```
 LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    2 ************************************************************************
                                                    3 *
                                                    4 *        Zvector E6 instruction tests for VSI encoded:
                                                    5 *
                                                    6 *        E634 VPKZ    - VECTOR PACK ZONED
                                                    7 *        E635 VLRL    - VECTOR LOAD RIGHTMOST WITH LENGTH
                                                    8 *
                                                    9 *        James Wekel June 2024
                                                   10 ************************************************************************


                                                   12 ************************************************************************
                                                   13 *
                                                   14 *        basic instruction tests
                                                   15 *
                                                   16 ************************************************************************
                                                   17 *  This program tests proper functioning of the z/arch E6 VSI vector
                                                   18 *  pack zones and load rightmost instructions.
                                                   19 *  Exceptions are not tested.
                                                   20 *
                                                   21 *  PLEASE NOTE that the tests are very SIMPLE TESTS designed to catch
                                                   22 *  obvious coding errors.  None of the tests are thorough.  They are
                                                   23 *  NOT designed to test all aspects of any of the instructions.
                                                   24 *
                                                   25 ************************************************************************
                                                   26 *
                                                   27 *    *Testcase VECTOR E6 VSI pack/load instructions
                                                   28 *    *
                                                   29 *    *   Zvector E6 instruction tests for VSI encoded:
                                                   30 *    *
                                                   31 *    *   E634 VPKZ    - VECTOR PACK ZONED
                                                   32 *    *   E635 VLRL    - VECTOR LOAD RIGHTMOST WITH LENGTH
                                                   33 *    *
                                                   34 *    *   # ---------------------------------------------------------
                                                   35 *    *   #  This tests only the basic function of the instruction.
                                                   36 *    *   #  Specification Exceptions are NOT tested.
                                                   37 *    *   # ---------------------------------------------------------
                                                   38 *    *
                                                   39 *    mainsize    2
                                                   40 *    numcpu      1
                                                   41 *    sysclear
                                                   42 *    archlvl     z/Arch
                                                   43 *
                                                   44 *    loadcore    "$(testpath)/zvector-e6-03-pack.core" 0x0
                                                   45 *
                                                   46 *    diag8cmd    enable    # (needed for messages to Hercules console)
                                                   47 *    runtest     2
                                                   48 *    diag8cmd    disable   # (reset back to default)
                                                   49 *
                                                   50 *    *Done
                                                   51 *
                                                   52 ************************************************************************


                          00000000  00001A7F     54 ZVE6TST  START 0
00000000                  00000000               55          USING ZVE6TST,R0            Low core addressability
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                     56
                               00000140  00000000    57 SVOLDPSW EQU   ZVE6TST+X'140'        z/Arch Supervisor call old PSW


00000000                       00000000  000001A0    59          ORG   ZVE6TST+X'1A0'        z/Architecure RESTART PSW
000001A0  00000001 80000000                          60          DC    X'0000000180000000'
000001A8  00000000 00000200                          61          DC    AD(BEGIN)

000001B0                       000001B0  000001D0    63          ORG   ZVE6TST+X'1D0'        z/Architecure PROGRAM CHECK PSW
000001D0  00020001 80000000                          64          DC    X'0002000180000000'
000001D8  00000000 0000DEAD                          65          DC    AD(X'DEAD')


000001E0                       000001E0  00000200    67          ORG   ZVE6TST+X'200'        Start of actual test program...
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                     69
                                                     70 ************************************************************************
                                                     71 *               The actual "ZVE6TST" program itself...
                                                     72 ************************************************************************
                                                     73 *
                                                     74 *  Architecture Mode: z/Arch
                                                     75 *  Register Usage:
                                                     76 *
                                                     77 *   R0       (work)
                                                     78 *   R1-4     (work)
                                                     79 *   R5       Testing control table - current test base
                                                     80 *   R6-R7    (work)
                                                     81 *   R8       First base register
                                                     82 *   R9       Second base register
                                                     83 *   R10      E6TESTS register
                                                     84 *   R11      E6TEST call return
                                                     85 *   R12-R13  (work)
                                                     86 *   R14      Subroutine call
                                                     87 *   R15      Secondary Subroutine call or work
                                                     88 *
                                                     89 ************************************************************************

00000200                        00000200             91          USING  BEGIN,R8        FIRST Base Register
00000200                        00001200             92          USING  BEGIN+4096,R9   SECOND Base Register

00000200  0580                                       94 BEGIN    BALR  R8,0             Initalize FIRST base register
00000202  0680                                       95          BCTR  R8,0             Initalize FIRST base register
00000204  0680                                       96          BCTR  R8,0             Initalize FIRST base register

00000206  4190 8800                  00000800        98          LA    R9,2048(,R8)     Initalize SECOND base register
0000020A  4190 9800                  00000800        99          LA    R9,2048(,R9)     Initalize SECOND base register
                                                    100
0000020E  B600 81D4                  000003D4       101          STCTL R0,R0,CTLR0      Store CR0 to enable AFP
00000212  9604 81D5                  000003D5       102          OI    CTLR0+1,X'04'    Turn on AFP bit
00000216  9602 81D5                  000003D5       103          OI    CTLR0+1,X'02'    Turn on Vector bit
0000021A  B700 81D4                  000003D4       104          LCTL  R0,R0,CTLR0      Reload updated CR0
                                                    105
                                                    106 *
0000021E  41A0 97B4                  000019B4       107          LA    R10,E6TESTS       get table of test addresses
                                                    108
                                00000222  00000001  109 NEXTE6   EQU   *
00000222  5850 A000                  00000000       110          L     R5,0(0,R10)       get test address
00000226  1255                                      111          LTR   R5,R5                have a test?
00000228  4780 8064                  00000264       112          BZ    ENDTEST                 done?
                                                    113
0000022C                        00000000            114          USING E6TEST,R5
0000022C  E710 8EA0 0006             000010A0       115          VL    V1,V1FUDGE
00000232  58B0 5000                  00000000       116          L     R11,TSUB          get address of test routine
00000236  05BB                                      117          BALR  R11,R11           do test
00000238  E710 8E80 000E             00001080       118          VST   V1,V1OUTPUT
0000023E  D50F 8E80 5014  00001080   00000014       119          CLC   V1OUTPUT,RESULT    valid?
00000244  4770 8050                  00000250       120          BNE   FAILMSG              no, issue failed message
                                                    121
00000248  41A0 A004                  00000004       122          LA    R10,4(0,R10)      next test address
0000024C  47F0 8022                  00000222       123          B     NEXTE6
                                                    124
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    125 *
                                                    126 * test failed: issue message with test number, instruction under test
                                                    127 *               and instruction I3
                                                    128 *
                                 00000250  00000001 129 FAILMSG  EQU   *
00000250  45F0 8072                        00000272 130           BAL   R15,RPTERROR
00000254  5800 81DC                        000003DC 131           L     R0,=F'1'          set failed test indicator
00000258  5000 8E00                        00001000 132           ST    R0,FAILED
                                                    133
0000025C  41A0 A004                        00000004 134           LA    R10,4(0,R10)      next test address
00000260  47F0 8022                        00000222 135           B     NEXTE6
                                                    136
                                 00000264  00000001 137 ENDTEST  EQU   *
00000264  5810 8E00                        00001000 138           L     R1,FAILED         did a test fail?
00000268  1211                                      139           LTR   R1,R1
0000026A  4780 81B8                        000003B8 140           BZ    EOJ                  No, exit
0000026E  47F0 81D0                        000003D0 141           B     FAILTEST             Yes, exit with BAD PSW
                                                    142
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    144 ********************************************************************************
                                                    145 *        RPTERROR                  Report instruction test in error
                                                    146 ********************************************************************************

00000272  50F0 80D4                      000002D4   148 RPTERROR ST    R15,RPTSAVE          Save return address
00000276  5050 80D8                      000002D8   149          ST    R5,RPTSVR5           Save R5
                                                    150 *
0000027A  4820 5004                      00000004   151          LH    R2,TNUM              get test number and convert
0000027E  4E20 8E6E                      0000106E   152          CVD   R2,DECNUM
00000282  D211 8E58 8E42       00001058  00001042   153          MVC   PRT3,EDIT
00000288  DE11 8E58 8E6E       00001058  0000106E   154          ED    PRT3,DECNUM
0000028E  D202 8E14 8E65       00001014  00001065   155          MVC   PRTNUM(3),PRT3+13    fill in message with test #
                                                    156
00000294  D207 8E2F 5008       0000102F  00000008   157          MVC   PRTNAME,OPNAME       fill in message with instruction
                                                    158 *
0000029A  E320 5007 0076                 00000007   159          LB    R2,I3                get I3 and convert
000002A0  4E20 8E6E                      0000106E   160          CVD   R2,DECNUM
000002A4  D211 8E58 8E42       00001058  00001042   161          MVC   PRT3,EDIT
000002AA  DE11 8E58 8E6E       00001058  0000106E   162          ED    PRT3,DECNUM
000002B0  D201 8E40 8E66       00001040  00001066   163          MVC   PRTI3(2),PRT3+14     fill in message with i3 field

                                                    165 *
                                                    166 *        Use Hercules Diagnose for Message to console
                                                    167 *
000002B6  9002 80E0                      000002E0   168          STM   R0,R2,RPTDWSAV       save regs used by MSG
000002BA  4100 003E                      0000003E   169          LA    R0,PRTLNG            message length
000002BE  4110 8E04                      00001004   170          LA    R1,PRTLINE             messagfe address
000002C2  4520 80F0                      000002F0   171          BAL   R2,MSG               call Hercules console MSG display
000002C6  9802 80E0                      000002E0   172          LM    R0,R2,RPTDWSAV       restore regs


000002CA  5850 80D8                      000002D8   174          L     R5,RPTSVR5           Restore R5
000002CE  58F0 80D4                      000002D4   175          L     R15,RPTSAVE          Restore return address
000002D2  07FF                                      176          BR    R15                  Return to caller

000002D4  00000000                                  178 RPTSAVE  DC    F'0'                 R15 save area
000002D8  00000000                                  179 RPTSVR5  DC    F'0'                 R5 save area

000002E0  00000000 00000000                         181 RPTDWSAV DC    2D'0'                R0-R2 save area for MSG call
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    183 ************************************************************************
                                                    184 *        Issue HERCULES MESSAGE pointed to by R1, length in R0
                                                    185 *              R2 = return address
                                                    186 ************************************************************************
000002F0  4900 81E0                  000003E0       188 MSG      CH    R0,=H'0'                 Do we even HAVE a message?
000002F4  07D2                                      189          BNHR  R2                       No, ignore

000002F6  9002 8128                  00000328       191          STM   R0,R2,MSGSAVE            Save registers

000002FA  4900 81E2                  000003E2       193          CH    R0,=AL2(L'MSGMSG)        Message length within limits?
