



```

LL      IIIIII      000000      SSSSSSSS      UU      UU      BBBB8888      77777777      5555555555      000000
LL      IIIIII      000000      SSSSSSSS      UU      UU      BBBB8888      77777777      5555555555      000000
LL      II        00      00      SS      UU      UU      BB      BB      77      55      00      00
LL      II        00      00      SS      UU      UU      BB      BB      77      55      00      00
LL      II        00      00      SS      UU      UU      BB      BB      77      555555      00      0000
LL      II        00      00      SS      UU      UU      BB      BB      77      555555      00      0000
LL      II        00      00      SSSSSS      UU      UU      BBBB8888      77      55      00      00
LL      II        00      00      SSSSSS      UU      UU      BBBB8888      77      55      00      00
LL      II        00      00      SS      UU      UU      BB      BB      77      55      0000      00
LL      II        00      00      SS      UU      UU      BB      BB      77      55      0000      00
LL      II        00      00      SS      UU      UU      BB      BB      77      55      00      00
LL      II        00      00      SS      UU      UU      BB      BB      77      55      00      00
LL      II        00      00      SS      UU      UU      BB      BB      77      55      00      00
LLLLLLLLLLLL      IIIIII      000000      SSSSSSSS      UUUUUUUUUU      BBBB8888      77      555555      000000
LLLLLLLLLLLL      IIIIII      000000      SSSSSSSS      UUUUUUUUUU      BBBB8888      77      555555      000000

```

```

LL      IIIIII      SSSSSSSS
LL      IIIIII      SSSSSSSS
LL      II        SS
LL      II        SS
LL      II        SS
LL      II        SS
LL      II        SSSSSS
LL      II        SSSSSS
LL      II        SS
LL      II        SS
LL      II        SS
LL      II        SS
LLLLLLLLLLLL      IIIIII      SSSSSSSS
LLLLLLLLLLLL      IIIIII      SSSSSSSS

```

(3) 137 PURGE DATAPATH

```

0000 1 .NOSHOW CONDITIONALS
0000 5
0000 7 .TITLE L10SUB750 - LOADABLE I/O SUBROUTINES
0000 9
0000 13
0000 17
0000 21
0000 22 .IDENT 'V04-000'
0000 23
0000 24
0000 25 *****
0000 26 *
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0000 44 *
0000 45 *
0000 46 *****
0000 47
0000 48 **
0000 49
0000 50 FACILITY:
0000 51
0000 52 EXECUTIVE, I/O CONTROL ROUTINES
0000 53
0000 54 ABSTRACT:
0000 55
0000 56 I/O SUBROUTINES WHICH CONTAIN PROCESSOR DEPENDENCIES.
0000 57
0000 58 AUTHOR:
0000 59
0000 60 N. KRONENBERG, JANUARY 12, 1979.
0000 61
0000 62 MODIFIED BY:
0000 63
0000 64 V03-012 KDM0096 Kathleen D. Morse 27-Mar-1984
0000 65 Add memory CSR scanning to IOC$PURGDATAP for MicroVAX I.
0000 66 (ALL DMA MicroVAX I drivers should call this routine, just
0000 67 before calling IOC$REQCOM.)
0000 68
0000 69 V03-011 KDM0081 Kathleen D. Morse 13-Sep-1983
0000 70 Create a version for Micro-VAX I.
0000 71

