



```

TTTTTTTTT1  TTTTTTTTTT  YY      YY  DDDDDDDD  RRRRRRRR  VV      VV  DDDDDDDD  AAAAAA  TTTTTTTTTT
TTTTTTTTT1  TTTTTTTTTT  YY      YY  DDDDDDDD  RRRRRRRR  VV      VV  DDDDDDDD  AAAAAA  TTTTTTTTTT
      TT      TT      YY      YY  DD      DD  RR      RR  DD      DD  AA      AA  TT      TT
      TT      TT      YY      YY  DD      DD  RR      RR  DD      DD  AA      AA  TT      TT
      TT      TT      YY      YY  DD      DD  RR      RR  DD      DD  AA      AA  TT      TT
      TT      TT      YY      YY  DD      DD  RR      RR  DD      DD  AA      AA  TT      TT
      TT      TT      YY      YY  DD      DD  RR      RR  DD      DD  AA      AA  TT      TT
      TT      TT      YY      YY  DD      DD  RR      RR  DD      DD  AA      AA  TT      TT
      TT      TT      YY      YY  DD      DD  RR      RR  DD      DD  AA      AA  TT      TT
      TT      TT      YY      YY  DD      DD  RR      RR  DD      DD  AA      AA  TT      TT
      TT      TT      YY      YY  DD      DD  RR      RR  DD      DD  AA      AA  TT      TT
      TT      TT      YY      YY  DD      DD  RR      RR  DD      DD  AA      AA  TT      TT
      TT      TT      YY      YY  DD      DD  RR      RR  DD      DD  AA      AA  TT      TT
      TT      TT      YY      YY  DD      DD  RR      RR  DD      DD  AA      AA  TT      TT
      TT      TT      YY      YY  DD      DD  RR      RR  DD      DD  AA      AA  TT      TT
      TT      TT      YY      YY  DD      DD  RR      RR  DD      DD  AA      AA  TT      TT
      TT      TT      YY      YY  DD      DD  RR      RR  DD      DD  AA      AA  TT      TT
      TT      TT      YY      YY  DD      DD  RR      RR  DD      DD  AA      AA  TT      TT
      TT      TT      YY      YY  DD      DD  RR      RR  DD      DD  AA      AA  TT      TT
      TT      TT      YY      YY  DD      DD  RR      RR  DD      DD  AA      AA  TT      TT
      TT      TT      YY      YY  DD      DD  RR      RR  DD      DD  AA      AA  TT      TT
      TT      TT      YY      YY  DD      DD  RR      RR  DD      DD  AA      AA  TT      TT

```

....
....
....
....

```

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
LLLLLLLLLL IIIIII SSSSSSSS
LLLLLLLLLL IIIIII SSSSSSSS

```

(2)	138	Declarations
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```

0000 1 .TITLE TTYDRV DAT - Terminal driver data base module
0000 2 .IDENT 'V04-001'
0000 3
0000 4
0000 5 *****
0000 6 *
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0000 24 *
0000 25 *
0000 26 *****
0000 27
0000 28 **
0000 29 FACILITY:
0000 30
0000 31 VAX/VMS TERMINAL DRIVER
0000 32
0000 33 ABSTRACT:
0000 34
0000 35 TERMINAL DRIVER DATA BASE
0000 36
0000 37 AUTHOR:
0000 38
0000 39 R.HEINEN 14-JUN-1977
0000 40
0000 41 Enhancement Revision history:
0000 42
0000 43 V04-001 MIR1100 Michael I. Rosenblum 7-Sep-1984
0000 44 The multinational set in the Type table did not conform
0000 45 to that specified in the VT200 series terminals.
0000 46 This was fixed.
0000 47
0000 48 V03-022 LMP0275 L. Mark Pilant, 12-Jul-1984 21:03
0000 49 Initialize the ACL info in the ORB to be a null descriptor
0000 50 list rather than an empty queue. This avoids the overhead
0000 51 of locking and unlocking the ACL mutex, only to find out
0000 52 that the ACL was empty.
0000 53
0000 54 V03-021 MIR0450 Michael I. Rosenblum 27-Jun-1984
0000 55 Make the read verify array correspond with that in FMS and
0000 56 TDMS as far as multinational is concerned.
0000 57

```

0000	58	:	V03-020	EMD0098	Ellen M. Dusseault	14-May-1984
0000	59	:			Add dev\$m_nnm characteristic to DEVCHAR2 so that these	
0000	60	:			devices will have the 'node\$' prefix.	
0000	61	:				
0000	62	:	V03-019	LMP0221	L. Mark Pilant,	7-Apr-1984 13:38
0000	63	:			Change UCBS\$L_OWNUIC to ORBS\$L_OWNER and UCBS\$W_VPROT to	
0000	64	:			ORBS\$W_PROT.	
0000	65	:				
0000	66	:	V03-018	RKS0018	RICK SPITZ	05-MAR-1984
0000	67	:			Do not set template bit in VTA0 UCB to prevent	
0000	68	:			assign from creating new UCBs when it is referenced.	
0000	69	:				
0000	70	:	V03-017	MIR0310	Michael I. Rosenblum	09-Feb-1984
0000	71	:			Put a turn off attributes sequence in the DECcrt commands	
0000	72	:			To allow terminals that don't correctly handle Save and	
0000	73	:			Restore to be able to use the new strings.	
0000	74	:				
0000	75	:	V03-016	MIR0300	Michael I. Rosenblum	30-Jan-1984
0000	76	:			add input fallback table to tables	
0000	77	:			remove recall key.	
0000	78	:				
0000	79	:	V03-015	MIR0080	Michael I. Rosenblum	15-Jul-1983
0000	80	:			Restructure module and add 8bit support to read verify	
0000	81	:			table.	
0000	82	:				
0000	83	:	V03-014	MIR0051	Michael I. Rosenblum	23-Jun-1983
0000	84	:			Change default lk201 key definitions.	
0000	85	:			Make fallback table smaller and remove the multi character	
0000	86	:			expansions. Move fallback table into terminal driver generic	
0000	87	:			tables.	
0000	88	:				
0000	89	:	V03-013	RKS0013	RICK SPITZ	4-JUN-1983
0000	90	:			Add support for detached terminal template UCB	
0000	91	:				
0000	92	:	V03-012	JLV0256	Jake VanNoy	23-MAY-1983
0000	93	:			Add extra pointers to allow table-driven multiecho.	
0000	94	:				
0000	95	:	V03-011	MIR0049	Michael I. Rosenblum	06-May-1983
0000	96	:			Add fallback presentation table macro.	
0000	97	:				
0000	98	:	V03-010	MIR0030	Michael I. Rosenblum	30-Mar-1983
0000	99	:			Add Verification array for read verification. Add eight	
0000	100	:			bit support and common escape escape sequence optimization	
0000	101	:			tables. Also change messages for the echoing control characters	
0000	102	:			to reflect the new lk201 definitions, add dec crt messages	
0000	103	:			and regis messages. Put in alternate echo string support.	
0000	104	:				
0000	105	:				
0000	106	:	V03-009	MIR0029	Michael I. Rosenblum	21-Mar-1983
0000	107	:			Add code to handle overstrike mode and non-termination	
0000	108	:			on unusual terminators.	
0000	109	:				
0000	110	:	V03-008	MIR4026	Michael I. Rosenblum	09-Mar-1983
0000	111	:			Remove character input restriction from the TAB key.	
0000	112	:				
0000	113	:	V03-007	MIR0026	Michael I. Rosenblum	15-Feb-1983
0000	114	:			Add data to handle the new type of reads. This includes	

```
0000 115 : enhancements to the input character dispatcher.
0000 116 :
0000 117 : V03-006 MIR0017 Michael I. Rosenblum 05-Jan-1983
0000 118 : Add CLASS_POWERFAIL entry point.
0000 119 :
0000 120 : V03-005 MIR0015 Michael I. Rosenblum 20-Dec-1982
0000 121 : Add CLASS_FORK and CLASS_DISCONNECT class entry points.
0000 122 :
0000 123 : V03-004 MIR0013 Michael I. Rosenblum 16-Dec-1982
0000 124 : Fix up references to new ucb structure
0000 125 :
0000 126 : V03-003 MIR0011 Michael I. Rosenblum 18-Nov-1982
0000 127 : Change all strings to be counted strings.
0000 128 : Remove all strings for holdscreen.
0000 129 : Add TTY$A_ANSI_DEOL which contains the ANSI escape sequence
0000 130 : that will go to the beginning of the line and clear to the end
0000 131 : of the line.
0000 132 :
0000 133 : V03-002 KDM0002 Kathleen D. Morse 28-Jun-1982
0000 134 : Added $DYNDEF.
0000 135 :
0000 136 :--
```

```
0000 138          .SBTTL  Declarations
0000 139
0000 140          :
000C 141          : EXTERNAL DEFINITIONS
0000 142          :
0000 143          $DDBDEF          : DEFINE DDB OFFSETS
0000 144          $DYNDEF          : DEFINE DYNAMIC DATA STRUCTURE TYPES
0000 145          $IODEF          : DEFINE I/O FUNCTION CODES
0000 146          $ORGBDEF        : DEFINE OBJECT'S RIGHTS BLOCK OFFSETS
0000 147          $TTYDEF          : DEFINE TERMINAL DRIVER SYMBOLS
0000 148          $TTDEF          : DEFINE TERMINAL CHARACTERISTICS
0000 149          $UCBDEF          : DEFINE UCB
0000 150          $VECDEF          : DEFINE VECTOR FOR CRB
0000 151          $TTYDEFS        : DEFINE TERMINAL DEFINITIONS
00000000 152          .PSECT $$$115_DRIVER, LONG
```

```
.sbttl autobaud tables
0000 154
0000 155
0000 156 TTY$AB_9600:: ; Table for samples taken at 9600
0000 157
10 7F 0000 158 .BYTE ^X7F,TT$C_BAUD_19200
10 7A 0002 159 .BYTE ^X7A,TT$C_BAUD_19200
10 72 0004 160 .BYTE ^X72,TT$C_BAUD_19200
10 7E 0006 161 .BYTE ^X7E,TT$C_BAUD_19200
0F 0D 0008 162 .BYTE ^X0D,TT$C_BAUD_9600
0D 66 000A 163 .BYTE ^X66,TT$C_BAUD_4800
0C 0C 000C 164 .BYTE ^X0C,TT$C_BAUD_3600
0B 78 000E 165 .BYTE ^X78,TT$C_BAUD_2400
09 70 0010 166 .BYTE ^X70,TT$C_BAUD_1800
08 00 0012 167 .BYTE ^X00,TT$C_BAUD_1200
FF FF 0014 168 .BYTE -1,-1 ; End of List
00000026 0016 169 .BLKB 16 ; Patch space
0026 170
0026 171 TTY$AB_600:: ; Table for samples taken at 600
0026 172
08 7E 0026 173 .BYTE ^X7E,TT$C_BAUD_1200
08 72 0028 174 .BYTE ^X72,TT$C_BAUD_1200
07 0D 002A 175 .BYTE ^X0D,TT$C_BAUD_600
06 66 002C 176 .BYTE ^X66,TT$C_BAUD_300
05 78 002E 177 .BYTE ^X78,TT$C_BAUD_150
03 60 0030 178 .BYTE ^X60,TT$C_BAUD_110
03 70 0032 179 .BYTE ^X70,TT$C_BAUD_110
FF FF 0034 180 .BYTE -1,-1 ; End of List
00000046 0036 181 .BLKB 16 ; Patch space
0046 182
```



