```
 LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                     2 ************************************************************************
                                                     3 *
                                                     4 *        Zvector E6 instruction tests for VRX encoded:
                                                     5 *
                                                     6 *        E601 VLEBRH  - VECTOR LOAD BYTE REVERSED ELEMENT (16)
                                                     7 *        E602 VLEBRG  - VECTOR LOAD BYTE REVERSED ELEMENT (64)
                                                     8 *        E603 VLEBRF  - VECTOR LOAD BYTE REVERSED ELEMENT (32)
                                                     9 *        E604 VLLEBRZ - VECTOR LOAD BYTE REVERSED ELEMENT AND ZERO
                                                    10 *        E605 VLBRREP - VECTOR LOAD BYTE REVERSED ELEMENT AND REPLICATE
                                                    11 *        E606 VLBR    - VECTOR LOAD BYTE REVERSED ELEMENTS
                                                    12 *        E607 VLER    - VECTOR LOAD ELEMENTS REVERSED
                                                    13 *
                                                    14 *        James Wekel June 2024
                                                    15 ************************************************************************


                                                    17 ************************************************************************
                                                    18 *
                                                    19 *        basic instruction tests
                                                    20 *
                                                    21 ************************************************************************
                                                    22 *  This program tests proper functioning of the z/arch E6 VRX vector
                                                    23 *  load instructions. Exceptions are not tested.
                                                    24 *
                                                    25 *  PLEASE NOTE that the tests are very SIMPLE TESTS designed to catch
                                                    26 *  obvious coding errors.  None of the tests are thorough.  They are
                                                    27 *  NOT designed to test all aspects of any of the instructions.
                                                    28 *
                                                    29 ************************************************************************
                                                    30 *
                                                    31 *    *Testcase VECTOR E6 VRX load instructions
                                                    32 *    *
                                                    33 *    *   Zvector E6 instruction tests for VRX encoded:
                                                    34 *    *
                                                    35 *    *   E601 VLEBRH  - VECTOR LOAD BYTE REVERSED ELEMENT (16)
                                                    36 *    *   E602 VLEBRG  - VECTOR LOAD BYTE REVERSED ELEMENT (64)
                                                    37 *    *   E603 VLEBRF  - VECTOR LOAD BYTE REVERSED ELEMENT (32)
                                                    38 *    *   E604 VLLEBRZ - VECTOR LOAD BYTE REVERSED ELEMENT AND ZERO
                                                    39 *    *   E605 VLBRREP - VECTOR LOAD BYTE REVERSED ELEMENT AND REPLICATE
                                                    40 *    *   E606 VLBR    - VECTOR LOAD BYTE REVERSED ELEMENTS
                                                    41 *    *   E607 VLER    - VECTOR LOAD ELEMENTS REVERSED
                                                    42 *    *
                                                    43 *    *   # ---------------------------------------------------------
                                                    44 *    *   #  This tests only the basic function of the instruction.
                                                    45 *    *   #  Exceptions are NOT tested.
                                                    46 *    *   # ---------------------------------------------------------
                                                    47 *    *
                                                    48 *    mainsize    2
                                                    49 *    numcpu      1
                                                    50 *    sysclear
                                                    51 *    archlvl     z/Arch
                                                    52 *
                                                    53 *    loadcore    "$(testpath)/zvector-e6-01-loads.core" 0x0
                                                    54 *
                                                    55 *    diag8cmd    enable    # (needed for messages to Hercules console)
                                                    56 *    runtest     2
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

                                                      57 *    diag8cmd    disable   # (reset back to default)
                                                      58 *
                                                      59 *    *Done
                                                      60 *
                                                      61 ********************************************************************************
```

```
 LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    63 ************************************************************************
                                                    64 *        FCHECK Macro - Is a Facility Bit set?
                                                    65 *
                                                    66 *        If the facility bit is NOT set, an message is issued and
                                                    67 *        the test is skipped.
                                                    68 *
                                                    69 *        Fcheck uses R0, R1 and R2
                                                    70 *
                                                    71 * eg.    FCHECK 134,'vector-packed-decimal'
                                                    72 ************************************************************************
                                                    73          MACRO
                                                    74          FCHECK &BITNO,&NOTSETMSG
                                                    75 .*                      &BITNO : facility bit number to check
                                                    76 .*                      &NOTSETMSG : 'facility name'
                                                    77          LCLA  &FBBYTE           Facility bit in Byte
                                                    78          LCLA  &FBBIT            Facility bit within Byte
                                                    79
                                                    80          LCLA  &L(8)
                                                    81 &L(1)    SetA  128,64,32,16,8,4,2,1  bit positions within byte
                                                    82
                                                    83 &FBBYTE  SETA  &BITNO/8
                                                    84 &FBBIT   SETA  &L((&BITNO-(&FBBYTE*8))+1)
                                                    85 .*       MNOTE 0,'checking Bit=&BITNO: FBBYTE=&FBBYTE, FBBIT=&FBBIT'
                                                    86
                                                    87          B     X&SYSNDX
                                                    88 *                                       Fcheck data area
                                                    89 *                                       skip messgae
                                                    90 SKT&SYSNDX DC  C'          Skipping tests: '
                                                    91          DC    C&NOTSETMSG
                                                    92          DC    C' facility (bit &BITNO) is not installed.'
                                                    93 SKL&SYSNDX EQU *-SKT&SYSNDX
                                                    94 *                                       facility bits
                                                    95          DS    FD                       gap
                                                    96 FB&SYSNDX DS   4FD
                                                    97          DS    FD                       gap
                                                    98 *
                                                    99 X&SYSNDX EQU *
                                                   100          LA    R0,((X&SYSNDX-FB&SYSNDX)/8)-1
                                                   101          STFLE FB&SYSNDX                get facility bits
                                                   102
                                                   103          XGR   R0,R0
                                                   104          IC    R0,FB&SYSNDX+&FBBYTE     get fbit byte
                                                   105          N     R0,=F'&FBBIT'            is bit set?
                                                   106          BNZ   XC&SYSNDX
                                                   107 *
                                                   108 * facility bit not set, issue message and exit
                                                   109 *
                                                   110          LA    R0,SKL&SYSNDX            message length
                                                   111          LA    R1,SKT&SYSNDX            message address
                                                   112          BAL   R2,MSG
                                                   113
                                                   114          B     EOJ
                                                   115 XC&SYSNDX EQU *
                                                   116          MEND
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    118 ********************************************************************************
                                                    119 *        Low core PSWs
                                                    120 ********************************************************************************


                             00000000  0000169F    122 ZVE6TST  START 0
00000000                     00000000                123          USING ZVE6TST,R0            Low core addressability
                                                     124
                             00000140  00000000    125 SVOLDPSW EQU   ZVE6TST+X'140'        z/Arch Supervisor call old PSW


00000000                     00000000  000001A0    127          ORG   ZVE6TST+X'1A0'        z/Architecure RESTART PSW
000001A0  00000001 80000000                         128          DC    X'0000000180000000'
000001A8  00000000 00000200                         129          DC    AD(BEGIN)


000001B0                     000001B0  000001D0    131          ORG   ZVE6TST+X'1D0'        z/Architecure PROGRAM CHECK PSW
000001D0  00020001 80000000                         132          DC    X'0002000180000000'
000001D8  00000000 0000DEAD                         133          DC    AD(X'DEAD')


000001E0                     000001E0  00000200    135          ORG   ZVE6TST+X'200'        Start of actual test program...
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                     137
                                                     138 ********************************************************************************
                                                     139 *               The actual "ZVE6TST" program itself...
                                                     140 ********************************************************************************
                                                     141 *
                                                     142 *  Architecture Mode: z/Arch
                                                     143 *
                                                     144 *  Architecture Mode: z/Arch
                                                     145 *  Register Usage:
                                                     146 *
                                                     147 *   R0       (work)
                                                     148 *   R1-4     (work)
                                                     149 *   R5       Testing control table - current test base
                                                     150 *   R6-R7    (work)
                                                     151 *   R8       First base register
                                                     152 *   R9       Second base register
                                                     153 *   R10      Third base register
                                                     154 *   R11      E6TEST call return
                                                     155 *   R12      E6TESTS register
                                                     156 *   R13      (work)
                                                     157 *   R14      Subroutine call
                                                     158 *   R15      Secondary Subroutine call or work
                                                     159 *
                                                     160 ********************************************************************************

00000200                          00000200           162          USING  BEGIN,R8       FIRST Base Register
00000200                          00001200           163          USING  BEGIN+4096,R9  SECOND Base Register
00000200                          00002200           164          USING  BEGIN+8192,R10 THIRD Base Register
                                                     165
00000200  0580                                       166 BEGIN    BALR   R8,0           Initalize FIRST base register
00000202  0680                                       167          BCTR   R8,0           Initalize FIRST base register
00000204  0680                                       168          BCTR   R8,0           Initalize FIRST base register
                                                     169
00000206  4190 8800                      00000800    170          LA     R9,2048(,R8)   Initalize SECOND base register
0000020A  4190 9800                      00000800    171          LA     R9,2048(,R9)   Initalize SECOND base register
                                                     172
0000020E  41A0 9800                      00000800    173          LA     R10,2048(,R9)  Initalize THIRD base register
00000212  41A0 A800                      00000800    174          LA     R10,2048(,R10) Initalize THIRD base register
                                                     175
00000216  B600 82A4                      000004A4    176          STCTL  R0,R0,CTLR0    Store CR0 to enable AFP
0000021A  9604 82A5                      000004A5    177          OI     CTLR0+1,X'04'  Turn on AFP bit
0000021E  9602 82A5                      000004A5    178          OI     CTLR0+1,X'02'  Turn on Vector bit
00000222  B700 82A4                      000004A4    179          LCTL   R0,R0,CTLR0    Reload updated CR0
                                                     180
                                                     181 ********************************************************************************
                                                     182 * Is Vector-enhancements facility 2 installed  (bit 148
                                                     183 ********************************************************************************
                                                     184
                                                     185          FCHECK 148,'Vector-enhancements facility 2'
00000226  47F0 80B8                      000002B8    186+         B      X0001
                                                     187+*                                  Fcheck data area
                                                     188+*                                  skip messgae
0000022A  40404040 40404040                          189+SKT0001  DC     C'          Skipping tests: '
00000244  E58583A3 96996085                          190+         DC     C'Vector-enhancements facility 2'
00000262  40868183 899389A3                          191+         DC     C' facility (bit 148) is not installed.'
