


```

PPPPPPP      AAAAAA      TTTTTTTTTT      AAAAAA      BBBB8888      LL      EEEEEEEEEEE      SSSSSSSS
PPPPPPP      AAAAAA      TTTTTTTTTT      AAAAAA      88888888      LL      EEEEEEEEEEE      SSSSSSSS
PP      PP      AA      AA      TT      AA      AA      BB      BB      LL      EE      SS
PP      PP      AA      AA      TT      AA      AA      BB      BB      LL      EE      SS
PP      PP      AA      AA      TT      AA      AA      BB      BB      LL      EE      SS
PP      PP      AA      AA      TT      AA      AA      BB      BB      LL      EE      SS
PPPPPPP      AA      AA      TT      AA      AA      88888888      LL      EEEEEEEEE     SSSSSS
PPPPPPP      AA      AA      TT      AA      AA      88888888      LL      EEEEEEEEE     SSSSSS
PP      AAAAAAAAAA      TT      AAAAAAAAAA      BB      BB      LL      EE      SS
PP      AAAAAAAAAA      TT      AAAAAAAAAA      BB      BB      LL      EE      SS
PP      AA      AA      TT      AA      AA      BB      BB      LL      EE      SS
PP      AA      AA      TT      AA      AA      BB      BB      LL      EE      SS
PP      AA      AA      TT      AA      AA      88888888      LLLLLLLLLL      EEEEEEEEEEE      SSSSSSSS
PP      AA      AA      TT      AA      AA      88888888      LLLLLLLLLL      EEEEE?EEEE     SSSSSSSS

```

```

LL      I11111      SSSSSSSS
LL      I11111      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
LL      I11111      SSSSSSSS
LL      I11111      SSSSSSSS

```

PATABLES
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DEFINITIONS
DRIVER PROLOGUE TABLE
DRIVER DISPATCH TABLE
FUNCTION DECISION TABLE

```
0000 1 .TITLE PATABLES.
0000 2 .IDENT 'V04-000'
0000 3
0000 4 :*****
0000 5 :*
0000 6 :* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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0000 22 :* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0000 23 :*
0000 24 :*
0000 25 :*****
0000 26 :
0000 27 :++
0000 28 :
0000 29 : FACILITY:
0000 30 :
0000 31 : VAX/VMS EXECUTIVE, I/O DRIVERS
0000 32 :
0000 33 : ABSTRACT: THIS MODULE CONTAINS THE DRIVER PROLOGUE TABLE,
0000 34 : DRIVER DISPATCH TABLE, AND FUNCTION DECISION TABLE.
0000 35 :
0000 36 : AUTHOR: N. KRONENBERG, JUNE 1981
0000 37 :
0000 38 : MODIFIED BY:
0000 39 :
0000 40 : V03-006 NPK3057 N. Kronenberg 23-Jul-1984
0000 41 : Change retry count from 10. to 50.
0000 42 :
0000 43 : V03-005 NPK3029 N. Kronenberg 22-Jul-1983
0000 44 : Change retry count from 3 to 10.
0000 45 :
0000 46 : V03-004 KTA3046 Kerbey T. Altmann 03-Apr-1983
0000 47 : Add $DEVDEF and $SSDEF.
0000 48 :
0000 49 : V03-003 ROW0099 Ralph O. Weber 8-JUN-1982
0000 50 : Add error log buffer size and register dump routine entries
0000 51 : in the DDTAB macro.
0000 52 : This change will be in a new driver image shipped in V3.1.
0000 53 :
0000 54 : V03-002 NPK2019 N. Kronenberg 6-Apr-1982
0000 55 : Make start I/O routine return ill function code instead
0000 56 : of bugcheck.
0000 57 :
```

PATABLES
V04-000

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5-SEP-1984 00:17:04

VAX/VMS Macro V04-00
[DRIVER.SRC]PATABLES.MAR;1

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PU
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0000 58 :
0000 59 :
0000 60 :
0000 61 :--

