```
 LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    2 ************************************************************************
                                                    3 *
                                                    4 *       Zvector E6 instruction tests for VRR-i encoded:
                                                    5 *
                                                    6 *       E650 VCVB    - VECTOR CONVERT TO BINARY  (32)
                                                    7 *       E652 VCVBG   - VECTOR CONVERT TO BINARY  (64)
                                                    8 *
                                                    9 *       James Wekel June 2024
                                                   10 ************************************************************************
                                                   11
                                                   12 ************************************************************************
                                                   13 *
                                                   14 *       basic instruction tests
                                                   15 *
                                                   16 ************************************************************************
                                                   17 *  This program tests proper functioning of the z/arch E6 VRR-i vector
                                                   18 *  convert to binary instructions. Exceptions are not tested.
                                                   19 *
                                                   20 *  PLEASE NOTE that the tests are very SIMPLE TESTS designed to catch
                                                   21 *  obvious coding errors.  None of the tests are thorough.  They are
                                                   22 *  NOT designed to test all aspects of any of the instructions.
                                                   23 *
                                                   24 ************************************************************************
                                                   25 *
                                                   26 *   *Testcase zvector-e6-11-convertbinary: VECTOR E6 VRR-i instruction
                                                   27 *   *
                                                   28 *   *   Zvector E6 tests for VRR-i encoded instruction:
                                                   29 *   *
                                                   30 *   *   E650 VCVB    - VECTOR CONVERT TO BINARY  (32)
                                                   31 *   *   E652 VCVBG   - VECTOR CONVERT TO BINARY  (64)
                                                   32 *   *
                                                   33 *   *   # ---------------------------------------------------------
                                                   34 *   *   #  This tests only the basic function of the instruction.
                                                   35 *   *   #  Exceptions are NOT tested.
                                                   36 *   *   # ---------------------------------------------------------
                                                   37 *   *
                                                   38 *   mainsize    2
                                                   39 *   numcpu      1
                                                   40 *   sysclear
                                                   41 *   archlvl     z/Arch
                                                   42 *
                                                   43 *   diag8cmd    enable    # (needed for messages to Hercules console)
                                                   44 *   loadcore    "$(testpath)/zvector-e6-11-convertbinary.core" 0x0
                                                   45 *   diag8cmd    disable   # (reset back to default)
                                                   46 *
                                                   47 *   *Done
                                                   48 ************************************************************************
```

```
 LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    50 ************************************************************************
                                                    51 *        FCHECK Macro - Is a Facility Bit set?
                                                    52 *
                                                    53 *        If the facility bit is NOT set, an message is issued and
                                                    54 *        the test is skipped.
                                                    55 *
                                                    56 *        Fcheck uses R0, R1 and R2
                                                    57 *
                                                    58 * eg.    FCHECK 134,'vector-packed-decimal'
                                                    59 ************************************************************************
                                                    60          MACRO
                                                    61          FCHECK &BITNO,&NOTSETMSG
                                                    62 .*                       &BITNO : facility bit number to check
                                                    63 .*                       &NOTSETMSG : 'facility name'
                                                    64          LCLA  &FBBYTE           Facility bit in Byte
                                                    65          LCLA  &FBBIT            Facility bit within Byte
                                                    66
                                                    67          LCLA  &L(8)
                                                    68 &L(1)    SetA  128,64,32,16,8,4,2,1  bit positions within byte
                                                    69
                                                    70 &FBBYTE  SETA  &BITNO/8
                                                    71 &FBBIT   SETA  &L((&BITNO-(&FBBYTE*8))+1)
                                                    72 .*       MNOTE 0,'checking Bit=&BITNO: FBBYTE=&FBBYTE, FBBIT=&FBBIT'
                                                    73
                                                    74          B     X&SYSNDX
                                                    75 *                                       Fcheck data area
                                                    76 *                                       skip messgae
                                                    77 SKT&SYSNDX DC  C'          Skipping tests: '
                                                    78          DC    C&NOTSETMSG
                                                    79          DC    C' facility (bit &BITNO) is not installed.'
                                                    80 SKL&SYSNDX EQU *-SKT&SYSNDX
                                                    81 *                                       facility bits
                                                    82          DS    FD                       gap
                                                    83 FB&SYSNDX DS   4FD
                                                    84          DS    FD                       gap
                                                    85 *
                                                    86 X&SYSNDX EQU *
                                                    87          LA    R0,((X&SYSNDX-FB&SYSNDX)/8)-1
                                                    88          STFLE FB&SYSNDX                get facility bits
                                                    89
                                                    90          XGR   R0,R0
                                                    91          IC    R0,FB&SYSNDX+&FBBYTE     get fbit byte
                                                    92          N     R0,=F'&FBBIT'            is bit set?
                                                    93          BNZ   XC&SYSNDX
                                                    94 *
                                                    95 * facility bit not set, issue message and exit
                                                    96 *
                                                    97          LA    R0,SKL&SYSNDX            message length
                                                    98          LA    R1,SKT&SYSNDX            message address
                                                    99          BAL   R2,MSG
                                                   100
                                                   101          B     EOJ
                                                   102 XC&SYSNDX EQU *
                                                   103          MEND
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                     105 ***************************************************************************
                                                     106 *        Low core PSWs
                                                     107 ***************************************************************************

                             00000000  00002227    109 ZVE6TST  START 0
00000000                     00000000                110          USING ZVE6TST,R0            Low core addressability
                                                     111
                             00000140  00000000    112 SVOLDPSW EQU   ZVE6TST+X'140'        z/Arch Supervisor call old PSW

00000000                     00000000  000001A0    114          ORG   ZVE6TST+X'1A0'        z/Architecure RESTART PSW
000001A0  00000001 80000000                         115          DC    X'0000000180000000'
000001A8  00000000 00000200                         116          DC    AD(BEGIN)

000001B0                     000001B0  000001D0    118          ORG   ZVE6TST+X'1D0'        z/Architecure PROGRAM CHECK PSW
000001D0  00020001 80000000                         119          DC    X'0002000180000000'
000001D8  00000000 0000DEAD                         120          DC    AD(X'DEAD')

000001E0                     000001E0  00000200    122          ORG   ZVE6TST+X'200'        Start of actual test program...
