFEFEB0   CTL$GQ_LOGIN
7FFEFEB8   CTL$GL_FINALSTS
7FFEFEBC   CTL$GL_WSPEAK
7FFEFEC0   CTL$GL_VIRTPEAK
7FFEFEC4   CTL$GL_VOLUMES
7FFEFEC8   CTL$GQ_ISTART
7FFEFED0   CTL$GL_ICPUTIM
7FFEFED4   CTL$GL_IFAULTS
7FFEFED8   CTL$GL_IFAULTIO
7FFEFEDC   CTL$GL_IWSPEAK
7FFEFEE0   CTL$GL_IPAGEFL
7FFEFEE4   CTL$GL_IDIOCNT
7FFEFEE8   CTL$GL_IBIOCNT
7FFEFEEC   CTL$GL_IVOLUMES
7FFEFEF0   CTL$T_NODEADDR
7FFEFEF7   CTL$T_NODENAME
7FFEFEFE   CTL$T_REMOTEID
7FFEFF10   CTL$GQ_PROCPRIV
7FFEFF18   CTL$GL_USRCHMK
7FFEFF1C   CTL$GL_USRCHME
7FFEFF20   CTL$GL_POWERAST
7FFEFF24   CTL$GB_PWRMODE
7FFEFF25   CTL$GB_SSFILTER
7FFEFF28   CTL$AL_FINALEXC
7FFEFF38   CTL$GL_CCBBASE
7FFEFF3C   CTL$GQ_DBGAREA

Value   Symbols...
-----   ----------
7FFEFF44   CTLSGL_RMSBASE
7FFEFF48   CTLSGL_PPMSG
7FFEFF50   CTLSGB_MSGMASK
7FFEFF51   CTLSGB_DEFLANG
7FFEFF52   CTLSGW_PPMSGCHN
7FFEFF54   CTLSGL_USRUNDWN
7FFEFF58   CTLSGL_PCB
7FFEFF5C   CTLSGL_RUF
7FFEFF60   CTLSGL_SITESPEC
7FFEFF64   CTLSGL_KNOWNFIL
7FFEFF68   CTLSAL_IPASTVEC
7FFEFF88   CTLSGL_CMCNTX
7FFEFF8C   CTLSGL_IAFLNKPTR
80000000   DEVSM_WCK   PSLSM_CM   VASM_SYSTEM
80000010   SYSCALL_HANDL
80000800   R-MMGSA_ENDVEC   R-PMSSGL_FCP   R-PMSSGL_FCP2
80000918   R-PMSSGL_TURN
8000091C   R-PMSSGL_SPLIT
80000920   R-PMSSGL_HIT
80000924   R-PMSSGL_DIRHIT
80000928   R-PMSSGL_DIRMISS
8000092C   R-PMSSGL_QUOHIT
80000930   R-PMSSGL_QUOMISS
80000934   R-PMSSGL_FIDHIT
80000938   R-PMSSGL_FIDMISS
8000093C   R-PMSSGL_EXTHIT
80000940   R-PMSSGL_EXTMISS
80000944   R-PMSSGL_OPEN
80000948   R-PMSSGL_OPENS
80000C50   R-SWPSA_KSTK
80000C54   R-EXESGL_BUGCHECK
80000C58   R-IOCSGL_DEVLIST
80000C5C   R-IOCSGL_ADPLIST
80000C60   R-IOCSGL_DPTLIST
80000C68   R-TTYSGL_DPT
80000C6C   R-SYSSGL_BOOTDDB
80000CA0   R-SYSSGL_BOOTUCB
80000D9C   R-OPASGL_DDB
80000DD0   R-OPASUCB0
80000F10   R-OPASCRB
80000F34   R-CONSINTDISI
80000F58   R-CONSINTDISO
80000F84   R-MBSGL_DDB
80000FB8   R-MBSUCB0
8000103C   R-MBSGL_UCB1   R-SYSSGL_JOBCTLMB
800010C0   R-MBSGL_UCB2   R-SYSSGL_OPRMBX
80001144   R-NLSGL_DDB
80001178   R-NLSGL_UCB0
800011FC   R-NETSWCB
80001274   R-MBSDPT
800012AD   R-NLSDPT
800012E6   R-OPSDPT

Value   Symbols...
-----   ----------
80001320   R-DRSINT   R-MMGSAL_BEGDRIVE
80001337   R-DRSINITIAL
8000133D   R-MBASINT
800013DC   R-MBASINITIAL
800013E8   R-MBSDDT
8000144E   R-EXESSNDEVMSG
8000147E   R-EXESWRTMAILBOX
800017F0   R-NLSDDT
80001850   R-CONSINITIAL
80001866   R-CONSINITLINE
80001893   R-CONSDISCON
80001894   R-CONSINTINP
800018CE   R-CONSSTARTIO
8000191F   R-CONSINTOUT
80001AB6   R-MASREQUEST
80001B51   R-MASRAVAIL
80001B8C   R-MASINT
80001CE1   R-MASINITIAL
80001DD8   R-MMGSAL_ENDDRIVE   R-PFNSAL_HEAD
80001DDC   R-PFNSAL_MFYLSTHD
80001DF0   R-SCHSGL_FREECNT
80001DF4   R-SCHSGL_MFYCNT
80001DFC   R-PFNSGL_PHYPGCNT
80001E00   R-PFNSAL_HILIMIT   R-SCHSGL_FREEREQ
80001E04   R-SCHSGL_MFYLIM
80001E0C   R-PFNSAL_LOLIMIT   R-SCHSGL_FREELIM
80001E10   R-SCHSGL_MFYLOLIM
80001E18   R-SCHSGL_MFYLIMSV
80001E1C   R-SCHSGL_MFYLOSV
80001E20   R-PMSSGL_FAULTS
80001E24   R-PMSSGL_PREADS   R-PMSSGL_RDFLTS
80001E28   R-PMSSGL_PREADIO
80001E2C   R-PMSSGL_PWRITES
80001E30   R-PMSSGL_PWRITIO
80001E34   R-PMSSGL_DZROFLTS
80001E38   R-PMSSAL_TRANSFLT
80001E58   R-PMSSGL_DPTSCN
80001E5C   R-PMSSGL_GVALID
80001E60   R-MPWSAL_PTE
80001E64   R-MPWSAW_PHVINDEX
80001E68   R-MPWSGL_BADPAGTOTAL
80001E6C   R-MMGSGL_IACLOCK
80001E70   R-MMGSGL_PFNLOCK
80001E74   R-PFMSGL_SIZE
80001E78   R-PFMSGL_PMBLST
80001E88   R-SCHSAQ_COMH
80001E8C   R-SCHSAQ_COMT
80001F88   R-SCHSAQ_COMOH
80001F8C   R-SCHSAQ_COMOT
8000207C   R-SCHSAQ_WQHDR
80002088   R-SCHSGQ_COLPGWQ
80002094   R-SCHSGQ_MWAIT

Value   Symbols...
-----   -----------
800020AC   R-SCH$GQ_PFWQ
800020B8   R-SCH$GQ_LEFWQ
800020C4   R-SCH$GQ_LEFOWQ
800020D0   R-SCH$GQ_HIBWQ
800020DC   R-SCH$GQ_HIBOWQ
800020E8   R-SCH$GQ_SUSP
800020F4   R-SCH$GQ_SUSPO
80002100   R-SCH$GQ_FPGWQ
8000210C   R-SCH$GL_CURPCB
80002110   R-SCH$GL_COMQS
80002114   R-SCH$GL_COMOQS
80002118   R-SCH$GB_SIP
80002119   R-SCH$GB_RESCAN
8000211A   R-MMG$GB_FREWFLGS
8000211C   R-SCH$GW_PROCCNT
8000211E   R-SCH$GW_PROCLIM
80002120   R-SWP$GL_SLOTCNT
80002124   R-SCH$GQ_CEBHD
8000212C   R-SCH$GW_CEBCNT
8000212E   R-SCH$GW_DELPHDCT
80002130   R-SWP$GL_SHELL
80002134   R-SWP$GL_INPCB
80002138   R-SWP$GL_ISPAGCNT
8000213C   R-SWP$GW_IBALSETX
8000213E   R-SWP$GB_ISWPRI
80002140   R-SWP$GL_ISWPPAGES
80002144   R-SWP$GL_ISWPCNT
80002148   R-SWP$GL_OSWPCNT
8000214C   R-SWP$GL_HOSWPCNT
80002150   R-SWP$GL_HISWPCNT
80002154   R-SCH$GL_RESMASK
80002158   R-SCH$GB_PRI
8000215C   R-SWP$GL_SWTIME
80002160   R-MMG$GL_NULLPFL
80002184   R-MMG$GL_PAGSWPVC
80002188   R-MMG$GL_MAXPFIDX
8000218C   R-MMG$GW_MINPFIDX   R-SGN$GW_SWPFILCT
80002190   R-EXE$GL_PWRDONE
80002194   R-EXE$GL_PWRINTVL
800021B0   R-SWP$GW_BALCNT
800021B2   R-SCH$GW_SWPFCNT
800021B4   R-PHV$GL_PIXBAS
800021B8   R-PHV$GL_REFCBAS
800021BC   R-EXE$GL_CONFREG
800021C0   R-MMG$GL_SBICONF
800021C4   R-EXE$GL_NUMNEXUS
800021C8   R-MMG$GL_RMSBASE
800021CC   R-MMG$GL_GBLSECFND
800021D0   R-MMG$GL_GBLPAGFIL
80002350   R-SCH$GL_NULLPCB
80002568   R-SCH$GL_SWPPCB
800025C8   R-SCH$GL_SWPPID