V03-001 NPK2016 N. Kronenberg
Fixed .TITLE

18-Mar-1982

DEFINITIONS

```
0000 63      .SBTTL  DEFINITIONS
0000 64
0000 65
0000 66  ::
0000 67  :: System definitions (LIB.MLB):
0000 68  ::
0000 69
0000 70      $CRBDEF      ;Channel Request Block offsets
0000 71      $DCDEF      ;Device type codes
0000 72      $DDBDEF     ;Device Data Block offsets
0000 73      $DEVDEF     ;Device definitions
0000 74      $DPTDEF     ;Driver Prologue Table offsets
0000 75      $DYNDEF     ;Dynamic block types
0000 76      $IPLDEF     ;IPL definitions
0000 77      $PDTDEF     ;Port Descriptor Table offsets
0000 78      $UCBDEF     ;Unit Control Block offsets
0000 79      $SSDEF      ;System service success codes
0000 80      $VECDEF     ;CRB transfer vector blk offsets
0000 81
0000 82  ::
0000 83  :: PADRIVER definitions (PALIB.MLB):
0000 84  ::
0000 85
0000 86      $PAPDTDEF    ;CI extension to PDT
0000 87      $PAREGDEF   ;CI port register definitions
0000 88      $PAUCBDEF   ;CI extension to UCB
0000 89
```

DRIVER PROLOGUE TABLE

```

0000 91 .SBTTL DRIVER PROLOGUE TABLE
0000 92
0000 93 DPTAB END=PA$END,- ;End of driver label
0000 94 ADAPTER=CI,- ;Adapter type
0000 95 UCBSIZE=UCB$C_PASIZE,- ;UCB size
0000 96 NAME=PAD$DRIVER,- ;Driver name
0000 97 FLAGS=<DPT$M_SCS!DPT$M_NOUNLOAD> ;Driver requires SCS load
0038 98 ; and cannot be reloaded
0038 99
0038 100 DPT_STORE INIT
0038 101
0038 102 DPT_STORE UCB,UCB$B_FIPL,B,IPL$SCS ;Fork IPL
003C 103
003C 104 DPT_STORE UCB,UCB$L_DEVCHAR,L,<- ;Device characteristics:
003C 105 DEV$M_SHRT,- ; Sharable
003C 106 DEV$M_AVL!,- ; Available
003C 107 DEV$M_ELG!,- ; Error logging device
003C 108 DEV$M_IDV!,- ; Input device
003C 109 DEV$M_ODV> ; Output device
0043 110
0043 111 DPT_STORE UCB,UCB$B_DIPL,B,20 ;Device interrupt IPL
0047 112 DPT_STORE UCB,UCB$B_DEVCLASS,B,- ;Device class =
0047 113 DC$BUS ; bus
004B 114 DPT_STORE UCB,UCB$B_ERTMAX,B,50 ;Retry count is 50 times
004F 115 DPT_STORE UCB,UCB$B_ERTCNT,B,50 ; without reboot of system
0053 116
0053 117 DPT_STORE REINIT
0053 118
0053 119 DPT_STORE DDB,DOB$D_DDT,D,PA$DDT ;DDT address
0058 120 DPT_STORE CRB,CRB$D_INTD+4,- ;Interrupt routine addr
0058 121 D,PA$INT ;
005D 122 DPT_STORE CRB,CRB$D_INTD+VEC$D_INITIAL,- ;
005D 123 D,PA$CTLINIT ;Controller init addr
0062 124 DPT_STORE CRB,CRB$D_INTD+VEC$D_UNITINIT,- ;
0062 125 D,PA$UNITINIT ;Unit init addr
0067 126 DPT_STORE CRB,CRB$D_TOUTROUT,- ;Periodic wake up routine
0067 127 D,CNF$TIMER ;
006C 128 DPT_STORE END ;

```

DRIVER DISPATCH TABLE

```

0000 130      .SBTTL DRIVER DISPATCH TABLE
0000 131
0000 132
0000 133      DDTAB DEVNAM=PA,-
0000 134          START=FATAL_QIO,-           ;QIO's are illegal temporarily
0000 135          FUNCTB=PA$FONCTABLE,-       ;Function decision table
0000 136          UNITINIT=PA$UNITINIT,-     ;Unit init routine addr
0000 137          ERLGBF=ELOG$K_BYTES,-      ;Size of the error log buffer
0000 138          -                          ;(for device attention errors)
0000 139          REGDMP=ELOG$REGDUMP        ;Register dump rout. addr.
0038 140
0038 141      :
0038 142      : No START I/O's possible:
0038 143      :
0038 144
0038 145      FATAL_QIO:
0038 146
50  00F4 8F  3C 0038 147      MOVZWL #SS$_ILLIOFUNC,R0      ; If ever get here, then
      51  D4  003D 148      CLRL R1                ; return error to caller
      003F 149      REQCOM                ; QIO