000002FE  47D0 8106                  00000306       194          BNH   MSGOK                    Yes, continue
00000302  4100 005F                  0000005F       195          LA    R0,L'MSGMSG              No, set to maximum

00000306  1820                                      197 MSGOK    LR    R2,R0                    Copy length to work register
00000308  0620                                      198          BCTR  R2,0                     Minus-1 for execute
0000030A  4420 8134                  00000334       199          EX    R2,MSGMVC                Copy message to O/P buffer

0000030E  4120 200A                  0000000A       201          LA    R2,1+L'MSGCMD(,R2)       Calculate true command length
00000312  4110 813A                  0000033A       202          LA    R1,MSGCMD                Point to true command

00000316  83120008                                  204          DC    X'83',X'12',X'0008'      Issue Hercules Diagnose X'008'
0000031A  4780 8120                  00000320       205          BZ    MSGRET                   Return if successful
0000031E  0000                                      206          DC    H'0'                     CRASH for debugging purposes

00000320  9802 8128                  00000328       208 MSGRET   LM    R0,R2,MSGSAVE            Restore registers
00000324  07F2                                      209          BR    R2                       Return to caller


00000328  00000000 00000000                         211 MSGSAVE  DC    3F'0'                    Registers save area
00000334  D200 8143 1000      00000343  00000000    212 MSGMVC   MVC   MSGMSG(0),0(R1)          Executed instruction


0000033A  D4E2C7D5 D6C8405C                         214 MSGCMD   DC    C'MSGNOH * '             *** HERCULES MESSAGE COMMAND ***
00000343  40404040 40404040                         215 MSGMSG   DC    CL95' '                  The message text to be displayed
                                                    216
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT
                                                     218 ********************************************************************************
                                                     219 *        Normal completion or Abnormal termination PSWs
                                                     220 ********************************************************************************

000003A8  00020001 80000000                          222 EOJPSW   DC    0D'0',X'0002000180000000',AD(0)
000003B8  B2B2 81A8                  000003A8        224 EOJ      LPSWE EOJPSW                Normal completion

000003C0  00020001 80000000                          226 FAILPSW  DC    0D'0',X'0002000180000000',AD(X'BAD')
000003D0  B2B2 81C0                  000003C0        228 FAILTEST LPSWE FAILPSW               Abnormal termination

                                                     230 ********************************************************************************
                                                     231 *        Working Storage
                                                     232 ********************************************************************************

000003D4  00000000                                   234 CTLR0    DS    F                     CR0
000003D8  00000000                                   235          DS    F

000003DC                                             237          LTORG ,                     Literals pool
000003DC  00000001                                   238                =F'1'
000003E0  0000                                       239                =H'0'
000003E2  005F                                       240                =AL2(L'MSGMSG)
                                                     241
                                                     242 *        some constants
                                                     243
                         00000400  00000001          244 K        EQU   1024                  One KB
                         00001000  00000001          245 PAGE     EQU   (4*K)                 Size of one page
                         00010000  00000001          246 K64      EQU   (64*K)                64 KB
                         00100000  00000001          247 MB       EQU   (K*K)                  1 MB
                                                     248
                         AABBCCDD  00000001          249 REG2PATT EQU   X'AABBCCDD'    Polluted Register pattern
                         000000DD  00000001          250 REG2LOW  EQU         X'DD'    (last byte above)
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    252 *=========================================================================
                                                    253 *
                                                    254 *  NOTE: start data on an address that is easy to display
                                                    255 *        within Hercules
                                                    256 *
                                                    257 *=========================================================================
                                                    258
000003E4                      000003E4  00001000    259          ORG   ZVE6TST+X'1000'
00001000  00000000                                  260 FAILED   DC    F'0'                       some test failed?


                                                    262 *
                                                    263 *        failed message and associated editting
                                                    264 *
00001004  40404040 40404040                         265 PRTLINE  DC    C'         Test # '
00001014  A7A7A7                                    266 PRTNUM   DC    C'xxx'
00001017  40868189 93858440                         267          DC    c' failed for instruction '
0000102F  A7A7A7A7 A7A7A7A7                         268 PRTNAME  DC    CL8'xxxxxxxx'
00001037  40A689A3 884089F3                         269          DC    C' with i3='
00001040  A7                                        270 PRTI3    DC    C'x'
00001041  4B                                        271          DC    C'.'
                              0000003E  00000001    272 PRTLNG   EQU   *-PRTLINE
00001042  40212020 20202020                        273 EDIT     DC    XL18'402120202020202020202020202020202020'
                                                    274
00001054  7E7E7E6E                                  275          DC    C'===>'
00001058  40404040 40404040                         276 PRT3     DC    CL18' '
0000106A  4C7E7E7E                                  277          DC    C'<===='
0000106E  00000000 00000000                         278 DECNUM   DS    CL16


                                                    280 *
                                                    281 *        Vector instruction results, pollution and input
                                                    282 *
00001080                                            283          DS    0F
00001080  00000000 00000000                         284 V1OUTPUT DS    XL16                                    V1 OUTPUT
00001090  00000000 00000000                         285          DS    XL16                                      gap
000010A0  FFFFFFFF FFFFFFFF                         286 V1FUDGE  DC    XL16'FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF'    V1 FUDGE
000010B0  F1F2F3F4 F5F6F7F8                         287 V1INPUT  DC    CL16'1234567890123456'                    V1 input
000010C0  F7F8F9F0 F1F2F3F4                         288          DC    CL14'78901234567890'
000010CE  D9                                        289          DC    X'D9'
000010CF  00000000 00000000                         290          DS    XL16
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                     292 ************************************************************************
                                                     293 *        E6TEST DSECT
                                                     294 ************************************************************************

                                                     296 E6TEST   DSECT ,
00000000  00000000                                   297 TSUB     DC    A(0)           pointer  to test
00000004  0000                                       298 TNUM     DC    H'00'          Test Number
00000006  00                                         299          DC    X'00'
00000007  00                                         300 I3       DC    HL1'00'        I3 used
                                                     301
00000008  40404040 40404040                          302 OPNAME   DC    CL8' '         E6 name
00000010  00000000                                   303 RELEN    DC    A(0)           RESULT LENGTH
00000014  00000000                                   304 RESULT   DC    A(0)
                                                     305 *        EXPECTED RESULT
                                                     306 **
                                                     307 *        test routine will be here (from VSI macro)

                          00000000  00001A7F         309 ZVE6TST  CSECT ,
000010E0                                             310          DS    0F

                                                     312 ************************************************************************
                                                     313 *     Macros to help build test tables
                                                     314 ************************************************************************

                                                     316 *
                                                     317 * macro to generate individual test
                                                     318 *
                                                     319          MACRO
                                                     320          VSI   &INST,&I3,&RESULT
                                                     321 .*                               &INST   - VSI instruction under test
                                                     322 .*                               &i3     - i3 field
                                                     323 .*                               &RESULT - XL16 result field
                                                     324          GBLA  &TNUM
                                                     325 &TNUM    SETA  &TNUM+1
                                                     326
                                                     327          DS    0FD
                                                     328          USING *,R5              base for test data and test routine
                                                     329
                                                     330 T&TNUM   DC    A(X&TNUM)         address of test routine
                                                     331          DC    H'&TNUM'          test number
                                                     332          DC    X'00'
                                                     333          DC    HL1'&I3'          i3
                                                     334          DC    CL8'&INST'        instruction name
                                                     335          DC    A(X&TNUM-RE&TNUM) result length
                                                     336 RE&TNUM  DC    &RESULT           expected result
                                                     337 .*
                                                     338 *
                                                     339 X&TNUM   DS    0F
                                                     340          &INST V1,V1INPUT,&I3    test instruction
                                                     341          BR    R11               return
                                                     342
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

                                                      343          DROP  R5
                                                      344 .*
                                                      345          MEND


                                                      347 *
                                                      348 * macro to generate table of pointers to individual tests
                                                      349 *
                                                      350          MACRO
                                                      351          PTTABLE
                                                      352          GBLA  &TNUM
                                                      353          LCLA  &CUR
                                                      354 &CUR     SETA  1
                                                      355 .*
                                                      356 TTABLE   DS    0F
                                                      357 .LOOP    ANOP
                                                      358 .*
                                                      359          DC    A(T&CUR)          TEST &CUR
                                                      360 .*
                                                      361 &CUR     SETA  &CUR+1
                                                      362          AIF   (&CUR LE &TNUM).LOOP
                                                      363 *
                                                      364          DC    A(0)              END OF TABLE
                                                      365          DC    A(0)
                                                      366 .*
                                                      367          MEND
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                     369 ************************************************************************
                                                     370 *        E6 VSI tests
                                                     371 ************************************************************************
                                                     372          PRINT DATA
                                                     373
                                                     374 *        E634 VPKZ    - VECTOR PACK ZONED
                                                     375 *        E635 VLRL    - VECTOR LOAD RIGHTMOST WITH LENGTH
                                                     376
                                                     377 *        VSI   instruction, i3, 16 byte expected result
                                                     378          VSI   VPKZ,00,XL16'0000000000000000000000000000001F'
000010E0                                             379+         DS    0FD
000010E0                       000010E0              380+         USING *,R5              base for test data and test routine
000010E0  00001104                                   381+T1       DC    A(X1)             address of test routine
000010E4  0001                                       382+         DC    H'1'              test number
000010E6  00                                         383+         DC    X'00'