Value   Symbols...
-----   ----------
80002608   R-MMGSAL_SYSPCB
800026A4   R-SCHSGL_PCBVEC
800026A8   R-SCHSGL_MAXPIX
800026AC   R-SCHSGL_SEQVEC
800026F0   R-EXESGL_FLAGS
800026F4   R-EXESGQ_ERLMBX
800026FC   R-EXESGL_USRCHMK
80002700   R-EXESGL_USRCHME
80002708   R-SWISGL_FQFL
8000270C   R-SWISGL_FQBL
80002738   R-LOGSAL_LOGTBL
8000274C   R-LOGSAB_HTBLCNT
80002750   R-LOGSAL_MUTEX
80002758   R-EXESGL_SYSUCB
8000275C   R-FILSGT_DDDEV
8000276A   R-FILSGT_TOPSYS
80002774   R-FILSGQ_CACHE
8000277C   R-EXESGQ_BOOTCB_D
80002780   R-EXESGL_BOOTCB
80002784   R-EXESGL_SAVEDUMP
80002788   R-IOCSGL_PSFL
8000278C   R-IOCSGL_PSBL
80002790   R-IOCSGL_IRPFL
80002794   R-IOCSGL_IRPBL
80002798   R-IOCSGL_IRPREM
8000279C   R-IOCSGL_IRPCNT
800027A0   R-IOCSGL_IRPMIN
800027A4   R-IOCSGL_SRPFL
800027A8   R-IOCSGL_SRPBL
800027AC   R-IOCSGL_SRPSIZE
800027B0   R-IOCSGL_SRPMIN
800027B4   R-IOCSGL_SRPSPLIT
800027B8   R-IOCSGL_SRPREM
800027BC   R-IOCSGL_SRPCNT
800027C0   R-IOCSGL_LRPFL
800027C4   R-IOCSGL_LRPBL
800027C8   R-IOCSGL_LRPSIZE
800027CC   R-IOCSGL_LRPMIN
800027D0   R-IOCSGL_LRPSPLIT
800027D4   R-IOCSGL_LRPREM
800027D8   R-IOCSGL_LRPCNT
800027DC   R-IOCSGL_POOLFKB
800027F4   R-IOCSGL_PFKBINT
800027F8   R-IOCSGL_AQBLIST
800027FC   R-IOCSGQ_MOUNTLST
80002804   R-IOCSGQ_BRDCST
8000280C   R-IOCSGL_CRBTMOUT
80002810   R-EXESGL_GSDGRPFL
80002814   R-EXESGL_GSDGRPBL
80002818   R-EXESGL_GSDSYSFL
8000281C   R-EXESGL_GSDSYSBL
80002820   R-EXESGL_GSDFREFL

Value   Symbols...
-----   ----------
80002824   R-EXE$GL_GSDFREBL
80002828   R-EXE$GL_GSDDELFL
8000282C   R-EXE$GL_GSDDELBL
80002830   R-EXE$GL_WCBDELFL
80002834   R-EXE$GL_WCBDELBL
80002838   R-EXE$GL_SYSWCBFL
8000283C   R-EXE$GL_SYSWCBBL
80002840   R-PMS$GL_KERNEL
80002854   R-PMS$GL_COMPAT
80002858   R-EXE$GL_ABSTIM
80002860   R-EXE$GQ_SYSTIME
80002868   R-EXE$GL_PFAILTIM
8000286C   R-EXE$GL_PFATIM
80002870   R-EXE$GL_TQFL
800028A0   R-EXE$AL_TQENOREPT
800028C0   R-IOC$GL_MUTEX
800028C4   R-EXE$GL_CEBMTX
800028C8   R-EXE$GL_PGDYNMTX
800028CC   R-EXE$GL_GSDMTX
800028D0   R-EXE$GL_SHMGSMTX
800028D4   R-EXE$GL_SHMMBMTX
800028D8   R-EXE$GL_ENQMTX
800028DC   R-EXE$GL_KFIMTX
800028E0   R-EXE$GL_KNOWNFIL
800028E4   R-KFI$GL_F11AACP
800028E8   R-EXE$GL_GPT
800028F0   R-SYS$GQ_VERSION
800028F8   R-SYS$GW_IJOBCNT
800028FA   R-SYS$GW_NJOBCNT
800028FC   R-SYS$GW_BJOBCNT
800028FE   R-EXE$GW_SCANPIX
80002900   R-EXE$GL_SYSMSG
80002904   R-EXE$GL_USRUNDWN
80002908   R-EXE$GL_NONPAGED
80002914   R-EXE$GL_SPLITADR
80002918   R-EXE$GL_PAGED
80002920   R-RMS$GL_SFDBASE
80002924   R-EXE$GL_SHBLIST
80002928   R-EXE$GL_RTBITMAP
8000292C   R-MCHK$GL_MASK
80002930   R-MCHK$GL_SP
80002934   R-EXE$GL_MCHKERRS
80002938   R-EXE$GL_MEMERRS
8000293C   R-IOS$GL_UBA_INT0
80002940   R-EXE$GL_BLAKHOLE
80002944   R-IOS$GL_SCB_INT0
80002948   R-EXE$GL_TENUSEC
8000294C   R-EXE$GL_MP
80002950   R-EXE$GL_SITESPEC
80002954   R-EXE$GL_INTSTKLM
80002958   R-LCK$GL_IDTBL
8000295C   R-LCK$GL_NXTID

Value   Symbols...
-----   ----------
80002960   R-LCKSGL_MAXID
80002964   R-LCKSGL_HASHTBL
80002968   R-LCKSGL_HTBLCNT
8000296C   R-LCKSGL_TIMOUTQ
80002974   R-LCKSGL_PRCMAP
80002978   R-LCKSGB_MAXDEPTH
8000297C   R-EXESGL_SYSFLAGS
80002980   R-EXESGL_ACMFLAGS
80002984   R-EXESGL_SVAPTE
80002988   R-EXESGQ_BLKHOLWQ
80002D90   R-ERLSAL_BUFADDR
80002D98   R-ERLSGB_BUFIND
80002D99   R-ERLSGB_BUFFLAG
80002D9A   R-ERLSGB_BUFPTR
80002D9B   R-ERLSGB_BUFTIM
80002D9C   R-ERLSGL_ERLPID
80002DA0   R-ERLSGL_SEQUENCE
80002DA4   R-PMSSGL_DIRIO
80002DA8   R-PMSSGL_BUFIO
80002DAC   R-PMSSGL_LOGNAM
80002DB0   R-PMSSGL_MBREADS
80002DB4   R-PMSSGL_MBWRITES
80002DB8   R-PMSSGL_TREADS
80002DBC   R-PMSSGL_TWRITES
80002DC0   R-PMSSGL_IOPFMPDB
80002DC4   R-PMSSGL_IOPFMSEQ
80002DC8   R-PMSSGL_ARRLOCPK
80002DCC   R-PMSSGL_DEPLOCPK
80002DD0   R-PMSSGL_ARRTRAPK
80002DD4   R-PMSSGL_TRCNGLOS
80002DD8   R-PMSSGL_RCVBUFFL
80002DDC   R-PMSSGL_ENQNEW
80002DE0   R-PMSSGL_ENQCVT
80002DE4   R-PMSSGL_DEQ
80002DE8   R-PMSSGL_ENQWAIT
80002DEC   R-PMSSGL_ENQNOTQD
80002DF0   R-PMSSGL_DLCKSRCH
80002DF4   R-PMSSGL_DLCKFND
80002DF8   R-PMSSGL_CHMK
80002DFC   R-PMSSGL_CHME
80002E00   R-PMSSGL_PAGES
80002E04   R-PMSSGW_BATCH
80002E06   R-PMSSGW_INTJOBS
80002E08   R-PMSSAL_READTBL
80002E30   R-PMSSAL_WRITETBL
80002E58   R-PMSSGL_READCNT
80002E5C   R-PMSSGL_WRTCNT
80002E60   R-PMSSGL_PASSALL
80002E64   R-PMSSGL_RWP
80002E68   R-PMSSGL_LRGRWP
80002E6C   R-PMSSGL_RWPSUM
80002E70   R-PMSSGL_NOSTDTRM