                            0000005D  00000001       192+SKL0001  EQU    *-SKT0001
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2    STMT
                                                   193+*                                    facility bits
00000288  00000000 00000000                        194+         DS    FD                    gap
00000290  00000000 00000000                        195+FB0001   DS    4FD
000002B0  00000000 00000000                        196+         DS    FD                    gap
                                                   197+*
                             000002B8  00000001    198+X0001    EQU   *
000002B8  4100 0004                    00000004    199+         LA    R0,((X0001-FB0001)/8)-1
000002BC  B2B0 8090                    00000290    200+         STFLE FB0001                get facility bits
000002C0  B982 0000                                201+         XGR   R0,R0
000002C4  4300 80A2                    000002A2    202+         IC    R0,FB0001+18          get fbit byte
000002C8  5400 82AC                    000004AC    203+         N     R0,=F'8'              is bit set?
000002CC  4770 80E0                    000002E0    204+         BNZ   XC0001
                                                   205+*
                                                   206+* facility bit not set, issue message and exit
                                                   207+*
000002D0  4100 005D                    0000005D    208+         LA    R0,SKL0001            message length
000002D4  4110 802A                    0000022A    209+         LA    R1,SKT0001            message address
000002D8  4520 81C0                    000003C0    210+         BAL   R2,MSG
000002DC  47F0 8288                    00000488    211+         B     EOJ
                             000002E0  00000001    212+XC0001   EQU   *
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    214 ********************************************************************************
                                                    215 *               Do tests in the E6TESTS table
                                                    216 ********************************************************************************
                                                    217
000002E0  58C0 82B0                       000004B0  218           L     R12,=A(E6TESTS)       get table of test addresses
                                                    219
                                 000002E4 00000001  220 NEXTE6    EQU   *
000002E4  5850 C000                       00000000  221           L     R5,0(0,R12)       get test address
000002E8  1255                                      222           LTR   R5,R5                  have a test?
000002EA  4780 8134                       00000334  223           BZ    ENDTEST                   done?
                                                    224
000002EE                         00000000           225           USING E6TEST,R5
                                                    226
000002EE  4800 5004                       00000004  227           LH    R0,TNUM             save current test number
000002F2  5000 8E04                       00001004  228           ST    R0,TESTING          for easy reference
                                                    229
000002F6  E710 8EA4 0006                  000010A4  230           VL    V1,V1FUDGE          pollute V1
000002FC  58B0 5000                       00000000  231           L     R11,TSUB            get address of test routine
00000300  05BB                                      232           BALR  R11,R11             do test
                                                    233
00000302  E710 8E84 000E                  00001084  234           VST   V1,V1OUTPUT         save test vector
                                                    235
00000308  E310 5014 0014                  00000014  236           LGF   R1,READDR           get address of expected result
0000030E  D50F 8E84 1000         00001084 00000000  237           CLC   V1OUTPUT,0(R1)      valid?
00000314  4770 8120                       00000320  238           BNE   FAILMSG                needs, issue failed message
                                                    239
00000318  41C0 C004                       00000004  240           LA    R12,4(0,R12)        next test address
0000031C  47F0 80E4                       000002E4  241           B     NEXTE6
                                                    242
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                     244 ************************************************************************
                                                     245 * result not as expected:
                                                     246 *        issue message with test number, instruction under test
                                                     247 *              and instruction m3
                                                     248 ************************************************************************
                               00000320  00000001    249 FAILMSG  EQU   *
00000320  45F0 8142                      00000342    250          BAL   R15,RPTERROR

                                                     252 ************************************************************************
                                                     253 * continue after a failed test
                                                     254 ************************************************************************
                               00000324  00000001    255 FAILCONT EQU   *
00000324  5800 82B4                      000004B4    256          L     R0,=F'1'          set failed test indicator
00000328  5000 8E00                      00001000    257          ST    R0,FAILED
                                                     258
0000032C  41C0 C004                      00000004    259          LA    R12,4(0,R12)      next test address
00000330  47F0 80E4                      000002E4    260          B     NEXTE6


                                                     262 ************************************************************************
                                                     263 * end of testing; set ending psw
                                                     264 ************************************************************************
                               00000334  00000001    265 ENDTEST  EQU   *
00000334  5810 8E00                      00001000    266          L     R1,FAILED         did a test fail?
00000338  1211                                       267          LTR   R1,R1
0000033A  4780 8288                      00000488    268          BZ    EOJ               No, exit
0000033E  47F0 82A0                      000004A0    269          B     FAILTEST          Yes, exit with BAD PSW
                                                     270
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    272 ************************************************************************
                                                    273 *        RPTERROR          Report instruction test in error
                                                    274 *                             R0 = MESSGAE LENGTH
                                                    275 *                             R1 = ADDRESS OF MESSAGE
                                                    276 ************************************************************************

00000342  50F0 81A4                 000003A4    278 RPTERROR ST    R15,RPTSAVE          Save return address
00000346  5050 81A8                 000003A8    279          ST    R5,RPTSVR5           Save R5
                                                    280 *
0000034A  4820 5004                 00000004    281          LH    R2,TNUM              get test number and convert
0000034E  4E20 8E72                 00001072    282          CVD   R2,DECNUM
00000352  D211 8E5C 8E46  0000105C  00001046    283          MVC   PRT3,EDIT
00000358  DE11 8E5C 8E72  0000105C  00001072    284          ED    PRT3,DECNUM
0000035E  D202 8E18 8E69  00001018  00001069    285          MVC   PRTNUM(3),PRT3+13    fill in message with test #
                                                    286
00000364  D207 8E33 5008  00001033  00000008    287          MVC   PRTNAME,OPNAME       fill in message with instruction
                                                    288 *
0000036A  E320 5007 0076            00000007    289          LB    R2,M3                get m3 and convert
00000370  4E20 8E72                 00001072    290          CVD   R2,DECNUM
00000374  D211 8E5C 8E46  0000105C  00001046    291          MVC   PRT3,EDIT
0000037A  DE11 8E5C 8E72  0000105C  00001072    292          ED    PRT3,DECNUM
00000380  D200 8E44 8E6B  00001044  0000106B    293          MVC   PRTM3(1),PRT3+15     fill in message with m3 field

                                                    295 *
                                                    296 *        Use Hercules Diagnose for Message to console
                                                    297 *
00000386  9002 81B0                 000003B0    298          STM   R0,R2,RPTDWSAV       save regs used by MSG
0000038A  4100 003E                 0000003E    299          LA    R0,PRTLNG            message length
0000038E  4110 8E08                 00001008    300          LA    R1,PRTLINE           messagfe address
00000392  4520 81C0                 000003C0    301          BAL   R2,MSG               call Hercules console MSG display
00000396  9802 81B0                 000003B0    302          LM    R0,R2,RPTDWSAV       restore regs


0000039A  5850 81A8                 000003A8    304          L     R5,RPTSVR5           Restore R5
0000039E  58F0 81A4                 000003A4    305          L     R15,RPTSAVE          Restore return address
000003A2  07FF                                  306          BR    R15                  Return to caller

000003A4  00000000                              308 RPTSAVE  DC    F'0'                 R15 save area
000003A8  00000000                              309 RPTSVR5  DC    F'0'                 R5 save area

000003B0  00000000 00000000                     311 RPTDWSAV DC    2D'0'                R0-R2 save area for MSG call
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    313 ************************************************************************
                                                    314 *        Issue HERCULES MESSAGE pointed to by R1, length in R0
                                                    315 *              R2 = return address
                                                    316 ************************************************************************
000003C0  4900 82B8                    000004B8    318 MSG      CH    R0,=H'0'                Do we even HAVE a message?
000003C4  07D2                                     319          BNHR  R2                      No, ignore

000003C6  9002 81FC                    000003FC    321          STM   R0,R2,MSGSAVE           Save registers

000003CA  4900 82BA                    000004BA    323          CH    R0,=AL2(L'MSGMSG)       Message length within limits?
000003CE  47D0 81D6                    000003D6    324          BNH   MSGOK                   Yes, continue
000003D2  4100 005F                    0000005F    325          LA    R0,L'MSGMSG             No, set to maximum

000003D6  1820                                     327 MSGOK    LR    R2,R0                   Copy length to work register
000003D8  0620                                     328          BCTR  R2,0                    Minus-1 for execute
000003DA  4420 8208                    00000408    329          EX    R2,MSGMVC               Copy message to O/P buffer

000003DE  4120 200A                    0000000A    331          LA    R2,1+L'MSGCMD(,R2)      Calculate true command length
000003E2  4110 820E                    0000040E    332          LA    R1,MSGCMD               Point to true command

000003E6  83120008                                 334          DC    X'83',X'12',X'0008'     Issue Hercules Diagnose X'008'
000003EA  4780 81F6                    000003F6    335          BZ    MSGRET                  Return if successful
                                                   336
000003EE  1222                                     337          LTR   R2,R2                   Is Diag8 Ry (R2) 0?