000010E7  00                                         384+         DC    HL1'00'           i3
000010E8  E5D7D2E9 40404040                          385+         DC    CL8'VPKZ'         instruction name
000010F0  00000010                                   386+         DC    A(X1-RE1)         result length
                                                     387+RE1      DC    XL16'0000000000000000000000000000001F' \
000010F4  00000000 00000000                             +                               expected result
000010FC  00000000 0000001F
                                                     388+*
00001104                                             389+X1       DS    0F
00001104  E600 8EB0 1034                 000010B0    390+         VPKZ  V1,V1INPUT,00     test instruction
0000110A  07FB                                       391+         BR    R11               return
0000110C                                             392+         DROP  R5
                                                     393          VSI   VPKZ,01,XL16'0000000000000000000000000000012F'
00001110                                             394+         DS    0FD
00001110                       00001110              395+         USING *,R5              base for test data and test routine
00001110  00001134                                   396+T2       DC    A(X2)             address of test routine
00001114  0002                                       397+         DC    H'2'              test number
00001116  00                                         398+         DC    X'00'
00001117  01                                         399+         DC    HL1'01'           i3
00001118  E5D7D2E9 40404040                          400+         DC    CL8'VPKZ'         instruction name
00001120  00000010                                   401+         DC    A(X2-RE2)         result length
                                                     402+RE2      DC    XL16'0000000000000000000000000000012F' \
00001124  00000000 00000000                             +                               expected result
0000112C  00000000 0000012F
                                                     403+*
00001134                                             404+X2       DS    0F
00001134  E601 8EB0 1034                 000010B0    405+         VPKZ  V1,V1INPUT,01     test instruction
0000113A  07FB                                       406+         BR    R11               return
0000113C                                             407+         DROP  R5
                                                     408          VSI   VPKZ,02,XL16'0000000000000000000000000000123F'
00001140                                             409+         DS    0FD
00001140                       00001140              410+         USING *,R5              base for test data and test routine
00001140  00001164                                   411+T3       DC    A(X3)             address of test routine
00001144  0003                                       412+         DC    H'3'              test number
00001146  00                                         413+         DC    X'00'
00001147  02                                         414+         DC    HL1'02'           i3
00001148  E5D7D2E9 40404040                          415+         DC    CL8'VPKZ'         instruction name
00001150  00000010                                   416+         DC    A(X3-RE3)         result length
                                                     417+RE3      DC    XL16'0000000000000000000000000000123F' \
00001154  00000000 00000000                             +                               expected result
0000115C  00000000 0000123F
                                                     418+*
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00001164                                           419+X3       DS    0F
00001164  E602 8EB0 1034                 000010B0  420+         VPKZ  V1,V1INPUT,02     test instruction
0000116A  07FB                                     421+         BR    R11               return
0000116C                                           422+         DROP  R5
                                                   423          VSI   VPKZ,03,XL16'00000000000000000000000000001234F'
00001170                                           424+         DS    0FD
00001170                   00001170                425+         USING *,R5              base for test data and test routine
00001170  00001194                                 426+T4       DC    A(X4)             address of test routine
00001174  0004                                     427+         DC    H'4'              test number
00001176  00                                       428+         DC    X'00'
00001177  03                                       429+         DC    HL1'03'           i3
00001178  E5D7D2E9 40404040                       430+         DC    CL8'VPKZ'         instruction name
00001180  00000010                                 431+         DC    A(X4-RE4)         result length
                                                   432+RE4      DC    XL16'00000000000000000000000000001234F' \
00001184  00000000 00000000                          +                                 expected result
0000118C  00000000 0001234F
                                                   433+*
00001194                                           434+X4       DS    0F
00001194  E603 8EB0 1034                 000010B0  435+         VPKZ  V1,V1INPUT,03     test instruction
0000119A  07FB                                     436+         BR    R11               return
0000119C                                           437+         DROP  R5
                                                   438          VSI   VPKZ,04,XL16'00000000000000000000000012345F'
000011A0                                           439+         DS    0FD
000011A0                   000011A0                440+         USING *,R5              base for test data and test routine
000011A0  000011C4                                 441+T5       DC    A(X5)             address of test routine
000011A4  0005                                     442+         DC    H'5'              test number
000011A6  00                                       443+         DC    X'00'
000011A7  04                                       444+         DC    HL1'04'           i3
000011A8  E5D7D2E9 40404040                       445+         DC    CL8'VPKZ'         instruction name
000011B0  00000010                                 446+         DC    A(X5-RE5)         result length
                                                   447+RE5      DC    XL16'00000000000000000000000012345F' \
000011B4  00000000 00000000                          +                                 expected result
000011BC  00000000 0012345F
                                                   448+*
000011C4                                           449+X5       DS    0F
000011C4  E604 8EB0 1034                 000010B0  450+         VPKZ  V1,V1INPUT,04     test instruction
000011CA  07FB                                     451+         BR    R11               return
000011CC                                           452+         DROP  R5
                                                   453          VSI   VPKZ,05,XL16'00000000000000000000000000123456F'
000011D0                                           454+         DS    0FD
000011D0                   000011D0                455+         USING *,R5              base for test data and test routine
000011D0  000011F4                                 456+T6       DC    A(X6)             address of test routine
000011D4  0006                                     457+         DC    H'6'              test number
000011D6  00                                       458+         DC    X'00'
000011D7  05                                       459+         DC    HL1'05'           i3
000011D8  E5D7D2E9 40404040                       460+         DC    CL8'VPKZ'         instruction name
000011E0  00000010                                 461+         DC    A(X6-RE6)         result length
                                                   462+RE6      DC    XL16'00000000000000000000000000123456F' \
000011E4  00000000 00000000                          +                                 expected result
000011EC  00000000 0123456F
                                                   463+*
000011F4                                           464+X6       DS    0F
000011F4  E605 8EB0 1034                 000010B0  465+         VPKZ  V1,V1INPUT,05     test instruction
000011FA  07FB                                     466+         BR    R11               return
000011FC                                           467+         DROP  R5
                                                   468          VSI   VPKZ,06,XL16'00000000000000000000000001234567F'
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00001200                                           469+         DS    0FD
00001200                      00001200             470+         USING *,R5              base for test data and test routine
00001200  00001224                                 471+T7       DC    A(X7)             address of test routine
00001204  0007                                     472+         DC    H'7'              test number
00001206  00                                       473+         DC    X'00'
00001207  06                                       474+         DC    HL1'06'           i3
00001208  E5D7D2E9 40404040                        475+         DC    CL8'VPKZ'         instruction name
00001210  00000010                                 476+         DC    A(X7-RE7)         result length
                                                   477+RE7      DC    XL16'00000000000000000000000001234567F' \
00001214  00000000 00000000                          +                                 expected result
0000121C  00000000 1234567F
                                                   478+*
00001224                                           479+X7       DS    0F
00001224  E606 8EB0 1034                 000010B0  480+         VPKZ  V1,V1INPUT,06     test instruction
0000122A  07FB                                     481+         BR    R11               return
0000122C                                           482+         DROP  R5
                                                   483          VSI   VPKZ,07,XL16'00000000000000000000000012345678F'
00001230                                           484+         DS    0FD
00001230                      00001230             485+         USING *,R5              base for test data and test routine
00001230  00001254                                 486+T8       DC    A(X8)             address of test routine
00001234  0008                                     487+         DC    H'8'              test number
00001236  00                                       488+         DC    X'00'
00001237  07                                       489+         DC    HL1'07'           i3
00001238  E5D7D2E9 40404040                        490+         DC    CL8'VPKZ'         instruction name
00001240  00000010                                 491+         DC    A(X8-RE8)         result length
                                                   492+RE8      DC    XL16'00000000000000000000000012345678F' \
00001244  00000000 00000000                          +                                 expected result
0000124C  00000001 2345678F
                                                   493+*
00001254                                           494+X8       DS    0F
00001254  E607 8EB0 1034                 000010B0  495+         VPKZ  V1,V1INPUT,07     test instruction
0000125A  07FB                                     496+         BR    R11               return
0000125C                                           497+         DROP  R5
                                                   498          VSI   VPKZ,08,XL16'00000000000000000000000123456789F'
00001260                                           499+         DS    0FD
00001260                      00001260             500+         USING *,R5              base for test data and test routine
00001260  00001284                                 501+T9       DC    A(X9)             address of test routine
00001264  0009                                     502+         DC    H'9'              test number
00001266  00                                       503+         DC    X'00'
00001267  08                                       504+         DC    HL1'08'           i3
00001268  E5D7D2E9 40404040                        505+         DC    CL8'VPKZ'         instruction name
00001270  00000010                                 506+         DC    A(X9-RE9)         result length
                                                   507+RE9      DC    XL16'00000000000000000000000123456789F' \
00001274  00000000 00000000                          +                                 expected result
0000127C  00000012 3456789F
                                                   508+*
00001284                                           509+X9       DS    0F
00001284  E608 8EB0 1034                 000010B0  510+         VPKZ  V1,V1INPUT,08     test instruction
0000128A  07FB                                     511+         BR    R11               return
0000128C                                           512+         DROP  R5
                                                   513          VSI   VPKZ,09,XL16'00000000000000000000001234567890F'
00001290                                           514+         DS    0FD
00001290                      00001290             515+         USING *,R5              base for test data and test routine
00001290  000012B4                                 516+T10      DC    A(X10)            address of test routine
00001294  000A                                     517+         DC    H'10'             test number
00001296  00                                       518+         DC    X'00'
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00001297  09                                       519+          DC    HL1'09'             i3
00001298  E5D7D2E9 40404040                         520+          DC    CL8'VPKZ'           instruction name
000012A0  00000010                                  521+          DC    A(X10-RE10)         result length
                                                    522+RE10      DC    XL16'00000000000000000000001234567890F' \
000012A4  00000000 00000000                            +                                  expected result
000012AC  00000123 4567890F
                                                    523+*
000012B4                                            524+X10       DS    0F
000012B4  E609 8EB0 1034                 000010B0   525+          VPKZ  V1,V1INPUT,09       test instruction
000012BA  07FB                                      526+          BR    R11                 return
000012BC                                            527+          DROP  R5
                                                    528           VSI   VPKZ,10,XL16'00000000000000000000012345678901F'
000012C0                                            529+          DS    0FD
000012C0                      000012C0              530+          USING *,R5                base for test data and test routine