Value   Symbols...
-----   ----------
80002E74   R-PMS$GL_RWPNOSTD   a
80002E78   R-PMS$GL_LDPCTX
80002E7C   R-PMS$GL_SWITCH
80002E80   R-PMS$GB_PROMPT
80002E84   R-PMS$GL_DOSTATS
80002E88   R-EXE$AL_LOAVEC   R-EXE$MCHK
80002E90   R-EXE$INT54
80002E98   R-EXE$INT58
80002EA0   R-EXE$INT5C
80002EA8   R-EXE$INT60
80002EB0   R-UBA$INT0
80002EB8   R-UBA$UNEXINT
80002EBE   R-ECC$REENABLE
80002EC4   R-EXE$INIBOOTADP
80002ECA   R-EXE$DUMPCPUREG
80002ED0   R-EXE$REGRESTOR
80002ED6   R-EXE$REGSAVE
80002EDC   R-EXE$INIPROCREG
80002EE2   R-EXE$TEST_CSR
80002EE8   R-IOC$PURGDATAP
80002EEE   R-EXE$DW780_INT
80002EF4   R-EXE$RH780_INT
80002EFA   R-CI$INITIAL
80002F00   R-CI$INT
80002F06   R-UBA$INITIAL
80002F0C   R-INI$MPMADP
80002F12   R-EXE$SHUTDWNADP
80002F18   R-EXE$MCHK_ERRCNT
80002F1C   R-EXE$LOAD_ERROR
80002F20   R-SCS$GQ_CONFIG
80002F28   R-SCS$GQ_DIRECT
80002F30   R-SCS$GL_BDT
80002F34   R-SCS$GL_CDL
80002F38   R-SCS$GL_RDT
80002F3C   R-SCS$GL_MCLEN
80002F40   R-SCS$GL_MCADR
80002F44   R-SCS$ACCEPT   R-SCS$AL_LOAVEC
80002F4A   R-SCS$ALLOC_CDT
80002F50   R-SCS$ALLOC_RSPID
80002F56   R-SCS$CONFIG_PTH
80002F5C   R-SCS$CONFIG_SYS
80002F62   R-SCS$CONNECT
80002F68   R-SCS$DEALL_CDT
80002F6E   R-SCS$DEALL_RSPID
80002F74   R-SCS$DISCONNECT
80002F7A   R-SCS$ENTER
80002F80   R-SCS$LISTEN
80002F86   R-SCS$LOCLOOKUP
80002F8C   R-SCS$REMOVE
80002F92   R-IOC$THREADCRB
80002F98   R-SCS$RESUMEWAITR
80002F9E   R-SCS$UNSTALLUCB

Value   Symbols...
-----   -----------
80002FA4   R-SCSSLKP_RDTCDRP
80002FAA   R-SCSSLKP_RDTWAIT
80002FB0   R-PATSA_NONPGD_DATA
80003200   R-EXESA_SYSPARAM   R-EXESGQ_TODCBASE   R-MMGSA_SYSPARAM
80003208   R-EXESGL_TODR
8000320C   R-SGNSGW_DFPFC
8000320E   R-SGNSGB_PGTBPFC
8000320F   R-SGNSGB_SYSPFC
80003210   R-SGNSGB_KFILSTCT
80003212   R-SGNSGW_GBLSECNT
80003214   R-SGNSGL_MAXGPGCT
80003218   R-SGNSGL_GBLPAGFIL
8000321C   R-SGNSGW_MAXPRCCT
8000321E   R-SGNSGW_PIXSCAN
80003220   R-SGNSGW_MAXPSTCT
80003222   R-SGNSGW_MINWSCNT
80003224   R-SGNSGW_PAGFILCT
80003226   R-SGNSGW_SWPFILES
80003228   R-SGNSGW_SYSDWSCT
8000322A   R-SGNSGW_ISPPGCT
8000322C   R-LCKSGL_EXTRASTK
80003230   R-SGNSGL_BALSETCT
80003234   R-SGNSGL_IRPCNT
80003238   R-SGNSGL_IRPCNTV
8000323C   R-SGNSGL_MAXWSCNT
80003240   R-SGNSGL_NPAGEDYN
80003244   R-SGNSGL_NPAGEVIR
80003248   R-SGNSGL_PAGEDYN
8000324C   R-SGNSGL_MAXVPGCT
80003250   R-SGNSGL_SPTREQ
80003254   R-SGNSGL_EXUSRSTK
80003258   R-SGNSGL_LRPCNT
8000325C   R-SGNSGL_LRPCNTV
80003260   R-SGNSGL_LRPSIZE
80003264   R-SGNSGL_LRPMIN
80003268   R-SGNSGL_SRPCNT
8000326C   R-SGNSGL_SRPCNTV
80003270   R-SGNSGL_SRPSIZE
80003274   R-SGNSGL_SRPMIN
80003278   R-SGNSGW_PCHANCNT
8000327A   R-SGNSGW_IMGIOCNT
8000327C   R-SCHSGW_QUAN
8000327E   R-MPWSAW_INITVAL   R-MPWSGW_MPWPFC
80003280   R-MPWSGW_HILIM
80003282   R-MPWSGW_LOLIM
80003284   R-MPWSGB_PRIO
80003285   R-SWPSGB_PRIO
80003288   R-MPWSGL_THRESH
8000328C   R-MPWSGL_WAITLIM
80003290   R-SGNSGW_WSLMXSKP
80003294   R-MMGSGL_PHYPGCNT
80003298   R-SCHSGL_PFRATL

Value   Symbols...
-----   ----------
8000329C   R-SCHSGL_PFRATH
800032A0   R-SCHSGL_PFRATS
800032A4   R-SCHSGL_WSINC
800032A8   R-SCHSGL_WSDEC
800032AC   R-SCHSGW_AWSMIN
800032B0   R-SCHSGL_AWSTIME
800032B4   R-SCHSGL_SWPRATE
800032B8   R-SWPSGL_SWPPGCNT
800032BC   R-SWPSGW_SWPINC
800032BE   R-SCHSGW_IOTA
800032C0   R-SCHSGW_LONGWAIT
800032C2   R-SCHSGW_SWPFAIL
800032C4   R-SGNSGL_VMSD1
800032C8   R-SGNSGL_VMSD2
800032CC   R-SGNSGL_VMSD3
800032D0   R-SGNSGL_VMSD4
800032D4   R-SGNSGL_VMS5
800032D8   R-SGNSGL_VMS6
800032DC   R-SGNSGL_VMS7
800032E0   R-SGNSGL_VMS8
800032E4   R-SGNSGL_USERD1
800032E8   R-SGNSGL_USERD2
800032EC   R-SGNSGL_USER3
800032F0   R-SGNSGL_USER4
800032F4   R-SGNSGL_EXTRACPU
800032F8   R-EXESGL_SYSUIC
800032FC   R-IOCSGW_MVTIMEOUT
800032FE   R-IOCSGW_MAXBUF
80003300   R-IOCSGW_MBXBFQUO
80003302   R-IOCSGW_MBXMXMSG
80003304   R-IOCSGW_MBXNMMSG
80003308   R-SGNSGL_FREELIM
8000330C   R-SGNSGL_FREEGOAL
80003310   R-SCHSGL_GROWLIM
80003314   R-SCHSGL_BORROWLIM
80003318   R-EXESGL_LOCKRTRY
8000331C   R-IOCSGW_XFMXRATE
8000331E   R-IOCSGW_LAMAPREG
80003320   R-EXESGL_RTIMESPT
80003324   R-EXESGL_CLITABL
80003328   R-LCKSGL_IDTBLSIZ
8000332C   R-LCKSGL_HTBLSIZ
80003330   R-LCKSGL_WAITTIME
80003334   R-SCSSGW_BDTCNT
80003336   R-SCSSGW_CDTCNT
80003338   R-SCSSGW_RDTCNT
8000333A   R-SCSSGW_MAXDG
8000333C   R-SCSSGW_MAXMSG
8000333E   R-SCSSGW_FLOWCUSH
80003340   R-SCSSGB_SYSTEMID
80003348   R-SCSSGW_PASTRTRY
8000334A   R-SCSSGW_PASTMOUT