```

0000	72	:	V03-010	TCM0004	Trudy C. Matthews	4-Jan-1982
0000	73	:			Added 11/790-specific path to IOC\$PURGDATAP.	
0000	74	:				
0000	75	:	V09	TCM0003	Trudy C. Matthews	9-Nov-1982
0000	76	:			Added a .TITLE statement for LIOSUB790.	
0000	77	:				
0000	78	:	V08	TCM0002	Trudy C. Mathews	29-Jul-1981
0000	79	:			Changed all '7ZZ's to '730's.	
0000	80	:				
0000	81	:	V07	TCM0001	Trudy C. Matthews	28-Feb-1980
0000	82	:			Changed IOC\$PURGDATAP for NEBULA so that it logs	
0000	83	:			the Unibus Error Summary register itself when there	
0000	84	:			are Unibus errors reported.	
0000	85	:				
0000	86	:	V06	NPK0002	N. KRONENBERG	4-DEC-1979
0000	87	:			REPLACED IOC\$PURGDATAP FOR NEBULA	
0000	88	:				
0000	89	:	V05	NPK0001	N. KRONENBERG	23-AUG-1979
0000	90	:			CORRECTED 11/750 CHECK FOR PURGE DONE.	
0000	91	:				
0000	92	:	V04	TCM0001	Trudy C. Matthews	3-Jul-1979
0000	93	:			Modified IOC\$PURGDATAP for NEBULA.	
0000	94	:				
0000	95	:				

```
0000 97 :  
0000 98 : MACRO LIBRARY CALLS:  
0000 99 :  
0000 100 $ADPDEF ; Define ADP offsets  
0000 101 $CRBDEF ; Define CRB offsets  
0000 102 $EMBETDEF ; Define error types.  
0000 103 $SEMBUEDEF ; Define Unibus Error buffer.  
0000 104 $IDBDEF ; Define IDB offsets  
0000 105 $PRDEF ; Define IPR'S  
0000 106 $UBADEF ; Define UBA offsets  
0000 107 $UBIDEF ; Define UBI offsets  
0000 108 $UCBDEF ; Define UCB offsets  
0000 109 $VECDEF ; Define CRB/VEC offsets  
0000 110  
0000 111  
00000000 0000 117 C780_LIKE = 0  
00000001 0000 118 C750_LIKE = 1  
0000 120  
0000 125  
0000 130  
0000 135
```

```

0000 137      .SBTTL  PURGE DATAPATH
0000 138      :+
0000 139      : IOC$PURGDATAP - PURGE DATAPATH
0000 140      :
0000 141      : This routine purges the caller's buffered datapath, and clears any
0000 142      : datapath errors.  if there was a datapath error, this fact is
0000 143      : returned to the caller.
0000 144      :
0000 145      : INPUTS:
0000 146      :
0000 147      :     R5 = UCB address
0000 148      :
0000 149      : OUTPUTS:
0000 150      :
0000 151      :     R0-R3 altered
0000 152      :     Other registers preserved
0000 153      :     R0 = low bit clear/set if transmission error/success
0000 154      :     R1 = DPR contents after purge (for register dump by caller)
0000 155      :     R2 = address of start of adapter map registers (for reg dump by caller)
0000 156      :     R3 = CRB address
0000 157      :-
0000 158      :
0000 159      .PSECT  WIONONPAGED
0000 160      :
0000 161      .ENABL  LSB
0000 162      :
0000 163      IOC$PURGDATAP::
0000 164      :
0000 165      :
0000 166      :
0000 167      :
0000 168      :
53  24  A5  BB 0000 188      PUSHR   #*M<R4>                ; Save register
52  38  B3  DO 0002 189      MOVL    UCBSL_CRB(R5),R3          ; Get CRB address
000A 190      MOVL    @CRB$C_INTD+VECSL_ADP(R3),R2 ; Get start of adapter register space
000A 191      :
000C 192      EXTZV   #VECSV_DATAPATH,-      ; Extract datapath #
000D 193      : #VECSS_DATAPATH,-          ; from CRB
0010 194      MOVAL   CRBSL_INTD+VECSB_DATAPATH(R3),R1
64  54  6241 DE 0010 195      MOVAL   UBISL_DPR(R2)[R1],R4      ; Get address of DPR
01  00  78  DO 0014 196      ASHL    #UBISV_DPR_PUR,#1,(R4)    ; Purge datapath
50  0A  DO 0018 197      MOVL    #UBISC_PURCNT,R0          ; Get max # of tries for
001B 198      : ; purge done test
07  51  64  DO 001B 199 10$: MOVL    (R4),R1                ; Get DPR contents
51  00  E1  DO 001E 200      BBC     #UBISV_DPR_PUR,R1,15$     ; Branch if purge done
F6  50  F5  DO 0022 201      SOBGTR  R0,10$                 ; Branch if more tries allowed
0025 202      BUG_CHECK BDPPURGERR,FATAL ; else, fatal error (purge state
0029 203      : ; stuck on)
07  51  1F  E1 0029 204 15$: BBC     #UBISV_DPR_ERROR,R1,20$   ; Branch if no error
64  00  D2  DO 002D 205      MCOML   #0,(R4)                ; Clear DPR error(s)
50  D4  DO 0030 206      CLRL    R0                      ; Set to return transfer error
03  11  DO 0032 207      BRB     30$                    ; Join common code
50  01  9A  DO 0034 208 20$: MOVZBL  #1,R0                      ; Set to return transfer success
52  0800 C2 DE 0037 209 30$: MOVAL   UBISL_MAP(R2),R2        ; Return address of 1st map register
003C 210      :
003C 211      POPR    #*M<R4>                ; Restore register
05  003E 212      RSB                      ; Return
003F 214      :
003F 263      :
003F 297      :