```
0046 184 .SBTTL CHARACTER DISPATCH TABLE - MACROS
0046 185 :++
0046 186 : $DISINI
0046 187 :
0046 188 : DESCRIPTION:
0046 189 : SETS UP A 256 BYTE TABLE TO ALLOW A QUICK DISPATCH ON INPUT CHARACTERS
0046 190 :
0046 191 : INPUTS:
0046 192 : NONE
0046 193 :--
0046 194 :
0046 195 .MACRO $DISINI
0046 196 $$$=
0046 197 .REPEAT 32
0046 198 .BYTE TTY$K_ET_UNUSED
0046 199 .ENDR
0046 200 .BLKB 256-32
0046 201 $$$$=
0046 202 .ENDM $DISINI
```

```
0046 204 :++
0046 205 : $DIS
0046 206 :
0046 207 : DESCRIPTION:
0046 208 :     GIVEN A LIST OF CHARACTERS WILL FILL EACH OF THEIR BYTES WITH
0046 209 :     THE CHARACTER DISPATCH TOKEN THAT THIS CHARACTER TRANSLATES TO.
0046 210 :
0046 211 : INPUTS:
0046 212 :     CHARLIST = A LIST OF CHARACTERS TO FILL WITH THIS TOKEN
0046 213 :     TOKEN = THE TOKEN CHARACTER. ONE OF THE FOLLOWING:
0046 214 :           1 CONTROL-U
0046 215 :           2 CONTROL-R
0046 216 :           3 DEL
0046 217 :           4 ESCAPE CHARACTER
0046 218 :           5 BACKWARD 1 CHAR
0046 219 :           6 FORWARD 1 CHAR
0046 220 :           7 END OF LINE
0046 221 :           8 BEGINNING OF LINE
0046 222 :           9 DELETE WORD LEFT
0046 223 :--
0046 224 :     .MACRO $DIS CHARLIST,TOKEN
0046 225 :     .IRP CHAR,CHARLIST
0046 226 :     .=$$$+CHAR
0046 227 :     .BYTE TOKEN
0046 228 :     .ENDR
0046 229 :     .ENDM $DIS
0046 230 :
0046 231 :++
0046 232 : $DISEND
0046 233 :
0046 234 : DESCRIPTIONS
0046 235 :     PUTS THE END ON THE CHARACTER DISPATCH TABLE
0046 236 :--
0046 237 :     .MACRO $DISEND
0046 238 :     .=$$$$
0046 239 :     .ENDM $DISEND
```

```
0000008E 0046 241 SBTTL CHARACTER DISPATCH TABLE
0000008F 0046 242 TTY$C_SS2=^X8E
0046 243 TTY$C_SS3=^X8F
0046 244 TTY$A_CCLIST::
0046 245 $DISINI
0146 246 $DIS TTY$C_CTRLU,TTY$K_ET_CTRLU
005C 247 $DIS TTY$C_CTRLR,TTY$K_ET_CTRLR
0059 248 $DIS TTY$C_DELETE,TTY$K_ET_DELEFT
00C6 249 $DIS <TTY$C_CSI,TTY$C_ESCAPE,TTY$C_LOWESC1,TTY$C_LOWESC2>,TTY$K_ET_ESCAPE
00C5 250 $DIS <TTY$C_SS2,TTY$C_SS3>,TTY$K_ET_ESCAPE
00D6 251 $DIS TTY$C_CTRLD,TTY$K_ET_BACK_CHAR
004B 252 $DIS TTY$C_CTRLF,TTY$K_ET_FORWARD_CHAR
004D 253 $DIS TTY$C_CTRL E,TTY$K_ET_MOVE_EOL
004C 254 $DIS TTY$C_BS,TTY$K_ET_MOVE_EOL
004F 255 $DIS TTY$C_CTRLV,TTY$K_ET_QUOTING
005D 256 $DIS TTY$C_LF,TTY$K_ET_DELETE_WORD
0051 257 $DIS TTY$C_CTRLB,TTY$K_ET_RECALL
0049 258 $DIS TTY$C_TAB,0 ; ALLOW TAB EVEN IF NOT A TERMINATOR
0050 259 $DIS <TTY$C_CR,TTY$C_CTRLZ>,TTY$K_ET_TERMINATE; TERMINATE THE READ
0061 260 $DIS TTY$C_CTRLA,TTY$K_ET_TOGGLE ; TOGGLE INSERT/OVERSTRIKE MODE
0048 261 $DISEND
```

```

0146 263 .SBTTL CHARACTER TYPE TABLE MACRO
0146 264 :++
0146 265 : TYPE - TYPE TABLE MACRO GENERATOR
0146 266 :
0146 267 : Description:
0146 268 :
0146 269 : The type table is used by the character output routines to determine
0146 270 : several things, whether the character is a spacing or non spacing character,
0146 271 : If this character needs special attention pre or post typeahead, and if
0146 272 : this character is lower case.
0146 273 :
0146 274 : The table is a table of bytes. The lower nibble is a count of
0146 275 : the occurrence of this type of entry, and the high order nibble is a set
0146 276 : of flags.
0146 277 :
0146 278 : Inputs:
0146 279 : Type - one of SPEC, CONTROL, CTRL2, CTRL3, LOWER
0146 280 :--
0146 281 .MACRO TYPE TYP
0146 282 Y=0
0146 283 .IF NB TYP
0146 284 Y=XY'TYP
0146 285 XY'TYP=1+XY'TYP
0146 286 .IF IDN CONTROL,TYP
0146 287 Y=Y!<TTY$M_CH_CTRL>
0146 288 .ENDC
0146 289 .IF IDN SPEC,TYP
0146 290 Y=Y!<TTY$M_CH_SPEC>
0146 291 .ENDC
0146 292 .IF IDN CTRL2,TYP
0146 293 Y=Y!<TTY$M_CH_CTRL2>
0146 294 .ENDC
0146 295 .IF IDN CTRL3,TYP
0146 296 Y=<TTY$M_CH_CTRL3>
0146 297 .ENDC
0146 298 .IF IDN LOWER,TYP
0146 299 Y=<TTY$M_CH_LOWER>
0146 300 .ENDC
0146 301 .ENDC
0146 302 .IF GE CHAR-97
0146 303 .IF LE CHAR-97-25
0146 304 Y=<TTY$M_CH_LOWER>
0146 305 .ENDC
0146 306 .ENDC
0146 307 .BYTE Y
0146 308 CHAR=CHAR+1
0146 309 .ENDM
0146 310 :
0146 311 : INITIALIZE COUNTS
0146 312 :
00000000 0146 313 CHAR=0
00000000 0146 314 XYSPEC=0
00000000 0146 315 XYCONTROL=0
00000000 0146 316 XYCTRL2=0
00000000 0146 317 XYCTRL3=0
00000000 0146 318 XYLOWER=0

```