Value   Symbols...
-----   ----------
8000334C   R-SCSSGW_PAPPDDG
8000334E   R-SCSSGB_PANPOLL
80003350   R-SCSSGW_PAPOLINT
80003352   R-SCSSGW_PAPOOLIN
80003354   R-SGNSGW_TPWAIT
80003356   R-SCSSGB_UDABURST
80003358   R-LOGSGL_HTBLSIZ
8000335C   R-LOGSGL_HTBLSIZG
80003360   R-LOGSGL_HTBLSIZP
80003364   R-EXESGL_DEFFLAGS
80003368   R-EXESGL_MSGFLAGS
8000336C   R-TTYSGL_DELTA
80003370   R-TTYSGB_DIALTYP
80003371   R-TTYSGB_DEFSPEED
80003372   R-TTYSGB_RSPEED
80003373   R-TTYSGB_PARITY
80003374   R-TTYSGW_DEFBUF
80003378   R-TTYSGL_DEFCHAR
8000337C   R-TTYSGL_DEFCHAR2
80003380   R-TTYSGW_TYPAHDSZ
80003382   R-TTYSGW_ALTYPAHD
80003384   R-TTYSGW_ALTALARM
80003386   R-TTYSGW_DMASIZE
80003388   R-TTYSGW_PROT
8000338C   R-TTYSGL_OWNUIC
80003390   R-TTYSGW_CLASSNAM
80003392   R-TTYSGB_SILOTIME
80003393   R-SYSSGB_DFMBC
80003394   R-SYSSGB_DFMBFSDK
80003395   R-SYSSGB_DFMBFSMT
80003396   R-SYSSGB_DFMBFSUR
80003397   R-SYSSGB_DFMBFREL
80003398   R-SYSSGB_DFMBFIDX
80003399   R-SYSSGB_DFMBFHSH
8000339A   R-SYSSGB_RMSPROLOG
8000339C   R-PQLSAL_DEFAULT   R-SYSSGW_RMSEXTEND
8000339E   R-SYSSGW_FILEPROT
800033A0   R-PQLSGDASTLM
800033A4   R-PQLSGDBIOLM
800033A8   R-PQLSGDBYTLM
800033AC   R-PQLSGDCPULM
800033B0   R-PQLSGDDIOLM
800033B4   R-PQLSGDFILLM
800033B8   R-PQLSGDPGFLQUOTA
800033BC   R-PQLSGDPRCLM
800033C0   R-PQLSGDTQELM
800033C4   R-PQLSGDWSQUOTA
800033C8   R-PQLSGDWSDEFAULT   R-SGNSGW_DFWSCNT
800033CC   R-PQLSGDENQLM
800033D0   R-PQLSGDWSEXTENT
800033D4   R-PQLSAL_MIN
800033D8   R-PQLSGMASTLM

Value   Symbols...
-----   ----------
800033DC   R-PQLSGMBIOLM
800033E0   R-PQLSGMBYTLM
800033E4   R-PQLSGMCPULM
800033E8   R-PQLSGMDIOLM
800033EC   R-PQLSGMFILLM
800033F0   R-PQLSGMPGFLQUOTA
800033F4   R-PQLSGMPRCLM
800033F8   R-PQLSGMTQELM
800033FC   R-PQLSGMWSQUOTA
80003400   R-PQLSGMWSDEFAULT
80003404   R-PQLSGMENQLM
80003408   R-PQLSGMWSEXTENT
8000340F   R-PQLSAB_FLAG
8000341E   R-ACPSGW_MAPCACHE
80003420   R-ACPSGW_HDRCACHE
80003422   R-ACPSGW_DIRCACHE
80003424   R-ACPSGW_WORKSET
80003426   R-ACPSGW_FIDCACHE
80003428   R-ACPSGW_EXTCACHE
8000342A   R-ACPSGW_EXTLIMIT
8000342C   R-ACPSGW_QUOCACHE
8000342E   R-ACPSGW_SYSACC
80003430   R-ACPSGB_MAXREAD
80003431   R-ACPSGB_WINDOW
80003432   R-ACPSGB_WRITBACK
80003433   R-ACPSGB_DATACHK
80003434   R-ACPSGB_BASEPRIO
80003435   R-ACPSGB_SWAPFLGS
80003438   R-SYSSGB_MXPRTSYM
80003439   R-SYSSGB_DEFPRI
8000343A   R-SYSSGW_IJOBLIM
8000343C   R-SYSSGW_BJOBLIM
8000343E   R-SYSSGW_NJOBLIM
80003440   R-SYSSGW_RJOBLIM
80003444   R-SWPSGL_SHELLSIZ
80003448   R-SWPSGW_BAKPTE
8000344A   R-SWPSGW_EMPTPTE
8000344C   R-SWPSGW_WSLPTE
8000344E   R-SWPSGB_SHLP1PT
80003450   R-SWPSGL_BSLOTSZ
80003454   R-SWPSGL_MAP
80003458   R-SWPSGL_PHDBASVA
8000345C   R-SGNSGL_PHDAPCNT
80003460   R-SGNSGL_PHDLWCNT
80003464   R-SGNSGL_P1LWCNT
80003468   R-SGNSGL_PHDPAGCT
8000346C   R-SGNSGL_PTPAGCNT
80003470   R-MMGSGL_CTLBASVA
80003474   R-EXESAL_STACKS
80003478   R-EXESGL_INTSTK
8000347C   R-MMGSGL_GPTBASE
80003480   R-MMGSGL_GPTE

Value   Symbols...
-----   -----------
80003484   R-MMGSGL_MAXGPTE
80003488   R-MMGSGL_FRESVA   R-MMGSGL_MAXSYSVA
8000348C   R-MMGSGL_SPTBASE
80003490   R-MMGSGL_SPTLEN
80003494   R-MMGSGL_SYSPHD
80003498   R-MMGSGL_SYSPHDLN
8000349C   R-SWPSGL_BALBASE
800034A0   R-SWPSGL_BALSPT
800034A4   R-MMGSGL_SBR
800034A8   R-MMGSGL_NPAGEDYN
800034AC   R-MMGSGL_NPAGNEXT
800034B0   R-MMGSGL_IRPNEXT
800034B4   R-MMGSGL_LRPNEXT
800034B8   R-MMGSGL_SRPNEXT
800034BC   R-MMGSGL_PAGEDYN
800034C0   R-MMGSGL_MAXPFN
800034C2   R-MMGSGW_BIGPFN
800034C4   R-MMGSGL_MINPFN
800034C8   R-EXESGL_RPB
800034CC   R-BOOSGL_SPTFREL
800034D0   R-BOOSGL_SPTFREH
800034D4   R-EXESGL_SCB
800034D8   R-EXESGB_CPUDATA
800034E8   R-EXESGB_CPUTYPE
800034E9   R-PFNSGB_LENGTH
800034EA   R-EXESGW_PGFL_FID
800034F0   R-PFNSAL_PTE   R-PFNSA_BASE
800034F4   R-PFNSAL_BAK
800034F8   R-PFNSAW_REFCNT
800034FC   R-PFNSAX_FLINK   R-PFNSAX_SHRCNT
80003500   R-PFNSAX_BLINK   R-PFNSAX_WSLX
80003504   R-PFNSAW_SWPVBN
80003508   R-PFNSAB_STATE
8000350C   R-PFNSAB_TYPE
80003510   R-EXESGT_STARTUP
80003530   R-MMGSGL_PGDCOD   R-PATSGL_EXP_NPG2
80003600   R-EXESRESTART   R-MMGSFRSTRONLY
800037B4   R-EXESINIT_DEVICE
80003882   R-EXESPWRTIMCHK
800038A9   R-EXESBUG_CHECK
8000397A   R-MPHSBUGCHKHK
80003A0C   R-EXESBOOTCB_CHK
80003A27   R-PMSSEND_IO
80003A47   R-PMSSEND_RQ
80003A75   R-PMSSTART_IO
80003A98   R-PMSSTART_RQ
80003B74   R-EXESAB_HEXTAB
80003B84   R-ERLSVEC256   R-ERLSVEC320   R-ERLSVEC384   R-ERLSVEC448
80003B88   R-ERLSVEC260   R-ERLSVEC324   R-ERLSVEC388   R-ERLSVEC452
80003B8C   R-ERLSVEC264   R-ERLSVEC328   R-ERLSVEC392   R-ERLSVEC456
80003B90   R-ERLSVEC268   R-ERLSVEC332   R-ERLSVEC396   R-ERLSVEC460
80003B94   R-ERLSVEC272   R-ERLSVEC336   R-ERLSVEC400   R-ERLSVEC464