000003F0  4780 81F6                    000003F6    338          BZ    MSGRET                    an error occurred but coninue
                                                   339
000003F4  0000                                     340          DC    H'0'                    CRASH for debugging purposes

000003F6  9802 81FC                    000003FC    342 MSGRET   LM    R0,R2,MSGSAVE           Restore registers
000003FA  07F2                                     343          BR    R2                      Return to caller


000003FC  00000000 00000000                        345 MSGSAVE  DC    3F'0'                   Registers save area
00000408  D200 8217 1000      00000417 00000000    346 MSGMVC   MVC   MSGMSG(0),0(R1)         Executed instruction

0000040E  D4E2C7D5 D6C8405C                        348 MSGCMD   DC    C'MSGNOH * '            *** HERCULES MESSAGE COMMAND ***
00000417  40404040 40404040                        349 MSGMSG   DC    CL95' '                 The message text to be displayed
                                                   350
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    352 ************************************************************************
                                                    353 *        Normal completion or Abnormal termination PSWs
                                                    354 ************************************************************************

00000478  00020001 80000000                         356 EOJPSW   DC    0D'0',X'0002000180000000',AD(0)
00000488  B2B2 8278                   00000478      358 EOJ      LPSWE EOJPSW               Normal completion

00000490  00020001 80000000                         360 FAILPSW  DC    0D'0',X'0002000180000000',AD(X'BAD')
000004A0  B2B2 8290                   00000490      362 FAILTEST LPSWE FAILPSW              Abnormal termination

                                                    364 ************************************************************************
                                                    365 *        Working Storage
                                                    366 ************************************************************************

000004A4  00000000                                  368 CTLR0    DS    F                    CR0
000004A8  00000000                                  369          DS    F

000004AC                                            371          LTORG ,                    Literals pool
000004AC  00000008                                  372                =F'8'
000004B0  00001620                                  373                =A(E6TESTS)
000004B4  00000001                                  374                =F'1'
000004B8  0000                                      375                =H'0'
000004BA  005F                                      376                =AL2(L'MSGMSG)
                                                    377
                                                    378 *        some constants
                                                    379
                        00000400  00000001          380 K        EQU   1024               One KB
                        00001000  00000001          381 PAGE     EQU   (4*K)              Size of one page
                        00010000  00000001          382 K64      EQU   (64*K)             64 KB
                        00100000  00000001          383 MB       EQU   (K*K)               1 MB
                                                    384
                        AABBCCDD  00000001          385 REG2PATT EQU   X'AABBCCDD'     Polluted Register pattern
                        000000DD  00000001          386 REG2LOW  EQU         X'DD'     (last byte above)
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                     388 *=====================================================================
                                                     389 *
                                                     390 *  NOTE: start data on an address that is easy to display
                                                     391 *        within Hercules
                                                     392 *
                                                     393 *=====================================================================
                                                     394
000004BC                      000004BC  00001000     395          ORG   ZVE6TST+X'1000'
00001000  00000000                                   396 FAILED   DC    F'0'                      some test failed?
00001004  00000000                                   397 TESTING  DC    F'0'                      current test number

                                                     399 *
                                                     400 *        failed message and associated editting
                                                     401 *
00001008  40404040 40404040                          402 PRTLINE  DC    C'         Test # '
00001018  A7A7A7                                     403 PRTNUM   DC    C'xxx'
0000101B  40868189 93858440                          404          DC    c' failed for instruction '
00001033  A7A7A7A7 A7A7A7A7                          405 PRTNAME  DC    CL8'xxxxxxxx'
0000103B  40A689A3 884094F3                          406          DC    C' with m3='
00001044  A7                                         407 PRTM3    DC    C'x'
00001045  4B                                         408          DC    C'.'
                              0000003E  00000001     409 PRTLNG   EQU   *-PRTLINE
00001046  40212020 20202020                          410 EDIT     DC    XL18'402120202020202020202020202020202020'
                                                     411
00001058  7E7E7E6E                                   412          DC    C'===>'
0000105C  40404040 40404040                          413 PRT3     DC    CL18' '
0000106E  4C7E7E7E                                   414          DC    C'<===='
00001072  00000000 00000000                          415 DECNUM   DS    CL16

                                                     417 *
                                                     418 *        Vector instruction results, pollution and input
                                                     419 *
00001084                                             420          DS    0F
00001084  00000000 00000000                          421 V1OUTPUT  DS    XL16                                    V1 OUTPUT
00001094  00000000 00000000                          422          DS    XL16                                      gap
000010A4  FFFFFFFF FFFFFFFF                          423 V1FUDGE  DC    XL16'FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF'    V1 FUDGE
000010B4  00010203 04050607                          424 V1INPUT  DC    XL16'000102030405060708090101112131415'    V1 input
000010C4  00000000 00000000                          425          DS    XL16                                      gap
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                     427 ********************************************************************************
                                                     428 *        E6TEST DSECT
                                                     429 ********************************************************************************


                                                     431 E6TEST   DSECT ,
00000000  00000000                                   432 TSUB     DC    A(0)           pointer  to test
00000004  0000                                       433 TNUM     DC    H'00'          Test Number
00000006  00                                         434          DC    X'00'
00000007  00                                         435 M3       DC    X'00'          M3 used
                                                     436
00000008  40404040 40404040                          437 OPNAME   DC    CL8' '         E6 name
00000010  00000000                                   438 RELEN    DC    A(0)           result length
00000014  00000000                                   439 READDR   DC    A(0)           result address
                                                     440
                                                     441 *        test routine will be here (from VRX macro)
                                                     442 *
                                                     443 *        followed by
                                                     444 *              EXPECTED RESULT


                          00000000  0000169F         446 ZVE6TST  CSECT ,
000010D4                                             447          DS    0F
                                                     449 ********************************************************************************
                                                     450 *     Macros to help build test tables
                                                     451 ********************************************************************************


                                                     453 *
                                                     454 * macro to generate individual test
                                                     455 *
                                                     456          MACRO
                                                     457          VRX   &INST,&M3
                                                     458 .*                              &INST    - VRX instruction under test
                                                     459 .*                              &M3      - m3 field
                                                     460
                                                     461          GBLA  &TNUM
                                                     462 &TNUM     SETA  &TNUM+1
                                                     463
                                                     464          DS    0FD
                                                     465          USING *,R5             base for test data and test routine
                                                     466
                                                     467 T&TNUM    DC    A(X&TNUM)        address of test routine
                                                     468          DC    H'&TNUM'         test number
                                                     469          DC    X'00'
                                                     470          DC    X'&M3'           M3
                                                     471          DC    CL8'&INST'       instruction name
                                                     472          DC    A(16)            result length
                                                     473 REA&TNUM DC    A(RE&TNUM)       result address
                                                     474 .*
                                                     475 *
                                                     476 X&TNUM   DS    0F
                                                     477          &INST V1,V1INPUT,&M3   test instruction
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

                                                      478           BR    R11                return
                                                      479
                                                      480 RE&TNUM   DC    0F                 xl16 result
                                                      481
                                                      482           DROP  R5
                                                      483           MEND




                                                      485 *
                                                      486 * macro to generate table of pointers to individual tests
                                                      487 *
                                                      488           MACRO
                                                      489           PTTABLE
                                                      490           GBLA  &TNUM
                                                      491           LCLA  &CUR
                                                      492 &CUR      SETA  1
                                                      493 .*
                                                      494 TTABLE    DS    0F
                                                      495 .LOOP     ANOP
                                                      496 .*
                                                      497           DC    A(T&CUR)           TEST &CUR
                                                      498 .*
                                                      499 &CUR      SETA  &CUR+1
                                                      500           AIF   (&CUR LE &TNUM).LOOP
                                                      501 *
                                                      502           DC    A(0)               END OF TABLE
                                                      503           DC    A(0)
                                                      504 .*
                                                      505           MEND
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                     507 ********************************************************************************