                                                     123
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                     125 ************************************************************************
                                                     126 *               The actual "ZVE6TST" program itself...
                                                     127 ************************************************************************
                                                     128 *
                                                     129 *  Architecture Mode: z/Arch
                                                     130 *  Register Usage:
                                                     131 *
                                                     132 *   R0       (work)
                                                     133 *   R1-4     (work)
                                                     134 *   R5       Testing control table - current test base
                                                     135 *   R6-R7    (work)
                                                     136 *   R8       First base register
                                                     137 *   R9       Second base register
                                                     138 *   R10      Third base register
                                                     139 *   R11      E6TEST call return
                                                     140 *   R12      E6TESTS register
                                                     141 *   R13      (work)
                                                     142 *   R14      Subroutine call
                                                     143 *   R15      Secondary Subroutine call or work
                                                     144 *
                                                     145 ************************************************************************

00000200                        00000200             147          USING  BEGIN,R8        FIRST Base Register
00000200                        00001200             148          USING  BEGIN+4096,R9   SECOND Base Register
00000200                        00002200             149          USING  BEGIN+8192,R10  THIRD Base Register
                                                     150
00000200  0580                                       151 BEGIN    BALR   R8,0            Initalize FIRST base register
00000202  0680                                       152          BCTR   R8,0            Initalize FIRST base register
00000204  0680                                       153          BCTR   R8,0            Initalize FIRST base register
                                                     154
00000206  4190 8800                     00000800    155          LA     R9,2048(,R8)    Initalize SECOND base register
0000020A  4190 9800                     00000800    156          LA     R9,2048(,R9)    Initalize SECOND base register
                                                     157
0000020E  41A0 9800                     00000800    158          LA     R10,2048(,R9)   Initalize THIRD base register
00000212  41A0 A800                     00000800    159          LA     R10,2048(,R10)  Initalize THIRD base register
                                                     160
00000216  B600 8334                     00000534    161          STCTL  R0,R0,CTLR0     Store CR0 to enable AFP
0000021A  9604 8335                     00000535    162          OI     CTLR0+1,X'04'   Turn on AFP bit
0000021E  9602 8335                     00000535    163          OI     CTLR0+1,X'02'   Turn on Vector bit
00000222  B700 8334                     00000534    164          LCTL   R0,R0,CTLR0     Reload updated CR0
                                                     165
                                                     166 ************************************************************************
                                                     167 * Is Vector packed-decimal facility installed  (bit 134)
                                                     168 ************************************************************************
                                                     169
                                                     170          FCHECK 134,'vector-packed-decimal'
00000226  47F0 80B0                     000002B0    171+         B      X0001
                                                     172+*                                  Fcheck data area
                                                     173+*                                  skip messgae
0000022A  40404040 40404040                          174+SKT0001  DC     C'          Skipping tests: '
00000244  A58583A3 96996097                          175+         DC     C'vector-packed-decimal'
00000259  40868183 899389A3                          176+         DC     C' facility (bit 134) is not installed.'
                            00000054  00000001       177+SKL0001  EQU    *-SKT0001
                                                     178+*                                  facility bits
00000280  00000000 00000000                          179+         DS     FD              gap
00000288  00000000 00000000                          180+FB0001   DS     4FD
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
000002A8  00000000 00000000                        181+          DS    FD                        gap
                                                   182+*
                             000002B0  00000001    183+X0001     EQU   *
000002B0  4100 0004                    00000004    184+          LA    R0,((X0001-FB0001)/8)-1
000002B4  B2B0 8088                    00000288    185+          STFLE FB0001                    get facility bits
000002B8  B982 0000                                186+          XGR   R0,R0
000002BC  4300 8098                    00000298    187+          IC    R0,FB0001+16              get fbit byte
000002C0  5400 833C                    0000053C    188+          N     R0,=F'2'                  is bit set?
000002C4  4770 80D8                    000002D8    189+          BNZ   XC0001
                                                   190+*
                                                   191+* facility bit not set, issue message and exit
                                                   192+*
000002C8  4100 0054                    00000054    193+          LA    R0,SKL0001                message length
000002CC  4110 802A                    0000022A    194+          LA    R1,SKT0001                message address
000002D0  4520 8250                    00000450    195+          BAL   R2,MSG
000002D4  47F0 8318                    00000518    196+          B     EOJ
                             000002D8  00000001    197+XC0001    EQU   *
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    199 ********************************************************************************
                                                    200 *               Do tests in the E6TESTS table
                                                    201 ********************************************************************************
                                                    202
000002D8  58C0 8340                       00000540  203           L     R12,=A(E6TESTS)       get table of test addresses
                                                    204
                               000002DC   00000001  205 NEXTE6    EQU   *
000002DC  5850 C000                       00000000  206           L     R5,0(0,R12)       get test address
000002E0  1255                                      207           LTR   R5,R5                  have a test?