000012C0  000012E4                                  531+T11       DC    A(X11)              address of test routine
000012C4  000B                                      532+          DC    H'11'               test number
000012C6  00                                        533+          DC    X'00'
000012C7  0A                                        534+          DC    HL1'10'             i3
000012C8  E5D7D2E9 40404040                         535+          DC    CL8'VPKZ'           instruction name
000012D0  00000010                                  536+          DC    A(X11-RE11)         result length
                                                    537+RE11      DC    XL16'00000000000000000000012345678901F' \
000012D4  00000000 00000000                            +                                  expected result
000012DC  00001234 5678901F
                                                    538+*
000012E4                                            539+X11       DS    0F
000012E4  E60A 8EB0 1034                 000010B0   540+          VPKZ  V1,V1INPUT,10       test instruction
000012EA  07FB                                      541+          BR    R11                 return
000012EC                                            542+          DROP  R5
                                                    543           VSI   VPKZ,11,XL16'00000000000000000000123456789012F'
000012F0                                            544+          DS    0FD
000012F0                      000012F0              545+          USING *,R5                base for test data and test routine
000012F0  00001314                                  546+T12       DC    A(X12)              address of test routine
000012F4  000C                                      547+          DC    H'12'               test number
000012F6  00                                        548+          DC    X'00'
000012F7  0B                                        549+          DC    HL1'11'             i3
000012F8  E5D7D2E9 40404040                         550+          DC    CL8'VPKZ'           instruction name
00001300  00000010                                  551+          DC    A(X12-RE12)         result length
                                                    552+RE12      DC    XL16'00000000000000000000123456789012F' \
00001304  00000000 00000000                            +                                  expected result
0000130C  00012345 6789012F
                                                    553+*
00001314                                            554+X12       DS    0F
00001314  E60B 8EB0 1034                 000010B0   555+          VPKZ  V1,V1INPUT,11       test instruction
0000131A  07FB                                      556+          BR    R11                 return
0000131C                                            557+          DROP  R5
                                                    558           VSI   VPKZ,12,XL16'00000000000000000001234567890123F'
00001320                                            559+          DS    0FD
00001320                      00001320              560+          USING *,R5                base for test data and test routine
00001320  00001344                                  561+T13       DC    A(X13)              address of test routine
00001324  000D                                      562+          DC    H'13'               test number
00001326  00                                        563+          DC    X'00'
00001327  0C                                        564+          DC    HL1'12'             i3
00001328  E5D7D2E9 40404040                         565+          DC    CL8'VPKZ'           instruction name
00001330  00000010                                  566+          DC    A(X13-RE13)         result length
                                                    567+RE13      DC    XL16'00000000000000000001234567890123F' \
00001334  00000000 00000000                            +                                  expected result
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
0000133C  00123456 7890123F                          568+*
00001344                                             569+X13      DS    0F
00001344  E60C 8EB0 1034                 000010B0    570+         VPKZ  V1,V1INPUT,12     test instruction
0000134A  07FB                                       571+         BR    R11              return
0000134C                                             572+         DROP  R5
                                                     573          VSI   VPKZ,13,XL16'0000000000000000012345678901234F'
00001350                                             574+         DS    0FD
00001350                 00001350                    575+         USING *,R5             base for test data and test routine
00001350  00001374                                   576+T14      DC    A(X14)           address of test routine
00001354  000E                                       577+         DC    H'14'            test number
00001356  00                                         578+         DC    X'00'
00001357  0D                                         579+         DC    HL1'13'          i3
00001358  E5D7D2E9 40404040                         580+         DC    CL8'VPKZ'        instruction name
00001360  00000010                                   581+         DC    A(X14-RE14)      result length
                                                     582+RE14     DC    XL16'0000000000000000012345678901234F' \
00001364  00000000 00000000                             +                              expected result
0000136C  01234567 8901234F
                                                     583+*
00001374                                             584+X14      DS    0F
00001374  E60D 8EB0 1034                 000010B0    585+         VPKZ  V1,V1INPUT,13     test instruction
0000137A  07FB                                       586+         BR    R11              return
0000137C                                             587+         DROP  R5
                                                     588          VSI   VPKZ,14,XL16'00000000000000000123456789012345F'
00001380                                             589+         DS    0FD
00001380                 00001380                    590+         USING *,R5             base for test data and test routine
00001380  000013A4                                   591+T15      DC    A(X15)           address of test routine
00001384  000F                                       592+         DC    H'15'            test number
00001386  00                                         593+         DC    X'00'
00001387  0E                                         594+         DC    HL1'14'          i3
00001388  E5D7D2E9 40404040                         595+         DC    CL8'VPKZ'        instruction name
00001390  00000010                                   596+         DC    A(X15-RE15)      result length
                                                     597+RE15     DC    XL16'00000000000000000123456789012345F' \
00001394  00000000 00000000                             +                              expected result
0000139C  12345678 9012345F
                                                     598+*
000013A4                                             599+X15      DS    0F
000013A4  E60E 8EB0 1034                 000010B0    600+         VPKZ  V1,V1INPUT,14     test instruction
000013AA  07FB                                       601+         BR    R11              return
000013AC                                             602+         DROP  R5
                                                     603          VSI   VPKZ,15,XL16'000000000000000012345678901234 56F'
000013B0                                             604+         DS    0FD
000013B0                 000013B0                    605+         USING *,R5             base for test data and test routine
000013B0  000013D4                                   606+T16      DC    A(X16)           address of test routine
000013B4  0010                                       607+         DC    H'16'            test number
000013B6  00                                         608+         DC    X'00'
000013B7  0F                                         609+         DC    HL1'15'          i3
000013B8  E5D7D2E9 40404040                         610+         DC    CL8'VPKZ'        instruction name
000013C0  00000010                                   611+         DC    A(X16-RE16)      result length
                                                     612+RE16     DC    XL16'00000000000000012345678901234 56F' \
000013C4  00000000 00000001                             +                              expected result
000013CC  23456789 0123456F
                                                     613+*
000013D4                                             614+X16      DS    0F
000013D4  E60F 8EB0 1034                 000010B0    615+         VPKZ  V1,V1INPUT,15     test instruction
000013DA  07FB                                       616+         BR    R11              return
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
000013DC                                           617+         DROP  R5
                                                   618          VSI   VPKZ,16,XL16'00000000000000123456789012345678F'
000013E0                                           619+         DS    0FD
000013E0                       000013E0            620+         USING *,R5              base for test data and test routine
000013E0  00001404                                 621+T17      DC    A(X17)            address of test routine
000013E4  0011                                     622+         DC    H'17'             test number
000013E6  00                                       623+         DC    X'00'
000013E7  10                                       624+         DC    HL1'16'           i3
000013E8  E5D7D2E9 40404040                        625+         DC    CL8'VPKZ'         instruction name
000013F0  00000010                                 626+         DC    A(X17-RE17)       result length
                                                   627+RE17     DC    XL16'00000000000000123456789012345678F' \
000013F4  00000000 00000012                           +                                expected result
000013FC  34567890 1234567F
                                                   628+*
00001404                                           629+X17      DS    0F
00001404  E610 8EB0 1034                000010B0   630+         VPKZ  V1,V1INPUT,16     test instruction
0000140A  07FB                                     631+         BR    R11               return
0000140C                                           632+         DROP  R5
                                                   633          VSI   VPKZ,17,XL16'00000000000000123456789012345678F'
00001410                                           634+         DS    0FD
00001410                       00001410            635+         USING *,R5              base for test data and test routine
00001410  00001434                                 636+T18      DC    A(X18)            address of test routine
00001414  0012                                     637+         DC    H'18'             test number
00001416  00                                       638+         DC    X'00'
00001417  11                                       639+         DC    HL1'17'           i3
00001418  E5D7D2E9 40404040                        640+         DC    CL8'VPKZ'         instruction name
00001420  00000010                                 641+         DC    A(X18-RE18)       result length
                                                   642+RE18     DC    XL16'00000000000000123456789012345678F' \
00001424  00000000 00000123                           +                                expected result
0000142C  45678901 2345678F
                                                   643+*
00001434                                           644+X18      DS    0F
00001434  E611 8EB0 1034                000010B0   645+         VPKZ  V1,V1INPUT,17     test instruction
0000143A  07FB                                     646+         BR    R11               return
0000143C                                           647+         DROP  R5
                                                   648          VSI   VPKZ,18,XL16'00000000000000123456789012345678F'
00001440                                           649+         DS    0FD
00001440                       00001440            650+         USING *,R5              base for test data and test routine
00001440  00001464                                 651+T19      DC    A(X19)            address of test routine
00001444  0013                                     652+         DC    H'19'             test number
00001446  00                                       653+         DC    X'00'
00001447  12                                       654+         DC    HL1'18'           i3
00001448  E5D7D2E9 40404040                        655+         DC    CL8'VPKZ'         instruction name
00001450  00000010                                 656+         DC    A(X19-RE19)       result length
                                                   657+RE19     DC    XL16'00000000000000123456789012345678F' \
00001454  00000000 00001234                           +                                expected result
0000145C  56789012 3456789F
                                                   658+*
00001464                                           659+X19      DS    0F
00001464  E612 8EB0 1034                000010B0   660+         VPKZ  V1,V1INPUT,18     test instruction
0000146A  07FB                                     661+         BR    R11               return
0000146C                                           662+         DROP  R5
                                                   663          VSI   VPKZ,19,XL16'00000000000000123456789012345678F'
00001470                                           664+         DS    0FD
00001470                       00001470            665+         USING *,R5              base for test data and test routine
00001470  00001494                                 666+T20      DC    A(X20)            address of test routine
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00001474  0014                                     667+         DC    H'20'              test number
00001476  00                                       668+         DC    X'00'
00001477  13                                       669+         DC    HL1'19'            i3
00001478  E5D7D2E9 40404040                        670+         DC    CL8'VPKZ'          instruction name
00001480  00000010                                 671+         DC    A(X20-RE20)        result length
                                                   672+RE20     DC    XL16'00000000000123456789012345678901F' \
00001484  00000000 00012345                          +                                  expected result
0000148C  67890123 4567890F
                                                   673+*
00001494                                           674+X20      DS    0F
00001494  E613 8EB0 1034                000010B0   675+         VPKZ  V1,V1INPUT,19      test instruction
0000149A  07FB                                     676+         BR    R11                return
0000149C                                           677+         DROP  R5