Value   Symbols...
-----   ----------
80003B98   R-ERLSVEC276   R-ERLSVEC340   R-ERLSVEC404   R-ERLSVEC468
8000389C   R-ERLSVEC280   R-ERLSVEC344   R-ERLSVEC408   R-ERLSVEC472
80003BA0   R-ERLSVEC284   R-ERLSVEC348   R-ERLSVEC412   R-ERLSVEC476
80003BA4   R-ERLSVEC288   R-ERLSVEC352   R-ERLSVEC416   R-ERLSVEC480
80003BA8   R-ERLSVEC292   R-ERLSVEC356   R-ERLSVEC420   R-ERLSVEC484
80003BAC   R-ERLSVEC296   R-ERLSVEC360   R-ERLSVEC424   R-ERLSVEC488
80003BB0   R-ERLSVEC300   R-ERLSVEC364   R-ERLSVEC428   R-ERLSVEC492
80003BB4   R-ERLSVEC304   R-ERLSVEC368   R-ERLSVEC432   R-ERLSVEC496
80003BB8   R-ERLSVEC308   R-ERLSVEC372   R-ERLSVEC436   R-ERLSVEC500
80003BBC   R-ERLSVEC312   R-ERLSVEC376   R-ERLSVEC440   R-ERLSVEC504
80003BC0   R-ERLSVEC316   R-ERLSVEC380   R-ERLSVEC444   R-ERLSVEC508
80003C34   R-ERLSUNEXP   R-ERLSVEC0   R-ERLSVEC100   R-ERLSVEC104   R-ERLSVEC108
                R-ERLSVEC112   R-ERLSVEC116   R-ERLSVEC12   R-ERLSVEC120   R-ERLSVEC124
                R-ERLSVEC128   R-ERLSVEC132   R-ERLSVEC136   R-ERLSVEC140   R-ERLSVEC144
                R-ERLSVEC148   R-ERLSVEC152   R-ERLSVEC156   R-ERLSVEC16   R-ERLSVEC160
                R-ERLSVEC164   R-EPLSVEC168   R-ERLSVEC172   R-ERLSVEC176   R-ERLSVEC180
                R-ERLSVEC184   R-ERLSVEC188   R-ERLSVEC192   R-ERLSVEC196   R-ERLSVEC20
                R-ERLSVEC200   R-ERLSVEC204   R-ERLSVEC208   R-ERLSVEC212   R-ERLSVEC216
                R-ERLSVEC220   R-EPLSVEC224   R-ERLSVEC228   R-ERLSVEC232   R-ERLSVEC236
                R-ERLSVEC24   R-ERLSVEC240   R-ERLSVEC244   R-ERLSVEC248   R-ERLSVEC252
                R-ERLSVEC28   R-ERLSVEC32   R-ERLSVEC36   R-ERLSVEC4   R-ERLSVEC40
                R-ERLSVEC44   R-ERLSVEC48   R-ERLSVEC52   R-ERLSVEC56   R-ERLSVEC60
                R-ERLSVEC64   R-ERLSVEC68   R-ERLSVEC72   R-ERLSVEC76   R-ERLSVEC8
                R-ERLSVEC80   R-ERLSVEC84   R-ERLSVEC88   R-ERLSVEC92   R-ERLSVEC96
80003C3C   R-ERLSVEC_RETURN
80003C44   R-EXESACVIOLAT
80003C6C   R-EXESARITH
80003C77   R-EXESASTFLT
80003C8C   R-EXESBREAK
80003C94   R-EXESCMODSUPR
80003CA4   R-EXESCMODUSER
80003CBC   R-EXESCOMPAT
80003CFC   R-EXESKERSTKNV
80003D00   R-EXESMCHECK
80003D08   R-EXESOPCCUS
80003D10   R-EXESOPCDEC
80003D42   R-EXESPAGRDERR
80003D4C   R-EXESRADRMOD
80003D54   R-EXESROPRAND
80003D5C   R-EXESTBIT
80003D70   R-EXESSSFAIL
80003D7F   R-EXESEXCEPTION
80003DE3   R-EXESMCHK_PRTCT
80003E0B   R-EXESMCHK_BUGCHK
80003E4D   R-EXESMCHK_TEST
80003E68   R-INISMASTERWAKE
80003E74   R-IOCSIOPOST
80004242   R-IOCSQNXTSEG
8000424E   R-IOCSQNXTSEG1
800042A5   R-IOCSWAKACP
8000440D   R-IOCSDIRPOST1
800044D8   R-EXESPOWERFAIL

Value   Symbols...
-----   ----------
80005078   R-MMG$PAGEFAULT
80005376   R-MMG$SVPCTX
800053A4   R-MMG$RESRCWAIT
800053BF   R-MMG$PGFLTWAIT
800057A4   R-MMG$WSLEPFN
8000586B   R-MMG$FREWSLE
800058FF   R-MMG$FREWSLX
80005924   R-MPH$INVALIDHK
8000592C   R-MMG$FRE_TRYSKIP
800059EF   R-MMG$DELWSLEX
80005A13   R-MMG$DELWSLEPPG
80005A39   R-MMG$ININEWPFN
80005A7B   R-MMG$MAKEWSLE
80005ADF   R-MMG$LOCKPGTB
80005AE5   R-MMG$INCPTREF
80005B23   R-MMG$DECPTREF
80005B8A   R-MMG$DECPHDREF
80005B8E   R-MMG$DECPHDREF1
80005B99   R-MMG$INIBLDPKT
80005BEB   R-MMG$ALLOCPFN
80005C00   R-MMG$DELCONPFN
80005C82   R-MMG$REMPFNH
80005C8D   R-MMG$REMPFN
80005CE4   R-MMG$RLPFNSAVPTE
80005CF9   R-MMG$DELPFNLST
80005D01   R-MMG$RELPFN
80005D4B   R-MMG$DALCBAKSTORE
80005D73   R-MMG$INSPFNH
80005DAF   R-MMG$DALLOCPFN
80005DB1   R-MMG$INSPFNT
80005E35   R-MMG$IOLOCK
80005F34   R-MMG$IOLOCKPAG
80006051   R-MMG$UNLOCK
800060A4   R-MMG$REFCNTNEG
800060A8   R-MMG$SHRCNTNEG
800060AC   R-MMG$ALLOCSWPAREA
800060E4   R-MMG$ALLOCPAGFIL1
8000624D   R-MMG$ALLOCPAGFIL2
800062D8   R-MMG$DALCPAGFIL
800062E1   R-MMG$DEALLOCPAGFIL
800063CC   R-MMG$CALCSWAPSIZE
80006402   R-MMG$SUBSECREF
8000640F   R-MMG$DECSECREF
800064E7   R-MMG$SVAPTECHK
80006500   R-MMG$PTEADRCHK
80006509   R-MMG$PTEREF
8000651B   R-MMG$PTEINDXCHK
80006521   R-MMG$PTEINDX
80006668   R-MMG$WRTMFYPAG
800069A2   R-MMG$SHRINKWS
80006A01   R-MMG$EXTRADYNWS
80006AB8   R-MMG$DELPAG

Value   Symbols...
-----   ----------
80006D71   R-MMG$PAGETYPE
80006D9B   R-MMG$DELGBLSEC
80006E76   R-MMG$GETPTIPAG
80006FB6   R-IAC$CLRIACLOCK
80006FE4   R-MMG$ULKGBLWSLE
80006FF5   R-MMG$LCKULKPAG
80007163   R-MMG$SWAPWSLE
8000719F   R-MMG$SCNWSLX
800071DB   R-MMG$PURGWSSCN
800072A0   R-MMG$SETPRTPAG
8000741F   R-MMG$WRTPGSBAK
80007712   R-MMG$FINDGSDPFN
80007788   R-MMG$DECSHMREF
8000778B   R-MMG$INCSHMREF
800077AA   R-MMG$VALIDATEGSD
800077AE   R-MMG$GETNXTGSD
80007825   R-MMG$FINDSHD
80007893   R-SCH$OSWPSCHED
80007A4A   R-MMG$MPWCHECK
80007A6E   R-BUG$FATAL   R-EXE$INSTIMQ
80007A95   R-EXE$RMVTIMQ
80007B06   R-EXE$NULLPROC
80007B0B   R-ACP$ACCESS
80007B10   R-ACP$ACCESSNET
80007B3C   R-ACP$DEACCESS
80007B91   R-ACP$MODIFY
80007B99   R-ACP$MOUNT
80007BB9   R-ACP$READBLK
80007BE8   R-ACP$WRITEBLK
80007F00   R-EXE$CANCELN
80007F0F   R-EXE$CANCEL
8000802F   R-EXE$CANTIM
8000804D   R-EXE$CANWAK
8000806C   R-EXE$CMEXEC
8000807C   R-EXE$CMKRNL
8000809D   R-EXE$DASSGN
800081AD   R-EXE$DERLMB
800081E7   R-EXE$FORCEX
8000822C   R-EXE$IORSNWAIT
80008252   R-EXE$ONEPARM
80008258   R-EXE$ZEROPARM
8000825E   R-EXE$MODIFY
80008264   R-EXE$READ
8000826D   R-EXE$WRITE
80008290   R-EXE$READLOCK
80008293   R-EXE$WRITELOCK
80008296   R-EXE$MODIFYLOCK
80008299   R-EXE$MODIFYLOCKR
800082A3   R-EXE$READLOCKR
800082AA   R-EXE$WRITELOCKR
80008324   R-EXE$READCHK
8000832A   R-EXE$WRITECHK

