



```

LL      IIIII  BBBB8888  VV      VV  EEEEEEEEE  CCCCCC  TTTTTTTTT  00000  RRRRRRR
LL      IIIII  BBBB8888  VV      VV  EEEEEEEEE  CCCCCC  TTTTTTTTT  00000  RRRRRRR
LL      II     BB      BB  VV      VV  EE          CC          TT      RR      RR
LL      II     BB      BB  VV      VV  EE          CC          TT      RR      RR
LL      II     BB      BB  VV      VV  EE          CC          TT      RR      RR
LL      II     BB      BB  VV      VV  EE          CC          TT      RR      RR
LL      II     BBBB8888  VV      VV  EEEEEEE   CC          TT      RR      RR
LL      II     BBBB8888  VV      VV  EEEEEEE   CC          TT      RR      RR
LL      II     BB      BB  VV      VV  EE          CC          TT      RR      RR
LL      II     BB      BB  VV      VV  EE          CC          TT      RR      RR
LL      II     BB      BB  VV      VV  EE          CC          TT      RR      RR
LL      II     BB      BB  VV      VV  EE          CC          TT      RR      RR
LLLLLLLL  IIIII  BBBB8888  VV      VV  EEEEEEEEE  CCCCCC  TTTT      RR      RR
LLLLLLLL  IIIII  BBBB8888  VV      VV  EEEEEEEEE  CCCCCC  TTTT      RR      RR

```

```

LL      IIIII  SSSSSSS  SS      SS  SSSSSSS  SSSSSSS  SS      SS
LL      IIIII  SSSSSSS  SS      SS  SSSSSSS  SSSSSSS  SS      SS
LL      II     SS      SS  SS      SS  SSSSSSS  SSSSSSS  SS      SS
LL      II     SS      SS  SS      SS  SSSSSSS  SSSSSSS  SS      SS
LL      II     SS      SS  SS      SS  SSSSSSS  SSSSSSS  SS      SS
LL      II     SSSSSS  SS      SS  SSSSSSS  SSSSSSS  SS      SS
LL      II     SSSSSS  SS      SS  SSSSSSS  SSSSSSS  SS      SS
LL      II     SS      SS  SS      SS  SSSSSSS  SSSSSSS  SS      SS
LL      II     SS      SS  SS      SS  SSSSSSS  SSSSSSS  SS      SS
LLLLLLLL  IIIII  SSSSSSS  SS      SS  SSSSSSS  SSSSSSS  SS      SS
LLLLLLLL  IIIII  SSSSSSS  SS      SS  SSSSSSS  SSSSSSS  SS      SS

```

(2) 60  
(3) 132

DECLARATIONS  
LIBRTL Vector

```

0000 1      .TITLE LIB$VECTOR - Entry vectors for LIBRTL.EXE
0000 2      .IDENT /1-011/ ; File: LIBVECTOR.MAR Edit:LEB1011
0000 3
0000 4
0000 5 :*****
0000 6 :*
0000 7 :* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
0000 8 :* DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
0000 9 :* ALL RIGHTS RESERVED.
0000 10 :*
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0000 17 :*
0000 18 :* THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
0000 19 :* AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
0000 20 :* CORPORATION.
0000 21 :*
0000 22 :* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
0000 23 :* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0000 24 :*
0000 25 :*
0000 26 :*****
0000 27 :
0000 28 :
0000 29 :++
0000 30 : FACILITY: Run-Time Library - General Utility Procedures
0000 31 :
0000 32 : ABSTRACT:
0000 33 :
0000 34 :     This module contains the entry vector definitions for the
0000 35 :     VAX-11 Run-Time Library shareable image LIBRTL.EXE
0000 36 :
0000 37 : ENVIRONMENT: User mode, AST Reentrant
0000 38 :
0000 39 : AUTHOR: Steven B. Lionel, CREATION DATE: 28-October-1982
0000 40 :
0000 41 : MODIFIED BY:
0000 42 :
0000 43 : 1-001 - Original. SBL 28-October-1982
0000 44 : 1-002 - Make FOR$CNV_OUT x entries separate - they were improperly declared
0000 45 :         as aliases of OT$$CVT_L_Tx routines. SBL 29-Nov-1982
0000 46 : 1-003 - Add LIB$GETxxI routines. SBL 19-Jan-1983
0000 47 : 1-004 - Add OT$$RET_A_CVT_TAB_R1, OT$$CVT_MUL and LIB$SIG_TO_STOP.
0000 48 :         FM 20-MAY-1983.
0000 49 : 1-005 - Add remaining LIB$, OT$$ and STR$ routines that were previously
0000 50 :         non-shared. LEB 23-May-1983.
0000 51 : 1-006 - Cleanup. LEB 24-May-1983.
0000 52 : 1-007 - Add OT$$CVT_L_TU, OT$$CVT_TU_L. SBL 26-May-1983
0000 53 : 1-008 - Add STR$MATCH_WILD and LIB$DAY OF WEEK. LEB 9-Jan-1984
0000 54 : 1-009 - Add LIB$FIND_IMAGE_SYMBOL, LIB$FIND_FILE_END and
0000 55 :         LIB$FILE_SCAN_END. LEB 25-Feb-1984
0000 56 : 1-010 - Add OT$$DIV_PKSHORT and OT$$DIV_PK_LONG. DG 5-Mar-1984
0000 57 : 1-011 - Add LIB$CREATE_DIR. LEB 11-Apr-1984

```

LIB\$VECTOR  
1-011

- Entry vectors for LIBRTL.EXE

L 1

15-SEP-1984 23:44:46  
6-SEP-1984 11:12:03

VAX/VMS Macro V04-00  
[LIBRTL.SRC]LIBVECTOR.MAR;1

Page 2  
(1)