000002E2  4780 820C                       0000040C  208           BZ    ENDTEST                   done?
                                                    209
000002E6  B982 0000                                 210           XGR   R0,R0               no cc error
                                                    211
000002EA                       00000000             212           USING E6TEST,R5
                                                    213
000002EA  4800 5004                       00000004  214           LH    R0,TNUM             save current test number
000002EE  5000 8E04                       00001004  215           ST    R0,TESTING          for easy reference
                                                    216
000002F2  58B0 5000                       00000000  217           L     R11,TSUB            get address of test routine
000002F6  05BB                                      218           BALR  R11,R11             do test
                                                    219
000002F8  E310 5009 0076                  00000009  220           LB    R1,CCMASK           (failure CC mask)
000002FE  8910 0004                       00000004  221           SLL   R1,4                (shift to BC instr CC position)
00000302  4410 811E                       0000031E  222           EX    R1,TESTCC              fail if...
                                                    223
                               00000306   00000001  224 TESTREST EQU   *
00000306  E310 5018 0014                  00000018  225           LGF   R1,READDR           get address of expected result
0000030C  D507 8F20 1000       00001120  00000000  226           CLC   R1OUTPUT,0(R1)      valid?
00000312  4770 81B2                       000003B2  227           BNE   FAILMSG                no, issue failed message
                                                    228
00000316  41C0 C004                       00000004  229           LA    R12,4(0,R12)        next test address
0000031A  47F0 80DC                       000002DC  230           B     NEXTE6
                                                    231
0000031E  4700 8122                       00000322  232 TESTCC    BC    0,CCMSG           (fail if unexpected condition code)
                                                    233
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    235 ********************************************************************************
                                                    236 * cc was not as expected
                                                    237 ********************************************************************************
                                00000322  00000001  238 CCMSG    EQU   *
00000322  E310 0001 0082                  00000001  239          XG    R1,R1
00000328  E310 5007 0076                  00000007  240          LB    R1,M3           m3 has CS bit
0000032E  5410 8344                       00000544  241          N     R1,=F'1'        get CS (CC set) bit
00000332  4780 8106                       00000306  242          BZ    TESTREST           ignore if not set
                                                    243 *
                                                    244 * extract CC extracted PSW
                                                    245 *
00000336  5810 8ED8                       000010D8  246          L     R1,CCPSW
0000033A  8810 000C                       0000000C  247          SRL   R1,12
0000033E  5410 8348                       00000548  248          N     R1,=XL4'3'
00000342  4210 8EE0                       000010E0  249          STC   R1,CCFOUND      save cc
                                                    250 *
                                                    251 * FILL IN MESSAGE
                                                    252 *
00000346  4820 5004                       00000004  253          LH    R2,TNUM                  get test number and convert
0000034A  4E20 8EC8                       000010C8  254          CVD   R2,DECNUM
0000034E  D211 8EB2 8E9C      000010B2    0000109C  255          MVC   PRT3,EDIT
00000354  DE11 8EB2 8EC8      000010B2    000010C8  256          ED    PRT3,DECNUM
0000035A  D202 8E57 8EBF      00001057    000010BF  257          MVC   CCPRTNUM(3),PRT3+13      fill in message with test #
                                                    258
00000360  D207 8E74 500A      00001074    0000000A  259          MVC   CCPRTNAME,OPNAME         fill in message with instruction
                                                    260
00000366  B982 0022                                 261          XGR   R2,R2                    get CC as U8
0000036A  4320 5008                       00000008  262          IC    R2,CC
0000036E  4E20 8EC8                       000010C8  263          CVD   R2,DECNUM                and convert
00000372  D211 8EB2 8E9C      000010B2    0000109C  264          MVC   PRT3,EDIT
00000378  DE11 8EB2 8EC8      000010B2    000010C8  265          ED    PRT3,DECNUM
0000037E  D200 8E8A 8EC1      0000108A    000010C1  266          MVC   CCPRTEXP(1),PRT3+15      fill in message with CC field
                                                    267
00000384  B982 0022                                 268          XGR   R2,R2                    get CCFOUND as U8
00000388  4320 8EE0                       000010E0  269          IC    R2,CCFOUND
0000038C  4E20 8EC8                       000010C8  270          CVD   R2,DECNUM                and convert
00000390  D211 8EB2 8E9C      000010B2    0000109C  271          MVC   PRT3,EDIT
00000396  DE11 8EB2 8EC8      000010B2    000010C8  272          ED    PRT3,DECNUM
0000039C  D200 8E9A 8EC1      0000109A    000010C1  273          MVC   CCPRTGOT(1),PRT3+15    fill in message with ccfound
                                                    274
000003A2  4100 0055                       00000055  275          LA    R0,CCPRTLNG              message length
000003A6  4110 8E47                       00001047  276          LA    R1,CCPRTLINE             messagfe address
000003AA  45F0 821A                       0000041A  277          BAL   R15,RPTERROR
                                                    278
000003AE  47F0 81FC                       000003FC  279          B     FAILCONT
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    281 ************************************************************************
                                                    282 * result not as expected:
                                                    283 *        issue message with test number, instruction under test
                                                    284 *              and instruction l2
                                                    285 ************************************************************************
                                 000003B2  00000001 286 FAILMSG  EQU   *
000003B2  4820 5004                        00000004 287          LH    R2,TNUM             get test number and convert
000003B6  4E20 8EC8                        000010C8 288          CVD   R2,DECNUM
000003BA  D211 8EB2 8E9C       000010B2  0000109C 289          MVC   PRT3,EDIT
000003C0  DE11 8EB2 8EC8       000010B2  000010C8 290          ED    PRT3,DECNUM
000003C6  D202 8E18 8EBF       00001018  000010BF 291          MVC   PRTNUM(3),PRT3+13   fill in message with test #