Value   Symbols...
-----   ----------
80008338   R-EXESREADCHKR
80008396   R-EXESWRITECHKR
800083E7   R-EXESSETCHAR
80008405   R-EXESSETMODE
8000841B   R-EXESSENSEMODE
80008443   R-EXESCARRIAGE
8000848B   R-EXESSCHDWK
800084ED   R-EXESSETIMR
80008624   R-EXESQIO
8000887E   R-EXESBLDPKTGSR
80008886   R-EXESBLDPKTGSW
8000888E   R-EXESBLDPKTSWPR
80008896   R-EXESBLDPKTSWPW
8000889E   R-EXESBUILDPKTW
800088A6   R-EXESBUILDPKTR
800088FD   R-EXESABORTIO
8000890A   R-EXESFINISHIOC
8000890C   R-EXESFINISHIO
80008920   R-EXESQIODRVPKT
80008924   R-EXESALTQUEPKT
80008936   R-EXESQIOACPPKT
80008950   R-EXESQIORETURN
80008957   R-EXESINSIOQ
80008972   R-EXESINSERTIRP
80008989   R-EXESSETPRI
80008A0B   R-MTSCHECK_ACCESS
80008A2C   R-SCHSASTDEL
80008A40   R-MPHSASTDELHK
80008A46   R-MPHSASTDELCONT
80008A5A   R-MPHSQEMPTYCONT
80008AF7   R-EXESASTDEL
80008AFA   R-EXESASTRET
80008BC3   R-EXESIPAPBKAST
80008BE8   R-MPHSQAST   R-SCHSQAST
80008C86   R-SCHSNEWLVL
80008CA9   R-MPHSNEWLVLHK
80008CBA   R-SCHSSWAPACBS
80008CBD   R-SCHSREMOVACB
80008CC4   R-EXESIOFORK
80008CC8   R-EXESFORK
80008CE4   R-EXESFRKIPL6DSP
80008CF0   R-EXESFRKIPL9DSP
80008CFC   R-EXESFRKIPL10DSP
80008D08   R-EXESFRKIPL11DSP
80008D14   R-EXESFRKIPL8DSP
80008D1C   R-EXESFORKDSPTH
80008D40   R-EXESHWCLKINT
80008DA0   R-EXESSWTIMINT
80008E69   R-EXESTIMEOUT
80008F9D   R-SCHSRSE
80008FEA   R-SCHSUNWAIT
8000901C   R-SCHSCHSE

Value   Symbols...
-----   ----------
80009038   R-SCH$CHSEP
800090AE   R-SCH$QEND
8000910B   R-SCH$FORCEDEXIT
80009200   R-SCH$WAKE
80009225   R-SCH$SWPWAKE
80009288   R-SWPSGL_SHELIO
8000928C   R-EXE$BUFFRQUOTA
80009298   R-EXE$BUFQUOPRC
800092AD   R-EXE$SNGLEQUOTA
800092B0   R-EXE$MULTIQUOTA
800092E4   R-EXE$PROBER
8000932D   R-EXE$PROBEW
8000936E   R-EXE$ALLOCBUF
80009372   R-EXE$ALLOCCEB
8000937B   R-EXE$ALLOCJIB
80009384   R-EXE$ALLOCIRP
8000938C   R-EXE$ALLOCPCB
80009394   R-EXE$ALLOCPQB
8000939D   R-EXE$ALLOCTQE
800093DD   R-EXE$ALONPAGWAIT
8000941A   R-EXE$ALONONPAGED
8000948E   R-EXE$ALOPAGED
800094C6   R-EXE$ALLOCATE
80009501   R-EXE$DEANONPAGED
8000950D   R-EXE$DEANONPGDSIZ
8000954B   R-EXE$DEAPAGED
80009596   R-EXE$DEALLOCATE
800095D6   R-EXE$ALOSHARED
800095F3   R-EXE$DEASHARED
80009631   R-EXE$EXTENDPOOL
800097C1   R-SCH$RWAIT
800097C9   R-SCH$LOCKWNOWAIT
800097E1   R-SCH$IOLOCKW
800097E8   R-SCH$LOCKW
800097FB   R-SCH$IOLOCKR
80009802   R-SCH$LOCKR
8000985B   R-SCH$RAVAIL
80009869   R-SCH$IOUNLOCK
80009870   R-SCH$UNLOCK
800098DD   R-SCH$POSTEF
800099C4   R-EXE$CHKWAIT2
80009A40   R-EXE$PROCSTRT
80009A54   R-MPH$RESCHED   R-SCH$RESCHED
80009A74   R-MPH$SCHED   R-SCH$SCHED
80009ACB   R-EXE$SHM_DELETE
80009B3A   R-EXE$BRDCST
80009E28   R-EXE$BRDCSTCOM
80009EFC   R-EXE$DELPRC
80009F4A   R-EXE$CLREF
80009F5A   R-SCH$GETEFC
80009F95   R-SCH$CLREFR
80009F9B   R-SCH$CLREF

Value   Symbols...
-----   -----------
80009FA9   R-EXE$READEF
80009FCD   R-EXE$SETEF
80009FF0   R-EXE$SUSPND
8000A046   R-EXE$RESUME
8000A05B   R-EXE$HIBER
8000A06F   R-EXE$WAKE
8000A080   R-EXE$NAMPID
8000A14B   R-EXE$SETPRN
8000A1C0   R-PFM$MON
8000A247   R-EXE$WFLAND
8000A24E   R-EXE$WFLOR
8000A258   R-EXE$WAITFR
8000A2C9   R-SCH$WAIT
8000A2E4   R-SCH$WAITK
8000A2EF   R-SCH$WAITL
8000A2F0   R-SCH$WAITM
8000A32C   R-LCK$SEARCHDLCK
8000A540   R-LCK$COMPAT_TBL
8000A8A5   R-LCK$REGRANTLOCK
8000AAB9   R-LCK$GRANTCVTS
8000AAF1   R-LCK$GRANTWTRS
8000AB54   R-LCK$DEQLOCK
8000AC98   R-IOC$GETBYTE
8000ACA9   R-IOC$PUTBYTE
8000ACBA   R-IOC$INITBUFWIND
8000ACC1   R-IOC$MOVFRUSER
8000ACC5   R-IOC$MOVFRUSER2
8000ACD2   R-IOC$MOVFRUSER1
8000ACD9   R-IOC$MOVTOUSER
8000ACDD   R-IOC$MOVTOUSER2
8000ACEA   R-IOC$MOVTOUSER1
8000ACF1   R-IOC$FILSPT
8000AD19   R-ERL$DEVICERR
8000AD1D   R-ERL$DEVICTMO
8000ADAA   R-ERL$DEVICEATTN
8000AE23   R-ERL$LOGSTATUS
8000AE95   R-ERL$LOGMESSAGE
8000AEEE   R-ERL$COLDSTART
8000AEF3   R-ERL$WARMSTART
8000AF0A   R-ERL$ALLOCEMB
8000AFAA   R-ERL$RELEASEMB
8000AFD4   R-ERL$WAKE
8000AFF5   R-IOC$CANCELIO
8000B00C   R-IOC$DELMBX
8000B095   R-IOC$DIAGBUFILL
8000B0B8   R-IOC$RELSCHAN
8000B0C2   R-IOC$RELCHAN
8000B105   R-IOC$REQSCHANH
8000B10F   R-IOC$REQSCHANL
8000B119   R-IOC$REQPCHANH
8000B122   R-IOC$REQPCHANL
8000B150   R-IOC$ALTREQCOM

Value   Symbols...
-----   ----------
8000B175   R-IOCSREQCOM
8000B1DA   R-IOCSMNTVER
8000B1E3   R-IOCSINITIATE
8000B20C   R-IOCSREQDATAP
8000B21E   R-IOCSREQDATAPNW
8000B22C   R-IOCSREQDATAPUDA
8000B25E   R-IOCSRELDATAPUDA
8000B26C   R-IOCSRELDATAP
8000B2B9   R-IOCSREQMAPUDA
8000B2CE   R-IOCSREQMAPREGN
8000B2D2   R-IOCSREQMAPREG
8000B30E   R-IOCSALOUBAMAPN
8000B315   R-IOCSALOUBAMAP
8000B37A   R-IOCSALOUBAMAPSP
8000B414   R-IOCSALOUBMAPRMN
8000B41B   R-IOCSALOUBMAPRM
8000B4C3   R-IOCSRELMAPUDA
8000B4E5   R-IOCSRELMAPREG
8000B59D   R-IOCSRETURN
8000B59E   R-IOCSWFIKPCH
8000B5C0   R-IOCSWFIRLCH
8000B5E4   R-IOCSALLOSPT
8000B60B   R-IOCSCVT_DEVNAM
8000B667   R-IOCSBROADCAST
8000B6D8   R-IOCSAPPLYECC
8000B74C   R-IOCSCVTLOGPHY
8000B755   R-IOCSCVTLOGPHYU
8000B777   R-IOCSMAPVBLK
8000B82E   R-IOCSUPDATRANSP
8000B86A   R-IOCSSENSEDISK
8000B875   R-IOCSLOADMBAMAP
8000B8BF   R-IOCSLOADUBAMAPA
8000B8D6   R-IOCSLOADUBAMAP
8000B949   R-IOCSPTETOPFN
8000B95D   R-IOCSLOADUBAMAPN
8000B99C   R-IOCSLUBAUDAMAP
8000BA2D   R-EXESMOUNTVER
8000BD70   R-EXESIPCONTROL
8000BFB9   R-COMSDELATTNAST
8000BFEC   R-COMSFLUSHATTNS
8000C01F   R-COMSPOST
8000C02D   R-COMSDRVDEALMEM
8000C056   R-COMSSETATTNAST
8000C0C3   R-COMSDELCTRLAST
8000C147   R-COMSFLUSHCTRLS
8000C194   R-COMSSETCTRLAST
8000C3FC   R-INISBRK
8000C3FE   R-INISWRITABLE
8000C405   R-INISRDONLY
8000C452   R-PATSA_NONPGD_CODE   R-PATSGL_EXP_NPG1
8000CE0D   R-EXESEXCPTNE
8000CE30   R-EXESCMODEXECX