LIE  
1-(

0000 58 ;--

```
0000 60 .SBTTL DECLARATIONS
0000 61 :
0000 62 : LIBRARY MACRO CALLS:
0000 63 :
0000 64 : LIB$:LIBRTL.MLB required
0000 65 :
0000 66 : EXTERNAL DECLARATIONS:
0000 67 :
0000 68 .DSABL GBL ; force all external symbols to be declared
0000 69 :
0000 70 : MACROS:
0000 71 :
0000 72 :
0000 73 :+
0000 74 : Macro to define an entry vector for a CALL entry point
0000 75 :-
0000 76
0000 77 .MACRO VCALL NAME
0000 78 .EXTRN NAME
0000 79 .ALIGN QUAD
0000 80 .TRANSFER NAME
0000 81 .MASK NAME
0000 82 JMP NAME+2
0000 83 .ENDM
0000 84
0000 85 :+
0000 86 : Macro to define an entry vector for a JSB entry point
0000 87 :-
0000 88
0000 89 .MACRO VJSB NAME
0000 90 .EXTRN NAME
0000 91 .ALIGN QUAD
0000 92 .TRANSFER NAME
0000 93 JMP NAME
0000 94 .BLKB 2
0000 95 .ENDM
0000 96
0000 97 :+
0000 98 : Macro to define a table that is included in the vector. The macros
0000 99 : invoked by VTAB are in LIB$:LIBRTL.MLB.
0000 100 :-
0000 101
0000 102 .MACRO VTAB NAME
0000 103 .ALIGN QUAD
0000 104 .TRANSFER NAME
0000 105 NAME:: $'NAME
0000 106 .ENDM
0000 107
0000 108 :+
0000 109 : Macro to define an alias for the next vectored entry point
0000 110 :-
0000 111
0000 112 .MACRO ALIAS NAME
0000 113 .TRANSFER NAME
0000 114 .ENDM
0000 115
0000 116
```

```
0000 117 :  
0000 118 : EQUATED SYMBOLS:  
0000 119 :  
0000 120 : NONE  
00G0 121 :  
0000 122 : OWN STORAGE:  
0000 123 :  
0000 124 : NONE  
0000 125 :  
0000 126 : PSECT DECLARATIONS:  
0000 127 :  
00000000 128 : .PSECT $LIB$VECTOR PIC,USR,CON,REL,LCL,SHR,-  
0000 129 : EXE,RD,NOWRT,QUAD  
0000 130 :
```







```
03F8 246          VCALL  LIB$FIXUP_FLT
0400 247
0400 248 ; Module LIB$FLT_UNDER
0400 249
0400 250          VCALL  LIB$FLT_UNDER
0408 251
0408 252 ; Module LIB$GET_INPUT
0408 253
0408 254          VCALL  LIB$GET_COMMAND
0410 255          VCALL  LIB$GET_INPUT
0418 256
0418 257 ; Module LIB$GET_OPCODE
0418 258
0418 259          VCALL  LIB$GET_OPCODE
0420 260
0420 261 ; Module LIB$INDEX
0420 262
0420 263          VCALL  LIB$INDEX
0428 264
0428 265 ; Module LIB$INSV
0428 266
0428 267          VCALL  LIB$INSV
0430 268
0430 269 ; Module LIB$INT_OVER
0430 270
0430 271          VCALL  LIB$INT_OVER
0438 272
0438 273 ; Module LIB$LOCC
0438 274
0438 275          VCALL  LIB$LOCC
0440 276
0440 277 ; Module LIB$LP_LINES
0440 278
0440 279          VCALL  LIB$LP_LINES
0448 280
0448 281 ; Module LIB$LUN
0448 282
0448 283          VCALL  LIB$FREE_LUN
0450 284          VCALL  LIB$GET_CUN
0458 285
0458 286 ; Module LIB$MATCHC
0458 287
0458 288          VCALL  LIB$MATCHC
0460 289
0460 290 ; Module LIB$MATCH_COND
0460 291
0460 292          VCALL  LIB$MATCH_COND
0468 293
0468 294 ; Module LIB$MOVTC
0468 295
0468 296          VCALL  LIB$MOVTC
0470 297
0470 298 ; Module LIB$MOVTUC
0470 299
0470 300          VCALL  LIB$MOVTUC
0478 301
0478 302 ; Module LIB$PUT_OUTPUT
```

```
0478 303
0478 304          VCALL  LIB$PUT_OUTPUT
0480 305
0480 306 ; Module LIB$RADIX_POINT
0480 307
0480 308          VCALL  LIB$RADIX_POINT
0488 309
0488 310 ; Module LIB$RENAME_FILE
0488 311
0488 312          VCALL  LIB$RENAME_FILE
0490 313
0490 314 ; Module LIB$REVERT
0490 315
0490 316          VCALL  LIB$REVERT
0498 317
0498 318 ; Module LIB$SCANC
0498 319
0498 320          VCALL  LIB$SCANC
04A0 321
04A0 322 ; Module LIB$SCOPY
04A0 323
04A0 324          VCALL  LIB$SCOPY_DXD
04A8 325          VJSB   LIB$SCOPY_DXD6
04B0 326          VCALL  LIB$SCOPY_R_DX
04B8 327          VJSB   LIB$SCOPY_R_DX6
04C0 328          VCALL  LIB$SFREET_DD
04C8 329          VJSB   LIB$SFREET_DD6
04D0 330          VCALL  LIB$SFREEN_DD
04D8 331          VJSB   LIB$SFREEN_DD6
04E0 332          VCALL  LIB$SGET1_DD
04E8 333          VJSB   LIB$SGET1_DD_R6
04F0 334