```
.SBTTL CHARACTER TYPE TABLE
0146 320
0146 321
0146 322 TTYSA_TYPE::
0146 323 TYPE CTRL3 : NULL
0147 324 TYPE CTRL3 : CONTROL A
0148 325 TYPE CTRL3 : CONTROL B
0149 326 TYPE CONTROL : CONTROL C
014A 327 TYPE CTRL3 : CONTROL D
014B 328 TYPE CTRL3 : CONTROL E
014C 329 TYPE CTRL3 : CONTROL F
014D 330 TYPE CTRL3 : BELL CONTROL G
014E 331 TYPE SPEC : BACKSPACE
014F 332 TYPE SPEC : TAB
0150 333 TYPE SPEC : LINE FEED
0151 334 TYPE SPEC : VERTICLE TAB
0152 335 TYPE SPEC : FORM FEED
0153 336 TYPE SPEC : CARRIAGE RETURN
0154 337 TYPE CTRL3 : CONTROL N
0155 338 TYPE CONTROL : CONTROL O
0156 339 TYPE CTRL3 : CONTROL P
0157 340 TYPE CONTROL : CONTROL Q
0158 341 TYPE CTRL2 : CONTROL R
0159 342 TYPE CONTROL : CONTROL S
015A 343 TYPE CTRL3 : CONTROL T
015B 344 TYPE CTRL2 : CONTROL U
015C 345 TYPE CTRL3 : CONTROL V
015D 346 TYPE CTRL3 : CONTROL W
015E 347 TYPE CONTROL : CONTROL X
015F 348 TYPE CONTROL : CONTROL Y
0160 349 TYPE SPEC : CONTROL Z
0161 350 TYPE CONTROL : ESCAPE
0162 351 TYPE CTRL3
0163 352 TYPE CTRL3
0164 353 TYPE CTRL3
0165 354 TYPE CTRL3
0166 355 TYPE SPACE
0167 356 TYPE :
0168 357 TYPE :
0169 358 TYPE #
016A 359 TYPE $
016B 360 TYPE %
016C 361 TYPE &
016D 362 TYPE '
016E 363 TYPE (
016F 364 TYPE )
0170 365 TYPE *
0171 366 TYPE +
0172 367 TYPE ,
0173 368 TYPE -
0174 369 TYPE .
0175 370 TYPE /
0176 371 TYPE 0
0177 372 TYPE 1
0178 373 TYPE 2
0179 374 TYPE 3
017A 375 TYPE 4
017B 376 TYPE 5
```

017C	377	TYPE	:	6
017D	378	TYPE	:	7
017E	379	TYPE	:	8
017F	380	TYPE	:	9
0180	381	TYPE	:	:
0181	382	TYPE	:	:
0182	383	TYPE	:	:
0183	384	TYPE	:	:
0184	385	TYPE	:	:
0185	386	TYPE	:	:
0186	387	TYPE	:	:
0187	388	TYPE	:	:
0188	389	TYPE	:	:
0189	390	TYPE	:	:
018A	391	TYPE	:	:
018B	392	TYPE	:	:
018C	393	TYPE	:	:
018D	394	TYPE	:	:
018E	395	TYPE	:	:
018F	396	TYPE	:	:
0190	397	TYPE	:	:
0191	398	TYPE	:	:
0192	399	TYPE	:	:
0193	400	TYPE	:	:
0194	401	TYPE	:	:
0195	402	TYPE	:	:
0196	403	TYPE	:	:
0197	404	TYPE	:	:
0198	405	TYPE	:	:
0199	406	TYPE	:	:
019A	407	TYPE	:	:
019B	408	TYPE	:	:
019C	409	TYPE	:	:
019D	410	TYPE	:	:
019E	411	TYPE	:	:
019F	412	TYPE	:	:
01A0	413	TYPE	:	:
01A1	414	TYPE	:	:
01A2	415	TYPE	:	:
01A3	416	TYPE	:	:
01A4	417	TYPE	:	:
01A5	418	TYPE	:	:
01A6	419	TYPE	:	:
01A7	420	TYPE	:	ELISPE
01A8	421	TYPE	:	LOWER A
01A9	422	TYPE	:	LOWER B
01AA	423	TYPE	:	LOWER C
01AB	424	TYPE	:	LOWER D
01AC	425	TYPE	:	LOWER E
01AD	426	TYPE	:	LOWER F
01AE	427	TYPE	:	LOWER G
01AF	428	TYPE	:	LOWER H
0180	429	TYPE	:	LOWER I
01B1	430	TYPE	:	LOWER J
01B2	431	TYPE	:	LOWER K
01B3	432	TYPE	:	LOWER L
01B4	433	TYPE	:	LOWER M
			:	LOWER N

01B5	434	TYPE		:	LOWER O
01B6	435	TYPE		:	LOWER P
01B7	436	TYPE		:	LOWER C
01B8	437	TYPE		:	LOWER F
01B9	438	TYPE		:	LOWER S
01BA	439	TYPE		:	LOWER T
01BB	440	TYPE		:	LOWER U
01BC	441	TYPE		:	LOWER V
01BD	442	TYPE		:	LOWER W
01BE	443	TYPE		:	LOWER X
01BF	444	TYPE		:	LOWER Y
01C0	445	TYPE		:	LOWER Z
01C1	446	TYPE		:	CURRLY LEFT
01C2	447	TYPE		:	UP LINE
01C3	448	TYPE		:	CURRLY RIGHT
01C4	449	TYPE		:	WIGGLE
01C5	450	TYPE	CTRL2	:	DELETE
01C6	451				
01C6	452				
01C6	453	:			
01C6	454	:	8 BIT CHARACTERS		
01C6	455	:			
01C6	456				
01C6	457	TYPE	CTRL3	:	RESERVED
01C7	458	TYPE	CTRL3	:	RESERVED
01C8	459	TYPE	CTRL3	:	RESERVED
01C9	460	TYPE	CTRL3	:	RESERVED
01CA	461	TYPE	CTRL3	:	IND
01CB	462	TYPE	CTRL3	:	NEL
01CC	463	TYPE	CTRL3	:	SSA
01CD	464	TYPE	CTRL3	:	ESA
01CE	465	TYPE	CTRL3	:	HTS
01CF	466	TYPE	CTRL3	:	HTJ
01D0	467	TYPE	CTRL3	:	VTS
01D1	468	TYPE	CTRL3	:	PLD
01D2	469	TYPE	CTRL3	:	PLU
01D3	470	TYPE	CTRL3	:	RI
01D4	471	TYPE	CTRL3	:	SS2
01D5	472	TYPE	CTRL3	:	SS3
01D6	473	TYPE	CTRL3	:	DCS
01D7	474	TYPE	CTRL3	:	PU1
01D8	475	TYPE	CTRL3	:	PU2
01D9	476	TYPE	CTRL3	:	STS
01DA	477	TYPE	CTRL3	:	CCH
01DB	478	TYPE	CTRL3	:	MW
01DC	479	TYPE	CTRL3	:	SPA
01DD	480	TYPE	CTRL3	:	EPA
01DE	481	TYPE	CTRL3	:	RESERVED
01DF	482	TYPE	CTRL3	:	RESERVED
01E0	483	TYPE	CTRL3	:	RESERVED
01E1	484	TYPE	CONTROL	:	CSI IS A CONTROL
01E2	485	TYPE	CTRL3	:	ST
01E3	486	TYPE	CTRL3	:	OSC
01E4	487	TYPE	CTRL3	:	PM
01E5	488	TYPE	CTRL3	:	APC
01E6	489	TYPE		:	RESERVED
01E7	490	TYPE		:	INVERTED EXCLAATION

01E8	491	TYPE	: CENT
01E9	492	TYPE	: POUND
01EA	493	TYPE	: RESERVED
01EB	494	TYPE	: YEN
01EC	495	TYPE	: RESERVED
01ED	496	TYPE	: SECTION
01EE	497	TYPE	: CURRENCY
01EF	498	TYPE	: COPYRIGHT
01F0	499	TYPE	: FEMINANE ORDINAL
01F1	500	TYPE	: LEFT ANGLE QUOTE
01F2	501	TYPE	: RESERVED
01F3	502	TYPE	: RESERVED
01F4	503	TYPE	: RESERVED
01F5	504	TYPE	: RESERVED
01F6	505	TYPE	: DEGREE
01F7	506	TYPE	: PLUS/MINUS
01F8	507	TYPE	: SUPER 2
01F9	508	TYPE	: SUPER 3
01FA	509	TYPE	: RESERVED
01FB	510	TYPE	: MICRO
01FC	511	TYPE	: PARAGRAPH
01FD	512	TYPE	: MIDDLE DOT
01FE	513	TYPE	: RESERVED
01FF	514	TYPE	: SUPER 1
0200	515	TYPE	: MASCULINE ORDINAL
0201	516	TYPE	: ALGLE QUOTE RIGHT
0202	517	TYPE	: 1/4
0203	518	TYPE	: 1/2
0204	519	TYPE	: RESERVED
0205	520	TYPE	: INVERTED ?
0206	521	TYPE	: CAP A GRAVE
0207	522	TYPE	: CAP A ACUTE
0208	523	TYPE	: CAP A CERC
0209	524	TYPE	: CAP A TILDE
020A	525	TYPE	: CAP A DIAERESSIS OR UMLAUT
020B	526	TYPE	: CAP A WITH RING
020C	527	TYPE	: AE DIPTHONG
020D	528	TYPE	: C CEDILLA
020E	529	TYPE	: CAP E GRAVE
020F	530	TYPE	: CAP E ACUTE
0210	531	TYPE	: CAP E CERC
0211	532	TYPE	: CAP E DIAERESSIS OR UMLAUT
0212	533	TYPE	: I GRAVE
0213	534	TYPE	: I ACCUTE
0214	535	TYPE	: I CIRC
0215	536	TYPE	: I UMLAUT
0216	537	TYPE	: RESERVED
0217	538	TYPE	: N TILDE
0218	539	TYPE	: CAP O GRAVE
0219	540	TYPE	: CAP O ACUTE
021A	541	TYPE	: CAP O CERC
021B	542	TYPE	: CAP O TILDE
021C	543	TYPE	: CAP O DIAERESSIS OR UMLAUT
021D	544	TYPE	: OE
021E	545	TYPE	: O WITH SLASH
021F	546	TYPE	: U GRAVE
0220	547	TYPE	: U ACCUTE



0221	548	TYPE		: U CIRC
0222	549	TYPE		: U UMLAUT
0223	550	TYPE		: Y WITH DIAERESIS OR UMLAUT
0224	551	TYPE		: RESERVED
0225	552	TYPE		: SMALL SHARP S
0226	553	:		
0226	554	:	LOWER CASE EIGHT BIT CHARACTERS	
0226	555	:		
0226	556	TYPE	LOWER	: LOWER A GRAVE
0227	557	TYPE	LOWER	: LOWER A ACUTE
0228	558	TYPE	LOWER	: LOWER A CIRC
0229	559	TYPE	LOWER	: LOWER A TILDE
022A	560	TYPE	LOWER	: LOWER A DIAERESSIS OR UMLAUT
022B	561	TYPE	LOWER	: LOWER A WITH RING
022C	562	TYPE	LOWER	: AE DIPHTHONG
022D	563	TYPE	LOWER	: C CEDILLA
022E	564	TYPE	LOWER	: e GRAVE
022F	565	TYPE	LOWER	: e ACCUTE
0230	566	TYPE	LOWER	: e CIRC
0231	567	TYPE	LOWER	: e UMLAUT
0232	568	TYPE	LOWER	: I GRAVE
0233	569	TYPE	LOWER	: I ACCUTE
0234	570	TYPE	LOWER	: I CIRC
0235	571	TYPE	LOWER	: I UMLAUT
0236	572	TYPE		: RESERVED
0237	573	TYPE	LOWER	: N TILDE
0238	574	TYPE	LOWER	: LOWER O GRAVE
0239	575	TYPE	LOWER	: LOWER O ACUTE
023A	576	TYPE	LOWER	: LOWER O CIRC
023B	577	TYPE	LOWER	: LOWER O TILDE
023C	578	TYPE	LOWER	: LOWER O DIAERESSIS OR UMLAUT
023D	579	TYPE	LOWER	: OE
023E	580	TYPE	LOWER	: O WITH SLASH
023F	581	TYPE	LOWER	: U GRAVE
0240	582	TYPE	LOWER	: U ACCUTE
0241	583	TYPE	LOWER	: U CIRC
0242	584	TYPE	LOWER	: U UMLAUT
0243	585	TYPE	LOWER	: Y WITH DIAERESIS OR UMLAUT
0244	586	TYPE		: RESERVED
0245	587	TYPE		: RESERVED

```

0246 589
0246 590 .SBTTL ESCAPE SEQUENCE TO TOKEN TRANSLATION TABLE
0246 591 interrupt_key::
7E 37 31 5B 1B 0246 592 .ASCII <TTY$C_ESCAPE>/[17~/ ; OS interupt key
00000005 024B 593 interrupt_key_len=.-interrupt_key
024B 594
024B 595 TTY$A_FCNTKN::
0000025D 024B 596 .BLKB 18 ; 0 - 18 AREN'T DEFINED
0D 025D 597 .BYTE TTY$K_ET_UNUSED ; 18
0D 025E 598 .BYTE TTY$K_ET_UNUSED ; 19
0D 025F 599 .BYTE TTY$K_ET_UNUSED ; 20
00 0260 600 .BYTE 0 ; 21 EXIT KEY
00 0261 601 .BYTE 0 ; 22 IS UNDEFINED
0D 0262 602 .BYTE TTY$K_ET_UNUSED ; 23
08 0263 603 .BYTE TTY$K_ET_MOVE_BOL ; 24
09 0264 604 .BYTE TTY$K_ET_DELETE_WORD ; 25
0C 0265 605 .BYTE TTY$K_ET_TOGGEL ; 26
0000001B 0266 606 TTY$K_MAXESCTKN=.-TTY$A_FCNTKN

```