                                                     508 *        E6 VRX load tests
                                                     509 ********************************************************************************
                                                     510          PRINT DATA
                                                     511 *        E601 VLEBRH  - VECTOR LOAD BYTE REVERSED ELEMENT (16)
                                                     512 *        E602 VLEBRG  - VECTOR LOAD BYTE REVERSED ELEMENT (64)
                                                     513 *        E603 VLEBRF  - VECTOR LOAD BYTE REVERSED ELEMENT (32)
                                                     514 *        E604 VLLEBRZ - VECTOR LOAD BYTE REVERSED ELEMENT AND ZERO
                                                     515 *        E605 VLBRREP - VECTOR LOAD BYTE REVERSED ELEMENT AND REPLICATE
                                                     516 *        E606 VLBR    - VECTOR LOAD BYTE REVERSED ELEMENTS
                                                     517 *        E607 VLER    - VECTOR LOAD ELEMENTS REVERSED
                                                     518
                                                     519 *        VRX   instruction, m3
                                                     520 *              followed by 16 byte expected result
                                                     521 *-------------------------------------------------------------------
                                                     522 * VLEBRH  - VECTOR LOAD BYTE REVERSED ELEMENT (16)
                                                     523 *-------------------------------------------------------------------
                                                     524          VRX   VLEBRH,0
000010D8                                             525+         DS    0FD
000010D8                          000010D8           526+         USING *,R5              base for test data and test routine
000010D8  000010F0                                   527+T1       DC    A(X1)             address of test routine
000010DC  0001                                       528+         DC    H'1'              test number
000010DE  00                                         529+         DC    X'00'
000010DF  00                                         530+         DC    X'0'              M3
000010E0  E5D3C5C2 D9C84040                          531+         DC    CL8'VLEBRH'       instruction name
000010E8  00000010                                   532+         DC    A(16)             result length
000010EC  000010F8                                   533+REA1     DC    A(RE1)            result address
                                                     534+*
000010F0                                             535+X1       DS    0F
000010F0  E610 8EB4 0001                 000010B4    536+         VLEBRH V1,V1INPUT,0     test instruction
000010F6  07FB                                       537+         BR    R11               return
000010F8                                             538+RE1      DC    0F                xl16 result
000010F8                                             539+         DROP  R5
000010F8  0100FFFF FFFFFFFF                          540          DC    XL16'0100FFFFFFFFFFFFFFFFFFFFFFFF'
00001100  FFFFFFFF FFFFFFFF
                                                     541
                                                     542          VRX   VLEBRH,1
00001108                                             543+         DS    0FD
00001108                          00001108           544+         USING *,R5              base for test data and test routine
00001108  00001120                                   545+T2       DC    A(X2)             address of test routine
0000110C  0002                                       546+         DC    H'2'              test number
0000110E  00                                         547+         DC    X'00'
0000110F  01                                         548+         DC    X'1'              M3
00001110  E5D3C5C2 D9C84040                          549+         DC    CL8'VLEBRH'       instruction name
00001118  00000010                                   550+         DC    A(16)             result length
0000111C  00001128                                   551+REA2     DC    A(RE2)            result address
                                                     552+*
00001120                                             553+X2       DS    0F
00001120  E610 8EB4 1001                 000010B4    554+         VLEBRH V1,V1INPUT,1     test instruction
00001126  07FB                                       555+         BR    R11               return
00001128                                             556+RE2      DC    0F                xl16 result
00001128                                             557+         DROP  R5
00001128  FFFF0100 FFFFFFFF                          558          DC    XL16'FFFF0100FFFFFFFFFFFFFFFFFFFFFFFF'
00001130  FFFFFFFF FFFFFFFF
                                                     559
                                                     560          VRX   VLEBRH,2
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00001138                                           561+          DS    0FD
00001138                      00001138             562+          USING *,R5              base for test data and test routine
00001138  00001150                                 563+T3        DC    A(X3)             address of test routine
0000113C  0003                                     564+          DC    H'3'              test number
0000113E  00                                       565+          DC    X'00'
0000113F  02                                       566+          DC    X'2'              M3
00001140  E5D3C5C2 D9C84040                        567+          DC    CL8'VLEBRH'       instruction name
00001148  00000010                                 568+          DC    A(16)             result length
0000114C  00001158                                 569+REA3      DC    A(RE3)            result address
                                                   570+*
00001150                                           571+X3        DS    0F
00001150  E610 8EB4 2001                000010B4   572+          VLEBRH V1,V1INPUT,2     test instruction
00001156  07FB                                     573+          BR    R11               return
00001158                                           574+RE3       DC    0F                xl16 result
00001158                                           575+          DROP  R5
00001158  FFFFFFFF 0100FFFF                        576           DC    XL16'FFFFFFFF0100FFFFFFFFFFFFFFFFFF'
00001160  FFFFFFFF FFFFFFFF
                                                   577
                                                   578           VRX   VLEBRH,3
00001168                                           579+          DS    0FD
00001168                      00001168             580+          USING *,R5              base for test data and test routine
00001168  00001180                                 581+T4        DC    A(X4)             address of test routine
0000116C  0004                                     582+          DC    H'4'              test number
0000116E  00                                       583+          DC    X'00'
0000116F  03                                       584+          DC    X'3'              M3
00001170  E5D3C5C2 D9C84040                        585+          DC    CL8'VLEBRH'       instruction name
00001178  00000010                                 586+          DC    A(16)             result length
0000117C  00001188                                 587+REA4      DC    A(RE4)            result address
                                                   588+*
00001180                                           589+X4        DS    0F
00001180  E610 8EB4 3001                000010B4   590+          VLEBRH V1,V1INPUT,3     test instruction
00001186  07FB                                     591+          BR    R11               return
00001188                                           592+RE4       DC    0F                xl16 result
00001188                                           593+          DROP  R5
00001188  FFFFFFFF FFFF0100                        594           DC    XL16'FFFFFFFFFFFF0100FFFFFFFFFFFFFFFF'
00001190  FFFFFFFF FFFFFFFF
                                                   595
                                                   596           VRX   VLEBRH,4
00001198                                           597+          DS    0FD
00001198                      00001198             598+          USING *,R5              base for test data and test routine
00001198  000011B0                                 599+T5        DC    A(X5)             address of test routine
0000119C  0005                                     600+          DC    H'5'              test number
0000119E  00                                       601+          DC    X'00'
0000119F  04                                       602+          DC    X'4'              M3
000011A0  E5D3C5C2 D9C84040                        603+          DC    CL8'VLEBRH'       instruction name
000011A8  00000010                                 604+          DC    A(16)             result length
000011AC  000011B8                                 605+REA5      DC    A(RE5)            result address
                                                   606+*
000011B0                                           607+X5        DS    0F
000011B0  E610 8EB4 4001                000010B4   608+          VLEBRH V1,V1INPUT,4     test instruction
000011B6  07FB                                     609+          BR    R11               return
000011B8                                           610+RE5       DC    0F                xl16 result
000011B8                                           611+          DROP  R5
000011B8  FFFFFFFF FFFFFFFF                        612           DC    XL16'FFFFFFFFFFFFFFFF0100FFFFFFFFFFFF'
000011C0  0100FFFF FFFFFFFF
                                                   613
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                     614          VRX   VLEBRH,5
000011C8                                             615+         DS    0FD
000011C8                       000011C8              616+         USING *,R5              base for test data and test routine
000011C8  000011E0                                   617+T6       DC    A(X6)             address of test routine
000011CC  0006                                       618+         DC    H'6'              test number
000011CE  00                                         619+         DC    X'00'
000011CF  05                                         620+         DC    X'5'              M3
000011D0  E5D3C5C2 D9C84040                          621+         DC    CL8'VLEBRH'       instruction name
000011D8  00000010                                   622+         DC    A(16)             result length
000011DC  000011E8                                   623+REA6     DC    A(RE6)            result address
                                                     624+*
000011E0                                             625+X6       DS    0F
000011E0  E610 8EB4 5001                 000010B4    626+         VLEBRH V1,V1INPUT,5     test instruction
000011E6  07FB                                       627+         BR    R11               return
000011E8                                             628+RE6      DC    0F                xl16 result
000011E8                                             629+         DROP  R5
000011E8  FFFFFFFF FFFFFFFF                          630          DC    XL16'FFFFFFFFFFFFFFFFFFFF0100FFFFFFFF'
000011F0  FFFF0100 FFFFFFFF
                                                     631
                                                     632          VRX   VLEBRH,6
000011F8                                             633+         DS    0FD
000011F8                       000011F8              634+         USING *,R5              base for test data and test routine
000011F8  00001210                                   635+T7       DC    A(X7)             address of test routine
000011FC  0007                                       636+         DC    H'7'              test number
000011FE  00                                         637+         DC    X'00'
000011FF  06                                         638+         DC    X'6'              M3
00001200  E5D3C5C2 D9C84040                          639+         DC    CL8'VLEBRH'       instruction name
00001208  00000010                                   640+         DC    A(16)             result length
0000120C  00001218                                   641+REA7     DC    A(RE7)            result address
                                                     642+*
00001210                                             643+X7       DS    0F
00001210  E610 8EB4 6001                 000010B4    644+         VLEBRH V1,V1INPUT,6     test instruction
00001216  07FB                                       645+         BR    R11               return
00001218                                             646+RE7      DC    0F                xl16 result
00001218                                             647+         DROP  R5
00001218  FFFFFFFF FFFFFFFF                          648          DC    XL16'FFFFFFFFFFFFFFFFFFFFFFFF0100FFFF'