                                                    292
000003CC  D207 8E33 500A       00001033  0000000A 293          MVC   PRTNAME,OPNAME      fill in message with instruction
                                                    294
000003D2  B982 0022                                 295          XGR   R2,R2               get M3 as U8
000003D6  4320 5007                        00000007 296          IC    R2,M3               and convert
000003DA  4E20 8EC8                        000010C8 297          CVD   R2,DECNUM
000003DE  D211 8EB2 8E9C       000010B2  0000109C 298          MVC   PRT3,EDIT
000003E4  DE11 8EB2 8EC8       000010B2  000010C8 299          ED    PRT3,DECNUM
000003EA  D201 8E44 8EC0       00001044  000010C0 300          MVC   PRTM3(2),PRT3+14    fill in message with m3 field
                                                    301
000003F0  4100 003F                        0000003F 302          LA    R0,PRTLNG           message length
000003F4  4110 8E08                        00001008 303          LA    R1,PRTLINE          messagfe address
000003F8  45F0 821A                        0000041A 304          BAL   R15,RPTERROR
```

```
                                                    306 ************************************************************************
                                                    307 * continue after a failed test
                                                    308 ************************************************************************
                                 000003FC  00000001 309 FAILCONT EQU   *
000003FC  5800 8344                        00000544 310          L     R0,=F'1'            set GLOBAL failed test indicator
00000400  5000 8E00                        00001000 311          ST    R0,FAILED
                                                    312
00000404  41C0 C004                        00000004 313          LA    R12,4(0,R12)        next test address
00000408  47F0 80DC                        000002DC 314          B     NEXTE6
```

```
                                                    316 ************************************************************************
                                                    317 * end of testing; set ending psw
                                                    318 ************************************************************************
                                 0000040C  00000001 319 ENDTEST  EQU   *
0000040C  5810 8E00                        00001000 320          L     R1,FAILED           did a test fail?
00000410  1211                                      321          LTR   R1,R1
00000412  4780 8318                        00000518 322          BZ    EOJ                    No, exit
00000416  47F0 8330                        00000530 323          B     FAILTEST               Yes, exit with BAD PSW
                                                    324
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    326 ************************************************************************
                                                    327 *        RPTERROR          Report instruction test in error
                                                    328 *                             R0 = MESSGAE LENGTH
                                                    329 *                             R1 = ADDRESS OF MESSAGE
                                                    330 ************************************************************************

0000041A  50F0 8238                 00000438    332 RPTERROR ST    R15,RPTSAVE          Save return address
0000041E  5050 823C                 0000043C    333          ST    R5,RPTSVR5           Save R5
                                                    334 *
                                                    335 *        Use Hercules Diagnose for Message to console
                                                    336 *
00000422  9002 8240                 00000440    337          STM   R0,R2,RPTDWSAV       save regs used by MSG
00000426  4520 8250                 00000450    338          BAL   R2,MSG               call Hercules console MSG display
0000042A  9802 8240                 00000440    339          LM    R0,R2,RPTDWSAV       restore regs


0000042E  5850 823C                 0000043C    341          L     R5,RPTSVR5           Restore R5
00000432  58F0 8238                 00000438    342          L     R15,RPTSAVE          Restore return address
00000436  07FF                                  343          BR    R15                  Return to caller

00000438  00000000                              345 RPTSAVE  DC    F'0'                 R15 save area
0000043C  00000000                              346 RPTSVR5  DC    F'0'                 R5 save area

00000440  00000000 00000000                     348 RPTDWSAV DC    2D'0'                R0-R2 save area for MSG call
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    350 ***************************************************************************
                                                    351 *        Issue HERCULES MESSAGE pointed to by R1, length in R0
                                                    352 *              R2 = return address
                                                    353 ***************************************************************************
                                                    354
00000450  4900 834C                 0000054C    355 MSG      CH    R0,=H'0'                Do we even HAVE a message?
00000454  07D2                                  356          BNHR  R2                      No, ignore
                                                    357
00000456  9002 828C                 0000048C    358          STM   R0,R2,MSGSAVE           Save registers
                                                    359
0000045A  4900 834E                 0000054E    360          CH    R0,=AL2(L'MSGMSG)       Message length within limits?
0000045E  47D0 8266                 00000466    361          BNH   MSGOK                   Yes, continue
00000462  4100 005F                 0000005F    362          LA    R0,L'MSGMSG             No, set to maximum
                                                    363
00000466  1820                                  364 MSGOK    LR    R2,R0                   Copy length to work register
00000468  0620                                  365          BCTR  R2,0                    Minus-1 for execute
0000046A  4420 8298                 00000498    366          EX    R2,MSGMVC               Copy message to O/P buffer
                                                    367
0000046E  4120 200A                 0000000A    368          LA    R2,1+L'MSGCMD(,R2)      Calculate true command length
00000472  4110 829E                 0000049E    369          LA    R1,MSGCMD               Point to true command
                                                    370
00000476  83120008                              371          DC    X'83',X'12',X'0008'     Issue Hercules Diagnose X'008'
0000047A  4780 8286                 00000486    372          BZ    MSGRET                  Return if successful
                                                    373
0000047E  1222                                  374          LTR   R2,R2                   Is Diag8 Ry (R2) 0?