```

0266 608 .SBTTL ESCAPE SYNTAX TABLE
0266 609 :
0266 610 : ESCAPE SYNTAX TABLE
0266 611 :
0266 612 †TYS$ _ESCAPE:: ; ESCAPE SYNTAX TABLE
0266 613 :
0266 614 : ESCAPE SEQUENCE <ESC><;><32:47>....<48:126>
0266 615 :
3B 3B 0266 616 .ASCII /:;/ ; ':'
OF' 0268 617 .BYTE 10%-TYS$ _ESCAPE ;
0269 618 :
0269 619 : ESCAPE SEQUENCE <ESC><?><32:47>....<48:126>
0269 620 :
3F 3F 0269 621 .ASCII /??/ ; '?'
OF' 026B 622 .BYTE 10%-TYS$ _ESCAPE ;
026C 623 :
026C 624 : ESCAPE SEQUENCE <ESC><O><32:47>....<64:126>
026C 625 :
4F 4F 026C 626 .ASCII /00/ ; '0'
18' 026E 627 .BYTE 20%-TYS$ _ESCAPE ;
026F 628 :
026F 629 : ESCAPE SEQUENCE <ESC><Y><32:126><32:126>
026F 630 :
59 59 026F 631 .ASCII /YY/ ; 'Y'
1E' 0271 632 .BYTE 30%-TYS$ _ESCAPE ;
0272 633 :
0272 634 : ANSI CONTROL SEQUENCES <ESC><[><48:63>...<32:47>...<64:126>
0272 635 :
5B 5B 0272 636 .ASCII /[[/ ; '['
15' 0274 637 .BYTE 15%-TYS$ _ESCAPE ;
0275 638 :
0275 639 :
0275 640 : ESCAPE SEQUENCE <ESC><32:47>....<48:126>
0275 641 :
000000F 0275 642 †TYS$K_SS2==.-TYS$ _ESCAPE
2F 20 0275 643 10%: .ASCII !7! ; SPACE TO '/'
OF 0277 644 .BYTE 10%-TYS$ _ESCAPE ; INTERMEDIATE CHARACTER
7E 30 0278 645 .ASCII /0/<126> ; '0' TO END
00 027A 646 .BYTE 0 ; FINAL
00000015 027B 647 †TYS$K_CSI==.-TYS$ _ESCAPE ; CSI PREFEXES THE FOLLOWING
3F 30 027B 648 15%: .ASCII /0?/ ; '0' TO '?'
15 027D 649 .BYTE 15%-TYS$ _ESCAPE
00000018 027E 650 †TYS$K_SS3==.-TYS$ _ESCAPE
2F 20 027E 651 20%: .ASCII !7! ; SPACE TO '/'
18 0280 652 .BYTE 20%-TYS$ _ESCAPE
7E 40 0281 653 .ASCII /@/<126> ; '@' TO END
00 0283 654 .BYTE 0 ; END OF ESC O.
7E 20 0284 655 30%: .ASCII ! !<126> ; SPACE TO END
21' 0286 656 .BYTE 40%-TYS$ _ESCAPE
7E 20 0287 657 40%: .ASCII ! !<126> ;
00 0289 658 .BYTE 0 ;
028A 659 :
028A 660 : ESCAPE SEQUENCES WITH MEANING FOR OUTPUT
028A 661 :
028A 662 : THERE IS A CORRELATION BETWEEN THIS TABLE AND CODE!
028A 663 :
028A 664 †TYS$ _ESC_OUT::

```

50

0D

4F

2A

TTYDRVDAT  
V04-001

- Terminal driver data base module E 14  
ESCAPE SYNTAX TABLE

16-SEP-1984 02:16:16  
7-SEP-1984 17:56:59

VAX/VMS Macro V04-00  
[TTDRVR.SRC]TTYDRVDAT.MAR;2

Page 17  
(11)

5A 4B 47 46 59 49 48 44 43 42 41 00' 028A 665  
5B 5C 3D 3E 0296  
OF 028A

.ASCIC /ABCDHIYFGKZ>=\[ /

:

TT  
V04

74

6E

61

75

70

74

6E

20

```
029A 667 :  
029A 668 : 8bit C1 input code to C0 code trantion table  
029A 669 :  
029A 670 †TYS_A_8BITESC::  
000002A7 029A 671 .BLKB 13 : MOVE TO SS2  
4E 02A7 672 .BYTE ^A/N/ : SS2  
4F 02A8 673 .BYTE ^A/O/ : SS3  
000002B5 02A9 674 .BLKB 12 : MOVE TO CSI  
5B 02B5 675 .BYTE ^A/E/ : CSI  
000002BA 02B6 676 .BLKB 4 : FILL OUT THE TABLE
```

```
02BA 678 :  
02BA 679 : ESCAPE SEQUENCE RULE INITIALIZA*ION TABLE  
02BA 680 :  
02BA 681 : TTYSA_ESCINIT::  
000002C7 02BA 682 .BLKB 13 : MOVE TO SS2  
OF 02C7 683 .BYTE TTY$K_SS2 : SS2  
18 02C8 684 .BYTE TTY$K_SS3 : SS3  
000002D5 02C9 685 .BLKB 12 : MOVE TO CSI  
15 02D5 686 .BYTE TTY$K_CSI : CSI  
000002DA 02D6 687 .BLKB 4 : FILL OUT THE TABLE
```

```

02DA 689          .SBTTL  FALLBACK - table that will create fallback presentation
02DA 690          :++
02DA 691          :FALLBACK - TABLE TO ALLOW THE TERMINAL TO DO FALLBACK PRESENTATION OF
02DA 692          :      8BIT CHARACTERS on 7 bit terminals
02DA 693          :
02DA 694          : Description:
02DA 695          :      The following macros generate 3 tables. The first is a 256 byte
02DA 696          : table with the single character fallback representation of all the
02DA 697          : characters that can be represented by a single character, those with
02DA 698          : no fallback presentation at all are represented by the _ character,
02DA 699          : those with multiple character representation have a 0 in there position.
02DA 700          : The second table is a list of counted strings containing the characters
02DA 701          : for all the characters that have multiple character fallback representation.
02DA 702          : The third table is a 96 byte table that contains the offsets into the
02DA 703          : second table of the counted string for the given character. The base
02DA 704          : of the third table is the first 8 bit printing character
02DA 705          :
02DA 706          :--
02DA 707          .macro  $fallini
02DA 708          $$=0
02DA 709          .repeat 256
02DA 710          .IF LE $$-<^X9F>          ; EVERYTHING BUT THE MULTINATIONAL SET SHOULD
02DA 711          :                          ; ECHO AS ITSELF.
02DA 712          .byte  $$
02DA 713          .IFF
02DA 714          .BYTE  ^A/_/
02DA 715          .ENDC
02DA 716          $$=$$+1
02DA 717          .endr
02DA 718          $$$=.
02DA 719          .SAVE
02DA 720          .PSECT  $$$115_TTDVR_EXPTAB
02DA 721          EXPTAB:
02DA 722          .REPEAT 96
02DA 723          .BYTE  0
02DA 724          .ENDR
02DA 725          TT_END=.
02DA 726          .PSECT  $$$115_TTDVR_EXPAN
02DA 727          EXPAN:
02DA 728          .RESTORE
02DA 729
02DA 730          .endm  $fallini
  
```

```

02DA 732 :++
02DA 733 : $FALL - generates the table entry for a given character
02DA 734 :
02DA 735 : Inputs:
02DA 736 :
02DA 737 :     CHARH - COLUMN IN THE ASCII TABLE.
02DA 738 :     CHARL - ROW IN THE ASCII TABLE.
02DA 739 :     FALLBACK - String that is the fallback representation
02DA 740 :     COUNT - Number of times to repeat this character
02DA 741 :--
02DA 742 :     .MACRO $FALL CHARH,CHARL,FALLBACK,COUNT=1
02DA 743 :     .=FALLTAB+<CHARH*16>+CHARL
02DA 744 :     .REPEAT COUNT
02DA 745 :     .NCHR SLEN,^ \FALLBACK\
02DA 746 :     .IF EQ SLEN-1
02DA 747 :     .BYTE ^A/FALLBACK/
02DA 748 :     .IFF
02DA 749 :     .BYTE 255
02DA 750 :     .SAVE
02DA 751 :     .PSECT $$$115_TTDRVR_EXPAN
02DA 752 :     $$EXP=-EXPAN
02DA 753 :     .ASCIC !FALLBACK!
02DA 754 :     .PSECT $$$115_TTDRVR_EXPTAB
02DA 755 :     .=EXPTAB+<CHARH*16>+CHARL-150
02DA 756 :     .BYTE $$EXP
02DA 757 :     .RESTORE
02DA 758 :     .ENDC
02DA 759 :     .ENDR
02DA 760 :     .ENDM $FALL
  
```



```
02DA 762 :++  
02DA 763 : $FALLEND - GENERATES END CONDITIONS FOR THE FALLBACK TABLE  
02DA 764 :  
02DA 765 : Description:  
02DA 766 :  
02DA 767 :     Resets the . to the end of the fallback table  
02DA 768 :  
02DA 769 : Inputs.  
02DA 770 :  
02DA 771 :     None  
02DA 772 :--  
02DA 773 : .MACRO $FALLEND  
02DA 774 : =$$$  
02DA 775 : .ENDM $FALLEND
```

```
02DA 777
02DA 778 FALLTAB:
02DA 779 SFALLINI
03DA 780 SFALL 10.1.!
037C 781 SFALL 10.2.c
037D 782 SFALL 10.3.L
037E 783 SFALL 10.5.Y
0380 784 : SFALL 10.7.Sc
0380 785 SFALL 10.8.O
0383 786 : SFALL 10.9.(C)
0383 787 SFALL 10.10.a
0385 788 : SFALL 10.11.^!<<!
0385 789 SFALL 11.0.o
038B 790 SFALL 11.1.+
038C 791 SFALL 11.2.2
038D 792 SFALL 11.3.3
038E 793 SFALL 11.5.u
0390 794 : SFALL 11.6.Pr
0390 795 SFALL 11.7.
0392 796 SFALL 11.9.i
0394 797 SFALL 11.10.o
0395 798 : SFALL 11.11.^!>>!
0395 799 : SFALL 11.12.<1/4>
0395 800 : SFALL 11.13.<1/2>
0395 801 SFALL 11.15.?
039A 802 SFALL 12.0.A,6
03A0 803 : SFALL 12.6.AE
03A0 804 SFALL 12.7.C
03A2 805 SFALL 12.8.E,4
03A6 806 SFALL 12.12.i,4
03AA 807 SFALL 13.1.N
03AC 808 SFALL 13.2.O,5
03B1 809 : SFALL 13.7.OE
03B1 810 SFALL 13.8.O
03B3 811 SFALL 13.9.U,4
03B7 812 SFALL 13.13.Y
03B8 813 : SFALL 13.15.ss
03B8 814 SFALL 14.0.a,6
03C0 815 : SFALL 14.6.ae
03C0 816 SFALL 14.7.c
03C2 817 SFALL 14.8.e,4
03C6 818 SFALL 14.12.i,4
03CA 819 SFALL 15.1.n
03CC 820 SFALL 15.2.o,5
03D1 821 : SFALL 15.7.oe
03D1 822 SFALL 15.8.o
03D3 823 SFALL 15.9.u,4
03D7 824 SFALL 15.13.y
03D8 825 SFALLEND
03DA 826
```