Value   Symbols...
-----   -----------
8000CE58   R-EXESCMODEXEC
8000CFEA   R-EXESEXCPTN
8000CFF8   R-EXESCMODKRNLX
8000D020   R-EXESCMODKRNL
8000D129   R-EXESFAILURE
8000D131   R-EXESSUCCESS
8000D20F   R-IOCSDISMOUNT
8000D3B0   R-EXESGETACCESS
8000D3FD   R-EXESCHKDELACCES   R-EXESCHKLOGACCES
8000D404   R-EXESCHKCREACCES   R-EXESCHKPHYACCES
8000D40B   R-EXESCHKRDACCES
8000D412   R-EXESCHKWRTACCES
8000D426   R-EXESMAXACMODE
8000D435   R-EXESPROBER_DSC
8000D439   R-EXESPROBEW_DSC
8000D47E   R-EXESIMGFIX
8000D4AD   R-IOCSCREATE_UCB
8000D531   R-IOCSFFCHAN
8000D575   R-IOCSSEARCHGEN
8000D57A   R-IOCSSEARCHALC
8000D57F   R-IOCSSEARCHDEV
8000D765   R-IOCSUNLOCK
8000D777   R-IOCSVERIFYCHAN
8000D7AE   R-LOGSDELETE
8000D7DC   R-LOGSINSLOGN
8000D7E2   R-LOGSINSLOGN_LCK
8000D82E   R-LOGSLOCKR
8000D834   R-LOGSLOCKW
8000D83A   R-LOGSUNLOCK
8000D84F   R-LOGSSEARCHLOG
8000D8B8   R-LOGSHASH
8000D8F4   R-LOGSTRNSLOGNAME
8000D912   R-LOGSTRANSLATE
8000D9A2   R-MMGSIMGRESET
8000DAB8   R-MMGSDALCSTXSCN1
8000DABF   R-MMGSDALCSTXSCN
8000DB42   R-MMGSDALCSTX
8000DB59   R-MMGSALCSTX
8000DB82   R-MMGSALCPHD
8000DC1C   R-RMSRESET
8000DC5D   R-EXESADJWSL
8000DD11   R-MMGSWSPEAKCHK
8000DD3C   R-EXESADJSTK
8000DDA7   R-EXESDACEFC
8000DDCE   R-EXESASCEFC
8000DFB7   R-EXESDLCEFC
8000E2A7   R-EXESASSIGN
8000E4E4   R-EXESSETAST
8000E506   R-EXESDCLAST
8000E54A   R-EXESEXPREG
8000E5A6   R-MMGSCRETVA
8000E5AE   R-EXESCRETVA

Value   Symbols...
-----   ----------
8000E5C9   R-MMGSCRECOM1
8000E5D1   R-MMGSCRECOM2
8000E5D7   R-EXESCNTREG
8000E623   R-MMGSINADRINI
8000E632   R-MMGSRETADRINI
8000E662   R-EXESDELTVA
8000E74A   R-MMGSCREPAG
8000E92C   R-EXESCREPRC
8000EECA   R-EXESCRMPSC
8000EECF   R-EXESMGBLSC
8000EF39   R-EXESASCTIM
8000EFDA   R-EXESBINTIM
8000F1FE   R-EXESNUMTIM
8000F320   R-EXESDCLCMH
8000F363   R-EXESCANEXH
8000F395   R-EXESDCLEXH
8000F814   R-EXESALLOC
8000F8F7   R-EXESDALLOC
8000F992   R-MMGSVFYSECFLG
8000F9EC   R-MMGSGSDMTXULK
8000FA05   R-MMGSDGBLSC1
8000FA0C   R-EXESDGBLSC
8000FB19   R-MMGSGSDSCN
8000FC03   R-MMGSDELGBLWCB
8000FC98   R-EXESFAO
8000FCA5   R-EXESFAOL
8001008B   R-EXESGETCHN
80010094   R-EXESGETDEV
800101A9   R-EXESGETDVI
800104AE   R-EXESGETPTI
800104CE   R-EXESIMGACT
800104D3   R-EXESULWSET
800104DA   R-EXESULKPAG
800104EA   R-EXESLKWSET
800104F1   R-EXESLCKPAG
80010560   R-EXESCRELOG
800105F5   R-EXESDELLOG
800106D7   R-EXESTRNLOG
80010745   R-EXESCREMBX
80010B7B   R-EXESDELMBX
80010BA9   R-EXESPURGWS
80010BE9   R-EXESSETEXV
80010C2C   R-EXESSETRWM
80010C33   R-EXESSETSFM
80010C41   R-EXESSETSWM
80010C61   R-EXESSETPRA
80010C95   R-EXESPOWERAST
80010D06   R-EXESSETPRT
80010D47   R-EXESSNDACC
80010D5A   R-EXESSNDSMB
80010D6D   R-EXESSNDOPR
80010E95   R-EXESSENDMSG

Value   Symbols...
-----   ----------
80010EF3   R-EXEOPRNDERL
80010EF9   R-EXENETNDERL
80010EFF   R-EXE$$NDERR
80010F45   R-EXE$SETOPR
80010FAC   R-EXE$UPDSEC
800110AB   R-MMG$UPDSECA$T
8001111E   R-MMG$SET_BITMAP
80011127   R-MMG$CLR_BITMAP
80011186   R-MMG$ALOSHMPAG
80011292   R-MMG$ALOSHMGSD
8001131D   R-MMG$FREEGSD
80011389   R-MMG$FIND1STGSD
800113B1   R-MMG$FINDSHB
800113E6   R-MMG$GETGSNAM
80011459   R-MMG$CEFTRNLOG
80011462   R-MMG$MBXTRNLOG
8001146B   R-MMG$GSDTRNLOG
80011614   R-MMG$WRITE_GSD
8001161D   R-MMG$READ_GSD
800117DB   R-MMG$FINDGSNOTRN
8001181B   R-MMG$UNIQUEGSD
80011874   R-MMG$SHMTXLK
800118B1   R-MMG$SHMTXULK
800118D2   R-MMG$DELSHMGS
8001197A   R-MMG$ALC_PGFLVBN
800119B7   R-LIB$CVT_DTB
800119BE   R-LIB$CVT_OTB
800119C5   R-LIB$CVT_HTB
80011A32   R-EXE$ENQ
80011BC0   R-EXE$DEQ
80011CC6   R-EXE$EXIT
80011D72   R-EXE$GETMSG
80012068   R-EXE$GETJPI
8001206F   R-EXE$GETSYI
800121B4   R-EXE$GETTIM
800121E1   R-EXE$EXCEPTABLE
80012236   R-EXE$PUTMSG
80012435   R-EXE$RUNDWN
800126CC   R-EXE$SETPFM
80012861   R-PFM$PURGE
800128ED   R-EXE$SETPRV
800129CB   R-EXE$SETSSF
800129E8   R-EXE$SETSTK
80012A3A   R-EXE$UNWIND
80012BBF   R-EXE$SETIME
80012EBE   R-EXE$REFLECT
8001300C   R-EXE$SRCHANDLER
800131F9   R-EXE$SIGTORET
80013222   R-EXE$EXPANDSTK
80013398   R-EXE$EXCMSG
80013539   R-EXE$GQ_SYSDISK
800137F3   R-EXE$PROCIMGACT