                                                   678          VSI   VPKZ,20,XL16'00000000001234567890123456789012F'
000014A0                                           679+         DS    0FD
000014A0                        000014A0           680+         USING *,R5               base for test data and test routine
000014A0  000014C4                                 681+T21      DC    A(X21)             address of test routine
000014A4  0015                                     682+         DC    H'21'              test number
000014A6  00                                       683+         DC    X'00'
000014A7  14                                       684+         DC    HL1'20'            i3
000014A8  E5D7D2E9 40404040                        685+         DC    CL8'VPKZ'          instruction name
000014B0  00000010                                 686+         DC    A(X21-RE21)        result length
                                                   687+RE21     DC    XL16'00000000001234567890123456789012F' \
000014B4  00000000 00123456                          +                                  expected result
000014BC  78901234 5678901F
                                                   688+*
000014C4                                           689+X21      DS    0F
000014C4  E614 8EB0 1034                000010B0   690+         VPKZ  V1,V1INPUT,20      test instruction
000014CA  07FB                                     691+         BR    R11                return
000014CC                                           692+         DROP  R5
                                                   693          VSI   VPKZ,21,XL16'00000000001234567890123456789012F'
000014D0                                           694+         DS    0FD
000014D0                        000014D0           695+         USING *,R5               base for test data and test routine
000014D0  000014F4                                 696+T22      DC    A(X22)             address of test routine
000014D4  0016                                     697+         DC    H'22'              test number
000014D6  00                                       698+         DC    X'00'
000014D7  15                                       699+         DC    HL1'21'            i3
000014D8  E5D7D2E9 40404040                        700+         DC    CL8'VPKZ'          instruction name
000014E0  00000010                                 701+         DC    A(X22-RE22)        result length
                                                   702+RE22     DC    XL16'00000000001234567890123456789012F' \
000014E4  00000000 01234567                          +                                  expected result
000014EC  89012345 6789012F
                                                   703+*
000014F4                                           704+X22      DS    0F
000014F4  E615 8EB0 1034                000010B0   705+         VPKZ  V1,V1INPUT,21      test instruction
000014FA  07FB                                     706+         BR    R11                return
000014FC                                           707+         DROP  R5
                                                   708          VSI   VPKZ,22,XL16'00000000123456789012345678901 23F'
00001500                                           709+         DS    0FD
00001500                        00001500           710+         USING *,R5               base for test data and test routine
00001500  00001524                                 711+T23      DC    A(X23)             address of test routine
00001504  0017                                     712+         DC    H'23'              test number
00001506  00                                       713+         DC    X'00'
00001507  16                                       714+         DC    HL1'22'            i3
00001508  E5D7D2E9 40404040                        715+         DC    CL8'VPKZ'          instruction name
00001510  00000010                                 716+         DC    A(X23-RE23)        result length
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    717+RE23     DC    XL16'0000000012345678901234567890123F' \
00001514  00000000 12345678                            +                          expected result
0000151C  90123456 7890123F
                                                    718+*
00001524                                            719+X23      DS    0F
00001524  E616 8EB0 1034                 000010B0   720+         VPKZ  V1,V1INPUT,22     test instruction
0000152A  07FB                                      721+         BR    R11              return
0000152C                                            722+         DROP  R5
                                                    723          VSI   VPKZ,23,XL16'00000001234567890123456789012345F'
00001530                                            724+         DS    0FD
00001530                          00001530          725+         USING *,R5             base for test data and test routine
00001530  00001554                                  726+T24      DC    A(X24)           address of test routine
00001534  0018                                      727+         DC    H'24'            test number
00001536  00                                        728+         DC    X'00'
00001537  17                                        729+         DC    HL1'23'          i3
00001538  E5D7D2E9 40404040                         730+         DC    CL8'VPKZ'        instruction name
00001540  00000010                                  731+         DC    A(X24-RE24)      result length
                                                    732+RE24     DC    XL16'00000001234567890123456789012345F' \
00001544  00000001 23456789                            +                          expected result
0000154C  01234567 8901234F
                                                    733+*
00001554                                            734+X24      DS    0F
00001554  E617 8EB0 1034                 000010B0   735+         VPKZ  V1,V1INPUT,23     test instruction
0000155A  07FB                                      736+         BR    R11              return
0000155C                                            737+         DROP  R5
                                                    738          VSI   VPKZ,24,XL16'000000123456789012345678901234 5F'
00001560                                            739+         DS    0FD
00001560                          00001560          740+         USING *,R5             base for test data and test routine
00001560  00001584                                  741+T25      DC    A(X25)           address of test routine
00001564  0019                                      742+         DC    H'25'            test number
00001566  00                                        743+         DC    X'00'
00001567  18                                        744+         DC    HL1'24'          i3
00001568  E5D7D2E9 40404040                         745+         DC    CL8'VPKZ'        instruction name
00001570  00000010                                  746+         DC    A(X25-RE25)      result length
                                                    747+RE25     DC    XL16'00000012345678901234567890123 45F' \
00001574  00000012 34567890                            +                          expected result
0000157C  12345678 9012345F
                                                    748+*
00001584                                            749+X25      DS    0F
00001584  E618 8EB0 1034                 000010B0   750+         VPKZ  V1,V1INPUT,24     test instruction
0000158A  07FB                                      751+         BR    R11              return
0000158C                                            752+         DROP  R5
                                                    753          VSI   VPKZ,25,XL16'0000012345678901234567890123456F'
00001590                                            754+         DS    0FD
00001590                          00001590          755+         USING *,R5             base for test data and test routine
00001590  000015B4                                  756+T26      DC    A(X26)           address of test routine
00001594  001A                                      757+         DC    H'26'            test number
00001596  00                                        758+         DC    X'00'
00001597  19                                        759+         DC    HL1'25'          i3
00001598  E5D7D2E9 40404040                         760+         DC    CL8'VPKZ'        instruction name
000015A0  00000010                                  761+         DC    A(X26-RE26)      result length
                                                    762+RE26     DC    XL16'0000012345678901234567890123456F' \
000015A4  00000123 45678901                            +                          expected result
000015AC  23456789 0123456F
                                                    763+*
000015B4                                            764+X26      DS    0F
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

000015B4  E619 8EB0 1034                 000010B0   765+         VPKZ  V1,V1INPUT,25     test instruction
000015BA  07FB                                      766+         BR    R11               return
000015BC                                            767+         DROP  R5
                                                    768          VSI   VPKZ,26,XL16'00012345678901234567890123456F'
000015C0                                            769+         DS    0FD
000015C0                           000015C0         770+         USING *,R5              base for test data and test routine
000015C0  000015E4                                  771+T27      DC    A(X27)            address of test routine
000015C4  001B                                      772+         DC    H'27'             test number
000015C6  00                                        773+         DC    X'00'
000015C7  1A                                        774+         DC    HL1'26'           i3
000015C8  E5D7D2E9 40404040                         775+         DC    CL8'VPKZ'         instruction name
000015D0  00000010                                  776+         DC    A(X27-RE27)       result length
                                                    777+RE27     DC    XL16'00012345678901234567890123456F' \
000015D4  00001234 56789012                            +                                expected result
000015DC  34567890 1234567F
                                                    778+*
000015E4                                            779+X27      DS    0F
000015E4  E61A 8EB0 1034                 000010B0   780+         VPKZ  V1,V1INPUT,26     test instruction
000015EA  07FB                                      781+         BR    R11               return
000015EC                                            782+         DROP  R5
                                                    783          VSI   VPKZ,27,XL16'000123456789012345678901234567F'
000015F0                                            784+         DS    0FD
000015F0                           000015F0         785+         USING *,R5              base for test data and test routine
000015F0  00001614                                  786+T28      DC    A(X28)            address of test routine
000015F4  001C                                      787+         DC    H'28'             test number
000015F6  00                                        788+         DC    X'00'
000015F7  1B                                        789+         DC    HL1'27'           i3
000015F8  E5D7D2E9 40404040                         790+         DC    CL8'VPKZ'         instruction name
00001600  00000010                                  791+         DC    A(X28-RE28)       result length
                                                    792+RE28     DC    XL16'000123456789012345678901234567F' \
00001604  00012345 67890123                            +                                expected result
0000160C  45678901 2345678F
                                                    793+*
00001614                                            794+X28      DS    0F
00001614  E61B 8EB0 1034                 000010B0   795+         VPKZ  V1,V1INPUT,27     test instruction
0000161A  07FB                                      796+         BR    R11               return
0000161C                                            797+         DROP  R5
                                                    798          VSI   VPKZ,28,XL16'0012345678901234567890123456789F'
00001620                                            799+         DS    0FD
00001620                           00001620         800+         USING *,R5              base for test data and test routine
00001620  00001644                                  801+T29      DC    A(X29)            address of test routine
00001624  001D                                      802+         DC    H'29'             test number
00001626  00                                        803+         DC    X'00'
00001627  1C                                        804+         DC    HL1'28'           i3
00001628  E5D7D2E9 40404040                         805+         DC    CL8'VPKZ'         instruction name
00001630  00000010                                  806+         DC    A(X29-RE29)       result length
                                                    807+RE29     DC    XL16'0012345678901234567890123456789F' \
00001634  00123456 78901234                            +                                expected result
0000163C  56789012 3456789F
                                                    808+*
00001644                                            809+X29      DS    0F
00001644  E61C 8EB0 1034                 000010B0   810+         VPKZ  V1,V1INPUT,28     test instruction
0000164A  07FB                                      811+         BR    R11               return
0000164C                                            812+         DROP  R5
                                                    813          VSI   VPKZ,29,XL16'01234567890123456789012345678 90F'
00001650                                            814+         DS    0FD
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00001650                     00001650              815+         USING *,R5              base for test data and test routine
00001650  00001674                                 816+T30      DC    A(X30)            address of test routine
00001654  001E                                     817+         DC    H'30'             test number
00001656  00                                       818+         DC    X'00'
00001657  1D                                       819+         DC    HL1'29'           i3
00001658  E5D7D2E9 40404040                        820+         DC    CL8'VPKZ'         instruction name
00001660  00000010                                 821+         DC    A(X30-RE30)       result length
                                                   822+RE30     DC    XL16'0123456789012345678901234567890F' \
00001664  01234567 89012345                          +                                 expected result
0000166C  67890123 4567890F
                                                   823+*
00001674                                           824+X30      DS    0F
00001674  E61D 8EB0 1034               000010B0    825+         VPKZ  V1,V1INPUT,29     test instruction
0000167A  07FB                                     826+         BR    R11               return