00000480  4780 8286                 00000486    375          BZ    MSGRET                    an error occurred but coninue
                                                    376
00000484  0000                                  377          DC    H'0'                    CRASH for debugging purposes
                                                    378
00000486  9802 828C                 0000048C    379 MSGRET   LM    R0,R2,MSGSAVE           Restore registers
0000048A  07F2                                  380          BR    R2                      Return to caller


0000048C  00000000 00000000                     382 MSGSAVE  DC    3F'0'                   Registers save area
00000498  D200 82A7 1000      000004A7  00000000  383 MSGMVC   MVC   MSGMSG(0),0(R1)         Executed instruction

0000049E  D4E2C7D5 D6C8405C                     385 MSGCMD   DC    C'MSGNOH * '            *** HERCULES MESSAGE COMMAND ***
000004A7  40404040 40404040                     386 MSGMSG   DC    CL95' '                 The message text to be displayed
                                                    387
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    389 ************************************************************************
                                                    390 *        Normal completion or Abnormal termination PSWs
                                                    391 ************************************************************************


00000508  00020001 80000000                         393 EOJPSW   DC    0D'0',X'0002000180000000',AD(0)

00000518  B2B2 8308                   00000508      395 EOJ      LPSWE EOJPSW               Normal completion


00000520  00020001 80000000                         397 FAILPSW  DC    0D'0',X'0002000180000000',AD(X'BAD')

00000530  B2B2 8320                   00000520      399 FAILTEST LPSWE FAILPSW              Abnormal termination


                                                    401 ************************************************************************
                                                    402 *        Working Storage
                                                    403 ************************************************************************


00000534  00000000                                  405 CTLR0    DS    F                    CR0
00000538  00000000                                  406         DS    F


0000053C                                            408         LTORG ,                    Literals pool
0000053C  00000002                                  409               =F'2'
00000540  00002160                                  410               =A(E6TESTS)
00000544  00000001                                  411               =F'1'
00000548  00000003                                  412               =XL4'3'
0000054C  0000                                      413               =H'0'
0000054E  005F                                      414               =AL2(L'MSGMSG)
                                                    415
                                                    416 *        some constants
                                                    417
                      00000400  00000001            418 K        EQU   1024               One KB
                      00001000  00000001            419 PAGE     EQU   (4*K)              Size of one page
                      00010000  00000001            420 K64      EQU   (64*K)             64 KB
                      00100000  00000001            421 MB       EQU   (K*K)               1 MB
                                                    422
                                                    423
                      AABBCCDD  00000001            424 REG2PATT EQU   X'AABBCCDD'     Polluted Register pattern
                      000000DD  00000001            425 REG2LOW  EQU         X'DD'     (last byte above)
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                     427 *=====================================================================
                                                     428 *
                                                     429 *  NOTE: start data on an address that is easy to display
                                                     430 *        within Hercules
                                                     431 *
                                                     432 *=====================================================================
                                                     433
00000550                       00000550  00001000    434          ORG   ZVE6TST+X'1000'
00001000  00000000                                   435 FAILED   DC    F'0'                    some test failed?
00001004  00000000                                   436 TESTING  DC    F'0'                    current test number

                                                     438 ************************************************************************
                                                     439 *        TEST failed : result messgae
                                                     440 ************************************************************************
                                                     441 *
                                                     442 *        failed message and associated editting
                                                     443 *
00001008  40404040 40404040                          444 PRTLINE  DC    C'         Test # '
00001018  A7A7A7                                     445 PRTNUM   DC    C'xxx'
0000101B  40868189 93858440                          446          DC    C' failed for instruction '
00001033  A7A7A7A7 A7A7A7A7                          447 PRTNAME  DC    CL8'xxxxxxxx'
0000103B  40A689A3 884094F3                          448          DC    C' with m3='
00001044  A7A7                                       449 PRTM3    DC    C'xx'
00001046  4B                                         450          DC    C'.'
                               0000003F  00000001    451 PRTLNG   EQU   *-PRTLINE

                                                     453 ************************************************************************
                                                     454 *        TEST failed : CC message
                                                     455 ************************************************************************
                                                     456 *
                                                     457 *        failed message and associated editting
                                                     458 *
00001047  40404040 40404040                          459 CCPRTLINE DC   C'         Test # '
00001057  A7A7A7                                     460 CCPRTNUM DC    C'xxx'
0000105A  40A69996 95874083                          461          DC    c' wrong cc for instruction '
00001074  A7A7A7A7 A7A7A7A7                          462 CCPRTNAME DC    CL8'xxxxxxxx'
0000107C  4085A797 8583A385                          463          DC    C' expected: cc='
0000108A  A7                                         464 CCPRTEXP DC    C'x'
0000108B  6B                                         465          DC    C','
0000108C  40998583 8589A585                          466          DC    C' received: cc='
0000109A  A7                                         467 CCPRTGOT DC    C'x'
0000109B  4B                                         468          DC    C'.'