04F0 335 ; Module LIB$SIGNAL
04F0 336
04F0 337          VCALL  LIB$SIGNAL
04F8 338          VCALL  LIB$STOP
0500 339
0500 340 ; Module LIB$SIG_TO_RET
0500 341
0500 342          VCALL  LIB$SIG_TO_RET
0508 343
0508 344 ; Module LIB$SKPC
0508 345
0508 346          VCALL  LIB$SKPC
0510 347
0510 348 ; Module LIB$SPANC
0510 349
0510 350          VCALL  LIB$SPANC
0518 351
0518 352 ; Module LIB$SPAWN
0518 353
0518 354          VCALL  LIB$SPAWN
0520 355
0520 356 ; Module LIB$STAT_VM
0520 357
0520 358          VCALL  LIB$SHOW_VM
0528 359          VCALL  LIB$STAT_VM
```

```
0530 360
0530 361 ; Module LIB$PARSE
0530 362
0530 363         VCALL  LIB$PARSE
0538 364
0538 365 ; Module LIB$TRA_ASC_EBC
0538 366
0538 367         VCALL  LIB$TRA_ASC_EBC
0540 368
0540 369 ; Module LIB$TRA_EBC_ASC
0540 370
0540 371         VCALL  LIB$TRA_EBC_ASC
0548 372
0548 373 ; Module LIB$VM
0548 374
0548 375         VCALL  LIB$FREE_VM
0550 376         VCALL  LIB$GET_VM
0558 377
0558 378 ; Module LIB$WAIT
0558 379
0558 380         VCALL  LIB$WAIT
0560 381
0560 382 ; Module OT$$SCVTDT
0560 383
0560 384         VJSB   OT$$SCVT_D_T_R8
0568 385         VJSB   OT$$SCVT_F_T_R8
0570 386
0570 387 ; Module OT$$SCVTRT
0570 388
0570 389         VJSB   OT$$SCVT_G_T_R8
0578 390         VJSB   OT$$SCVT_H_T_R8
0580 391
0580 392 ; Module OT$$SCVTLT
0580 393
0580 394         VCALL  OT$$SCVT_L_TB
0588 395         VCALL  OT$$SCVT_L_TI
0590 396         VCALL  OT$$SCVT_L_TL
0598 397         VCALL  OT$$SCVT_L_TO
05A0 398         VCALL  OT$$SCVT_L_TZ
05A8 399         ; See below for FOR$CNV_OUT_x alternate entries
05A8 400
05A8 401 ; Module OT$$CVTTF
05A8 402
05A8 403         VCALL  OT$$SCVT_T_F
0580 404
0580 405 ; Module OT$$CVTTIL
0580 406
0580 407         ALIAS  FOR$CNV_IN_I
0580 408         VCALL  OT$$SCVT_TI_L
0588 409
0588 410 ; Module OT$$CVTTLL
0588 411
0588 412         ALIAS  FOR$CNV_IN_L
0588 413         VCALL  OT$$SCVT_TL_L
05C0 414
05C0 415 ; Module OT$$CVTTOL
05C0 416
```

```
05C0 417 VCALL OTSSCVT_TB_L
05C8 418 ALIAS FOR$CNV_IN_0
05C8 419 VCALL OTSSCVT_TO_L
05D0 420 ALIAS FOR$CNV_IN_Z
05D0 421 VCALL OTSSCVT_TZ_L
05D8 422
05D8 423 ; Module OTSSCVTR
05D8 424
05D8 425 ALIAS FOR$CNV_IN_DEFG
05D8 426 VCALL OTSSCVT_T_D
05E0 427 VCALL OTSSCVT_T_G
05E8 428 VCALL OTSSCVT_T_H
05F0 429
05F0 430 ; Module OTSSMOVE
05F0 431
05F0 432 VCALL OTSSMOVE3
05F8 433 VJSB OTSSMOVE3_RS
0600 434 VCALL OTSSMOVE5
0608 435 VJSB OTSSMOVE5_RS
0610 436
0610 437 ; Module OTSSCOPY
0610 438
0610 439 VCALL OTSSCOPY_DXD
0618 440 VJSB OTSSCOPY_DXD6
0620 441 VCALL OTSSCOPY_R_DX
0628 442 VJSB OTSSCOPY_R_DX6
0630 443 VCALL OTSSFREE1_DD
0638 444 VJSB OTSSFREE1_DD6
0640 445 VCALL OTSSFREE1_DD
0648 446 VJSB OTSSFREE1_DD6
0650 447 VCALL OTSSGET1_DD
0658 448 VJSB OTSSGET1_DD_R6
0660 449
0660 450 ; Module STR$ANALYZE_SDESC
0660 451
0660 452 VCALL STR$ANALYZE_SDESC
0668 453 VJSB STR$ANALYZE_SDESC_R1
0670 454
0670 455 ; Module STR$APPEND
0670 456
0670 457 VCALL STR$APPEND
0678 458
0678 459 ; Module STR$COMPARE
0678 460
0678 461 VCALL STR$COMPARE
0680 462
0680 463 ; Module STR$COMPARE_CASE_BLIND
0680 464
0680 465 VCALL STR$CASE_BLIND_COMPARE
0688 466
0688 467 ; Module STR$COMPARE_EQL
0688 468
0688 469 VCALL STR$COMPARE_EQL
0690 470
0690 471 ; Module STR$CONCAT
0690 472
0690 473 VCALL STR$CONCAT
```

```
0698 474
0698 475 : Module STR$COPY
0698 476
0698 477     VCALL STR$COPY_DX
06A0 478     VJSB STR$COPY_DX_R8
06A8 479     VCALL STR$COPY_R
06B0 480     VJSB STR$COPY_R_R8
06B8 481
06B8 482 : Module STR$DUPL_CHAR
06B8 483
06B8 484     VCALL STR$DUPL_CHAR
06C0 485     VJSB STR$DUPL_CHARR8
06C8 486
06C8 487 : Module STR$FIND_FIRST
06C8 488
06C8 489     VCALL STR$FIND_FIRST_IN_SET
06D0 490     VCALL STR$FIND_FIRST_NOT_IN_SET
06D8 491