```

      03FA 840      .SBTTL WORD TERMINATOR BIT MASK MACRO AND TABLE
      03FA 841      :
      03FA 842      : This is the default word terminator bitmask, this table is used
      03FA 843      : by the delete word routine to determine when a word ends.
      03FA 844      :
      03FA 845      !TYSA_WORDTERM::
FFFFFFFFFF 03FA 846      .LONG -1 ; ALL THE CONTROL CHARACTERS
FC00FBDF 03FE 847      .LONG ^B11111100000000001111101111011111; ALL THE SPECIALS EXCEPT THE DIGI
38000001 0402 848      .LONG ^B001110000000000000000000000000001; THE UPPER CASE LETTERS AREN'T TE
B8000001 0406 849      .LONG ^B101110000000000000000000000000001; THE LOWER CASE LETTERS AREN'T EI
      040A 850      : duplicate for the eight bit set
FFFFFFFFFF 040A 851      .LONG -1 ; ALL THE CONTROL CHARACTERS
FC00FFFF 040E 852      .LONG ^B11111100000000001111111111111111; ALL THE SPECIALS EXCEPT THE DIGI
38000001 0412 853      .LONG ^B001110000000000000000000000000001; THE UPPER CASE LETTERS AREN'T TE
B8000001 0416 854      .LONG ^B101110000000000000000000000000001; THE LOWER CASE LETTERS AREN'T EI
      041A 855      :
      041A 856      : There are certain characters which are to be considered words on there
      041A 857      : own (characters like the = which are delimiters) this table contains
      041A 858      : the bits for those characters.
      041A 859      :
      041A 860      !TYSA_PREFIX::
00000000 041A 861      .LONG 0 ; ALL THE CONTROL CHARACTERS
10008208 041E 862      .LONG ^B0001000000000000001000001000001000;
08000001 0422 863      .LONG ^B000010000000000000000000000000001; THE UPPER CASE LETTERS AREN'T TE
08000000 0426 864      .LONG ^B000010000000000000000000000000000; THE LOWER CASE LETTERS AREN'T EI
      042A 865      : duplicate for the eight bit set
00000000 042A 866      .LONG 0 ; ALL THE CONTROL CHARACTERS
00000000 042E 867      .LONG 0
00000000 0432 868      .LONG 0
00000000 0436 869      .LONG 0

```

TT  
Ps  
  
PS  
--  
SA  
SS  
SS  
SS  
SS  
  
Ph  
--  
In  
Co  
Pa  
Sy  
Pa  
Sy  
Ps  
Cr  
As  
  
Th  
20  
Th  
12  
41  
  
Ma  
--  
S  
-S  
TC  
  
20  
Th  
MA

```

043A 871 .SBTTL VERIFY_ARRAY - Array of definitions for Read verifictaion
043A 872 :
043A 873 :
043A 874 :
043A 875 :
00000001 043A 876 ALPHA_UPPER = 1
00000002 043A 877 ALPHA_LOWER = 2
00000004 043A 878 NUM09 = 4
00000008 043A 879 PLUS_MINUS = 8
00000010 043A 880 PRINTABLE = 16
00000020 043A 881 CHAR_ALL = 32
043A 882 :
043A 883 :
043A 884 VERIFY_ARRAY::
043A 885 .REPEAT 32
043A 886 .BYTE CHAR_ALL
20 043A 887 .ENDR
33 045A 888 .BYTE CHAR_ALL!PRINTABLE!ALPHA_UPPER!ALPHA_LOWER
045B 889 .REPEAT 10
045B 890 .BYTE CHAR_ALL!PRINTABLE
30 045B 891 .ENDR
38 0465 892 .BYTE CHAR_ALL!PRINTABLE!PLUS_MINUS
30 0466 893 .BYTE CHAR_ALL!PRINTABLE
38 0467 894 .BYTE CHAR_ALL!PRINTABLE!PLUS_MINUS
38 0468 895 .BYTE CHAR_ALL!PRINTABLE!PLUS_MINUS
30 0469 896 .BYTE CHAR_ALL!PRINTABLE
046A 897 .REPEAT 10
046A 898 .BYTE CHAR_ALL!PRINTABLE!NUM09
34 046A 899 .ENDR
0474 900 .REPEAT 7
0474 901 .BYTE CHAR_ALL!PRINTABLE
30 0474 902 .ENDR
047B 903 .REPEAT 26
047B 904 .BYTE CHAR_ALL!PRINTABLE!ALPHA_UPPER
31 047B 905 .ENDR
0495 906 .REPEAT 6
0495 907 .BYTE CHAR_ALL!PRINTABLE
30 0495 908 .ENDR
049B 909 .REPEAT 26
049B 910 .BYTE CHAR_ALL!PRINTABLE!ALPHA_LOWER
32 049B 911 .ENDR
04B5 912 .REPEAT 4
04B5 913 .BYTE CHAR_ALL!PRINTABLE
30 04B5 914 .ENDR
20 04B9 915 .BYTE CHAR_ALL
04BA 916 .REPEAT 32
04BA 917 .BYTE CHAR_ALL
20 04BA 918 .ENDR
20 04DA 919 .BYTE CHAR_ALL
04DB 920 .REPEAT 3
04DB 921 .BYTE CHAR_ALL!PRINTABLE
30 04DB 922 .ENDR
20 04DE 923 .BYTE CHAR_ALL
30 04DF 924 .BYTE CHAR_ALL!PRINTABLE
20 04E0 925 .BYTE CHAR_ALL
04E1 926 .REPEAT 5
04E1 927 .BYTE CHAR_ALL!PRINTABLE

```

```

30 04E1 928 .ENDR
   04E6 929 .REPEAT 4
   04E6 930 .BYTE CHAR_ALL
20 04E6 931 .ENDR
   04EA 932 .REPEAT 4
   04EA 933 .BYTE CHAR_ALL!PRINTABLE
30 04EA 934 .ENDR
20 04EE 935 .BYTE CHAR_ALL
   04EF 936 .REPEAT 3
   04EF 937 .BYTE CHAR_ALL!PRINTABLE
30 04EF 938 .ENDR
20 04F2 939 .BYTE CHAR_ALL
   04F3 940 .REPEAT 5
   04F3 941 .BYTE CHAR_ALL!PRINTABLE
30 04F3 942 .ENDR
20 04F8 943 .BYTE CHAR_ALL
30 04F9 944 .BYTE CHAR_ALL!PRINTABLE
   04FA 945 .REPEAT 16
   04FA 946 .BYTE CHAR_ALL!PRINTABLE.ALPHA_UPPER
31 04FA 947 .ENDR
20 050A 948 .BYTE CHAR_ALL
   050B 949 .REPEAT 13
   050B 950 .BYTE CHAR_ALL!PRINTABLE!ALPHA_UPPER
31 050B 951 .ENDR
20 0518 952 .BYTE CHAR_ALL
30 0519 953 .BYTE CHAR_ALL!PRINTABLE
   051A 954 .REPEAT 16
   051A 955 .BYTE CHAR_ALL!PRINTABLE!ALPHA_LOWER
32 051A 956 .ENDR
20 052A 957 .BYTE CHAR_ALL
   052B 958 .REPEAT 13
   052B 959 .BYTE CHAR_ALL!PRINTABLE!ALPHA_LOWER
32 052B 960 .ENDR
20 0538 961 .BYTE CHAR_ALL
20 0539 962 .BYTE CHAR_ALL
  
```

```

053A 964 .SBTTL SPECIAL STRINGS
053A 965 :
053A 966 : MULTI ECHO STRINGS
053A 967 :
053A 968 : *****
053A 969 : ALL OF THE SPECAIL STRINGS MUST BE COUNTED STRINGS (1 BYTE LENGTH COUNT
053A 970 : FOLLOWED BY DATA
053A 971 : *****
053A 972 :
053A 973 : TAB STRINGS
053A 974 :
20 20 20 20 20 20 20 20 00' 053A 975 TTYSA_TAB:: .ASCIC / /
08 053A
0543 976 :
0543 977 : BACKSPACE STRING
0543 978 :
08 08 08 08 08 08 08 07 0543 979 TTYSA_DELCRTTAB:: .BYTE 7,TTYSC_BS,TTYSC_BS,TTYSC_BS,TTYSC_BS,TTYSC_BS,-
054B 980 TTYSC_BS,TTYSC_BS
08 20 08 03 054B 981 TTYSA_BACKSPACE:: .BYTE 3,TTYSC_BS,TTYSC_BLANK,TTYSC_BS
08 20 02 054F 982 TTYSA_SPACEBACK:: .BYTE 2,TTYSC_BLANK,TTYSC_BS
0552 983 :
0552 984 : UTILITY STRINGS
0552 985 :
0552 986 : THE ORGANIZATION OF THIS TABLE IS CRITICAL
0552 987 :
0552 988 :
0D 00' 0552 989 TTYSA_CTRLU:: .ASCIC <TTYSC_CR>
01 0552
0D 00' 0554 990 TTYSA_CTRLR:: .ASCIC <TTYSC_CR>
01 0554
0D 2A 54 49 58 45 2A 00' 0556 991 TTYSA_CTRLZ:: .ASCIC /*EXIT*/<TTYSC_CR>
07 0556
50 55 52 52 45 54 4E 49 2A 0A 0D 00' 055E 992 .BLKB 32-<.-TTYSA_CTRLZ>
0A 0D 2A 54 0576 993 TTYSA_CTRLY: .ASCIC <13><10>/*INTERRUPT*/<13><10>
0F 0576
0D 2A 4C 45 43 4E 41 43 2A 0A 0D 00' 0586 994 .BLKB 32-<.-TTYSA_CTRLY>
0A 05A2 995 TTYSA_CTRLC: .ASCIC <13><10>/*CANCEL*/<13><10>
0C 0596
4F 20 54 55 50 54 55 4F 2A 0A 0D 00' 05A3 996 .BLKB 32-<.-TTYSA_CTRLC>
0A 0D 2A 46 46 05B6 997 TTYSA_CTRL0: .ASCIC <13><10>/*OUTPUT OFF*/<13><10>
10 05B6
2A 4E 4F 20 54 55 50 54 55 4F 2A 00' 05C7 998 .BLKB 32-<.-TTYSA_CTRL0>
0D 05D6 999 TTYSA_OUTON: .ASCIC /*OUTPUT ON*/<TTYSC_CR>
0C 05E2
000005F6 05E3 1000 .BLKB 32-<.-TTYSA_OUTON>
05F6 1001
05F6 1002 :
05F6 1003 : DEC CRT ECHO STRINGS
05F6 1004 :
05F6 1005 : SAVE THE ATTRIBUTES GO INTO REVERSE VIDEO, PRINT THE MESSAGE THEN
05F6 1006 : RESTORE THE ATTRIBUTES.
05F6 1007 :
05F6 1008 TTYSA_CTRLZ_DEC::

```