```


FUNCTION DECISION TABLE

```
0045 151 .SBTTL FUNCTION DECISION TABLE
0045 152
0045 153 PAS$FUNCTABLE:
0045 154
0045 155 FUNCTAB , - ;Valid functions:
0045 156 <> ;None at present
004D 157
004D 158 FUNCTAB , - ;Buffered functions:
004D 159 <>
0055 160
0055 161
0055 162
0055 163
0055 164
0055 165 .END
```

PATABLES
Symbol table

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5-SEP-1984 00:17:04 [DRIVER.SRC]PATABLES.MAR;1

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\$\$\$	= 00000020	R	02	PA_PIC	00000924
\$\$\$CURSIZ	= 000001C4			PA_PMC	00000004
\$\$\$NEWSIZ	= 000001D0			PA_PPR	00000940
\$\$OP	= 00000002			PA_PQBBR	00000904
ATS CI	= 00000004			PA_PS	00000900
CNF\$TIMER	*****	X	02	PA_PSR	00000918
CRBSL_INTD	= 00000024			PDT\$B_DQIMAP	00000154
CRBSL_TOUTROUT	= 0000001C			PDT\$B_HSHUT DG	000001B0
DCS_BOS	= 00000080			PDT\$B_MAX_PORT	0000017C
DDBSL_DDT	= 0000000C			PDT\$B_NXT_PORT	0000017E
DEVSM_AVL	= 00040000			PDT\$B_PO_CBSTS	00000180
DEVSM_ELG	= 00400000			PDT\$B_P1_LBSTS	00000181
DEVSM_IDV	= 04000000			PDT\$B_PLOGMAP	00000134
DEVSM_ODV	= 08000000			PDT\$B_PORTMAP	00000114
DEVSM_SHR	= 00010000			PDT\$B_PORT_NUM	0000017D
DPTSC_LENGTH	= 00000038			PDT\$B_REQIDPS	0000017F
DPTSC_VERSION	= 00000004			PDT\$C_LENGTH	= 000000E4
DPT\$INITAB	00000038	R	02	PDT\$C_PAREGBASE	000000E4
DPT\$M_NOUNLOAD	= 00000004			PDT\$C_PAREGEND	00000110
DPT\$M_SCS	= 00000008			PDT\$C_PQB	= 000001E0
DPT\$REINITAB	00000053	R	02	PDT\$L_CNF	000000E4
DPT\$TAB	00000000	R	02	PDT\$L_CQ0	000000F0
DYN\$C_CRB	= 00000005			PDT\$L_CQ1	000000F4
DYN\$C_DDB	= 00000006			PDT\$L_DFQ	000000FC
DYN\$C_DPT	= 0000001E			PDT\$L_DFQHDR	00000208
DYN\$C_UCB	= 00000010			PDT\$L_DGHDRSZ	00000190
ELOG\$R_BYTES	*****	X	03	PDT\$L_DGNETHD	00000194
ELOG\$REGDUMP	*****	X	03	PDT\$L_DQELOGOUT	000002E0
FATAL_QIO	00000038	R	03	PDT\$L_GPTBASE	0000022C
FUNCTAB_LEN	= 00000010			PDT\$L_GPTLEN	00000230
IOCSMNTVER	*****	X	03	PDT\$L_LBDG	00000184
IOCSREQCOM	*****	X	03	PDT\$L_MFQ	00000100
IOCSRETURN	*****	X	03	PDT\$L_MFQHDR	0000020C
IPL\$SCS	= 00000008			PDT\$L_MQELOGOUT	00000320
MASKR	= 00000000			PDT\$L_MTC	00000104
MASKL	= 00000000			PDT\$L_P FAR	00000108
PAS\$CTINIT	*****	X	02	PDT\$L_PMC	000000E8
PAS\$DDT	00000000	RG	03	PDT\$L_POLLERDUE	0000018C
PAS\$END	*****	X	02	PDT\$L_POOLDUE	00000188
PAS\$FUNCTABLE	00000045	R	03	PDT\$L_PPR	0000010C
PAS\$INT	*****	X	02	PDT\$L_PS	000000EC
PAS\$UNITINIT	*****	X	02	PDT\$L_PSR	000000F8
PA_CNF	00000000			PDT\$L_SPTBASE	00000224
PA_CQ0	00000908			PDT\$L_SPTLEN	00000228
PA_CQ1	0000090C			PDT\$L_VBDT	0000021C
PA_CQ2	00000910			PDT\$L_VPQB	00000218
PA_CQ3	00000914			PDT\$Q_COMQ2	000001F0
PA_DFQ	00000928			PDT\$Q_COMQ3	000001F8
PA_MADR	00000014			PDT\$Q_COMQBASE	000001E0
PA_MDATR	00000018			PDT\$Q_COMQH	000001E8
PA_MFQ	0000092C			PDT\$Q_COMQL	000001E0
PA_MTC	00000930			PDT\$Q_DFREQ	000001D0
PA_MTEC	00000934			PDT\$Q_FORMPB	00000174
PA_PDC	00000920			PDT\$Q_MFREQ	000001D8
PA_PEC	0000091C			PDT\$Q_RSPQ	00000200
PA_PESR	0000093C			PDT\$Q_TEMP_RSPQ	0000019C
PA_P FAR	00000938			PDT\$W_BDTLEN	00000220