06D8 492 : Module STR$FIND_FIRST_SUBSTRING
06D8 493
06D8 494     VCALL STR$FIND_FIRST_SUBSTRING
06E0 495
06E0 496 : Module STR$GET_FREE
06E0 497
06E0 498     VCALL STR$FREE1_DX
06E8 499     VJSB STR$FREE1_DX_R4
06F0 500     VCALL STR$GET1_DX
06F8 501     VJSB STR$GET1_DX_R4
0700 502
0700 503 : Module STR$LEFT
0700 504
0700 505     VCALL STR$LEFT
0708 506     VJSB STR$LEFT_R8
0710 507
0710 508 : Module STR$LEN_EXTR
0710 509
0710 510     VCALL STR$LEN_EXTR
0718 511     VJSB STR$LEN_EXTR_R8
0720 512
0720 513 : Module STR$POSITION
0720 514
0720 515     VCALL STR$POSITION
0728 516     VJSB STR$POSITION_R6
0730 517
0730 518 : Module STR$POS_EXTR
0730 519
0730 520     VCALL STR$POS_EXTR
0738 521     VJSB STR$POS_EXTR_R8
0740 522
0740 523 : Module STR$PREFIX
0740 524
0740 525     VCALL STR$PREFIX
0748 526
0748 527 : Module STR$REPLACE
0748 528
0748 529     VCALL STR$REPLACE
0750 530     VJSB STR$REPLACE_R8
```

```
0758 531
0758 532 ; Module STR$RIGHT
0758 533
0758 534          VCALL  STR$RIGHT
0760 535          VJSB   STR$RIGHT_RB
0768 536
0768 537 ; Module STR$TRANSLATE
0768 538
0768 539          VCALL  STR$TRANSLATE
0770 540
0770 541 ; Module STR$TRIM
0770 542
0770 543          VCALL  STR$TRIM
0778 544
0778 545 ; Module STR$UPCASE
0778 546
0778 547          VCALL  STR$UPCASE
0780 548
0780 549 ;+
0780 550 ; End of initial LIBRTL vector.  All subsequent additions must be made
0780 551 ; after this point.
0780 552 ;-
0780 553
0780 554 ; Module OT$$CVTLT (continued)
0780 555
0780 556          VCALL  FOR$CNV_OUT_I  ; Use OT$$CVT_L_TI instead
0788 557          VCALL  FOR$CNV_OUT_L  ; Use OT$$CVT_L_TL instead
0790 558          VCALL  FOR$CNV_OUT_O  ; Use OT$$CVT_L_TO instead
0798 559          VCALL  FOR$CNV_OUT_Z  ; Use OT$$CVT_L_TZ instead
07A0 560
07A0 561 ; Module LIB$GETDVI
07A0 562
07A0 563          VCALL  LIB$GETDVI
07A8 564
07A8 565 ; Module LIB$GETJPI
07A8 566
07A8 567          VCALL  LIB$GETJPI
07B0 568
07B0 569 ; Module LIB$GETSYI
07B0 570
07B0 571          VCALL  LIB$GETSYI
07B8 572
07B8 573 ; Module LIB$$SIGSTOP
07B8 574
07B8 575          VCALL  LIB$$SIG_TO_STOP
07C0 576
07C0 577 ; Module OT$$SCVRT
07C0 578
07C0 579          VJSB   OT$$RET_A_CVT_TAB_R1
07C8 580          VJSB   OT$$SCVT_MOL
07D0 581
07D0 582 ;+
07D0 583 ; Add all the remaining LIB$, STR$ and OT$$ modules that were previously
07D0 584 ; non-shared.
07D0 585 ;-
07D0 586 ; Module LIB$ADDX
07D0 587
```

```
07D0 588          VCALL  LIB$ADDX
07D8 589          VCALL  LIB$SUBX
07E0 590
07E0 591 ; Module LIB$ASN_WTH_MBX
07E0 592
07E0 593          VCALL  LIB$ASN_WTH_MBX
07E8 594
07E8 595 ; Module LIB$BBCCI
07E8 596
07E8 597          VCALL  LIB$BBCCI
07F0 598
07F0 599 ; Module LIB$BBSSI
07F0 600
07F0 601          VCALL  LIB$BBSSI
07F8 602
07F8 603 ; Module LIB$BINARY_TREE
07F8 604
07F8 605          VCALL  LIB$INSERT_TREE
0800 606          VCALL  LIB$LOOKUP_TREE
0808 607          VCALL  LIB$TRAVERSE_TREE
0810 608
0810 609 ; Module LIB$CALLG
0810 610
0810 611          VCALL  LIB$CALLG
0818 612
0818 613 ; Module LIB$CHAR
0818 614
0818 615          VCALL  LIB$CHAR
0820 616
0820 617 ; Module LIB$COMMON
0820 618
0820 619          VCALL  LIB$GET_COMMON
0828 620          VCALL  LIB$PUT_COMMON
0830 621
0830 622 ; Module LIB$DATE_TIME
0830 623
0830 624          VCALL  LIB$DATE_TIME
0838 625
0838 626 ; Module LIB$DAY
0838 627
0838 628          VCALL  LIB$DAY
0840 629
0840 630 ; Module LIB$DO_COMMAND
0840 631
0840 632          VCALL  LIB$DO_COMMAND
0848 633
0848 634 ; Module LIB$EDIV
0848 635
0848 636          VCALL  LIB$EDIV
0850 637
0850 638 ; Module LIB$EMODD
0850 639
0850 640          VCALL  LIB$EMODD
0858 641
0858 642 ; Module LIB$EMODF
0858 643
0858 644          VCALL  LIB$EMODF
```