```

74 69 78 45 20 6D 37 5B 1B 37 1B 00' 05F6 1009 .ASCII <TTYSC_ESCAPE>/7/<TTYSC_ESCAPE>/[7m Exit /-
                                20 0602
                                6D 5B 1B 0603 1010 <TTYSC_ESCAPE>/[m/ -
                                0D 38 1B 0606 1011 <TTYSC_ESCAPE>/8/<TTYSC_CR>
                                12 05F6
                                0000061E 0609 1012 .BLKB 40-<.-TTYSA_CTRLZ_DEC>
                                061E 1013 TTYSA_CTRLZ_DEC:
                                061E 1014 .ASCII <13><10><TTYSC_ESCAPE>/7/<TTYSC_ESCAPE>/[7m Interrupt /-
6E 49 20 6D 37 5B 1B 37 1B 0A 0D 00' 062A 1015 <TTYSC_ESCAPE>/[m/ -
    20 74 70 75 72 72 65 74 062A 1016 <TTYSC_ESCAPE>/8/<13><10>
                                6D 5B 1B 0632 1015
                                0A 0D 38 1B 0635 1016
                                1A 061E
                                00000646 0639 1017 .BLKB 40-<.-TTYSA_CTRLY_DEC>
                                0646 1018 TTYSA_CTRLY_DEC:
                                0646 1019 .ASCII <13><10><TTYSC_ESCAPE>/7/<TTYSC_ESCAPE>/[7m Cancel /-
61 43 20 6C 37 5B 1B 37 1B 0A 0D 00' 0652 1020 <TTYSC_ESCAPE>/[m/ -
    20 6C 65 63 6E 0652 1021 <TTYSC_ESCAPE>/8/<13><10>
                                6D 5B 1B 0657 1020
                                0A 0D 38 1B 065A 1021
                                17 0646
                                0000066E 065E 1022 .BLKB 40-<.-TTYSA_CTRLC_DEC>
                                066E 1023 TTYSA_CTRLC_DEC:
                                066E 1024 .ASCII <13><10><TTYSC_ESCAPE>/7/<TTYSC_ESCAPE>/[7m Output off /-
75 4F 20 6D 37 5B 1B 37 1B 0A 0D 00' 067A 1025 <TTYSC_ESCAPE>/[m/ -
    20 66 66 6F 20 74 75 70 74 067A 1026 <TTYSC_ESCAPE>/8/<13><10>
                                6D 5B 1B 0683 1025
                                0A 0D 38 1B 0686 1026
                                1B 066E
                                00000696 068A 1027 .BLKB 40-<.-TTYSA_CTRLLO_DEC>
                                0696 1028 TTYSA_CTRLLO_DEC:
                                0696 1029 .ASCII <TTYSC_ESCAPE>/7/<TTYSC_ESCAPE>/[7m Output on /-
70 74 75 4F 20 6D 37 5B 1B 37 1B 00' 06A2 1030 <TTYSC_ESCAPE>/[m/ -
    20 6E 6F 20 74 75 06A2 1031 <TTYSC_ESCAPE>/8/<TTYSC_CR>
                                6D 5B 1B 06A8 1030
                                0D 38 1B 06AB 1031
                                17 0696
                                000006BE 06AE 1032 .BLKB 40-<.-TTYSA_OUTON_DEC>
                                06BE 1033
                                06BE 1034 : SEQUENCES FOR TERMINALS THAT SUPPORT REGIS
                                06BE 1035 :
                                06BE 1036 : EXIT REGIS THEN PRINT DEC CRT CODES
                                06BE 1037 :
                                06BE 1038 TTYSA_CTRLY_REG:
                                06BE 1039 .ASCII <TTYSC_ESCAPE>/\/-
74 6E 49 20 6D 37 5B 1B 37 1B 0A 0D 06C1 1040 <13><10><TTYSC_ESCAPE>/7/<TTYSC_ESCAPE>/[7m Interrupt /-
    20 74 70 75 72 72 65 06CD
                                6D 5B 1B 06D4 1041 <TTYSC_ESCAPE>/[m/ -
                                0A 0D 38 1B 06D7 1042 <TTYSC_ESCAPE>/8/<13><10>
                                1C 06BE
                                000006E6 06DB 1043 .BLKB 40-<.-TTYSA_CTRLY_REG>
                                06E6 1044 TTYSA_CTRLY_REG:
                                06E6 1045 .ASCII <TTYSC_ESCAPE>/\/-
6E 61 43 20 6D 37 5B 1B 37 1B 0A 0D 06E9 1046 <13><10><TTYSC_ESCAPE>/7/<TTYSC_ESCAPE>/[7m Cancel /-
    20 6C 65 63 06F5
                                0D 5B 1B 06F9 1047 <TTYSC_ESCAPE>/[m/ -
                                0A 0D 38 1B 06FC 1048 <TTYSC_ESCAPE>/8/<13><10>
                                19 06E6
                                0000070E 0700 1049 .BLKB 40-<.-TTYSA_CTRLC_REG>
                                070E 1050 TTYSA_DEOL::
                                070E 1051 .ASCII <TTYSC_CR>/ /-
20 20 20 20 20 20 20 20 20 20 0D 00'

```

```

20 20 20 20 20 20 20 20 20 20 071A
0D 0724 1052 <TTYSC_CR>
16 070E
0725 1053 TTYSA_ANSI_UPCEL::
4B 5B 1B 41 5B 1B 0D 00' 0725 1054 .ASCIC <TTYSC_CR><TTYSC_ESCAPE>/[A/<TTYSC_ESCAPE>/[K/
07 0725
072D 1055 TTYSA_ANSI_DEOL::
4B 5B 1B 0D 00' 072D 1056 .ASCIC <TTYSC_CR><TTYSC_ESCAPE>/[K/
04 072D
0732 1057 TTYSA_ANSIBACKUP::
44 30 30 30 5B 1B 00' 0732 1058 .ASCIC <TTYSC_ESCAPE>/[000D/
06 0732
0739 1059 TTYSA_ANSICEL::
4B 5B 1B 00' 0739 1060 .ASCIC <TTYSC_ESCAPE>/[K/
03 0739
073D 1061 :
073D 1062 : VTAB AND FORM
073D 1063 :
0A 0A 0A 0A 04 073D 1064 TTYSA_VTAB:: .BYTE 4,TTYSC_LF,TTYSC_LF,TTYSC_LF,TTYSC_LF
00 0742 1065 TTYSA_MECHFORM:: .BYTE 0
0A 0A 0A 0A 0D 05 0743 1066 TTYSA_FORM:: .BYTE 5,TTYSC_CR,TTYSC_LF,TTYSC_LF,TTYSC_LF,TTYSC_LF
0C 0A 0A 0A 0A 05 0749 1067 TTYSA_LONGFORM:: .BYTE 5,TTYSC_LF,TTYSC_LF,TTYSC_LF,TTYSC_LF,TTYSC_FF
074F 1068 :
074F 1069 : MAXIMUM POSSIBLE ABSOLUTE SYSTEM TIME. USED TO KEEP EX$TIMEOUT
074F 1070 : FROM TIMING OUT READS WITH ZERO SECOND TIMEOUT.
074F 1071 :
7FFFFFFF 074F 1072 TTYSA_MAXTIME:: .LONG ^X7FFFFFFF
0753 1073 :
0753 1074 :

```

```

0753 1076 .SBTTL TERMINAL CLASS DRIVER PROLOGUE TABLE
00000000 1077 .PSECT $$$105_PROLOGUE
0000 1078
0000 1079 :
0000 1080 : CLASS DRIVER DPT
0000 1081 :
0000 1082 :
0000 1083 TTSDPT:: : DRIVER START
0000 1084 DPTAB - : DRIVER PROLOGUE TABLE
0000 1085 END=TT END,- : END OF CLASS DRIVER
0000 1086 FLAGS=DPTSM NOUNLOAD,- : UNLOAD NOT ALLOWED
0000 1087 UCBSIZE=UCB$C_TL_LENGTH,- : SIZE OF UCB
0000 1088 ADAPTER=NULL,- : ADAPTER TYPE
0000 1089 NAME=TTDRIVER,- : NAME OF DRIVER
0000 1090 VECTOR=CLASS_VECTOR : CLASS VECTOR TABLE
0038 1091
0038 1092 DPT_STORE INIT
0038 1093 DPT_STORE UCB,UCB$B_FIPL,B,8 : FORK IPL
003C 1094 DPT_STORE UCB,UCB$L_DEVCHAR,L,<- : CHARACTERISTICS
003C 1095 DEVSM_REC!- :
003C 1096 DEVSM_AVL!- :
003C 1097 DEVSM_IDV!- :
003C 1098 DEVSM_ODV!- :
003C 1099 DEVSM_TRM!- :
003C 1100 DEVSM_CCL>
0043 1101 DPT_STORE UCB,UCB$L_DEVCHAR2,L,<- : DEVICE CHARACTERISTICS
0043 1102 DEVSM_NNM> : PREFIX WITH 'NODES'
004A 1103 DPT_STORE UCB,UCB$B_DEVCLASS,B,DC$ TERM;
004E 1104 DPT_STORE UCB,UCB$B_DEVTYPE,B,TT$ UNKNOW : TYPE
0052 1105 DPT_STORE UCB,UCB$W_DEVBUFSIZ,@W,TTY$GW_DEFBUF : BUFFER SIZE
0059 1106 DPT_STORE UCB,UCB$L_DEVDEPEND,@L,TTY$GL_DEFCHAR : DEFAULT CHARACTERS
0060 1107 DPT_STORE UCB,UCB$L_DEVDEPN2,@L,TTY$GL_DEFCHAR2; : DEFAULT CHARACTERS
0067 1108 DPT_STORE UCB,UCB$B_DIPL,B,21 : DEVICE IPL
006B 1109 DPT_STORE ORB,ORB$B_FLAGS,B,- : Protection block flags
006B 1110 ZORB$M PROT 16> : SOGW protection word
006F 1111 DPT_STORE ORB,ORB$W_PROT,@W,TTY$GW PROT : Default allocation protection
0076 1112 DPT_STORE ORB,ORB$L_OWNER,@L,TTY$GL_OWNUIC : Default owner UIC
007D 1113 DPT_STORE DDB,DDB$L_DDT,D,TT$DDT
0082 1114
0082 1115 DPT_STORE REINIT
0082 1116 DPT_STORE CRB,CRB$L_INTD+VECSL_INITIAL,D,VT$INITIAL : CONTROLLER INIT
0087 1117 DPT_STORE CRB,CRB$L_INTD+VECSL_UNITINIT,D,VT$INITLINE; : UNIT INIT
008C 1118 DPT_STORE END
0000 1119
0000 1120
0000 1121
    
```

```

0000 1123          .SBTTL DRIVER DISPATCH TABLE AND FUNCTION DECISION TABLE
0000 1124          :
0000 1125          : DRIVER DISPATCH TABLE
0000 1126          :
0000 1127          DDTAB TT,-                ; DRIVER DISPATCH TABLE
0000 1128          TTY$STARTIO,-           ; START IO OPERATION
0000 1129          0,-                     ; UNEXPECTED INTERRUPT
0000 1130          FUNCTION,-              ; FUNCTION DECISION TABLE
0000 1131          TTY$CANCELIO,-         ; CANCEL I/O
0000 1132          0,-                     ; REGISTER DUMP ROUTINE
0000 1133          0,-                     ; SIZE OF DIAGNOSTIC BUFFER
0000 1134          0,-                     ; SIZE OF ERROR LOG BUFFER
0000 1135          0,-                     ; Unit initialization routine
0000 1136          TTY$WRTSTARTIO         ; Alternate START I/O
0788 1137          :
0788 1138          : FUNCTION DECISION TABLE FOR ALL TERMINALS
0788 1139          :
0788 1140          : FUNCTION:
0788 1141          FUNCTION:
0788 1142          FUNCTAB -                ; LEGAL FUNCTIONS
0788 1143          <READLBLK,-
0788 1144          WRITELBLK,-
0788 1145          READVBLK,-
0788 1146          WRITEVBLK,-
0788 1147          READPBLK,-
0788 1148          WRITEPBLK,-
0788 1149          READPROMPT,-
0788 1150          TTYREADALL,-
0788 1151          TTYREADPALL,-
0788 1152          SETMODE,-
0788 1153          SETCHAR,-
0788 1154          SENSEMODE,-
0788 1155          SENSECHAR,-
0788 1156          >
0793 1157          FUNCTAB -                ; BUFFERED I/O FUNCTIONS
0793 1158          <READLBLK,-
0793 1159          WRITELBLK,-
0793 1160          READVBLK,-
0793 1161          WRITEVBLK,-
0793 1162          READPBLK,-
0793 1163          READPROMPT,-
0793 1164          TTYREADALL,-
0793 1165          TTYREADPALL,-
0793 1166          WRITEPBLK,-
0793 1167          >
0798 1168          FUNCTAB TTY$FDTREAD,<READLBLK,READVBLK,READPBLK,READPROMPT,-
0798 1169          TTYREADALL,TTYREADPALL>
07A7 1170          FUNCTAB TTY$FDTWRITE,<WRITELBLK,WRITEVBLK,WRITEPBLK>
07B3 1171          FUNCTAB TTY$FDTSETM,<SETMODE>
07BF 1172          FUNCTAB TTY$FDTSETC,<SETCHAR>
07CB 1173          FUNCTAB TTY$FDTSENSEM,<SENSEMODE>
07D7 1174          FUNCTAB TTY$FDTSENSEC,<SENSECHAR>
07E3 1175

```