00001220  FFFFFFFF 0100FFFF
                                                     649
                                                     650          VRX   VLEBRH,7
00001228                                             651+         DS    0FD
00001228                       00001228              652+         USING *,R5              base for test data and test routine
00001228  00001240                                   653+T8       DC    A(X8)             address of test routine
0000122C  0008                                       654+         DC    H'8'              test number
0000122E  00                                         655+         DC    X'00'
0000122F  07                                         656+         DC    X'7'              M3
00001230  E5D3C5C2 D9C84040                          657+         DC    CL8'VLEBRH'       instruction name
00001238  00000010                                   658+         DC    A(16)             result length
0000123C  00001248                                   659+REA8     DC    A(RE8)            result address
                                                     660+*
00001240                                             661+X8       DS    0F
00001240  E610 8EB4 7001                 000010B4    662+         VLEBRH V1,V1INPUT,7     test instruction
00001246  07FB                                       663+         BR    R11               return
00001248                                             664+RE8      DC    0F                xl16 result
00001248                                             665+         DROP  R5
00001248  FFFFFFFF FFFFFFFF                          666          DC    XL16'FFFFFFFFFFFFFFFFFFFFFFFFFFFF0100'
00001250  FFFFFFFF FFFF0100
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                     667
                                                     668 *-------------------------------------------------------------------
                                                     669 * VLEBRG  - VECTOR LOAD BYTE REVERSED ELEMENT (64)
                                                     670 *-------------------------------------------------------------------
                                                     671          VRX   VLEBRG,0
00001258                                             672+         DS    0FD
00001258                       00001258              673+         USING *,R5              base for test data and test routine
00001258  00001270                                   674+T9       DC    A(X9)             address of test routine
0000125C  0009                                       675+         DC    H'9'              test number
0000125E  00                                         676+         DC    X'00'
0000125F  00                                         677+         DC    X'0'              M3
00001260  E5D3C5C2 D9C74040                          678+         DC    CL8'VLEBRG'       instruction name
00001268  00000010                                   679+         DC    A(16)             result length
0000126C  00001278                                   680+REA9     DC    A(RE9)            result address
                                                     681+*
00001270                                             682+X9       DS    0F
00001270  E610 8EB4 0002                 000010B4    683+         VLEBRG V1,V1INPUT,0     test instruction
00001276  07FB                                       684+         BR    R11               return
00001278                                             685+RE9      DC    0F                xl16 result
00001278                                             686+         DROP  R5
00001278  07060504 03020100                          687          DC    XL16'07060504030201
00001280  FFFFFFFF FFFFFFFF                                              00FFFFFFFFFFFFFF'
                                                     688
                                                     689          VRX   VLEBRG,1
00001288                                             690+         DS    0FD
00001288                       00001288              691+         USING *,R5              base for test data and test routine
00001288  000012A0                                   692+T10      DC    A(X10)            address of test routine
0000128C  000A                                       693+         DC    H'10'             test number
0000128E  00                                         694+         DC    X'00'
0000128F  01                                         695+         DC    X'1'              M3
00001290  E5D3C5C2 D9C74040                          696+         DC    CL8'VLEBRG'       instruction name
00001298  00000010                                   697+         DC    A(16)             result length
0000129C  000012A8                                   698+REA10    DC    A(RE10)           result address
                                                     699+*
000012A0                                             700+X10      DS    0F
000012A0  E610 8EB4 1002                 000010B4    701+         VLEBRG V1,V1INPUT,1     test instruction
000012A6  07FB                                       702+         BR    R11               return
000012A8                                             703+RE10     DC    0F                xl16 result
000012A8                                             704+         DROP  R5
000012A8  FFFFFFFF FFFFFFFF                          705          DC    XL16'FFFFFFFFFFFFFF
000012B0  07060504 03020100                                              0706050403020100'
                                                     706
                                                     707 *-------------------------------------------------------------------
                                                     708 * VLEBRF  - VECTOR LOAD BYTE REVERSED ELEMENT (32)
                                                     709 *-------------------------------------------------------------------
                                                     710          VRX   VLEBRF,0
000012B8                                             711+         DS    0FD
000012B8                       000012B8              712+         USING *,R5              base for test data and test routine
000012B8  000012D0                                   713+T11      DC    A(X11)            address of test routine
000012BC  000B                                       714+         DC    H'11'             test number
000012BE  00                                         715+         DC    X'00'
000012BF  00                                         716+         DC    X'0'              M3
000012C0  E5D3C5C2 D9C64040                          717+         DC    CL8'VLEBRF'       instruction name
000012C8  00000010                                   718+         DC    A(16)             result length
000012CC  000012D8                                   719+REA11    DC    A(RE11)           result address
                                                     720+*
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
000012D0                                           721+X11      DS    0F
000012D0  E610 8EB4 0003                 000010B4  722+         VLEBRF V1,V1INPUT,0     test instruction
000012D6  07FB                                     723+         BR    R11               return
000012D8                                           724+RE11     DC    0F                xl16 result
000012D8                                           725+         DROP  R5
000012D8  03020100 FFFFFFFF                        726          DC    XL16'03020100FFFFFFFFFFFFFFFFFFFFFFFF'
000012E0  FFFFFFFF FFFFFFFF
                                                   727
                                                   728          VRX   VLEBRF,1
000012E8                                           729+         DS    0FD
000012E8                         000012E8          730+         USING *,R5              base for test data and test routine
000012E8  00001300                                 731+T12      DC    A(X12)            address of test routine
000012EC  000C                                     732+         DC    H'12'             test number
000012EE  00                                       733+         DC    X'00'
000012EF  01                                       734+         DC    X'1'              M3
000012F0  E5D3C5C2 D9C64040                        735+         DC    CL8'VLEBRF'       instruction name
000012F8  00000010                                 736+         DC    A(16)             result length
000012FC  00001308                                 737+REA12    DC    A(RE12)           result address
                                                   738+*
00001300                                           739+X12      DS    0F
00001300  E610 8EB4 1003                 000010B4  740+         VLEBRF V1,V1INPUT,1     test instruction
00001306  07FB                                     741+         BR    R11               return
00001308                                           742+RE12     DC    0F                xl16 result
00001308                                           743+         DROP  R5
00001308  FFFFFFFF 03020100                        744          DC    XL16'FFFFFFFF03020100FFFFFFFFFFFFFFFF'
00001310  FFFFFFFF FFFFFFFF
                                                   745
                                                   746          VRX   VLEBRF,2
00001318                                           747+         DS    0FD
00001318                         00001318          748+         USING *,R5              base for test data and test routine
00001318  00001330                                 749+T13      DC    A(X13)            address of test routine
0000131C  000D                                     750+         DC    H'13'             test number
0000131E  00                                       751+         DC    X'00'
0000131F  02                                       752+         DC    X'2'              M3
00001320  E5D3C5C2 D9C64040                        753+         DC    CL8'VLEBRF'       instruction name
00001328  00000010                                 754+         DC    A(16)             result length
0000132C  00001338                                 755+REA13    DC    A(RE13)           result address
                                                   756+*
00001330                                           757+X13      DS    0F
00001330  E610 8EB4 2003                 000010B4  758+         VLEBRF V1,V1INPUT,2     test instruction
00001336  07FB                                     759+         BR    R11               return
00001338                                           760+RE13     DC    0F                xl16 result
00001338                                           761+         DROP  R5
00001338  FFFFFFFF FFFFFFFF                        762          DC    XL16'FFFFFFFFFFFFFFFF03020100FFFFFFFF'
00001340  03020100 FFFFFFFF
                                                   763
                                                   764          VRX   VLEBRF,3
00001348                                           765+         DS    0FD
00001348                         00001348          766+         USING *,R5              base for test data and test routine
00001348  00001360                                 767+T14      DC    A(X14)            address of test routine
0000134C  000E                                     768+         DC    H'14'             test number
0000134E  00                                       769+         DC    X'00'
0000134F  03                                       770+         DC    X'3'              M3
00001350  E5D3C5C2 D9C64040                        771+         DC    CL8'VLEBRF'       instruction name
00001358  00000010                                 772+         DC    A(16)             result length
0000135C  00001368                                 773+REA14    DC    A(RE14)           result address
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                     774+*
00001360                                             775+X14      DS    0F
00001360  E610 8EB4 3003                 000010B4    776+         VLEBRF V1,V1INPUT,3     test instruction
00001366  07FB                                       777+         BR    R11               return
00001368                                             778+RE14     DC    0F                xl16 result
00001368                                             779+         DROP  R5
00001368  FFFFFFFF FFFFFFFF                          780          DC    XL16'FFFFFFFFFFFFFFFFFFFFFFFF03020100'
00001370  FFFFFFFF 03020100
                                                     781
                                                     782 *-------------------------------------------------------------------
                                                     783 * VLLEBRZ - VECTOR LOAD BYTE REVERSED ELEMENT AND ZERO
                                                     784 *-------------------------------------------------------------------
                                                     785          VRX   VLLEBRZ,1
00001378                                             786+         DS    0FD
00001378                         00001378            787+         USING *,R5              base for test data and test routine
00001378  00001390                                   788+T15      DC    A(X15)            address of test routine