                               00000055  00000001    469 CCPRTLNG   EQU   *-CCPRTLINE
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    471 ************************************************************************
                                                    472 *        TEST failed : message working storge
                                                    473 ************************************************************************
0000109C  40212020 20202020                         474 EDIT     DC    XL18'4021202020202020202020202020202020'
                                                    475
000010AE  7E7E7E6E                                  476          DC    C'===>'
000010B2  40404040 40404040                         477 PRT3     DC    CL18' '
000010C4  4C7E7E7E                                  478          DC    C'<==='
000010C8  00000000 00000000                         479 DECNUM   DS    CL16
                                                    480 *
                                                    481 *        CC extrtaction
                                                    482 *
000010D8  00000000 00000000                         483 CCPSW    DS    2F          extract PSW after test (has CC)
000010E0  00                                        484 CCFOUND  DS    X           extracted cc

                                                    486 ************************************************************************
                                                    487 *        Vector instruction results, pollution and input
                                                    488 ************************************************************************
000010E8                                            489          DS    0FD
000010E8  AABBCCDD EEFFAABB                         490 R1FUDGE  DC    XL8'AABBCCDDEEFFAABB'                    R1 FUDGE
000010F0  00000000 00000000                         491          DS    XL16                                        gap
00001100  00000000 00000000                         492 V1OUTPUT DS    XL16                                     V1 OUTPUT
00001110  00000000 00000000                         493          DS    XL16                                        gap
00001120  00000000 00000000                         494 R1OUTPUT DS    FD                                       R1 OUTPUT
00001128  00000000 00000000                         495          DS    XL16                                        gap
00001138  FFFFFFFF FFFFFFFF                         496 V1FUDGE  DC    XL16'FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF'   V1 FUDGE
00001148  BBBBBBBB BBBBBBBB                         497 V1FUDGEB DC    XL16'BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB'   V1 FUDGE b
00001158  F1F2F3F4 F5F6F7F8                         498 V1INPUT  DC    CL16'1234567890123456'                   V1 input
00001168  F7F8F9F0 F1F2F3F4                         499          DC    CL14'78901234567890'
00001176  D9                                        500          DC    X'D9'
00001177  00000000 00000000                         501          DS    XL16                                        gap
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                     503 ********************************************************************************
                                                     504 *        E6TEST DSECT
                                                     505 ********************************************************************************


                                                     507 E6TEST   DSECT ,
00000000  00000000                                   508 TSUB     DC    A(0)           pointer  to test
00000004  0000                                       509 TNUM     DC    H'00'          Test Number
00000006  00                                         510          DC    XL1'00'
00000007  00                                         511 M3       DC    HL1'00'        M3
00000008  00                                         512 CC       DC    HL1'00'        cc
00000009  00                                         513 CCMASK   DC    HL1'00'        not expected CC mask
                                                     514
0000000A  40404040 40404040                          515 OPNAME   DC    CL8' '         E6 name
                                                     516
00000014  00000000                                   517 RELEN    DC    A(0)           RESULT LENGTH
00000018  00000000                                   518 READDR   DC    A(0)           expected result address
                                                     519
                                                     520 **
                                                     521 *        test routine will be here (from VRR_I macro)
                                                     522 *              followed by
                                                     523 *              r1     - expected result (64 bits) (even for VCVB)
                                                     524 *              v1     - 16 byte packed decimal source
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT
                                                      526 ********************************************************************************
                                                      527 *     Macros to help build test tables
                                                      528 *------------------------------------------------------------------------------
                                                      529 *     VRR_I Macro to help build test tables
                                                      530 ********************************************************************************
                                                      531          MACRO
                                                      532          VRR_I &INST,&M3,&CC
                                                      533 .*                                  &INST  - VRS-d instruction under test
                                                      534 .*                                  &M3    - P2 (bit 0), P1 (bit 2) and
                                                      535 .*                                    CS (bit 3)
                                                      536 .*                                  &CC    - expected CC
                                                      537 .*
                                                      538 .*                       note:      M4    - bit 0   IOM (always 0)
                                                      539 .*
                                                      540 .*
                                                      541          LCLA  &XCC(4)  &CC has mask values for FAILED condition codes
                                                      542 &XCC(1)  SETA  7                    CC != 0
                                                      543 &XCC(2)  SETA  11                   CC != 1
                                                      544 &XCC(3)  SETA  13                   CC != 2
                                                      545 &XCC(4)  SETA  14                   CC != 3
                                                      546
                                                      547          GBLA  &TNUM
                                                      548 &TNUM    SETA  &TNUM+1
                                                      549
                                                      550          DS    0FD
                                                      551          USING *,R5                base for test data and test routine
                                                      552
                                                      553 T&TNUM   DC    A(X&TNUM)           address of test routine
                                                      554          DC    H'&TNUM'            test number
                                                      555          DC    XL1'00'
                                                      556          DC    HL1'&M3'            &M3
                                                      557          DC    HL1'&CC'            cc
                                                      558          DC    HL1'&XCC(&CC+1)'    cc failed mask
                                                      559
                                                      560          DC    CL8'&INST'          instruction name