0860 645  
0860 646 ; Module LIB\$EMODG  
0860 647  
0860 648 VCALL LIB\$EMODG  
0868 649  
0868 650 ; Module LIB\$EMODH  
0868 651  
0868 652 VCALL LIB\$EMODH  
0870 653  
0870 654 ; Module LIB\$EMUL  
0870 655  
0870 656 VCALL LIB\$EMUL  
0878 657  
0878 658 ; Module LIB\$GET\_FOREIGN  
0878 659  
0878 660 VCALL LIB\$GET\_FOREIGN  
0880 661  
0880 662 ; Module LIB\$ICHAR  
0880 663  
0880 664 VCALL LIB\$ICHAR  
0888 665  
0888 666 ; Module LIB\$INSQHI  
0888 667  
0888 668 VCALL LIB\$INSQHI  
0890 669  
0890 670 ; Module LIB\$INSQTI  
0890 671  
0890 672 VCALL LIB\$INSQTI  
0898 673  
0898 674 ; Module LIB\$LEN  
0898 675  
0898 676 VCALL LIB\$LEN  
08A0 677  
08A0 678 ; Module LIB\$LOOKUP\_KEY  
08A0 679  
08A0 680 VCALL LIB\$LOOKUP\_KEY  
08A8 681  
08A8 682 ; Module LIB\$MOVCS  
08A8 683  
08A8 684 VCALL LIB\$MOVCS  
08B0 685  
08B0 686 ; Module LIB\$MOVCS  
08B0 687  
08B0 688 VCALL LIB\$MOVCS  
08B8 689  
08B8 690 ; Module LIB\$POLYD  
08B8 691  
08B8 692 VCALL LIB\$POLYD  
08C0 693  
08C0 694 ; Module LIB\$POLYF  
08C0 695  
08C0 696 VCALL LIB\$POLYF  
08C8 697  
08C8 698 ; Module LIB\$POLYG  
08C8 699  
08C8 700 VCALL LIB\$POLYG  
08D0 701