0000167C                                           827+         DROP  R5
                                                   828          VSI   VPKZ,30,XL16'123456789012345678901234567890D'  note: D
00001680                                           829+         DS    0FD
00001680                     00001680              830+         USING *,R5              base for test data and test routine
00001680  000016A4                                 831+T31      DC    A(X31)            address of test routine
00001684  001F                                     832+         DC    H'31'             test number
00001686  00                                       833+         DC    X'00'
00001687  1E                                       834+         DC    HL1'30'           i3
00001688  E5D7D2E9 40404040                        835+         DC    CL8'VPKZ'         instruction name
00001690  00000010                                 836+         DC    A(X31-RE31)       result length
                                                   837+RE31     DC    XL16'123456789012345678901234567890D' \
00001694  12345678 90123456                          +                                 expected result
0000169C  78901234 5678909D
                                                   838+*
000016A4                                           839+X31      DS    0F
000016A4  E61E 8EB0 1034               000010B0    840+         VPKZ  V1,V1INPUT,30     test instruction
000016AA  07FB                                     841+         BR    R11               return
000016AC                                           842+         DROP  R5
                                                   843
                                                   844          VSI   VLRL,00,XL16'000000000000000000000000000000F1'
000016B0                                           845+         DS    0FD
000016B0                     000016B0              846+         USING *,R5              base for test data and test routine
000016B0  000016D4                                 847+T32      DC    A(X32)            address of test routine
000016B4  0020                                     848+         DC    H'32'             test number
000016B6  00                                       849+         DC    X'00'
000016B7  00                                       850+         DC    HL1'00'           i3
000016B8  E5D3D9D3 40404040                        851+         DC    CL8'VLRL'         instruction name
000016C0  00000010                                 852+         DC    A(X32-RE32)       result length
                                                   853+RE32     DC    XL16'000000000000000000000000000000F1' \
000016C4  00000000 00000000                           +                                 expected result
000016CC  00000000 000000F1
                                                   854+*
000016D4                                           855+X32      DS    0F
000016D4  E600 8EB0 1035               000010B0    856+         VLRL  V1,V1INPUT,00     test instruction
000016DA  07FB                                     857+         BR    R11               return
000016DC                                           858+         DROP  R5
                                                   859          VSI   VLRL,01,XL16'000000000000000000000000000000F1F2'
000016E0                                           860+         DS    0FD
000016E0                     000016E0              861+         USING *,R5              base for test data and test routine
000016E0  00001704                                 862+T33      DC    A(X33)            address of test routine
000016E4  0021                                     863+         DC    H'33'             test number
000016E6  00                                       864+         DC    X'00'
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

000016E7  01                                       865+         DC    HL1'01'           i3
000016E8  E5D3D9D3 40404040                        866+         DC    CL8'VLRL'         instruction name
000016F0  00000010                                 867+         DC    A(X33-RE33)       result length
                                                   868+RE33     DC    XL16'00000000000000000000000000000F1F2' \
000016F4  00000000 00000000                           +                                 expected result
000016FC  00000000 0000F1F2
                                                   869+*
00001704                                           870+X33      DS    0F
00001704  E601 8EB0 1035                 000010B0  871+         VLRL  V1,V1INPUT,01     test instruction
0000170A  07FB                                     872+         BR    R11               return
0000170C                                           873+         DROP  R5
                                                   874          VSI   VLRL,02,XL16'00000000000000000000000000F1F2F3'
00001710                                           875+         DS    0FD
00001710                 00001710                  876+         USING *,R5              base for test data and test routine
00001710  00001734                                 877+T34      DC    A(X34)            address of test routine
00001714  0022                                     878+         DC    H'34'             test number
00001716  00                                       879+         DC    X'00'
00001717  02                                       880+         DC    HL1'02'           i3
00001718  E5D3D9D3 40404040                        881+         DC    CL8'VLRL'         instruction name
00001720  00000010                                 882+         DC    A(X34-RE34)       result length
                                                   883+RE34     DC    XL16'00000000000000000000000000F1F2F3' \
00001724  00000000 00000000                           +                                 expected result
0000172C  00000000 00F1F2F3
                                                   884+*
00001734                                           885+X34      DS    0F
00001734  E602 8EB0 1035                 000010B0  886+         VLRL  V1,V1INPUT,02     test instruction
0000173A  07FB                                     887+         BR    R11               return
0000173C                                           888+         DROP  R5
                                                   889          VSI   VLRL,03,XL16'00000000000000000000000F1F2F3F4'
00001740                                           890+         DS    0FD
00001740                 00001740                  891+         USING *,R5              base for test data and test routine
00001740  00001764                                 892+T35      DC    A(X35)            address of test routine
00001744  0023                                     893+         DC    H'35'             test number
00001746  00                                       894+         DC    X'00'
00001747  03                                       895+         DC    HL1'03'           i3
00001748  E5D3D9D3 40404040                        896+         DC    CL8'VLRL'         instruction name
00001750  00000010                                 897+         DC    A(X35-RE35)       result length
                                                   898+RE35     DC    XL16'00000000000000000000000000F1F2F3F4' \
00001754  00000000 00000000                           +                                 expected result
0000175C  00000000 F1F2F3F4
                                                   899+*
00001764                                           900+X35      DS    0F
00001764  E603 8EB0 1035                 000010B0  901+         VLRL  V1,V1INPUT,03     test instruction
0000176A  07FB                                     902+         BR    R11               return
0000176C                                           903+         DROP  R5
                                                   904          VSI   VLRL,04,XL16'0000000000000000000000F1F2F3F4F5'
00001770                                           905+         DS    0FD
00001770                 00001770                  906+         USING *,R5              base for test data and test routine
00001770  00001794                                 907+T36      DC    A(X36)            address of test routine
00001774  0024                                     908+         DC    H'36'             test number
00001776  00                                       909+         DC    X'00'
00001777  04                                       910+         DC    HL1'04'           i3
00001778  E5D3D9D3 40404040                        911+         DC    CL8'VLRL'         instruction name
00001780  00000010                                 912+         DC    A(X36-RE36)       result length
                                                   913+RE36     DC    XL16'00000000000000000000000F1F2F3F4F5' \
00001784  00000000 00000000                           +                                 expected result
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
0000178C  000000F1 F2F3F4F5                          914+*
00001794                                             915+X36     DS    0F
00001794  E604 8EB0 1035                 000010B0    916+        VLRL  V1,V1INPUT,04     test instruction
0000179A  07FB                                       917+        BR    R11               return
0000179C                                             918+        DROP  R5
                                                     919         VSI   VLRL,05,XL16'0000000000000000000F1F2F3F4F5F6'
000017A0                                             920+        DS    0FD
000017A0                          000017A0           921+        USING *,R5              base for test data and test routine
000017A0  000017C4                                   922+T37     DC    A(X37)            address of test routine
000017A4  0025                                       923+        DC    H'37'             test number
000017A6  00                                         924+        DC    X'00'
000017A7  05                                         925+        DC    HL1'05'           i3
000017A8  E5D3D9D3 40404040                          926+        DC    CL8'VLRL'         instruction name
000017B0  00000010                                   927+        DC    A(X37-RE37)       result length
                                                     928+RE37    DC    XL16'0000000000000000000F1F2F3F4F5F6' \
000017B4  00000000 00000000                             +                              expected result
000017BC  0000F1F2 F3F4F5F6                          929+*
000017C4                                             930+X37     DS    0F
000017C4  E605 8EB0 1035                 000010B0    931+        VLRL  V1,V1INPUT,05     test instruction
000017CA  07FB                                       932+        BR    R11               return
000017CC                                             933+        DROP  R5
                                                     934         VSI   VLRL,06,XL16'0000000000000000F1F2F3F4F5F6F7'
000017D0                                             935+        DS    0FD
000017D0                          000017D0           936+        USING *,R5              base for test data and test routine
000017D0  000017F4                                   937+T38     DC    A(X38)            address of test routine
000017D4  0026                                       938+        DC    H'38'             test number
000017D6  00                                         939+        DC    X'00'
000017D7  06                                         940+        DC    HL1'06'           i3
000017D8  E5D3D9D3 40404040                          941+        DC    CL8'VLRL'         instruction name
000017E0  00000010                                   942+        DC    A(X38-RE38)       result length
                                                     943+RE38    DC    XL16'0000000000000000F1F2F3F4F5F6F7' \
000017E4  00000000 00000000                             +                              expected result
000017EC  00F1F2F3 F4F5F6F7                          944+*
000017F4                                             945+X38     DS    0F
000017F4  E606 8EB0 1035                 000010B0    946+        VLRL  V1,V1INPUT,06     test instruction
000017FA  07FB                                       947+        BR    R11               return
000017FC                                             948+        DROP  R5
                                                     949         VSI   VLRL,07,XL16'00000000000000000F1F2F3F4F5F6F7F8'
00001800                                             950+        DS    0FD
00001800                          00001800           951+        USING *,R5              base for test data and test routine
00001800  00001824                                   952+T39     DC    A(X39)            address of test routine
00001804  0027                                       953+        DC    H'39'             test number
00001806  00                                         954+        DC    X'00'
00001807  07                                         955+        DC    HL1'07'           i3
00001808  E5D3D9D3 40404040                          956+        DC    CL8'VLRL'         instruction name
00001810  00000010                                   957+        DC    A(X39-RE39)       result length
                                                     958+RE39    DC    XL16'00000000000000000F1F2F3F4F5F6F7F8' \
00001814  00000000 00000000                             +                              expected result
0000181C  F1F2F3F4 F5F6F7F8
                                                     959+*
00001824                                             960+X39     DS    0F
00001824  E607 8EB0 1035                 000010B0    961+        VLRL  V1,V1INPUT,07     test instruction
0000182A  07FB                                       962+        BR    R11               return
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
0000182C                                            963+          DROP  R5
                                                    964           VSI   VLRL,08,XL16'00000000000000F1F2F3F4F5F6F7F8F9'
00001830                                            965+          DS    0FD
00001830                      00001830              966+          USING *,R5              base for test data and test routine
00001830  00001854                                  967+T40       DC    A(X40)            address of test routine
00001834  0028                                      968+          DC    H'40'             test number
00001836  00                                        969+          DC    X'00'
00001837  08                                        970+          DC    HL1'08'           i3
00001838  E5D3D9D3 40404040                         971+          DC    CL8'VLRL'         instruction name
00001840  00000010                                  972+          DC    A(X40-RE40)       result length
                                                    973+RE40      DC    XL16'00000000000000F1F2F3F4F5F6F7F8F9' \
00001844  00000000 000000F1                           +                                   expected result
0000184C  F2F3F4F5 F6F7F8F9
                                                    974+*
00001854                                            975+X40       DS    0F