0000137C  000F                                       789+         DC    H'15'             test number
0000137E  00                                         790+         DC    X'00'
0000137F  01                                         791+         DC    X'1'              M3
00001380  E5D3D3C5 C2D9E940                         792+         DC    CL8'VLLEBRZ'      instruction name
00001388  00000010                                   793+         DC    A(16)             result length
0000138C  00001398                                   794+REA15    DC    A(RE15)           result address
                                                     795+*
00001390                                             796+X15      DS    0F
00001390  E610 8EB4 1004                 000010B4    797+         VLLEBRZ V1,V1INPUT,1    test instruction
00001396  07FB                                       798+         BR    R11               return
00001398                                             799+RE15     DC    0F                xl16 result
00001398                                             800+         DROP  R5
00001398  00000000 00000100                          801          DC    XL16'00000000000001000000000000000000'
000013A0  00000000 00000000
                                                     802
                                                     803          VRX   VLLEBRZ,2
000013A8                                             804+         DS    0FD
000013A8                         000013A8            805+         USING *,R5              base for test data and test routine
000013A8  000013C0                                   806+T16      DC    A(X16)            address of test routine
000013AC  0010                                       807+         DC    H'16'             test number
000013AE  00                                         808+         DC    X'00'
000013AF  02                                         809+         DC    X'2'              M3
000013B0  E5D3D3C5 C2D9E940                         810+         DC    CL8'VLLEBRZ'      instruction name
000013B8  00000010                                   811+         DC    A(16)             result length
000013BC  000013C8                                   812+REA16    DC    A(RE16)           result address
                                                     813+*
000013C0                                             814+X16      DS    0F
000013C0  E610 8EB4 2004                 000010B4    815+         VLLEBRZ V1,V1INPUT,2    test instruction
000013C6  07FB                                       816+         BR    R11               return
000013C8                                             817+RE16     DC    0F                xl16 result
000013C8                                             818+         DROP  R5
000013C8  00000000 03020100                         819          DC    XL16'00000000030201000000000000000000'
000013D0  00000000 00000000
                                                     820
                                                     821          VRX   VLLEBRZ,3
000013D8                                             822+         DS    0FD
000013D8                         000013D8            823+         USING *,R5              base for test data and test routine
000013D8  000013F0                                   824+T17      DC    A(X17)            address of test routine
000013DC  0011                                       825+         DC    H'17'             test number
000013DE  00                                         826+         DC    X'00'
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
000013DF  03                                       827+         DC    X'3'               M3
000013E0  E5D3D3C5 C2D9E940                        828+         DC    CL8'VLLEBRZ'       instruction name
000013E8  00000010                                 829+         DC    A(16)              result length
000013EC  000013F8                                 830+REA17    DC    A(RE17)            result address
                                                   831+*
000013F0                                           832+X17      DS    0F
000013F0  E610 8EB4 3004                 000010B4  833+         VLLEBRZ V1,V1INPUT,3     test instruction
000013F6  07FB                                     834+         BR    R11                return
000013F8                                           835+RE17     DC    0F                 xl16 result
000013F8                                           836+         DROP  R5
000013F8  07060504 03020100                        837          DC    XL16'07060504030201000000000000000000'
00001400  00000000 00000000
                                                   838
                                                   839          VRX   VLLEBRZ,6
00001408                                           840+         DS    0FD
00001408                 00001408                  841+         USING *,R5               base for test data and test routine
00001408  00001420                                 842+T18      DC    A(X18)             address of test routine
0000140C  0012                                     843+         DC    H'18'              test number
0000140E  00                                       844+         DC    X'00'
0000140F  06                                       845+         DC    X'6'               M3
00001410  E5D3D3C5 C2D9E940                        846+         DC    CL8'VLLEBRZ'       instruction name
00001418  00000010                                 847+         DC    A(16)              result length
0000141C  00001428                                 848+REA18    DC    A(RE18)            result address
                                                   849+*
00001420                                           850+X18      DS    0F
00001420  E610 8EB4 6004                 000010B4  851+         VLLEBRZ V1,V1INPUT,6     test instruction
00001426  07FB                                     852+         BR    R11                return
00001428                                           853+RE18     DC    0F                 xl16 result
00001428                                           854+         DROP  R5
00001428  03020100 00000000                        855          DC    XL16'03020100000000000000000000000000'
00001430  00000000 00000000
                                                   856
                                                   857 *-------------------------------------------------------------------
                                                   858 * VLBRREP - VECTOR LOAD BYTE REVERSED ELEMENT AND REPLICATE
                                                   859 *-------------------------------------------------------------------
                                                   860          VRX   VLBRREP,1
00001438                                           861+         DS    0FD
00001438                 00001438                  862+         USING *,R5               base for test data and test routine
00001438  00001450                                 863+T19      DC    A(X19)             address of test routine
0000143C  0013                                     864+         DC    H'19'              test number
0000143E  00                                       865+         DC    X'00'
0000143F  01                                       866+         DC    X'1'               M3
00001440  E5D3C2D9 D9C5D740                        867+         DC    CL8'VLBRREP'       instruction name
00001448  00000010                                 868+         DC    A(16)              result length
0000144C  00001458                                 869+REA19    DC    A(RE19)            result address
                                                   870+*
00001450                                           871+X19      DS    0F
00001450  E610 8EB4 1005                 000010B4  872+         VLBRREP V1,V1INPUT,1     test instruction
00001456  07FB                                     873+         BR    R11                return
00001458                                           874+RE19     DC    0F                 xl16 result
00001458                                           875+         DROP  R5
00001458  01000100 01000100                        876          DC    XL16'01000100010001000100010001000100'
00001460  01000100 01000100
                                                   877
                                                   878          VRX   VLBRREP,2
00001468                                           879+         DS    0FD
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00001468                     00001468               880+         USING *,R5              base for test data and test routine
00001468  00001480                                  881+T20      DC    A(X20)            address of test routine
0000146C  0014                                      882+         DC    H'20'             test number
0000146E  00                                        883+         DC    X'00'
0000146F  02                                        884+         DC    X'2'              M3
00001470  E5D3C2D9 D9C5D740                         885+         DC    CL8'VLBRREP'      instruction name
00001478  00000010                                  886+         DC    A(16)             result length
0000147C  00001488                                  887+REA20    DC    A(RE20)           result address
                                                    888+*
00001480                                            889+X20      DS    0F
00001480  E610 8EB4 2005               000010B4     890+         VLBRREP V1,V1INPUT,2    test instruction
00001486  07FB                                      891+         BR    R11               return
00001488                                            892+RE20     DC    0F                xl16 result
00001488                                            893+         DROP  R5
00001488  03020100 03020100                         894          DC    XL16'03020100030201000302010003020100'
00001490  03020100 03020100
                                                    895
                                                    896          VRX   VLBRREP,3
00001498                                            897+         DS    0FD
00001498                     00001498               898+         USING *,R5              base for test data and test routine
00001498  000014B0                                  899+T21      DC    A(X21)            address of test routine
0000149C  0015                                      900+         DC    H'21'             test number
0000149E  00                                        901+         DC    X'00'
0000149F  03                                        902+         DC    X'3'              M3
000014A0  E5D3C2D9 D9C5D740                         903+         DC    CL8'VLBRREP'      instruction name
000014A8  00000010                                  904+         DC    A(16)             result length
000014AC  000014B8                                  905+REA21    DC    A(RE21)           result address
                                                    906+*
000014B0                                            907+X21      DS    0F
000014B0  E610 8EB4 3005               000010B4     908+         VLBRREP V1,V1INPUT,3    test instruction
000014B6  07FB                                      909+         BR    R11               return
000014B8                                            910+RE21     DC    0F                xl16 result
000014B8                                            911+         DROP  R5
000014B8  07060504 03020100                         912          DC    XL16'07060504030201000706050403020100'
000014C0  07060504 03020100
                                                    913
                                                    914 *-------------------------------------------------------------------
                                                    915 * VLBR    - VECTOR LOAD BYTE REVERSED ELEMENTS
                                                    916 *-------------------------------------------------------------------
                                                    917          VRX   VLBR,1
000014C8                                            918+         DS    0FD
000014C8                     000014C8               919+         USING *,R5              base for test data and test routine
000014C8  000014E0                                  920+T22      DC    A(X22)            address of test routine
000014CC  0016                                      921+         DC    H'22'             test number
000014CE  00                                        922+         DC    X'00'
000014CF  01                                        923+         DC    X'1'              M3
000014D0  E5D3C2D9 40404040                         924+         DC    CL8'VLBR'         instruction name
000014D8  00000010                                  925+         DC    A(16)             result length
000014DC  000014E8                                  926+REA22    DC    A(RE22)           result address
                                                    927+*
000014E0                                            928+X22      DS    0F
000014E0  E610 8EB4 1006               000010B4     929+         VLBR  V1,V1INPUT,1      test instruction
000014E6  07FB                                      930+         BR    R11               return
000014E8                                            931+RE22     DC    0F                xl16 result