                                                      561          DC    A(16)               result length
                                                      562 REA&TNUM DC    A(RE&TNUM)          result address
                                                      563 .*
                                                      564 *                                  INSTRUCTION UNDER TEST ROUTINE
                                                      565 X&TNUM   DS    0F
                                                      566          LG    R1,R1FUDGE          pollute R1
                                                      567          VL    V1,RE&TNUM+8        get V1 source
                                                      568
                                                      569          &INST R1,V1,&M3           test instruction
                                                      570
                                                      571          STG   R1,R1OUTPUT         save
                                                      572          EPSW  R2,R0               exptract psw
                                                      573          ST    R2,CCPSW                to save CC
                                                      574
                                                      575          BR    R11                 return
                                                      576
                                                      577 RE&TNUM  DC    0F
                                                      578          DROP  R5
                                                      579
                                                      580          MEND
```

```
 LOC         OBJECT CODE       ADDR1     ADDR2     STMT

                                                     582 ********************************************************************************
                                                     583 *     PTTABLE Macro to generate table of pointers to individual tests
                                                     584 ********************************************************************************
                                                     585
                                                     586          MACRO
                                                     587          PTTABLE
                                                     588          GBLA  &TNUM
                                                     589          LCLA  &CUR
                                                     590 &CUR     SETA  1
                                                     591 .*
                                                     592 TTABLE   DS    0F
                                                     593 .LOOP    ANOP
                                                     594 .*
                                                     595          DC    A(T&CUR)           address of test
                                                     596 .*
                                                     597 &CUR     SETA  &CUR+1
                                                     598          AIF   (&CUR LE &TNUM).LOOP
                                                     599 *
                                                     600          DC    A(0)               END OF TABLE
                                                     601          DC    A(0)
                                                     602 .*
                                                     603          MEND
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT
                                                      605 ********************************************************************************
                                                      606 *        E6 VRR_I tests
                                                      607 ********************************************************************************
                                00000000  00002227    608 ZVE6TST  CSECT ,
00001188                                              609          DS    0F


                                                      611          PRINT DATA
                                                      612 *
                                                      613 *        E650 VCVB    - VECTOR CONVERT TO BINARY  (32)
                                                      614 *        E652 VCVBG   - VECTOR CONVERT TO BINARY  (64)
                                                      615 *
                                                      616 *        VRR_I instr, m3, m4
                                                      617 *             followed by
                                                      618 *             r1     - expected result (64 bits) (even for VCVB)
                                                      619 *             v1     - 16 byte packed decimal source
                                                      620
                                                      621 *-------------------------------------------------------------------
                                                      622 * VCVB    - VECTOR CONVERT TO BINARY  (32)
                                                      623 *-------------------------------------------------------------------
                                                      624 * VCVB simple
                                                      625          VRR_I VCVB,1,0
00001188                                              626+         DS    0FD
00001188                        00001188              627+         USING *,R5              base for test data and test routine
00001188  000011A4                                    628+T1       DC    A(X1)             address of test routine
0000118C  0001                                        629+         DC    H'1'              test number
0000118E  00                                          630+         DC    XL1'00'
0000118F  01                                          631+         DC    HL1'1'            &M3
00001190  00                                          632+         DC    HL1'0'            cc
00001191  07                                          633+         DC    HL1'7'            cc failed mask
00001192  E5C3E5C2 40404040                           634+         DC    CL8'VCVB'         instruction name
0000119C  00000010                                    635+         DC    A(16)             result length
000011A0  000011C8                                    636+REA1     DC    A(RE1)            result address
                                                      637+*                                  INSTRUCTION UNDER TEST ROUTINE
000011A4                                              638+X1       DS    0F
000011A4  E310 8EE8 0004                 000010E8     639+         LG    R1,R1FUDGE        pollute R1
000011AA  E710 5048 0006                 000011D0     640+         VL    V1,RE1+8          get V1 source
000011B0  E611 0010 0050                              641+         VCVB  R1,V1,1           test instruction
000011B6  E310 8F20 0024                 00001120     642+         STG   R1,R1OUTPUT       save
000011BC  B98D 0020                                   643+         EPSW  R2,R0             exptract psw
000011C0  5020 8ED8                      000010D8     644+         ST    R2,CCPSW              to save CC
000011C4  07FB                                        645+         BR    R11               return
000011C8                                              646+RE1      DC    0F
000011C8                                              647+         DROP  R5
000011C8  AABBCCDD 0000000A                           648          DC    XL08'AABBCCDD0000000A'                    R1 result
000011D0  00000000 00000000                           649          DC    XL16'0000000000000000000000000000010C'    V1 source
000011D8  00000000 0000010C
                                                      650
                                                      651          VRR_I VCVB,1,0
000011E0                                              652+         DS    0FD
000011E0                        000011E0              653+         USING *,R5              base for test data and test routine
000011E0  000011FC                                    654+T2       DC    A(X2)             address of test routine
000011E4  0002                                        655+         DC    H'2'              test number
000011E6  00                                          656+         DC    XL1'00'