00001854  E608 8EB0 1035                 000010B0   976+          VLRL  V1,V1INPUT,08     test instruction
0000185A  07FB                                      977+          BR    R11               return
0000185C                                            978+          DROP  R5
                                                    979           VSI   VLRL,09,XL16'000000000000F1F2F3F4F5F6F7F8F9F0'
00001860                                            980+          DS    0FD
00001860                      00001860              981+          USING *,R5              base for test data and test routine
00001860  00001884                                  982+T41       DC    A(X41)            address of test routine
00001864  0029                                      983+          DC    H'41'             test number
00001866  00                                        984+          DC    X'00'
00001867  09                                        985+          DC    HL1'09'           i3
00001868  E5D3D9D3 40404040                         986+          DC    CL8'VLRL'         instruction name
00001870  00000010                                  987+          DC    A(X41-RE41)       result length
                                                    988+RE41      DC    XL16'000000000000F1F2F3F4F5F6F7F8F9F0' \
00001874  00000000 0000F1F2                           +                                   expected result
0000187C  F3F4F5F6 F7F8F9F0
                                                    989+*
00001884                                            990+X41       DS    0F
00001884  E609 8EB0 1035                 000010B0   991+          VLRL  V1,V1INPUT,09     test instruction
0000188A  07FB                                      992+          BR    R11               return
0000188C                                            993+          DROP  R5
                                                    994           VSI   VLRL,10,XL16'0000000000F1F2F3F4F5F6F7F8F9F0F1'
00001890                                            995+          DS    0FD
00001890                      00001890              996+          USING *,R5              base for test data and test routine
00001890  000018B4                                  997+T42       DC    A(X42)            address of test routine
00001894  002A                                      998+          DC    H'42'             test number
00001896  00                                        999+          DC    X'00'
00001897  0A                                       1000+          DC    HL1'10'           i3
00001898  E5D3D9D3 40404040                        1001+          DC    CL8'VLRL'         instruction name
000018A0  00000010                                 1002+          DC    A(X42-RE42)       result length
                                                   1003+RE42      DC    XL16'0000000000F1F2F3F4F5F6F7F8F9F0F1' \
000018A4  00000000 00F1F2F3                           +                                   expected result
000018AC  F4F5F6F7 F8F9F0F1
                                                   1004+*
000018B4                                           1005+X42       DS    0F
000018B4  E60A 8EB0 1035                 000010B0  1006+          VLRL  V1,V1INPUT,10     test instruction
000018BA  07FB                                     1007+          BR    R11               return
000018BC                                           1008+          DROP  R5
                                                   1009           VSI   VLRL,11,XL16'00000000F1F2F3F4F5F6F7F8F9F0F1F2'
000018C0                                           1010+          DS    0FD
000018C0                      000018C0             1011+          USING *,R5              base for test data and test routine
000018C0  000018E4                                 1012+T43       DC    A(X43)            address of test routine
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
000018C4  002B                                     1013+          DC    H'43'              test number
000018C6  00                                       1014+          DC    X'00'
000018C7  0B                                       1015+          DC    HL1'11'            i3
000018C8  E5D3D9D3 40404040                        1016+          DC    CL8'VLRL'          instruction name
000018D0  00000010                                 1017+          DC    A(X43-RE43)        result length
                                                   1018+RE43      DC    XL16'00000000F1F2F3F4F5F6F7F8F9F0F1F2' \
000018D4  00000000 F1F2F3F4                            +                                   expected result
000018DC  F5F6F7F8 F9F0F1F2
                                                   1019+*
000018E4                                           1020+X43       DS    0F
000018E4  E60B 8EB0 1035                 000010B0  1021+          VLRL  V1,V1INPUT,11      test instruction
000018EA  07FB                                     1022+          BR    R11                return
000018EC                                           1023+          DROP  R5
                                                   1024           VSI   VLRL,12,XL16'000000F1F2F3F4F5F6F7F8F9F0F1F2F3'
000018F0                                           1025+          DS    0FD
000018F0                           000018F0        1026+          USING *,R5               base for test data and test routine
000018F0  00001914                                 1027+T44       DC    A(X44)             address of test routine
000018F4  002C                                     1028+          DC    H'44'              test number
000018F6  00                                       1029+          DC    X'00'
000018F7  0C                                       1030+          DC    HL1'12'            i3
000018F8  E5D3D9D3 40404040                        1031+          DC    CL8'VLRL'          instruction name
00001900  00000010                                 1032+          DC    A(X44-RE44)        result length
                                                   1033+RE44      DC    XL16'000000F1F2F3F4F5F6F7F8F9F0F1F2F3' \
00001904  000000F1 F2F3F4F5                            +                                   expected result
0000190C  F6F7F8F9 F0F1F2F3
                                                   1034+*
00001914                                           1035+X44       DS    0F
00001914  E60C 8EB0 1035                 000010B0  1036+          VLRL  V1,V1INPUT,12      test instruction
0000191A  07FB                                     1037+          BR    R11                return
0000191C                                           1038+          DROP  R5
                                                   1039           VSI   VLRL,13,XL16'0000F1F2F3F4F5F6F7F8F9F0F1F2F3F4'
00001920                                           1040+          DS    0FD
00001920                           00001920        1041+          USING *,R5               base for test data and test routine
00001920  00001944                                 1042+T45       DC    A(X45)             address of test routine
00001924  002D                                     1043+          DC    H'45'              test number
00001926  00                                       1044+          DC    X'00'
00001927  0D                                       1045+          DC    HL1'13'            i3
00001928  E5D3D9D3 40404040                        1046+          DC    CL8'VLRL'          instruction name
00001930  00000010                                 1047+          DC    A(X45-RE45)        result length
                                                   1048+RE45      DC    XL16'0000F1F2F3F4F5F6F7F8F9F0F1F2F3F4' \
00001934  0000F1F2 F3F4F5F6                            +                                   expected result
0000193C  F7F8F9F0 F1F2F3F4
                                                   1049+*
00001944                                           1050+X45       DS    0F
00001944  E60D 8EB0 1035                 000010B0  1051+          VLRL  V1,V1INPUT,13      test instruction
0000194A  07FB                                     1052+          BR    R11                return
0000194C                                           1053+          DROP  R5
                                                   1054           VSI   VLRL,14,XL16'00F1F2F3F4F5F6F7F8F9F0F1F2F3F4F5'
00001950                                           1055+          DS    0FD
00001950                           00001950        1056+          USING *,R5               base for test data and test routine
00001950  00001974                                 1057+T46       DC    A(X46)             address of test routine
00001954  002E                                     1058+          DC    H'46'              test number
00001956  00                                       1059+          DC    X'00'
00001957  0E                                       1060+          DC    HL1'14'            i3
00001958  E5D3D9D3 40404040                        1061+          DC    CL8'VLRL'          instruction name
00001960  00000010                                 1062+          DC    A(X46-RE46)        result length
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                   1063+RE46     DC    XL16'00F1F2F3F4F5F6F7F8F9F0F1F2F3F4F5' \
00001964  00F1F2F3 F4F5F6F7                            +                                 expected result
0000196C  F8F9F0F1 F2F3F4F5
                                                   1064+*
00001974                                           1065+X46      DS    0F
00001974  E60E 8EB0 1035                 000010B0  1066+          VLRL  V1,V1INPUT,14     test instruction
0000197A  07FB                                     1067+          BR    R11               return
0000197C                                           1068+          DROP  R5
                                                   1069           VSI   VLRL,15,XL16'F1F2F3F4F5F6F7F8F9F0F1F2F3F4F5F6'
00001980                                           1070+          DS    0FD
00001980                 00001980                  1071+          USING *,R5              base for test data and test routine
00001980  000019A4                                 1072+T47       DC    A(X47)            address of test routine
00001984  002F                                     1073+          DC    H'47'             test number
00001986  00                                       1074+          DC    X'00'
00001987  0F                                       1075+          DC    HL1'15'           i3
00001988  E5D3D9D3 40404040                        1076+          DC    CL8'VLRL'         instruction name
00001990  00000010                                 1077+          DC    A(X47-RE47)       result length
                                                   1078+RE47     DC    XL16'F1F2F3F4F5F6F7F8F9F0F1F2F3F4F5F6' \
00001994  F1F2F3F4 F5F6F7F8                            +                                 expected result
0000199C  F9F0F1F2 F3F4F5F6
                                                   1079+*
000019A4                                           1080+X47      DS    0F
000019A4  E60F 8EB0 1035                 000010B0  1081+          VLRL  V1,V1INPUT,15     test instruction
000019AA  07FB                                     1082+          BR    R11               return
000019AC                                           1083+          DROP  R5
                                                   1084
                                                   1085
000019AC  00000000                                 1086           DC    F'0'      END OF TABLE
000019B0  00000000                                 1087           DC    F'0'
                                                   1088 *
                                                   1089 * table of pointers to individual load test
                                                   1090 *
000019B4                                           1091 E6TESTS  DS    0F
                                                   1092           PTTABLE
000019B4                                           1093+TTABLE   DS    0F
000019B4  000010E0                                 1094+          DC    A(T1)             TEST &CUR
000019B8  00001110                                 1095+          DC    A(T2)             TEST &CUR
000019BC  00001140                                 1096+          DC    A(T3)             TEST &CUR
000019C0  00001170                                 1097+          DC    A(T4)             TEST &CUR
000019C4  000011A0                                 1098+          DC    A(T5)             TEST &CUR
000019C8  000011D0                                 1099+          DC    A(T6)             TEST &CUR
000019CC  00001200                                 1100+          DC    A(T7)             TEST &CUR
000019D0  00001230                                 1101+          DC    A(T8)             TEST &CUR
000019D4  00001260                                 1102+          DC    A(T9)             TEST &CUR
000019D8  00001290                                 1103+          DC    A(T10)            TEST &CUR
000019DC  000012C0                                 1104+          DC    A(T11)            TEST &CUR
000019E0  000012F0                                 1105+          DC    A(T12)            TEST &CUR
000019E4  00001320                                 1106+          DC    A(T13)            TEST &CUR
000019E8  00001350                                 1107+          DC    A(T14)            TEST &CUR
000019EC  00001380                                 1108+          DC    A(T15)            TEST &CUR
000019F0  000013B0                                 1109+          DC    A(T16)            TEST &CUR
000019F4  000013E0                                 1110+          DC    A(T17)            TEST &CUR
000019F8  00001410                                 1111+          DC    A(T18)            TEST &CUR
000019FC  00001440                                 1112+          DC    A(T19)            TEST &CUR
00001A00  00001470                                 1113+          DC    A(T20)            TEST &CUR
00001A04  000014A0                                 1114+          DC    A(T21)            TEST &CUR
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00001A08  000014D0                          1115+          DC    A(T22)             TEST &CUR
00001A0C  00001500                          1116+          DC    A(T23)             TEST &CUR
00001A10  00001530                          1117+          DC    A(T24)             TEST &CUR
00001A14  00001560                          1118+          DC    A(T25)             TEST &CUR
00001A18  00001590                          1119+          DC    A(T26)             TEST &CUR
00001A1C  000015C0                          1120+          DC    A(T27)             TEST &CUR
00001A20  000015F0                          1121+          DC    A(T28)             TEST &CUR
00001A24  00001620                          1122+          DC    A(T29)             TEST &CUR
00001A28  00001650                          1123+          DC    A(T30)             TEST &CUR
00001A2C  00001680                          1124+          DC    A(T31)             TEST &CUR
00001A30  000016B0                          1125+          DC    A(T32)             TEST &CUR
00001A34  000016E0                          1126+          DC    A(T33)             TEST &CUR
00001A38  00001710                          1127+          DC    A(T34)             TEST &CUR