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08D0 702 ; Module LIB$POLYH
08D0 703
08D0 704          VCALL  LIB$POLYH
08D8 705
08D8 706 ; Module LIB$REMQHI
08D8 707
08D8 708          VCALL  LIB$REMQH'
08E0 709
08E0 710 ; Module LIB$REMQTI
08E0 711
08E0 712          VCALL  LIB$REMQTI
08E8 713
08E8 714 ; Module LIB$RUN_PROGRAM
08E8 715
08E8 716          VCALL  LIB$RUN_PROGRAM
08F0 717
08F0 718 ; Module LIB$SYS_ASCTIM
08F0 719
08F0 720          VCALL  LIB$SYS_ASCTIM
08F8 721
08F8 722 ; Module LIB$SYS_FAO
08F8 723
08F8 724          VCALL  LIB$SYS_FAO
0900 725
0900 726 ; Module LIB$SYS_FAOL
0900 727
0900 728          VCALL  LIB$SYS_FAOL
0908 729
0908 730 ; Module LIB$SYS_GETMSG
0908 731
0908 732          VCALL  LIB$SYS_GETMSG
0910 733
0910 734 ; Module LIB$SYS_TRNLOG
0910 735
0910 736          VCALL  LIB$SYS_TRNLOG
0918 737
0918 738 ; Module LIB$TIMER
0918 739
0918 740          VCALL  LIB$FREE_TIMER
0920 741          VCALL  LIB$INIT_TIMER
0928 742          VCALL  LIB$SHOW_TIMER
0930 743          VCALL  LIB$STAT_TIMER
0938 744
0938 745 ; Module LIB$TRIM_FILESPEC
0938 746
0938 747          VCALL  LIB$TRIM_FILESPEC
0940 748
0940 749 ; Module OT$CNVOUT
0940 750
0940 751          ALIAS  COB$CNVOUT
0940 752          VCALL  OT$CNVOUT
0948 753          VCALL  OT$CNVOUT_G
0950 754          VCALL  OT$CNVOUT_H
0958 755
0958 756 ; Module OT$CVTDP_R9
0958 757
0958 758          ALIAS  COB$CVTDP_R9
```

```
0958 759          VJSB  OTSS$CVTDP_R9
0960 760
0960 761 ; Module OTSS$CVTFP_R9
0960 762
0960 763          ALIAS  COB$CVTFP_R9
0960 764          VJSB  OTSS$CVTFP_R9
0968 765
0968 766 ; Module OTSS$CVTGP_R9
0968 767
0968 768          VJSB  OTSS$CVTGP_R9
0970 769
0970 770 ; Module OTSS$CVTHP_R9
0970 771
0970 772          VJSB  OTSS$CVTHP_R9
0978 773
0978 774 ; Module OTSS$CVTPD_R9
0978 775
0978 776          ALIAS  COB$CVTPD_R9
0978 777          VJSB  OTSS$CVTPD_R9
0980 778
0980 779 ; Module OTSS$CVTPF_R9
0980 780
0980 781          ALIAS  COB$CVTPF_R9
0980 782          VJSB  OTSS$CVTPF_R9
0988 783
0988 784 ; Module OTSS$CVTPG_R9
0988 785
0988 786          VJSB  OTSS$CVTPG_R9
0990 787
0990 788 ; Module OTSS$CVTPH_R9
0990 789
0990 790          VJSB  OTSS$CVTPH_R9
0998 791
0998 792 ; Module OTSS$CVTRDP_R9
0998 793
0998 794          ALIAS  COB$CVTRDP_R9
0998 795          VJSB  OTSS$CVTRDP_R9
09A0 796
09A0 797 ; Module OTSS$CVTRFP_R9
09A0 798
09A0 799          ALIAS  COB$CVTRFP_R9
09A0 800          VJSB  OTSS$CVTRFP_R9
09A8 801
09A8 802 ; Module OTSS$CVTRGP_R9
09A8 803
09A8 804          VJSB  OTSS$CVTRGP_R9
09B0 805
09B0 806 ; Module OTSS$CVTRHP_R9
09B0 807
09B0 808          VJSB  OTSS$CVTRHP_R9
09B8 809
09B8 810 ; Module STR$ARITH
09B8 811
09B8 812          VCALL  STR$ADD
09C0 813          VCALL  STR$DIVIDE
09C8 814          VCALL  STR$MUL
09D0 815          VCALL  STR$RECIP
```