Value   Symbols...
-----   ----------
80013887   R-EXESCLI_UTILSRV
800138C1   R-EXESEXIT_IMAGE
800138CE   R-EXESCATCH_ALL
8001396E   R-EXESRMSEXH
800139E5   R-EXESOPEN_MSG
80013B63   R-EXESCLOSE_MSG
80013BF4   R-PATSA_PAGED_CODE
80014AEB   R-MMGSRET_BYT_QUOTA
80015284   R-IACSFIXUP_IAF
800152C3   R-IACSSRCH_SHL_C
800152CF   R-IACSSRCH_SHL_D
80015383   R-IACSFIXUP_ADDR
80015459   R-IACSPRVSHRIMG
80015497   R-IACSRESET_IAF
800166D7   R-EXESIMGSTA
8001688E   R-EXESIMGPURMSG
80016897   R-EXESIMGDELMSG
8001699E   R-EXESPRCPURMSG
800169A7   R-EXESPRCDELMSG
80016B0E   R-PGLSAB_SYSPGL
80016B50   R-EXESSWAPINIT
80016EE9   R-FILSCVTFILNAM
80016FC8   R-FILSOPENFILE
800170EA   R-FILSCACHE_INIT
8001715E   R-FILSCACHE_TRUNC
80017243   R-FILSMOUNT
800172D3   R-FILSFINDFILID
800175DA   R-FILSRDCHKFILHDR
800176B2   R-FILSWRITEVBN
800176B9   R-FILSREADVBN
80017770   R-FILSSTATBLK
80017837   R-FILSRDWRTLBN
80017964   R-MMGSINIWCB
80017A00   R-SWPSGL_SHELLBAS
80018A00   R-MMGSAL_PGDCODEN   R-XDSSGT_WORD_PFN
80018AF8   R-XDSSGT_LONG_PFN
80018CB8   R-XDELIBRK
80018D31   R-XDEL_LOADBASE
80018D5D   R-XDSSGL_XESTRING
80018D61   R-XDSSGL_XFSTRING
80019508   R-XDELBPT
800195A0   R-XDELTBIT
80019676   R-LIBSINS_DECODE
80019D10   R-LIBSGB_OPINFO1
8001A510   R-LIBSGB_OPINFO2
8001AE00   R-LOGSAL_DISKLOG
8001B06C   R-EXESINIT
8001BE5C   R-INISALONONPAGED
8001BEEF   R-MMGSAL_FIXUPTBL
8001C06D   R-PATSA_PFN_FIXUP
8001C075   R-INISA_INILOAVEC   R-INISIOMAP
8001C07C   R-BOOSA_BOOPARAM   R-BOOSGL_DSKDRV   R-EXESA_BOOPARAM

Value   Symbols...
-----   ----------
8001C080   R-BOO$GL_SYSLOA
8001C084   R-BOO$GL_TRMDRV
8001C088   R-BOO$GQ_INILOA
8001C090   R-BOO$GL_NPAGEDYN
8001C094   R-BOO$GL_SPLITADR
8001C098   R-BOO$GL_IRPCNT
8001C09C   R-BOOGL_LRPIZE
8001C0A0   R-BOO$GL_LRPMIN
8001C0A4   R-BOO$GL_LRPSPLIT
8001C0A8   R-BOO$GL_LRPCNT
8001C0AC   R-BOO$GL_SRPSPLIT
8001C0B0   R-BOO$GL_SRPCNT
8001C0B4   R-BOO$GQ_FILCACHE
8001C0BC   R-BOO$GL_BOOTCB
8001C0C0   R-BOO$GT_TOPSYS
8001C0CA   R-BOO$GB_SYSTEMID
8001C0D0   R-BOO$GL_PRTDRV
8001C0D4   R-BOO$GL_UCODE
8001C0D8   R-BOO$GL_SCSLOA
8001C0DC   R-SYS$GT_ANNOUNCE
8001C118   R-IOC$INITDRV
8001C11E   R-IOC$REINITDRV
8001C1B9   R-IOC$RELOC_DDT
8001C200   R-BUG$A_PAGED
8001C734   R-EXE$OUTHEX
8001C74E   R-EXE$OUTBLANK
8001C753   R-EXE$OUTCHAR
8001C7AE   R-EXE$OUTCRLF
8001C7B8   R-EXE$OUTCSTRING
8001C7BD   R-EXE$OUTZSTRING
8001C7CC   R-BUG$T_MESSAGES
8001E9C8   R-BUG$A_PAGEDEND
8001EA00   R-MMG$A_SYS_END
FFFFFE00   VA$M_VPG

                Key for special characters above:
                    +---------------------+
                    | * - Undefined |
                    | U - Universal |
                    | R - Relocatable |
                    | X - External |
                    +---------------------+

```
                                            +------------------+
                                            | Image Synopsis |
                                            +------------------+
```

Virtual memory allocated: 80000000 8001E9FF 0001EA00 (125440. bytes, 245. pages)
Stack size: 0. pages
Image header virtual block limits: 1.   1. (1. block)
Image binary virtual block limits: 2.   246. (245. blocks)
Image name and identification: SYS V03-003
Number of files: 9.
Number of modules: 142.
Number of program sections: 82.
Number of global symbols: 2196.
Number of cross references: 4421.
Number of image sections: 1.
Image type: SYSTEM.
Map format: FULL WITH CROSS REFERENCE in file _DRA7:[SYS.LIS]SYS.MAP;1
Estimated map length: 701. blocks

```
                                            +-----------------------+
                                            | Link Run Statistics |
                                            +-----------------------+
```

Performance Indicators	Page Faults	CPU Time	Elapsed Time
Command processing:	43	00:00:00.50	00:00:02.19
Pass 1:	705	00:00:12.60	00:00:27.96
Allocation/Relocation:	132	00:00:01.19	00:00:02.12
Pass 2:	264	00:00:08.33	00:00:17.59
Map data after object module synopsis:	238	00:00:15.68	00:00:20.25
Symbol table output:	226	00:00:00.66	00:00:02.41
Total run values:	1608	00:00:38.96	00:01:12.52

Using a working set limited to 1005 pages and 770 pages of data storage (excluding image)

Total number object records read (both passes): 5946
     of which 2973 were in libraries and 284 were DEBUG data records containing 12634 bytes

Number of modules extracted explicitly   = 136
     with 6 extracted to resolve undefined symbols

128 library searches were for symbols not in the library searched

A total of 102 global symbol table records was written

/USERLIB=PROC COMS:SYSLNK/OPTIONS/EXE=EXES:SYS/SYSTEM/HEADER/MAP=MAPS:SYS/FULL/CROSS/SYMBOL=EXES:SYS
<_DBB0:[SYS.COM]SYSLNK.OPT;1>
!
!   [S Y S . C O M] S Y S L N K . O P T
!
!   OPTION FILE FOR LINKING THE SYSTEM
!
LIBS:SYS/INCLUDE:(-
       MDAT,PDAT,PMSDAT,SHELL,SDAT,SYSCOMMON,SYSLOAVEC,SCSVEC,-
       ACCOUNT,ALLOCPFN,ASTDEL,BOOPARAM,BUFFERCTL,BUGCHECK,BUGCHKMSG,-
       IOPERFORM,CONSOLIO,CMODSSDSP,CVT_ATB,CVTFILNAM,DEADLOCK,-

```
     DISMOUNT,ERRORLOG,EXCEPTION,EXCEPTMSG,EXSUBROUT,FILEREAD,-
     FILERWIO,FORKCNTRL,GLOBALS,IMGACTSUB,-
     INIT,INITVEC,RELOCDRV,IOCIOPOST,IOLOCK,-
     IOSUBNPAG,IOSUBPAGD,IOSUBRAMS,LOADMREG,LOGNAMSUB,MEMORYALC,MOUNTVER,-
     IPCONTROL,MUTEX,NULLPROC,OSWPSCHED,PAGEFAULT,PAGEFILE,PHDUTL,POSTEF,-
     POWERFAIL,PROCSTRT,RMSRESET,RSE,SCHED,SVAPTE,SWAPPER,-
     SYSPARAM,TIMESCHDL,WRTMFYPAG),-
     RESOBJS:DELTA/INCLUDE:XDELTA, -
     RESOBJS:SDA/INCLUDE:(LIBSINS_DECODE,LIBSVAX_INST),-
     LIBS:SYS/INCLUDE:(SYSADJWSL,SYSADJSTK,SYSACPFDT,-
     SYSASCEFC,SYSASSIGN,SYSASTCON,SYSBRDCST,SYSCANCEL,SYSCANEVT,SYSCHGMOD,-
     SYSCREDEL,SYSCREPRC,SYSCRMPSC,SYSCVRTIM,SYSDASSGN,SYSDCLCMH,SYSDCLEXH,-
     SYSDELPRC,SYSDERLMB,SYSDEVALC,SYSDGBLSC,SYSENQDEQ,SYSEVTSRV,-
     SYSEXIT,SYSFAO,SYSFORCEX,SYSGETDEV,SYSGETMSG,-
     SYSGETJPI,SYSGETPTI,SYSGETSYI,SYSGETTIM,-
     SYSIMGACT,SYSIMGSTA,SYSLKWSET,SYSLOGNAM,SYSMAILBX,SYSPCNTRL,-
     SYSPURGWS,SYSPUTMSG,OPENMSG,SYSQIOFDT,SYSRUNDWN,SYSSCHEVT,-
     SYSQIOREQ,SYSSETEXV,SYSSETMOD,SYSSETPFM,SYSSETPRA,SYSSETPRI,SYSSETPRT,-
     SYSSETPRV,SYSSETSSF,SYSSETSTK,SYSSNDMSG,SYSUNWIND,SYSUPDSEC,-
     SYSWAIT,SYSSETIME,-
     SHMGSDRTN,DRINTHAND,MBAINTDSP,MBDRIVER,NLDRIVER,-
     MTFDT,CONINTDSP,COMDRVSUB,MAHANDLER),-
     RESOBJS:DELTA/INCLUDE:XDSTRING,-
     LIBS:SYS/INCLUDE:(VERSION,-
     DEVICEDAT,-
     MDAT_END)                    ! Last module linked into SYS.EXE
```