```

07E3 1177
07E3 1178 : THIS TABLE IS USED FOR COMMUNICATION WITH THE TERMINAL CLASS DRIVER.
07E3 1179 : IT INITIALLY CONTAINS RELATIVE OFFSETS TO VARIOUS ROUTINES AND
07E3 1180 : DATA STRUCTURES NEEDED BY TERMINAL PORT DRIVERS. AT DRIVER LOAD
07E3 1181 : THE RELATIVE OFFSETS ARE RELOCATED TO ACTUAL VIRTUAL ADDRESSES.
07E3 1182 : THE LIST IS TERMINATED BY A 0 LONGWORD TO SIGNAL THE RELOCATION
07E3 1183 : ROUTINE WHERE THE LIST TERMINATES.
07E3 1184
07E3 1185 CLASS_VECTOR:
00000000' 07E3 1186 .LONG TTY$GETNEXTCHAR - TTSDPT : GET NEXT STRING
00000000' 07E7 1187 .LONG TTY$PUTNEXTCHAR - TTSDPT : PUT NEXT STRING
00000000' 07EB 1188 .LONG TTY$SETUP_UCB - TTSDPT : ROUTINE TO INIT UCB
00000000' 07EF 1189 .LONG PORT_TRANSITION - TTSDPT : ROUTINE TO HANDLE MODEM TRANSITION
00000753' 07F3 1190 .LONG TTSDDT - TTSDPT : CLASS DRIVER DDT
00000000' 07F7 1191 .LONG TTY$READERROR - TTSDPT :
00000000' 07FB 1192 .LONG TTY$CLASS_DISCONNECT - TTSDPT : CLASS DISCONNECT ROUTINE
00000000' 07FF 1193 .LONG TTY$CLASS_FORK - TTSDPT : CLASS FORK ROUTINE
00000000' 0803 1194 .LONG TTY$POWERACTION - TTSDPT : CLASS POWERFAIL ACTION ROUTINE
0807 1195 :
0807 1196 : A pointer to tables is included here so that changes to the
0807 1197 : tables can be made from code external to the driver.
0807 1198 :
0000080B' 0807 1199 .LONG TTYSA_TABLES - TTSDPT ; MISCELLANEOUS TABLES
080B 1200 :
080B 1201 : THIS MARKS THE END OF THE CLASS DRIVER VECTORS.
080B 1202 : THE VECTORS AFTER THIS ARE USED FOR OTHER PURPOSES WITHIN THE
080B 1203 : DRIVER. THEY ARE INCLUDED HERE TO TAKE ADVANTAGE OF THE AUTOMATIC
080B 1204 : RELOCATION THAT TAKES PLACE AT BOOT TIME. BY REPLACING ANY OF
080B 1205 : THESE FOLLOWING VECTORS, THE TABLES THAT THEY POINT TO CAN BE
080B 1206 : "SWITCHED" WITHOUT MODIFICATION OF THE DRIVER.
080B 1207 :
080B 1208 TTYSA_TABLES:
00000827' 080B 1209 TTYSA_INTECHO:
080B 1210 .LONG INTECHO - TTSDPT ; INTERRUPT ECHOS
080F 1211 TTYSA_EXITECHO:
00000847' 080F 1212 .LONG EXITECHO - TTSDPT ; EXIT ECHOS
0813 1213 TTYSA_CTRL0ECHO:
0000084F' 0813 1214 .LONG CTRL0ECHO - TTSDPT ; CTRL0 ECHOS
0817 1215 TTYSA_INPFALL:
00000863' 0817 1216 .LONG NOFALL - TTSDPT ; INPUT FALLBACK TABLE
081B 1217 TTYSA_FALLTAB:
000002DA' 081B 1218 .LONG FALLTAB - TTSDPT ; FALLBACK TRANSLATION
081F 1219 TTYSA_EXPAN:
00000000' 081F 1220 .LONG EXPAN - TTSDPT ; EXPANSION LIST FOR BREAK CHARACTER
0823 1221 TTYSA_EXPTAB:
00000000' 0823 1222 .LONG EXPTAB - TTSDPT ; FALLBACK BREAK CHARACTER LIST
0827 1223 :
0827 1224 : HERE ARE THE DEFAULT TABLES PROVIDED BY TTDRIVER.
0827 1225 :
0827 1226 INTECHO:
00000576' 0827 1227 .LONG TTYSA_CTRLY - TTSDPT : 0
00000596' 082B 1228 .LONG TTYSA_CTRLC - TTSDPT : 1
0000068E' 082F 1229 .LONG TTYSA_CTRLY_REG - TTSDPT : 2 (ASSUMES DECCRT)
000006E6' 0833 1230 .LONG TTYSA_CTRLC_REG - TTSDPT : 3 (ASSUMES DECCRT)
0000061E' 0837 1231 .LONG TTYSA_CTRLY_DEC - TTSDPT : 4
00000646' 083B 1232 .LONG TTYSA_CTRLC_DEC - TTSDPT : 5
0000068E' 083F 1233 .LONG TTYSA_CTRLY_REG - TTSDPT : 6

```

TTYDRV DAT  
V04-001

000006E6'	0843	1234	.LONG	TTYSA_CTRLC_REG -	TTSDPT	: 7
	0847	1235		EXITECHO:		
00000556'	0847	1236	.LONG	TTYSA_CTRLZ -	TTSDPT	:
000005F6'	084B	1237	.LONG	TTYSA_CTRLZ_DEC -	TTSDPT	:
	084F	1238		CTRLOECHO:		
00000586'	084F	1239	.LONG	TTYSA_CTRL0 -	TTSDPT	:
0000066E'	0853	1240	.LONG	TTYSA_CTRL0_DEC -	TTSDPT	:
000005D6'	0857	1241	.LONG	TTYSA_OUTON -	TTSDPT	:
00000696'	085B	1242	.LONG	TTYSA_OUTON_DEC -	TTSDPT	:
	085F	1243				
00000000	085F	1244	.LONG	0		: END OF LIST
	0863	1245				
	0863	1246		NOFALL:		
00000000	0863	1247	.LONG	0		