000014E8                                            932+         DROP  R5
000014E8  01000302 05040706                         933          DC    XL16'01000302050407060908111013121514'
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
000014F0  09081110 13121514                            934
                                                       935          VRX   VLBR,2
000014F8                                               936+         DS    0FD
000014F8                     000014F8                  937+         USING *,R5              base for test data and test routine
000014F8  00001510                                     938+T23      DC    A(X23)            address of test routine
000014FC  0017                                         939+         DC    H'23'             test number
000014FE  00                                           940+         DC    X'00'
000014FF  02                                           941+         DC    X'2'              M3
00001500  E5D3C2D9 40404040                            942+         DC    CL8'VLBR'         instruction name
00001508  00000010                                     943+         DC    A(16)             result length
0000150C  00001518                                     944+REA23    DC    A(RE23)           result address
                                                       945+*
00001510                                               946+X23      DS    0F
00001510  E610 8EB4 2006                 000010B4      947+         VLBR  V1,V1INPUT,2      test instruction
00001516  07FB                                         948+         BR    R11               return
00001518                                               949+RE23     DC    0F                xl16 result
00001518                                               950+         DROP  R5
00001518  03020100 07060504                            951          DC    XL16'030201000706050411100908151413 12'
00001520  11100908 15141312
                                                       952
                                                       953          VRX   VLBR,3
00001528                                               954+         DS    0FD
00001528                     00001528                  955+         USING *,R5              base for test data and test routine
00001528  00001540                                     956+T24      DC    A(X24)            address of test routine
0000152C  0018                                         957+         DC    H'24'             test number
0000152E  00                                           958+         DC    X'00'
0000152F  03                                           959+         DC    X'3'              M3
00001530  E5D3C2D9 40404040                            960+         DC    CL8'VLBR'         instruction name
00001538  00000010                                     961+         DC    A(16)             result length
0000153C  00001548                                     962+REA24    DC    A(RE24)           result address
                                                       963+*
00001540                                               964+X24      DS    0F
00001540  E610 8EB4 3006                 000010B4      965+         VLBR  V1,V1INPUT,3      test instruction
00001546  07FB                                         966+         BR    R11               return
00001548                                               967+RE24     DC    0F                xl16 result
00001548                                               968+         DROP  R5
00001548  07060504 03020100                            969          DC    XL16'0706050403020100151413121110 0908'
00001550  15141312 11100908
                                                       970
                                                       971          VRX   VLBR,4
00001558                                               972+         DS    0FD
00001558                     00001558                  973+         USING *,R5              base for test data and test routine
00001558  00001570                                     974+T25      DC    A(X25)            address of test routine
0000155C  0019                                         975+         DC    H'25'             test number
0000155E  00                                           976+         DC    X'00'
0000155F  04                                           977+         DC    X'4'              M3
00001560  E5D3C2D9 40404040                            978+         DC    CL8'VLBR'         instruction name
00001568  00000010                                     979+         DC    A(16)             result length
0000156C  00001578                                     980+REA25    DC    A(RE25)           result address
                                                       981+*
00001570                                               982+X25      DS    0F
00001570  E610 8EB4 4006                 000010B4      983+         VLBR  V1,V1INPUT,4      test instruction
00001576  07FB                                         984+         BR    R11               return
00001578                                               985+RE25     DC    0F                xl16 result
00001578                                               986+         DROP  R5
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00001578  15141312 11100908                          987          DC    XL16'15141312111009080706050403020100'
00001580  07060504 03020100
                                                      988
                                                      989 *-------------------------------------------------------------------
                                                      990 * LER    - VECTOR LOAD ELEMENTS REVERSED
                                                      991 *-------------------------------------------------------------------
                                                      992          VRX   VLER,1
00001588                                              993+         DS    0FD
00001588                        00001588              994+         USING *,R5              base for test data and test routine
00001588  000015A0                                    995+T26      DC    A(X26)            address of test routine
0000158C  001A                                        996+         DC    H'26'             test number
0000158E  00                                          997+         DC    X'00'
0000158F  01                                          998+         DC    X'1'              M3
00001590  E5D3C5D9 40404040                           999+         DC    CL8'VLER'         instruction name
00001598  00000010                                   1000+         DC    A(16)             result length
0000159C  000015A8                                   1001+REA26    DC    A(RE26)           result address
                                                     1002+*
000015A0                                             1003+X26      DS    0F
000015A0  E610 8EB4 1007                 000010B4    1004+         VLER  V1,V1INPUT,1      test instruction
000015A6  07FB                                       1005+         BR    R11               return
000015A8                                             1006+RE26     DC    0F                xl16 result
000015A8                                             1007+         DROP  R5
000015A8  14151213 10110809                          1008          DC    XL16'14151213101108090607040502030001'
000015B0  06070405 02030001
                                                     1009
                                                     1010          VRX   VLER,2
000015B8                                             1011+         DS    0FD
000015B8                        000015B8             1012+         USING *,R5              base for test data and test routine
000015B8  000015D0                                   1013+T27      DC    A(X27)            address of test routine
000015BC  001B                                       1014+         DC    H'27'             test number
000015BE  00                                         1015+         DC    X'00'
000015BF  02                                         1016+         DC    X'2'              M3
000015C0  E5D3C5D9 40404040                          1017+         DC    CL8'VLER'         instruction name
000015C8  00000010                                   1018+         DC    A(16)             result length
000015CC  000015D8                                   1019+REA27    DC    A(RE27)           result address
                                                     1020+*
000015D0                                             1021+X27      DS    0F
000015D0  E610 8EB4 2007                 000010B4    1022+         VLER  V1,V1INPUT,2      test instruction
000015D6  07FB                                       1023+         BR    R11               return
000015D8                                             1024+RE27     DC    0F                xl16 result
000015D8                                             1025+         DROP  R5
000015D8  12131415 08091011                          1026          DC    XL16'12131415080910110405060700010203'
000015E0  04050607 00010203
                                                     1027
                                                     1028          VRX   VLER,3
000015E8                                             1029+         DS    0FD
000015E8                        000015E8             1030+         USING *,R5              base for test data and test routine
000015E8  00001600                                   1031+T28      DC    A(X28)            address of test routine
000015EC  001C                                       1032+         DC    H'28'             test number
000015EE  00                                         1033+         DC    X'00'
000015EF  03                                         1034+         DC    X'3'              M3
000015F0  E5D3C5D9 40404040                          1035+         DC    CL8'VLER'         instruction name
000015F8  00000010                                   1036+         DC    A(16)             result length
000015FC  00001608                                   1037+REA28    DC    A(RE28)           result address
                                                     1038+*
00001600                                             1039+X28      DS    0F
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00001600  E610 8EB4 3007                 000010B4  1040+          VLER  V1,V1INPUT,3      test instruction
00001606  07FB                                     1041+          BR    R11               return
00001608                                           1042+RE28      DC    0F                xl16 result
00001608                                           1043+          DROP  R5
00001608  08091011 12131415                        1044           DC    XL16'08091011121314150001020304050607'
00001610  00010203 04050607
                                                   1045
                                                   1046
00001618  00000000                                 1047           DC    F'0'     END OF TABLE
0000161C  00000000                                 1048           DC    F'0'
                                                   1049 *
                                                   1050 * table of pointers to individual tests
                                                   1051 *
00001620                                           1052 E6TESTS   DS    0F
                                                   1053           PTTABLE
00001620                                           1054+TTABLE    DS    0F
00001620  000010D8                                 1055+          DC    A(T1)             TEST &CUR
00001624  00001108                                 1056+          DC    A(T2)             TEST &CUR
00001628  00001138                                 1057+          DC    A(T3)             TEST &CUR
0000162C  00001168                                 1058+          DC    A(T4)             TEST &CUR
00001630  00001198                                 1059+          DC    A(T5)             TEST &CUR
00001634  000011C8                                 1060+          DC    A(T6)             TEST &CUR
00001638  000011F8                                 1061+          DC    A(T7)             TEST &CUR
0000163C  00001228                                 1062+          DC    A(T8)             TEST &CUR
00001640  00001258                                 1063+          DC    A(T9)             TEST &CUR
00001644  00001288                                 1064+          DC    A(T10)            TEST &CUR
00001648  000012B8                                 1065+          DC    A(T11)            TEST &CUR
0000164C  000012E8                                 1066+          DC    A(T12)            TEST &CUR
00001650  00001318                                 1067+          DC    A(T13)            TEST &CUR
00001654  00001348                                 1068+          DC    A(T14)            TEST &CUR
00001658  00001378                                 1069+          DC    A(T15)            TEST &CUR
0000165C  000013A8                                 1070+          DC    A(T16)            TEST &CUR
00001660  000013D8                                 1071+          DC    A(T17)            TEST &CUR
00001664  00001408                                 1072+          DC    A(T18)            TEST &CUR