```

L10SUB750  
V04-000

- LOADABLE I/O SUBROUTINES  
PURGE DATAPATH

H 2

16-SEP-1984 00:50:11 VAX/VMS Macro V04-00  
5-SEP-1984 04:10:05 [SYSLOA.SRC]L10SUB.MAR;1

Page 5  
(3)

L10  
V04

003F 298 .DSABL LSB  
003F 299  
003F 300 .END



```

BUG$_BDPPURGERR      = ***** X 02
C750-LIKE            = 00000001
C780-LIKE            = 00000000
CPU TYPE             = 00000002
CRBSL_INTD           = 00000024
IOCSPORGDATAP       = 00000000 RG 02
PRS_SID_TYP730       = 00000003
PRS_SID_TYP750       = 00000002
PRS_SID_TYP780       = 00000001
PRS_SID_TYP790       = 00000004
PRS_SID_TYPUV1       = 00000007
UBISC_PORCNT         = 0000000A
UBISL_DPR             = 00000000
UBISL_MAP            = 00000800
UBISV_DPR_ERROR      = 0000001F
UBISV_DPR_PUR        = 00000000
UCBSL_CRB            = 00000024
VECSB_DATAPATH       = 00000013
VECSL_ADP            = 00000014
VECSS_DATAPATH       = 00000005
VECSV_DATAPATH       = 00000000
    
```

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

PSECT name	Allocation	PSECT No.	Attributes
. ABS	00000000 ( 0.)	00 ( 0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
\$AB\$\$	00000000 ( 0.)	01 ( 1.)	NOPIC USR CON ABS LCL NOSHR EXE RD WRT NOVEC BYTE
WIONONPAGED	0000003F ( 63.)	02 ( 2.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE

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

Phase	Page faults	CPU Time	Elapsed Time
Initialization	36	00:00:00.03	00:00:03.45
Command processing	130	00:00:00.47	00:00:03.65
Pass 1	272	00:00:04.95	00:00:20.80
Symbol table sort	0	00:00:00.76	00:00:03.38
Pass 2	45	00:00:00.98	00:00:06.18
Symbol table output	4	00:00:00.03	00:00:00.03
Psect synopsis output	1	00:00:00.00	00:00:00.14
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	490	00:00:07.22	00:00:37.63

The working set limit was 1350 pages.  
44457 bytes (87 pages) of virtual memory were used to buffer the intermediate code.  
There were 50 pages of symbol table space allocated to hold 774 non-local and 4 local symbols.  
304 source lines were read in Pass 1, producing 13 object records in Pass 2.  
18 pages of virtual memory were used to define 17 macros.

-----  
! Macro library statistics !  
-----

Macro library name	Macros defined
-----	-----
_\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	10
-\$255\$DUA28:[SYSLIB]STARLET.MLB;2	4
TOTALS (all libraries)	14

869 GETS were required to define 14 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:LIOSUB750/OBJ=OBJ\$:LIOSUB750 MSRC\$:CPUSW750/UPDATE=(ENH\$:CPUSW750)+MSRC\$:LIOSUB/UPDATE=(ENH\$:LIOSUB)+EXECMLS/LIB