```

0867 1249
0867 1250      .SBTTL LOGICAL UCB INIT ROUTINES
0867 1251      :
0867 1252      : THESE ROUTINES SERVE AS THE CONTROLLER AND UNIT INIT
0867 1253      : ROUTINES WHEN THE TEMPLATE UCB IS CONNECTED VIA SYSGEN.
0867 1254      : THEY SAVE THE ADDRESS OF THE TEMPLATE DDB AND UCB FOR
0867 1255      : CLONEING FUTURE LOGICAL TERMINAL UCBS
0867 1256      :
0867 1257
0867 1258 VT$INITIAL:                ; CONTROLLER INIT
00000887'EF D5 0867 1259          TSTL   VT$DDB      ; SKIP IF ALREADY SET UP
              07 12 086D 1260          BNEQ   10$
00000887'EF 56 D0 086F 1261          MOVL   R6,VT$DDB ; SAVE ADDRESS OF DDB
              05 0876 1262 10$:      RSB
0877 1263
0877 1264 VT$INITLINE:              ; UNIT INIT
0000088B'EF D5 0877 1265          TSTL   VT$UCB      ; SKIP IF ALREADY SET UP
              07 12 087D 1266          BNEQ   10$
0000088B'EF 55 D0 087F 1267          MOVL   R5,VT$UCB ; SAVE TEMPLATE UCB ADDRESS
              05 0886 1268 10$:      RSB
0887 1269
0887 1270 VT$DDB::                   .LONG   0
00000000 0887 1271
0888 1272 VT$UCB::                   .LONG   0
00000000 0888 1273
088F 1274
088F 1275
088F 1276      .END
  
```

TTYDRV DAT  
Symbol table

- Terminal driver data base module L 15

16-SEP-1984 02:16:16 VAX/VMS Macro V04-00 Page 37  
7-SEP-1984 17:56:59 [TTDRVR.SRC]TTYDRV DAT.MAR;2 (26)

SS = 00000100  
 SSS = 00000020 R 05  
 SSSS = 00000146 R 02  
 SSOP = 00000002  
 ALPHA\_LOWER = 00000002  
 ALPHA\_UPPER = 00000001  
 AT\$ NOLL \*\*\*\*\* X 05  
 CHAR = 00000100  
 CHAR\_ALL = 00000020  
 CLASS\_VECTOR = 000007E3 R 02  
 CRBSL\_INTD = 00000024  
 CTRL0ECHO = 0000084F R 02  
 DCS\_TERM \*\*\*\*\* X 05  
 DDBSL\_DDT = 0000000C  
 DEVSM\_AVL \*\*\*\*\* X 05  
 DEVSM\_CCL \*\*\*\*\* X 05  
 DEVSM\_IDV \*\*\*\*\* X 05  
 DEVSM\_NNM \*\*\*\*\* X 05  
 DEVSM\_ODV \*\*\*\*\* X 05  
 DEVSM\_REC \*\*\*\*\* X 05  
 DEVSM\_TRM \*\*\*\*\* X 05  
 DPTSC\_LENGTH = 00000038  
 DPTSC\_VERSION = 00000004  
 DPTSINITAB = 00000038 R 05  
 DPTSM NOUNLOAD = 00000004  
 DPTSREINITAB = 00000082 R 05  
 DPTSTAB = 00000000 R 05  
 DYN\$C\_CRB = 00000005  
 DYN\$C\_DDB = 00000006  
 DYN\$C\_DPT = 0000001E  
 DYN\$C\_ORB = 00000049  
 DYN\$C\_UCB = 00000010  
 EXITECHO = 00000847 R 02  
 EXPAN = 00000000 R 04  
 EXPTAB = 00000000 R 03  
 FALLTAB = 000002DA R 02  
 FUNCTAB\_LEN = 00000058  
 FUNCTION = 0000078B R 02  
 INTECHO = 00000827 R 02  
 INTERRUPT\_KEY = 00000246 RG 02  
 INTERRUPT\_KEY\_LEN = 00000005 G  
 IOS\_READBLK = 00000021  
 IOS\_READPBLK = 0000000C  
 IOS\_READPROMPT = 00000037  
 IOS\_READVBLK = 00000031  
 IOS\_SENSECHAR = 0000001B  
 IOS\_SENSEMODE = 00000027  
 IOS\_SETCHAR = 0000001A  
 IOS\_SETMODE = 00000023  
 IOS\_TTYREADALL = 0000003A  
 IOS\_TTYREADPALL = 0000003B  
 IOS\_VIRTUAL = 0000003F  
 IOS\_WRITELBLK = 00000020  
 IOS\_WRITEPBLK = 0000000B  
 IOS\_WRITEVBLK = 00000030  
 IOCSMNTVER \*\*\*\*\* X 02  
 IOCSRETURN \*\*\*\*\* X 02

MASKH  
 MASKL  
 NOFALL  
 NUM09  
 ORBSB\_FLAGS  
 ORBSL\_OWNER  
 ORBSM\_PROT\_16  
 ORBSW\_PROT  
 PLUS\_MINUS  
 PORT\_TRANSITION  
 PRINTABLE  
 SLEN  
 TTSC\_BAUD\_110  
 TTSC\_BAUD\_1200  
 TTSC\_BAUD\_150  
 TTSC\_BAUD\_1800  
 TTSC\_BAUD\_19200  
 TTSC\_BAUD\_2400  
 TTSC\_BAUD\_300  
 TTSC\_BAUD\_3600  
 TTSC\_BAUD\_4800  
 TTSC\_BAUD\_600  
 TTSC\_BAUD\_9600  
 TTSDDT  
 TTSDPT  
 TTS\_UNKNOWN  
 TTY\$AB\_600  
 TTY\$AB\_9600  
 TTY\$A\_8BITESC  
 TTY\$A\_ANSIBACKUP  
 TTY\$A\_ANSICEL  
 TTY\$A\_ANSI\_DEOL  
 TTY\$A\_ANSI\_UPCEL  
 TTY\$A\_BACKSPACE  
 TTY\$A\_CCLIST  
 TTY\$A\_CTRLC  
 TTY\$A\_CTRLC\_DEC  
 TTY\$A\_CTRLC\_REG  
 TTY\$A\_CTRL0  
 TTY\$A\_CTRL0ECHO  
 TTY\$A\_CTRL0\_DEC  
 TTY\$A\_CTRLR  
 TTY\$A\_CTRLU  
 TTY\$A\_CTRLV  
 TTY\$A\_CTRLV\_DEC  
 TTY\$A\_CTRLV\_REG  
 TTY\$A\_CTRLZ  
 TTY\$A\_CTRLZ\_DEC  
 TTY\$A\_DELCRTTAB  
 TTY\$A\_DEOL  
 TTY\$A\_ESCAPE  
 TTY\$A\_ESCINIT  
 TTY\$A\_ESC\_OUT  
 TTY\$A\_EXITECHO  
 TTY\$A\_EXPAN  
 TTY\$A\_EXPTAB  
 TTY\$A\_FALLTAB

= 00000000  
 = 08000000  
 = 00000863 R 02  
 = 00000004  
 = 0000000B  
 = 00000000  
 = 00000001  
 = 00000018  
 = 00000008  
 \*\*\*\*\* X 02  
 = 00000010  
 = 00000001  
 = 00000003  
 = 00000008  
 = 00000005  
 = 00000009  
 = 00000010  
 = 0000000B  
 = 00000006  
 = 0000000C  
 = 0000000D  
 = 00000007  
 = 0000000F  
 00000753 RG 02  
 00000000 RG 05  
 = 00000000  
 00000026 RG 02  
 00000000 RG 02  
 0000029A RG 02  
 00000732 RG 02  
 00000739 RG 02  
 0000072D RG 02  
 00000725 RG 02  
 0000054B RG 02  
 00000046 RG 02  
 00000596 R 02  
 00000646 R 02  
 000006E6 R 02  
 000005B6 R 02  
 00000813 RG 02  
 0000066E R 02  
 00000554 RG 02  
 00000552 RG 02  
 00000576 R 02  
 0000061E R 02  
 000006BE R 02  
 00000556 RG 02  
 000005F6 RG 02  
 00000543 RG 02  
 0000070E RG 02  
 00000266 RG 02  
 000002BA RG 02  
 0000028A RG 02  
 0000080F RG 02  
 0000081F RG 02  
 00000823 RG 02  
 0000081B RG 02



TTYDRV DAT  
Symbol table

TTYSA_FCNTKN	0000024B	RG	02	TTY\$K_ET_CTRLU	= 00000001		
TTYSA_FORM	00000743	RG	02	TTY\$K_ET_DELEFT	= 00000003		
TTYSA_INPFALL	00000817	RG	02	TTY\$K_ET_DELETE_WORD	= 00000009		
TTYSA_INTECHO	0000080B	RG	02	TTY\$K_ET_ESCAPE	= 00000004		
TTYSA_LONGFORM	00000749	RG	02	TTY\$K_ET_FORWARD_CHAR	= 00000006		
TTYSA_MAXTIME	0000074F	RG	02	TTY\$K_ET_MOVE_BOC	= 00000008		
TTYSA_MECHFORM	00000742	RG	02	TTY\$K_ET_MOVE_EOL	= 00000007		
TTYSA_OUTON	000005D6	R	02	TTY\$K_ET_QUOTING	= 0000000A		
TTYSA_OUTON DEC	00000696	R	02	TTY\$K_ET_RECALL	= 0000000B		
TTYSA_PREFIX	0000041A	RG	02	TTY\$K_ET_TERMINATE	= 0000000E		
TTYSA_SPACEBACK	0000054F	RG	02	TTY\$K_ET_TOGGEL	= 0000000C		
TTYSA_STANDARD	000003DA	RG	02	TTY\$K_ET_UNUSED	= 0000000D		
TTYSA_TAB	0000053A	RG	02	TTY\$K_MAXESCTKN	= 0000001B	G	
TTYSA_TABLES	0000080B	R	02	TTY\$K_SS2	= 0000000F	G	
TTYSA_TYPE	00000146	RG	02	TTY\$K_SS3	= 00000018	G	
TTYSA_VTAB	0000073D	RG	02	TTY\$M_CH_CTRL	= 00000020		
TTYSA_WORDTERM	000003FA	RG	02	TTY\$M_CH_CTRL2	= 00000080		
TTY\$CANCELIO	*****	X	02	TTY\$M_CH_CTRL3	= 00000040		
TTY\$CLASS_DISCONNECT	*****	X	02	TTY\$M_CH_LOWER	= 00000008		
TTY\$CLASS_FORK	*****	X	02	TTY\$M_CH_SPEC	= 00000010		
TTY\$C_BLANK	= 00000020			TTY\$POWERACTION	*****	X	02
TTY\$C_BS	= 00000008			TTY\$PUTNEXTCHAR	*****	X	02
TTY\$C_CR	= 0000000D			TTY\$READERROR	*****	X	02
TTY\$C_CSI	= 0000009B			TTY\$SETUP_UCB	*****	X	02
TTY\$C_CTRLA	= 00000001			TTY\$STARTIO	*****	X	02
TTY\$C_CTRLB	= 00000002			TTY\$WRTSTARTIO	*****	X	02
TTY\$C_CTRLD	= 00000004			TT END	= 00000060	R	03
TTY\$C_CTRL E	= 00000005			UCB\$B_DEVCLASS	= 00000040		
TTY\$C_CTRLF	= 00000006			UCB\$B_DEVTYPE	= 00000041		
TTY\$C_CTRLR	= 00000012			UCB\$B_DIPL	= 0000005E		
TTY\$C_CTRLU	= 00000015			UCB\$B_FIPL	= 0000000B		
TTY\$C_CTRLV	= 00000016			UCB\$C_TL_LENGTH	= 00000080		
TTY\$C_CTRLZ	= 0000001A			UCB\$S_DEVCHAR	= 00000038		
TTY\$C_DELETE	= 0000007F			UCB\$S_DEVCHAR2	= 0000003C		
TTY\$C_ESCAPE	= 0000001B			UCB\$S_DEVDEPEND	= 00000044		
TTY\$C_FF	= 0000000C			UCB\$S_DEVDEPND2	= 00000048		
TTY\$C_LF	= 0000000A			UCB\$W_DEVBUFSIZ	= 00000042		
TTY\$C_LOWESC1	= 0000007D			VEC\$S_INITIAL	= 0000000C		
TTY\$C_LOWESC2	= 0000007E			VEC\$S_UNITINIT	= 00000018		
TTY\$C_SS2	= 0000008E			VERIFY_ARRAY	0000043A	RG	02
TTY\$C_SS3	= 0000008F			VT\$DDB	00000887	RG	02
TTY\$C_TAB	= 00000009			VT\$INITIAL	00000867	R	02
TTY\$FDTREAD	*****	X	02	VT\$INITLINE	00000877	R	02
TTY\$FDTSENSEC	*****	X	02	VT\$UCB	0000088B	RG	02
TTY\$FDTSENSEM	*****	X	02	XYCONTROL	= 00000008		
TTY\$FDTSETC	*****	X	02	XYCTRL2	= 00000003		
TTY\$FDTSETM	*****	X	02	XYCTRL3	= 0000002F		
TTY\$FDTWRITE	*****	X	02	XYLOWER	= 0000001D		
TTY\$GETNEXTCHAR	*****	X	02	XYSPEC	= 00000007		
TTY\$GL_DEFCHAR	*****	X	05	Y	= 00000000		
TTY\$GL_DEFCHAR2	*****	X	05				
TTY\$GL_OWNUIC	*****	X	05				
TTY\$GW_DEFBUF	*****	X	05				
TTY\$GW_PROT	*****	X	05				
TTY\$K_CSI	= 00000015	G					
TTY\$K_ET_BACK_CHAR	= 00000005						
TTY\$K_ET_CTRLR	= 00000002						

-----  
! 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
\$\$\$115_DRIVER	U000088F ( 2191.)	02 ( 2.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC LONG
\$\$\$115_TTDRVR_EXPTAB	00000060 ( 96.)	03 ( 3.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE
\$\$\$115_TTDRVR_EXPAN	00000000 ( 0.)	04 ( 4.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE
\$\$\$105_PROLOGOE	0000008D ( 141.)	05 ( 5.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE

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

Phase	Page faults	CPU Time	Elapsed Time
Initialization	29	00:00:00.03	00:00:02.46
Command processing	118	00:00:00.38	00:00:02.72
Pass 1	667	00:00:24.74	00:01:30.78
Symbol table sort	0	00:00:01.98	00:00:08.88
Pass 2	223	00:00:05.31	00:00:20.77
Symbol table output	26	00:00:00.12	00:00:01.36
Psect synopsis output	3	00:00:00.02	00:00:00.02
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	1068	00:00:32.58	00:02:06.99

The working set limit was 2100 pages.  
207939 bytes (407 pages) of virtual memory were used to buffer the intermediate code.  
There were 100 pages of symbol table space allocated to hold 1847 non-local and 7 local symbols.  
1276 source lines were read in Pass 1, producing 28 object records in Pass 2.  
41 pages of virtual memory were used to define 38 macros.

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

Macro library name	Macros defined
-\$255\$DUA28:[SYS.03J]LIB.MLB;1	22
-\$255\$DUA28:[SYSLIB]STARLET.MLB;2	6
TOTALS (all libraries)	28

2031 GETS were required to define 28 macros.

There were no errors, warnings or information messages.

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

BCDFGHIJKLMNOPQRSTUVWXYZBCDFGHIJKLMNOPQRSTUVWXYZBCDFGHIJKLMNOPQRSTUVWXYZ

0403 AH-BT13A-SE  
VAX/VMS V4.0

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