00001668  00001438                                 1073+          DC    A(T19)            TEST &CUR
0000166C  00001468                                 1074+          DC    A(T20)            TEST &CUR
00001670  00001498                                 1075+          DC    A(T21)            TEST &CUR
00001674  000014C8                                 1076+          DC    A(T22)            TEST &CUR
00001678  000014F8                                 1077+          DC    A(T23)            TEST &CUR
0000167C  00001528                                 1078+          DC    A(T24)            TEST &CUR
00001680  00001558                                 1079+          DC    A(T25)            TEST &CUR
00001684  00001588                                 1080+          DC    A(T26)            TEST &CUR
00001688  000015B8                                 1081+          DC    A(T27)            TEST &CUR
0000168C  000015E8                                 1082+          DC    A(T28)            TEST &CUR
                                                   1083+*
00001690  00000000                                 1084+          DC    A(0)              END OF TABLE
00001694  00000000                                 1085+          DC    A(0)
                                                   1086
00001698  00000000                                 1087           DC    F'0'     END OF TABLE
0000169C  00000000                                 1088           DC    F'0'
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

                                          1090 ********************************************************************************
                                          1091 *        Register equates
                                          1092 ********************************************************************************


                              00000000  00000001  1094 R0       EQU   0
                              00000001  00000001  1095 R1       EQU   1
                              00000002  00000001  1096 R2       EQU   2
                              00000003  00000001  1097 R3       EQU   3
                              00000004  00000001  1098 R4       EQU   4
                              00000005  00000001  1099 R5       EQU   5
                              00000006  00000001  1100 R6       EQU   6
                              00000007  00000001  1101 R7       EQU   7
                              00000008  00000001  1102 R8       EQU   8
                              00000009  00000001  1103 R9       EQU   9
                              0000000A  00000001  1104 R10      EQU   10
                              0000000B  00000001  1105 R11      EQU   11
                              0000000C  00000001  1106 R12      EQU   12
                              0000000D  00000001  1107 R13      EQU   13
                              0000000E  00000001  1108 R14      EQU   14
                              0000000F  00000001  1109 R15      EQU   15


                                          1111 ********************************************************************************
                                          1112 *        Register equates
                                          1113 ********************************************************************************


                              00000000  00000001  1115 V0       EQU   0
                              00000001  00000001  1116 V1       EQU   1
                              00000002  00000001  1117 V2       EQU   2
                              00000003  00000001  1118 V3       EQU   3
                              00000004  00000001  1119 V4       EQU   4
                              00000005  00000001  1120 V5       EQU   5
                              00000006  00000001  1121 V6       EQU   6
                              00000007  00000001  1122 V7       EQU   7
                              00000008  00000001  1123 V8       EQU   8
                              00000009  00000001  1124 V9       EQU   9
                              0000000A  00000001  1125 V10      EQU   10
                              0000000B  00000001  1126 V11      EQU   11
                              0000000C  00000001  1127 V12      EQU   12
                              0000000D  00000001  1128 V13      EQU   13
                              0000000E  00000001  1129 V14      EQU   14
                              0000000F  00000001  1130 V15      EQU   15
                              00000010  00000001  1131 V16      EQU   16
                              00000011  00000001  1132 V17      EQU   17
                              00000012  00000001  1133 V18      EQU   18
                              00000013  00000001  1134 V19      EQU   19
                              00000014  00000001  1135 V20      EQU   20
                              00000015  00000001  1136 V21      EQU   21
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT
                                00000016  00000001  1137 V22       EQU   22
                                00000017  00000001  1138 V23       EQU   23
                                00000018  00000001  1139 V24       EQU   24
                                00000019  00000001  1140 V25       EQU   25
                                0000001A  00000001  1141 V26       EQU   26
                                0000001B  00000001  1142 V27       EQU   27
                                0000001C  00000001  1143 V28       EQU   28
                                0000001D  00000001  1144 V29       EQU   29
                                0000001E  00000001  1145 V30       EQU   30
                                0000001F  00000001  1146 V31       EQU   31
                                                    1147
                                                    1148           END
```

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
BEGIN	I	00000200	2	166	129 162 163 164
CTLR0	F	000004A4	4	368	176 177 178 179
DECNUM	C	00001072	16	415	282 284 290 292
E6TEST	4	00000000	24	431	225
E6TESTS	F	00001620	4	1052	218
EDIT	X	00001046	18	410	283 291
ENDTEST	U	00000334	1	265	223
EOJ	I	00000488	4	358	211 268
EOJPSW	D	00000478	8	356	358
FAILCONT	U	00000324	1	255	
FAILED	F	00001000	4	396	257 266
FAILMSG	U	00000320	1	249	238
FAILPSW	D	00000490	8	360	362
FAILTEST	I	000004A0	4	362	269
FB0001	F	00000290	8	195	199 200 202
IMAGE	1	00000000	5792	0	
K	U	00000400	1	380	381 382 383
K64	U	00010000	1	382	
M3	X	00000007	1	435	289
MB	U	00100000	1	383	
MSG	I	000003C0	4	318	210 301
MSGCMD	C	0000040E	9	348	331 332
MSGMSG	C	00000417	95	349	325 346 323
MSGMVC	I	00000408	6	346	329
MSGOK	I	000003D6	2	327	324
MSGRET	I	000003F6	4	342	335 338
MSGSAVE	F	000003FC	4	345	321 342
NEXTE6	U	000002E4	1	220	241 260
OPNAME	C	00000008	8	437	287
PAGE	U	00001000	1	381	
PRT3	C	0000105C	18	413	283 284 285 291 292 293
PRTLINE	C	00001008	16	402	409 300
PRTLNG	U	0000003E	1	409	299
PRTM3	C	00001044	1	407	293
PRTNAME	C	00001033	8	405	287
PRTNUM	C	00001018	3	403	285
R0	U	00000000	1	1094	123 176 179 199 201 202 203 208 227 228 256 257 298
					299 302 318 321 323 325 327 342
R1	U	00000001	1	1095	209 236 237 266 267 300 332 346
R10	U	0000000A	1	1104	164 173 174
R11	U	0000000B	1	1105	231 232 537 555 573 591 609 627 645 663 684 702 723
					741 759 777 798 816 834 852 873 891 909 930 948 966
					984 1005 1023 1041
R12	U	0000000C	1	1106	218 221 240 259
R13	U	0000000D	1	1107	
R14	U	0000000E	1	1108	
R15	U	0000000F	1	1109	250 278 305 306
R2	U	00000002	1	1096	210 281 282 289 290 298 301 302 319 321 327 328 329
					331 337 342 343
R3	U	00000003	1	1097	
R4	U	00000004	1	1098	
R5	U	00000005	1	1099	221 222 225 279 304 526 539 544 557 562 575 580 593
					598 611 616 629 634 647 652 665 673 686 691 704 712
					725 730 743 748 761 766 779 787 800 805 818 823 836
					841 854 862 875 880 893 898 911 919 932 937 950 955
					968 973 986 994 1007 1012 1025 1030 1043

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
R6	U	00000006	1	1100	
R7	U	00000007	1	1101	
R8	U	00000008	1	1102	162 166 167 168 170
R9	U	00000009	1	1103	163 170 171 173
RE1	F	000010F8	4	538	533
RE10	F	000012A8	4	703	698
RE11	F	000012D8	4	724	719
RE12	F	00001308	4	742	737
RE13	F	00001338	4	760	755
RE14	F	00001368	4	778	773
RE15	F	00001398	4	799	794
RE16	F	000013C8	4	817	812
RE17	F	000013F8	4	835	830
RE18	F	00001428	4	853	848
RE19	F	00001458	4	874	869
RE2	F	00001128	4	556	551
RE20	F	00001488	4	892	887
RE21	F	000014B8	4	910	905
RE22	F	000014E8	4	931	926
RE23	F	00001518	4	949	944
RE24	F	00001548	4	967	962
RE25	F	00001578	4	985	980
RE26	F	000015A8	4	1006	1001
RE27	F	000015D8	4	1024	1019
RE28	F	00001608	4	1042	1037
RE3	F	00001158	4	574	569
RE4	F	00001188	4	592	587
RE5	F	000011B8	4	610	605
RE6	F	000011E8	4	628	623
RE7	F	00001218	4	646	641
RE8	F	00001248	4	664	659
RE9	F	00001278	4	685	680
REA1	A	000010EC	4	533	
REA10	A	0000129C	4	698	
REA11	A	000012CC	4	719	
REA12	A	000012FC	4	737	
REA13	A	0000132C	4	755	
REA14	A	0000135C	4	773	
REA15	A	0000138C	4	794	
REA16	A	000013BC	4	812	
REA17	A	000013EC	4	830	
REA18	A	0000141C	4	848	
REA19	A	0000144C	4	869	
REA2	A	0000111C	4	551	
REA20	A	0000147C	4	887	
REA21	A	000014AC	4	905	
REA22	A	000014DC	4	926	
REA23	A	0000150C	4	944	
REA24	A	0000153C	4	962	
REA25	A	0000156C	4	980	
REA26	A	0000159C	4	1001	
REA27	A	000015CC	4	1019	
REA28	A	000015FC	4	1037	
REA3	A	0000114C	4	569	
REA4	A	0000117C	4	587	
REA5	A	000011AC	4	605	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
REA6	A	000011DC	4	623	
REA7	A	0000120C	4	641	
REA8	A	0000123C	4	659	
REA9	A	0000126C	4	680	
READDR	A	00000014	4	439	236
REG2LOW	U	000000DD	1	386	
REG2PATT	U	AABBCCDD	1	385	
RELEN	A	00000010	4	438	
RPTDWSAV	D	000003B0	8	311	298 302
RPTERROR	I	00000342	4	278	250
RPTSAVE	F	000003A4	4	308	278 305
RPTSVR5	F	000003A8	4	309	279 304
SKL0001	U	0000005D	1	192	208
SKT0001	C	0000022A	26	189	192 209
SVOLDPSW	U	00000140	0	125	
T1	A	000010D8	4	527	1055
T10	A	00001288	4	692	1064
T11	A	000012B8	4	713	1065
T12	A	000012E8	4	731	1066
T13	A	00001318	4	749	1067
T14	A	00001348	4	767	1068
T15	A	00001378	4	788	1069
T16	A	000013A8	4	806	1070
T17	A	000013D8	4	824	1071
T18	A	00001408	4	842	1072
T19	A	00001438	4	863	1073
T2	A	00001108	4	545	1056
T20	A	00001468	4	881	1074
T21	A	00001498	4	899	1075
T22	A	000014C8	4	920	1076
T23	A	000014F8	4	938	1077
T24	A	00001528	4	956	1078
T25	A	00001558	4	974	1079
T26	A	00001588	4	995	1080
T27	A	000015B8	4	1013	1081
T28	A	000015E8	4	1031	1082
T3	A	00001138	4	563	1057
T4	A	00001168	4	581	1058
T5	A	00001198	4	599	1059
T6	A	000011C8	4	617	1060
T7	A	000011F8	4	635	1061
T8	A	00001228	4	653	1062
T9	A	00001258	4	674	1063
TESTING	F	00001004	4	397	228
TNUM	H	00000004	2	433	227 281
TSUB	A	00000000	4	432	231
TTABLE	F	00001620	4	1054	
V0	U	00000000	1	1115	
V1	U	00000001	1	1116	230 234 536 554 572 590 608 626 644 662 683 701 722 740 758 776 797 815 833 851 872 890 908 929 947 965 983 1004 1022 1040
V10	U	0000000A	1	1125	
V11	U	0000000B	1	1126	
V12	U	0000000C	1	1127	
V13	U	0000000D	1	1128	
V14	U	0000000E	1	1129	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
V15	U	0000000F	1	1130	
V16	U	00000010	1	1131	
V17	U	00000011	1	1132	
V18	U	00000012	1	1133	
V19	U	00000013	1	1134	
V1FUDGE	X	000010A4	16	423	230
V1INPUT	X	000010B4	16	424	536 554 572 590 608 626 644 662 683 701 722 740 758 776 797 815 833 851 872 890 908 929 947 965 983 1004 1022 1040
V1OUTPUT	X	00001084	16	421	234 237
V2	U	00000002	1	1117	
V20	U	00000014	1	1135	
V21	U	00000015	1	1136	
V22	U	00000016	1	1137	
V23	U	00000017	1	1138	
V24	U	00000018	1	1139	
V25	U	00000019	1	1140	
V26	U	0000001A	1	1141	
V27	U	0000001B	1	1142	
V28	U	0000001C	1	1143	
V29	U	0000001D	1	1144	
V3	U	00000003	1	1118	
V30	U	0000001E	1	1145	
V31	U	0000001F	1	1146	
V4	U	00000004	1	1119	
V5	U	00000005	1	1120	
V6	U	00000006	1	1121	
V7	U	00000007	1	1122	
V8	U	00000008	1	1123	
V9	U	00000009	1	1124	
X0001	U	000002B8	1	198	186 199
X1	F	000010F0	4	535	527
X10	F	000012A0	4	700	692
X11	F	000012D0	4	721	713
X12	F	00001300	4	739	731
X13	F	00001330	4	757	749
X14	F	00001360	4	775	767
X15	F	00001390	4	796	788
X16	F	000013C0	4	814	806
X17	F	000013F0	4	832	824
X18	F	00001420	4	850	842
X19	F	00001450	4	871	863
X2	F	00001120	4	553	545
X20	F	00001480	4	889	881
X21	F	000014B0	4	907	899
X22	F	000014E0	4	928	920
X23	F	00001510	4	946	938
X24	F	00001540	4	964	956
X25	F	00001570	4	982	974
X26	F	000015A0	4	1003	995
X27	F	000015D0	4	1021	1013
X28	F	00001600	4	1039	1031
X3	F	00001150	4	571	563
X4	F	00001180	4	589	581
X5	F	000011B0	4	607	599
X6	F	000011E0	4	625	617

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES					
X7	F	00001210	4	643	635					
X8	F	00001240	4	661	653					
X9	F	00001270	4	682	674					
XC0001	U	000002E0	1	212	204					
ZVE6TST	J	00000000	5792	122	125	127	131	135	395	123
=A(E6TESTS)	A	000004B0	4	373	218					
=AL2(L'MSGMSG)	R	000004BA	2	376	323					
=F'1'	F	000004B4	4	374	256					
=F'8'	F	000004AC	4	372	203					
=H'0'	H	000004B8	2	375	318					

```
 MACRO    DEFN  REFERENCES

FCHECK     74    185
PTTABLE   489   1053
VRX       457    524    542    560    578    596    614    632    650    671    689    710    728    746    764    785    803    821
                 839    860    878    896    917    935    953    971    992   1010   1028
```

```
   DESC      SYMBOL   SIZE     POS         ADDR

Entry: 0

Image       IMAGE    5792  0000-169F  0000-169F
  Region             5792  0000-169F  0000-169F
    CSECT   ZVE6TST  5792  0000-169F  0000-169F
```

```
   STMT                         FILE NAME
1     /home/tn529/sharedvfp/tests/zvector-e6-01-loads.asm

** NO ERRORS FOUND **
```