```
09D8 816          VCALL  STR$RCUND
09E0 817
09E0 818 ; Module OTSS$CVTLT
09E0 819
09E0 820          VCALL  OTSS$CVT_L_TU
09E8 821
09E8 822 ; Module OTSS$CVTTIL
09E8 823
09E8 824          VCALL  OTSS$CVT_TU_L
09F0 825
09F0 826
09F0 827 ; Module STR$MATCH
09F0 828
09F0 829          VCALL  STR$MATCH_WILD
09F8 830
09F8 831
09F8 832 ; Module LIB$DAY_OF_WEEK
09F8 833
09F8 834          VCALL  LIB$DAY_OF_WEEK
0A00 835
0A00 836 ; Module LIB$FILESCAN
0A00 837
0A00 838          VCALL  LIB$FIND_FILE_END
0A08 839          VCALL  LIB$FILE_SCAN_END
0A10 840
0A10 841 ; Module LIB$FIND_IMAGE
0A10 842
0A10 843          VCALL  LIB$FIND_IMAGE_SYMBOL
0A18 844
0A18 845 ; Module OTSS$DIV_PKSHORT
0A18 846
0A18 847          VCALL  OTSS$DIV_PKSHORT
0A20 848
0A20 849 ; Module OTSS$DIV_PK_LONG
0A20 850
0A20 851          VCALL  OTSS$DIV_PK_LONG
0A28 852
0A28 853 ; Module LIB$CREATE_DIR
0A28 854
0A28 855          VCALL  LIB$CREATE_DIR
0A30 856
0A30 857          .END
```

; End of module LIB\$VECTOR

LIB\$VECTOR  
Symbol table

- Entry vectors for LIBRTL.EXE

B 3

15-SEP-1984 23:44:46 VAX/VMS Macro V04-00  
6-SEP-1984 11:12:03 [LIBRTL.SRC]LIBVECTOR.MAR;1

Page 18  
(3)

FOR\$CNV_OUT_I	*****	X	01	LIB\$FREE_VM	*****	X	01
FOR\$CNV_OUT_L	*****	X	01	LIB\$GETDVI	*****	X	01
FOR\$CNV_OUT_O	*****	X	01	LIB\$GETJPI	*****	X	01
FOR\$CNV_OUT_Z	*****	X	01	LIB\$GETSYI	*****	X	01
LIB\$AB_ASC_EBC	00000000	RG	01	LIB\$GET_COMMAND	*****	X	01
LIB\$AB_EBC_ASC	00000100	RG	01	LIB\$GET_COMMON	*****	X	01
LIB\$AB_UPCASE	00000200	RG	01	LIB\$GET_EF	*****	X	01
LIB\$ADDX	*****	X	01	LIB\$GET_FOREIGN	*****	X	01
LIB\$ANALYZE_SDESC	*****	X	01	LIB\$GET_INPUT	*****	X	01
LIB\$ANALYZE_SDESC_R2	*****	X	01	LIB\$GET_LUN	*****	X	01
LIB\$ASN_WTH_MBX	*****	X	01	LIB\$GET_OPCODE	*****	X	01
LIB\$AST_IN_PROG	*****	X	01	LIB\$GET_SYMBOL	*****	X	01
LIB\$ATTACH	*****	X	01	LIB\$GET_VM	*****	X	01
LIB\$BBCCI	*****	X	01	LIB\$ICHAR	*****	X	01
LIB\$BBSSI	*****	X	01	LIB\$INDEX	*****	X	01
LIB\$CALLG	*****	X	01	LIB\$INIT_TIMER	*****	X	01
LIB\$CHAR	*****	X	01	LIB\$INSERT_TREE	*****	X	01
LIB\$CRC	*****	X	01	LIB\$INSQHI	*****	X	01
LIB\$CRC_TABLE	*****	X	01	LIB\$INSQTI	*****	X	01
LIB\$CREATE_DIR	*****	X	01	LIB\$INSV	*****	X	01
LIB\$CURRENCY	*****	X	01	LIB\$INT_OVER	*****	X	01
LIB\$CVTDF	*****	X	01	LIB\$LEN	*****	X	01
LIB\$CVT_DTB	*****	X	01	LIB\$LOCC	*****	X	01
LIB\$CVT-HTB	*****	X	01	LIB\$LOOKUP_KEY	*****	X	01
LIB\$CVT-OTB	*****	X	01	LIB\$LOOKUP_TREE	*****	X	01
LIB\$DATE_TIME	*****	X	01	LIB\$LP_LINES	*****	X	01
LIB\$DAY	*****	X	01	LIB\$MATCHC	*****	X	01
LIB\$DAY_OF_WEEK	*****	X	01	LIB\$MATCH_COND	*****	X	01
LIB\$DEC_OVER	*****	X	01	LIB\$MOVCS	*****	X	01
LIB\$DELETE_FILE	*****	X	01	LIB\$MOVCS5	*****	X	01
LIB\$DELETE_LOGICAL	*****	X	01	LIB\$MOVTC	*****	X	01
LIB\$DELETE_SYMBOL	*****	X	01	LIB\$MOVTUC	*****	X	01
LIB\$DIGIT_SEP	*****	X	01	LIB\$POLYD	*****	X	01
LIB\$DISABLE_CTRL	*****	X	01	LIB\$POLYF	*****	X	01
LIB\$DO_COMMAND	*****	X	01	LIB\$POLYG	*****	X	01
LIB\$EDIV	*****	X	01	LIB\$POLYH	*****	X	01
LIB\$EMODD	*****	X	01	LIB\$PUT_COMMON	*****	X	01
LIB\$EMODF	*****	X	01	LIB\$PUT_OUTPUT	*****	X	01
LIB\$EMODG	*****	X	01	LIB\$RADIX_POINT	*****	X	01
LIB\$EMODH	*****	X	01	LIB\$REMQHI	*****	X	01
LIB\$EMUL	*****	X	01	LIB\$REMQTI	*****	X	01
LIB\$ENABLE_CTRL	*****	X	01	LIB\$RENAME_FILE	*****	X	01
LIB\$ESTABLISH	*****	X	01	LIB\$RESERVE_EF	*****	X	01
LIB\$EXTV	*****	X	01	LIB\$REVERT	*****	X	01
LIB\$EXTZV	*****	X	01	LIB\$RUN_PROGRAM	*****	X	01
LIB\$FFC	*****	X	01	LIB\$SCARC	*****	X	01
LIB\$FFS	*****	X	01	LIB\$SCOPY_DXDX	*****	X	01
LIB\$FILE_SCAN	*****	X	01	LIB\$SCOPY_DXDX6	*****	X	01
LIB\$FILE_SCAN_END	*****	X	01	LIB\$SCOPY-R_DX	*****	X	01
LIB\$FIND_FILE	*****	X	01	LIB\$SCOPY-R_DX6	*****	X	01
LIB\$FIND_FILE_END	*****	X	01	LIB\$SET_LOGICAL	*****	X	01
LIB\$FIND_IMAGE_SYMBOL	*****	X	01	LIB\$SET_SYMBOL	*****	X	01
LIB\$FIXUP_FLT	*****	X	01	LIB\$FREE1_DD	*****	X	01
LIB\$FLT_UNDER	*****	X	01	LIB\$FREE1-DD6	*****	X	01
LIB\$FREE_EF	*****	X	01	LIB\$FREE-DD	*****	X	01
LIB\$FREE_LUN	*****	X	01	LIB\$FREE-DD6	*****	X	01
LIB\$FREE_TIMER	*****	X	01	LIB\$SET1_DD	*****	X	01

LIB\$VECTOR  
Symbol table

- Entry vectors for LIBRTL.EXE C 3

15-SEP-1984 23:44:46 VAX/VMS Macro V04-00  
6-SEP-1984 11:12:03 [LIBRTL.SRC]LIBVECTOR.MAR;1

Page 19  
(3)

LIB\$GET1_DD_R6	*****	X	01	OT\$SCVT_T_D	*****	X	01
LIB\$SHOW_TIMER	*****	X	01	OT\$SCVT_T_F	*****	X	01
LIB\$SHOW_VM	*****	X	01	OT\$SCVT_T_G	*****	X	01
LIB\$SIGNAL	*****	X	01	OT\$SCVT_T_H	*****	X	01
LIB\$SIG_TO_RET	*****	X	01	OT\$SDIV_PK_SHORT	*****	X	01
LIB\$SIG_TO_STOP	*****	X	01	OT\$SDIV_PK_LONG	*****	X	01