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PATABLES
Symbol table

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```

PDT$W_DQELN      00000210
PDT$W_LPRT STS   00000110
PDT$W_MQELN      00000214
PDT$W_PBCOUNT    00000112
PDT$W_STGDYN     00000198
PDT$W_STDGUSED   0000019A
SIZ...           = 00000001
SS$ ILLIOFUNC    = 000000F4
UCB$B_DEVCLASS   = 00000040
UCB$B_DIPL       = 0000005E
UCB$B_ERTCNT     = 00000080
UCB$B_ERTMAX     = 00000081
UCB$B_FIPL       = 0000000B
UCB$B_LMERTCNT   000000D2
UCB$B_LMERTMAX   000000D3
UCB$B_LMEST      000000D0
UCB$B_LMET       000000D1
UCB$C_PASIZE     = 000001B4
UCB$K_ERRDGBYTS = 000000B4
UCB$K_LMPKTBYTS = 00000040
UCB$L_CICMD      000000F0
UCB$L_DEVCHAR    = 00000038
UCB$L_DPC        = 0000009C
UCB$L_MSGFKBLK   000000A0
UCB$N_LSADDR     000000D8
UCB$N_LSID       000000DE
UCB$N_RSADDR     000000E4
UCB$N_RSID       000000EA
UCB$T_MSGDATA    000000F8
UCB$T_OPAO TEMP  000000B8
UCB$W_LMERRCNT   000000D4
UCB$W_MSGBYTCNT 000000F4
UCB$W_MSGPPDTYP 000000F6
VEC$L_INITIAL    = 0000000C
VEC$L_UNITINIT   = 00000018
  
```

↑-----↑
! Psect synopsis !
↑-----↑

PSECT name	Allocation	PSECT No.	Attributes
. ABS .	00000000 (0.)	00 (0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
\$ABSS	00000944 (2372.)	01 (1.)	NOPIC USR CON ABS LCL NOSHR EXE RD WRT NOVEC BYTE
\$\$\$105_PROLOGUE	0000006D (109.)	02 (2.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE
\$\$\$115_DRIVER	00000055 (85.)	03 (3.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC LONG

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

Phase	Page faults	CPU Time	Elapsed Time
Initialization	35	00:00:00.07	00:00:00.34
Command processing	133	00:00:00.50	00:00:04.46
Pass 1	418	00:00:11.75	00:00:38.66
Symbol table sort	0	00:00:01.67	00:00:04.79

Pass 2	48	00:00:01.75	00:00:05.63
Symbol table output	18	00:00:00.10	00:00:00.23
Psect synopsis output	2	00:00:00.02	00:00:00.02
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	656	00:00:15.87	00:00:54.13

The working set limit was 1650 pages.
91602 bytes (179 pages) of virtual memory were used to buffer the intermediate code.
There were 90 pages of symbol table space allocated to hold 1619 non-local and 0 local symbols.
165 source lines were read in Pass 1, producing 15 object records in Pass 2.
31 pages of virtual memory were used to define 27 macros.

! Macro library statistics !

Macro library name	Macros defined
-\$255\$DUA28:[DRIVER.OBJ]PALIB.MLB;1	3
-\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	14
-\$255\$DUA28:[SYSLIB]STARLET.MLB;2	8
TOTALS (all libraries)	25

1981 GETS were required to define 25 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LISS:PATABLES/OBJ=OBJ\$:PATABLES MSRC\$:PATABLES/UPDATE=(ENH\$:PATABLES)+EXECMLS/LIB+LIB\$:PALIB.MLB/LIB

0115 AH-BT13A-SE
VAX/VMS V4.0

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