00001A3C  00001740                          1128+          DC    A(T35)             TEST &CUR
00001A40  00001770                          1129+          DC    A(T36)             TEST &CUR
00001A44  000017A0                          1130+          DC    A(T37)             TEST &CUR
00001A48  000017D0                          1131+          DC    A(T38)             TEST &CUR
00001A4C  00001800                          1132+          DC    A(T39)             TEST &CUR
00001A50  00001830                          1133+          DC    A(T40)             TEST &CUR
00001A54  00001860                          1134+          DC    A(T41)             TEST &CUR
00001A58  00001890                          1135+          DC    A(T42)             TEST &CUR
00001A5C  000018C0                          1136+          DC    A(T43)             TEST &CUR
00001A60  000018F0                          1137+          DC    A(T44)             TEST &CUR
00001A64  00001920                          1138+          DC    A(T45)             TEST &CUR
00001A68  00001950                          1139+          DC    A(T46)             TEST &CUR
00001A6C  00001980                          1140+          DC    A(T47)             TEST &CUR
                                            1141+*
00001A70  00000000                          1142+          DC    A(0)                    END OF TABLE
00001A74  00000000                          1143+          DC    A(0)
                                            1144
00001A78  00000000                          1145           DC    F'0'          END OF TABLE
00001A7C  00000000                          1146           DC    F'0'
```

```
 LOC        OBJECT CODE       ADDR1     ADDR2     STMT

                                        1148 ********************************************************************************
                                        1149 *        Register equates
                                        1150 ********************************************************************************


                            00000000  00000001  1152 R0       EQU   0
                            00000001  00000001  1153 R1       EQU   1
                            00000002  00000001  1154 R2       EQU   2
                            00000003  00000001  1155 R3       EQU   3
                            00000004  00000001  1156 R4       EQU   4
                            00000005  00000001  1157 R5       EQU   5
                            00000006  00000001  1158 R6       EQU   6
                            00000007  00000001  1159 R7       EQU   7
                            00000008  00000001  1160 R8       EQU   8
                            00000009  00000001  1161 R9       EQU   9
                            0000000A  00000001  1162 R10      EQU   10
                            0000000B  00000001  1163 R11      EQU   11
                            0000000C  00000001  1164 R12      EQU   12
                            0000000D  00000001  1165 R13      EQU   13
                            0000000E  00000001  1166 R14      EQU   14
                            0000000F  00000001  1167 R15      EQU   15


                                        1169 ********************************************************************************
                                        1170 *        Register equates
                                        1171 ********************************************************************************


                          00000000  00000001  1173 V0       EQU   0
                          00000001  00000001  1174 V1       EQU   1
                          00000002  00000001  1175 V2       EQU   2
                          00000003  00000001  1176 V3       EQU   3
                          00000004  00000001  1177 V4       EQU   4
                          00000005  00000001  1178 V5       EQU   5
                          00000006  00000001  1179 V6       EQU   6
                          00000007  00000001  1180 V7       EQU   7
                          00000008  00000001  1181 V8       EQU   8
                          00000009  00000001  1182 V9       EQU   9
                          0000000A  00000001  1183 V10      EQU   10
                          0000000B  00000001  1184 V11      EQU   11
                          0000000C  00000001  1185 V12      EQU   12
                          0000000D  00000001  1186 V13      EQU   13
                          0000000E  00000001  1187 V14      EQU   14
                          0000000F  00000001  1188 V15      EQU   15
                          00000010  00000001  1189 V16      EQU   16
                          00000011  00000001  1190 V17      EQU   17
                          00000012  00000001  1191 V18      EQU   18
                          00000013  00000001  1192 V19      EQU   19
                          00000014  00000001  1193 V20      EQU   20
                          00000015  00000001  1194 V21      EQU   21
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT
                                00000016  00000001  1195 V22       EQU   22
                                00000017  00000001  1196 V23       EQU   23
                                00000018  00000001  1197 V24       EQU   24
                                00000019  00000001  1198 V25       EQU   25
                                0000001A  00000001  1199 V26       EQU   26
                                0000001B  00000001  1200 V27       EQU   27
                                0000001C  00000001  1201 V28       EQU   28
                                0000001D  00000001  1202 V29       EQU   29
                                0000001E  00000001  1203 V30       EQU   30
                                0000001F  00000001  1204 V31       EQU   31
                                                    1205
                                                    1206           END
```

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
BEGIN	I	00000200	2	94	61 91 92
CTLR0	F	000003D4	4	234	101 102 103 104
DECNUM	C	0000106E	16	278	152 154 160 162
E6TEST	4	00000000	24	296	114
E6TESTS	F	000019B4	4	1091	107
EDIT	X	00001042	18	273	153 161
ENDTEST	U	00000264	1	137	112
EOJ	I	000003B8	4	224	140
EOJPSW	D	000003A8	8	222	224
FAILED	F	00001000	4	260	132 138
FAILMSG	U	00000250	1	129	120
FAILPSW	D	000003C0	8	226	228
FAILTEST	I	000003D0	4	228	141
I3	U	00000007	1	300	159
IMAGE	1	00000000	6784	0	
K	U	00000400	1	244	245 246 247
K64	U	00010000	1	246	
MB	U	00100000	1	247	
MSG	I	000002F0	4	188	171
MSGCMD	C	0000033A	9	214	201 202
MSGMSG	C	00000343	95	215	195 212 193
MSGMVC	I	00000334	6	212	199
MSGOK	I	00000306	2	197	194
MSGRET	I	00000320	4	208	205
MSGSAVE	F	00000328	4	211	191 208
NEXTE6	U	00000222	1	109	123 135
OPNAME	C	00000008	8	302	157
PAGE	U	00001000	1	245	
PRT3	C	00001058	18	276	153 154 155 161 162 163
PRTI3	C	00001040	1	270	163
PRTLINE	C	00001004	16	265	272 170
PRTLNG	U	0000003E	1	272	169
PRTNAME	C	0000102F	8	268	157
PRTNUM	C	00001014	3	266	155
R0	U	00000000	1	1152	55 101 104 131 132 168 169 172 188 191 193 195 197
					208
R1	U	00000001	1	1153	138 139 170 202 212
R10	U	0000000A	1	1162	107 110 122 134
R11	U	0000000B	1	1163	116 117 391 406 421 436 451 466 481 496 511 526 541
					556 571 586 601 616 631 646 661 676 691 706 721 736
					751 766 781 796 811 826 841 857 872 887 902 917 932
					947 962 977 992 1007 1022 1037 1052 1067 1082
R12	U	0000000C	1	1164	
R13	U	0000000D	1	1165	
R14	U	0000000E	1	1166	
R15	U	0000000F	1	1167	130 148 175 176
R2	U	00000002	1	1154	151 152 159 160 168 171 172 189 191 197 198 199 201
					208 209
R3	U	00000003	1	1155	
R4	U	00000004	1	1156	
R5	U	00000005	1	1157	110 111 114 149 174 380 392 395 407 410 422 425 437
					440 452 455 467 470 482 485 497 500 512 515 527 530
					542 545 557 560 572 575 587 590 602 605 617 620 632
					635 647 650 662 665 677 680 692 695 707 710 722 725
					737 740 752 755 767 770 782 785 797 800 812 815 827
					830 842 846 858 861 873 876 888 891 903 906 918 921

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES												
					933	936	948	951	963	966	978	981	993	996	1008	1011	1023
					1026	1038	1041	1053	1056	1068	1071	1083					
R6	U	00000006	1	1158													
R7	U	00000007	1	1159													
R8	U	00000008	1	1160	91	94	95	96	98								
R9	U	00000009	1	1161	92	98	99										
RE1	X	000010F4	16	387	386												
RE10	X	000012A4	16	522	521												
RE11	X	000012D4	16	537	536												
RE12	X	00001304	16	552	551												
RE13	X	00001334	16	567	566												
RE14	X	00001364	16	582	581												
RE15	X	00001394	16	597	596												
RE16	X	000013C4	16	612	611												
RE17	X	000013F4	16	627	626												
RE18	X	00001424	16	642	641												
RE19	X	00001454	16	657	656												
RE2	X	00001124	16	402	401												
RE20	X	00001484	16	672	671												
RE21	X	000014B4	16	687	686												
RE22	X	000014E4	16	702	701												
RE23	X	00001514	16	717	716												
RE24	X	00001544	16	732	731												
RE25	X	00001574	16	747	746												
RE26	X	000015A4	16	762	761												
RE27	X	000015D4	16	777	776												
RE28	X	00001604	16	792	791												
RE29	X	00001634	16	807	806												
RE3	X	00001154	16	417	416												
RE30	X	00001664	16	822	821												
RE31	X	00001694	16	837	836												
RE32	X	000016C4	16	853	852												
RE33	X	000016F4	16	868	867												
RE34	X	00001724	16	883	882												
RE35	X	00001754	16	898	897												
RE36	X	00001784	16	913	912												
RE37	X	000017B4	16	928	927												
RE38	X	000017E4	16	943	942												
RE39	X	00001814	16	958	957												
RE4	X	00001184	16	432	431												
RE40	X	00001844	16	973	972												
RE41	X	00001874	16	988	987												
RE42	X	000018A4	16	1003	1002												
RE43	X	000018D4	16	1018	1017												
RE44	X	00001904	16	1033	1032												
RE45	X	00001934	16	1048	1047												
RE46	X	00001964	16	1063	1062												
RE47	X	00001994	16	1078	1077												
RE5	X	000011B4	16	447	446												
RE6	X	000011E4	16	462	461												
RE7	X	00001214	16	477	476												
RE8	X	00001244	16	492	491												
RE9	X	00001274	16	507	506												
REG2LOW	U	000000DD	1	250													
REG2PATT	U	AABBCCDD	1	249													
RELEN	A	00000010	4	303													

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
RESULT	A	00000014	4	304	119
RPTDWSAV	D	000002E0	8	181	168 172
RPTERROR	I	00000272	4	148	130
RPTSAVE	F	000002D4	4	178	148 175
RPTSVR5	F	000002D8	4	179	149 174
SVOLDPSW	U	00000140	0	57	
T1	A	000010E0	4	381	1094
T10	A	00001290	4	516	1103
T11	A	000012C0	4	531	1104
T12	A	000012F0	4	546	1105
T13	A	00001320	4	561	1106
T14	A	00001350	4	576	1107
T15	A	00001380	4	591	1108
T16	A	000013B0	4	606	1109
T17	A	000013E0	4	621	1110
T18	A	00001410	4	636	1111
T19	A	00001440	4	651	1112
T2	A	00001110	4	396	1095
T20	A	00001470	4	666	1113
T21	A	000014A0	4	681	1114
T22	A	000014D0	4	696	1115
T23	A	00001500	4	711	1116
T24	A	00001530	4	726	1117
T25	A	00001560	4	741	1118
T26	A	00001590	4	756	1119
T27	A	000015C0	4	771	1120
T28	A	000015F0	4	786	1121
T29	A	00001620	4	801	1122
T3	A	00001140	4	411	1096
T30	A	00001650	4	816	1123
T31	A	00001680	4	831	1124
T32	A	000016B0	4	847	1125
T33	A	000016E0	4	862	1126
T34	A	00001710	4	877	1127
T35	A	00001740	4	892	1128
T36	A	00001770	4	907	1129
T37	A	000017A0	4	922	1130
T38	A	000017D0	4	937	1131
T39	A	00001800	4	952	1132
T4	A	00001170	4	426	1097
T40	A	00001830	4	967	1133
T41	A	00001860	4	982	1134
T42	A	00001890	4	997	1135
T43	A	000018C0	4	1012	1136
T44	A	000018F0	4	1027	1137
T45	A	00001920	4	1042	1138
T46	A	00001950	4	1057	1139
T47	A	00001980	4	1072	1140
T5	A	000011A0	4	441	1098
T6	A	000011D0	4	456	1099
T7	A	00001200	4	471	1100
T8	A	00001230	4	486	1101
T9	A	00001260	4	501	1102
TNUM	H	00000004	2	298	151
TSUB	A	00000000	4	297	116
TTABLE	F	000019B4	4	1093	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
V0	U	00000000	1	1173	
V1	U	00000001	1	1174	115 118 390 405 420 435 450 465 480 495 510 525 540 555 570 585 600 615 630 645 660 675 690 705 720 735 750 765 780 795 810 825 840 856 871 886 901 916 931 946 961 976 991 1006 1021 1036 1051 1066 1081
V10	U	0000000A	1	1183	
V11	U	0000000B	1	1184	
V12	U	0000000C	1	1185	
V13	U	0000000D	1	1186	
V14	U	0000000E	1	1187	
V15	U	0000000F	1	1188	
V16	U	00000010	1	1189	
V17	U	00000011	1	1190	
V18	U	00000012	1	1191	
V19	U	00000013	1	1192	
V1FUDGE	X	000010A0	16	286	115
V1INPUT	C	000010B0	16	287	390 405 420 435 450 465 480 495 510 525 540 555 570 585 600 615 630 645 660 675 690 705 720 735 750 765 780 795 810 825 840 856 871 886 901 916 931 946 961 976 991 1006 1021 1036 1051 1066 1081
V1OUTPUT	X	00001080	16	284	118 119
V2	U	00000002	1	1175	
V20	U	00000014	1	1193	
V21	U	00000015	1	1194	
V22	U	00000016	1	1195	
V23	U	00000017	1	1196	
V24	U	00000018	1	1197	
V25	U	00000019	1	1198	
V26	U	0000001A	1	1199	
V27	U	0000001B	1	1200	
V28	U	0000001C	1	1201	
V29	U	0000001D	1	1202	
V3	U	00000003	1	1176	
V30	U	0000001E	1	1203	
V31	U	0000001F	1	1204	
V4	U	00000004	1	1177	
V5	U	00000005	1	1178	
V6	U	00000006	1	1179	
V7	U	00000007	1	1180	
V8	U	00000008	1	1181	
V9	U	00000009	1	1182	
X1	F	00001104	4	389	381 386
X10	F	000012B4	4	524	516 521
X11	F	000012E4	4	539	531 536
X12	F	00001314	4	554	546 551
X13	F	00001344	4	569	561 566
X14	F	00001374	4	584	576 581
X15	F	000013A4	4	599	591 596
X16	F	000013D4	4	614	606 611
X17	F	00001404	4	629	621 626
X18	F	00001434	4	644	636 641
X19	F	00001464	4	659	651 656
X2	F	00001134	4	404	396 401
X20	F	00001494	4	674	666 671
X21	F	000014C4	4	689	681 686
X22	F	000014F4	4	704	696 701

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
X23	F	00001524	4	719	711 716
X24	F	00001554	4	734	726 731
X25	F	00001584	4	749	741 746
X26	F	000015B4	4	764	756 761
X27	F	000015E4	4	779	771 776
X28	F	00001614	4	794	786 791
X29	F	00001644	4	809	801 806
X3	F	00001164	4	419	411 416
X30	F	00001674	4	824	816 821
X31	F	000016A4	4	839	831 836
X32	F	000016D4	4	855	847 852
X33	F	00001704	4	870	862 867
X34	F	00001734	4	885	877 882
X35	F	00001764	4	900	892 897
X36	F	00001794	4	915	907 912
X37	F	000017C4	4	930	922 927
X38	F	000017F4	4	945	937 942
X39	F	00001824	4	960	952 957
X4	F	00001194	4	434	426 431
X40	F	00001854	4	975	967 972
X41	F	00001884	4	990	982 987
X42	F	000018B4	4	1005	997 1002
X43	F	000018E4	4	1020	1012 1017
X44	F	00001914	4	1035	1027 1032
X45	F	00001944	4	1050	1042 1047
X46	F	00001974	4	1065	1057 1062
X47	F	000019A4	4	1080	1072 1077
X5	F	000011C4	4	449	441 446
X6	F	000011F4	4	464	456 461
X7	F	00001224	4	479	471 476
X8	F	00001254	4	494	486 491
X9	F	00001284	4	509	501 506
ZVE6TST	J	00000000	6784	54	57 59 63 67 259 55
=AL2(L'MSGMSG)	R	000003E2	2	240	193
=F'1'	F	000003DC	4	238	131
=H'0'	H	000003E0	2	239	188

```
 MACRO    DEFN   REFERENCES

PTTABLE    351    1092
VSI        320     378     393     408     423     438     453     468     483     498     513     528     543     558     573     588     603     618
                   633     648     663     678     693     708     723     738     753     768     783     798     813     828     844     859     874
                   889     904     919     934     949     964     979     994    1009    1024    1039    1054    1069
```

```
   DESC      SYMBOL   SIZE     POS         ADDR

Entry: 0

Image       IMAGE    6784  0000-1A7F  0000-1A7F
  Region             6784  0000-1A7F  0000-1A7F
    CSECT   ZVE6TST  6784  0000-1A7F  0000-1A7F
```

```
   STMT                    FILE NAME
1     /devstor/dev/tests/zvector-e6-03-pack.asm

** NO ERRORS FOUND **
```