LIB\$SKPC	*****	X	01	OT\$SMOVE3	*****	X	01
LIB\$SPANC	*****	X	01	OT\$SMOVE3_R5	*****	X	01
LIB\$SPAWN	*****	X	01	OT\$SMOVE5	*****	X	01
LIB\$STAT_TIMER	*****	X	01	OT\$SMOVE5_R5	*****	X	01
LIB\$STAT_VM	*****	X	01	OT\$SSCOPY_DXDX	*****	X	01
LIB\$STOP	*****	X	01	OT\$SSCOPY_DXDX6	*****	X	01
LIB\$SUBX	*****	X	01	OT\$SSCOPY_R_DX	*****	X	01
LIB\$SYS_ASCTIM	*****	X	01	OT\$SSCOPY_R_DX6	*****	X	01
LIB\$SYS_FAO	*****	X	01	OT\$SSFREET_DD	*****	X	01
LIB\$SYS_FAOL	*****	X	01	OT\$SSFREET1_DD6	*****	X	01
LIB\$SYS_GETMSG	*****	X	01	OT\$SSFREEN_DD	*****	X	01
LIB\$SYS_TRNLOG	*****	X	01	OT\$SSFREEN_DD6	*****	X	01
LIB\$PARSE	*****	X	01	OT\$SSGET1_DD	*****	X	01
LIB\$TRAVERSE_TREE	*****	X	01	OT\$SSGET1_DD_R6	*****	X	01
LIB\$TRA_ASC_EBC	*****	X	01	STR\$ADD	*****	X	01
LIB\$TRA_EBC_ASC	*****	X	01	STR\$ANALYZE_SDESC	*****	X	01
LIB\$TRM_FILESPEC	*****	X	01	STR\$ANALYZE_SDESC_R1	*****	X	01
LIB\$WAIT	*****	X	01	STR\$APPEND	*****	X	01
OT\$SCVT_D_T_R8	*****	X	01	STR\$CASE_BLIND_COMPARE	*****	X	01
OT\$SCVT_F_T_R8	*****	X	01	STR\$COMPARE	*****	X	01
OT\$SCVT_G_T_R8	*****	X	01	STR\$COMPARE_EQ	*****	X	01
OT\$SCVT_H_T_R8	*****	X	01	STR\$CONCAT	*****	X	01
OT\$SCVT_MOL	*****	X	01	STR\$COPY_DX	*****	X	01
OT\$SRET_A_CVT_TAB_R1	*****	X	01	STR\$COPY_DX_R8	*****	X	01
OT\$SCNVOUT	*****	X	01	STR\$COPY_R	*****	X	01
OT\$SCNVOUT_G	*****	X	01	STR\$COPY_R_R8	*****	X	01
OT\$SCNVOUT_H	*****	X	01	STR\$DIVIDE	*****	X	01
OT\$SCVTD_P_R9	*****	X	01	STR\$DUPL_CHAR	*****	X	01
OT\$SCVTF_P_R9	*****	X	01	STR\$DUPL_CHARR8	*****	X	01
OT\$SCVTGP_R9	*****	X	01	STR\$FIND_FIRST_IN_SET	*****	X	01
OT\$SCVTHP_R9	*****	X	01	STR\$FIND_FIRST_NOT_IN_SET	*****	X	01
OT\$SCVTPD_R9	*****	X	01	STR\$FIND_FIRST_SUBSTRING	*****	X	01
OT\$SCVTPF_R9	*****	X	01	STR\$FREET_DX	*****	X	01
OT\$SCVTPG_R9	*****	X	01	STR\$FREET1_DX_R4	*****	X	01
OT\$SCVTPH_R9	*****	X	01	STR\$GET1_DX	*****	X	01
OT\$SCVTRDP_R9	*****	X	01	STR\$GET1_DX_R4	*****	X	01
OT\$SCVTRFP_R9	*****	X	01	STR\$LEFT	*****	X	01
OT\$SCVTRGP_R9	*****	X	01	STR\$LEFT_R8	*****	X	01
OT\$SCVTRHP_R9	*****	X	01	STR\$LEN_EXTR	*****	X	01
OT\$SCVT_L_TB	*****	X	01	STR\$LEN_EXTR_R8	*****	X	01
OT\$SCVT_L_TI	*****	X	01	STR\$MATCH_WILD	*****	X	01
OT\$SCVT_L_TL	*****	X	01	STR\$MUL	*****	X	01
OT\$SCVT_L_TO	*****	X	01	STR\$POSITION	*****	X	01
OT\$SCVT_L_TU	*****	X	01	STR\$POSITION_R6	*****	X	01
OT\$SCVT_L_TZ	*****	X	01	STR\$POS_EXTR	*****	X	01
OT\$SCVT_TB_L	*****	X	01	STR\$POS_EXTR_R8	*****	X	01
OT\$SCVT_TI_L	*****	X	01	STR\$PREFIX	*****	X	01
OT\$SCVT_TL_L	*****	X	01	STR\$RECIP	*****	X	01
OT\$SCVT_TO_L	*****	X	01	STR\$REPLACE	*****	X	01
OT\$SCVT_TU_L	*****	X	01	STR\$REPLACE_R8	*****	X	01
OT\$SCVT_TZ_L	*****	X	01	STR\$RIGHT	*****	X	01

LIB\$VECTOR  
Symbol table

- Entry vectors for LIBRTL.EXE

D 3

15-SEP-1984 23:44:46  
6-SEP-1984 11:12:03

VAX/VMS Macro V04-00  
[LIBRTL.SRC]LIBVECTOR.MAR;1

Page 20  
(3)

STR\$RIGHT_R8	*****	X	01
STR\$ROUND	*****	X	01
STR\$TRANSLATE	*****	X	01
STR\$TRIM	*****	X	01
STR\$UPCASE	*****	X	01

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

PSECT name	Allocation	PSECT No.	Attributes												
ABS	00000000 ( 0.)	00 ( 0.)	NOPIC	USR	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE		
\$LIB\$VECTOR	00000A30 ( 2608.)	01 ( 1.)	PIC	USR	CON	REL	LCL	SHR	EXE	RD	NOWRT	NOVEC	QUAD		

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

Phase	Page faults	CPU Time	Elapsed Time
initialization	36	00:00:00.08	00:00:00.88
Command processing	154	00:00:00.35	00:00:03.31
Pass 1	209	00:00:04.74	00:00:16.40
Symbol table sort	0	00:00:00.20	00:00:00.88
Pass 2	149	00:00:01.62	00:00:07.35
Symbol table output	27	00:00:00.11	00:00:00.44
Psect synopsis output	2	00:00:00.01	00:00:00.01
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	579	00:00:07.11	00:00:29.30

The working set limit was 1350 pages.  
40821 bytes (80 pages) of virtual memory were used to buffer the intermediate code.  
There were 20 pages of symbol table space allocated to hold 234 non-local and 0 local symbols.  
857 source lines were read in Pass 1, producing 45 object records in Pass 2.  
13 pages of virtual memory were used to define 7 macros.

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

Macro library name	Macros defined
-\$255\$DUA28:[LIBRTL.OBJ]LIBRTL.MLB;1	3
-\$255\$DUA28:[SYSLIB]STARLET.MLB;2	0
TOTALS (all libraries)	3

87 GETS were required to define 3 macros.

There were no errors, warnings or information messages.

MACRO/ENABLE=SUPPRESSION/LIS=LIS\$:LIBVECTOR/OBJ=OBJ\$:LIBVECTOR MSRC\$:LIBVECTOR/UPDATE=(ENH\$:LIBVECTOR)+LIB\$:LIBRTL/LIB