000011E7  01                                          657+         DC    HL1'1'            &M3
000011E8  00                                          658+         DC    HL1'0'            cc
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

000011E9  07                                       659+          DC    HL1'7'              cc failed mask
000011EA  E5C3E5C2 40404040                        660+          DC    CL8'VCVB'           instruction name
000011F4  00000010                                 661+          DC    A(16)               result length
000011F8  00001220                                 662+REA2      DC    A(RE2)              result address
                                                   663+*                                   INSTRUCTION UNDER TEST ROUTINE
000011FC                                           664+X2        DS    0F
000011FC  E310 8EE8 0004                 000010E8  665+          LG    R1,R1FUDGE          pollute R1
00001202  E710 9028 0006                 00001228  666+          VL    V1,RE2+8            get V1 source
00001208  E611 0010 0050                           667+          VCVB  R1,V1,1             test instruction
0000120E  E310 8F20 0024                 00001120  668+          STG   R1,R1OUTPUT         save
00001214  B98D 0020                                669+          EPSW  R2,R0               exptract psw
00001218  5020 8ED8                      000010D8  670+          ST    R2,CCPSW                to save CC
0000121C  07FB                                     671+          BR    R11                 return
00001220                                           672+RE2       DC    0F
00001220                                           673+          DROP  R5
00001220  AABBCCDD FFFFFFF6                        674           DC    XL08'AABBCCDDFFFFFFF6'                    R1 result
00001228  00000000 00000000                        675           DC    XL16'0000000000000000000000000000010D'    V1 source
00001230  00000000 0000010D
                                                   676
                                                   677           VRR_I VCVB,1,0
00001238                                           678+          DS    0FD
00001238                 00001238                  679+          USING *,R5                base for test data and test routine
00001238  00001254                                 680+T3        DC    A(X3)               address of test routine
0000123C  0003                                     681+          DC    H'3'                test number
0000123E  00                                       682+          DC    XL1'00'
0000123F  01                                       683+          DC    HL1'1'              &M3
00001240  00                                       684+          DC    HL1'0'              cc
00001241  07                                       685+          DC    HL1'7'              cc failed mask
00001242  E5C3E5C2 40404040                        686+          DC    CL8'VCVB'           instruction name
0000124C  00000010                                 687+          DC    A(16)               result length
00001250  00001278                                 688+REA3      DC    A(RE3)              result address
                                                   689+*                                   INSTRUCTION UNDER TEST ROUTINE
00001254                                           690+X3        DS    0F
00001254  E310 8EE8 0004                 000010E8  691+          LG    R1,R1FUDGE          pollute R1
0000125A  E710 5048 0006                 00001280  692+          VL    V1,RE3+8            get V1 source
00001260  E611 0010 0050                           693+          VCVB  R1,V1,1             test instruction
00001266  E310 8F20 0024                 00001120  694+          STG   R1,R1OUTPUT         save
0000126C  B98D 0020                                695+          EPSW  R2,R0               exptract psw
00001270  5020 8ED8                      000010D8  696+          ST    R2,CCPSW                to save CC
00001274  07FB                                     697+          BR    R11                 return
00001278                                           698+RE3       DC    0F
00001278                                           699+          DROP  R5
00001278  AABBCCDD 0008A160                        700           DC    XL08'AABBCCDD0008A160'                    R1 result
00001280  00000000 00000000                        701           DC    XL16'0000000000000000000000000565600C'    V1 source
00001288  00000000 0565600C
                                                   702
                                                   703           VRR_I VCVB,1,0
00001290                                           704+          DS    0FD
00001290                 00001290                  705+          USING *,R5                base for test data and test routine
00001290  000012AC                                 706+T4        DC    A(X4)               address of test routine
00001294  0004                                     707+          DC    H'4'                test number
00001296  00                                       708+          DC    XL1'00'
00001297  01                                       709+          DC    HL1'1'              &M3
00001298  00                                       710+          DC    HL1'0'              cc
00001299  07                                       711+          DC    HL1'7'              cc failed mask
0000129A  E5C3E5C2 40404040                        712+          DC    CL8'VCVB'           instruction name
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

000012A4  00000010                                 713+         DC    A(16)             result length
000012A8  000012D0                                 714+REA4     DC    A(RE4)            result address
                                                   715+*                                INSTRUCTION UNDER TEST ROUTINE
000012AC                                           716+X4       DS    0F
000012AC  E310 8EE8 0004                 000010E8  717+         LG    R1,R1FUDGE        pollute R1
000012B2  E710 5048 0006                 000012D8  718+         VL    V1,RE4+8          get V1 source
000012B8  E611 0010 0050                           719+         VCVB  R1,V1,1           test instruction
000012BE  E310 8F20 0024                 00001120  720+         STG   R1,R1OUTPUT       save
000012C4  B98D 0020                                721+         EPSW  R2,R0             exptract psw
000012C8  5020 8ED8                      000010D8  722+         ST    R2,CCPSW              to save CC
000012CC  07FB                                     723+         BR    R11               return
000012D0                                           724+RE4      DC    0F
000012D0                                           725+         DROP  R5
000012D0  AABBCCDD FFF75EA0                        726          DC    XL08'AABBCCDDFFF75EA0'                    R1 result
000012D8  00000000 00000000                        727          DC    XL16'0000000000000000000000000565600D'    V1 source
000012E0  00000000 0565600D
                                                   728
                                                   729          VRR_I VCVB,1,0                                  INT_MAX
000012E8                                           730+         DS    0FD
000012E8                         000012E8          731+         USING *,R5              base for test data and test routine
000012E8  00001304                                 732+T5       DC    A(X5)             address of test routine
000012EC  0005                                     733+         DC    H'5'              test number
000012EE  00                                       734+         DC    XL1'00'
000012EF  01                                       735+         DC    HL1'1'            &M3
000012F0  00                                       736+         DC    HL1'0'            cc
000012F1  07                                       737+         DC    HL1'7'            cc failed mask
000012F2  E5C3E5C2 40404040                        738+         DC    CL8'VCVB'         instruction name
000012FC  00000010                                 739+         DC    A(16)             result length
00001300  00001328                                 740+REA5     DC    A(RE5)            result address
                                                   741+*                                INSTRUCTION UNDER TEST ROUTINE
00001304                                           742+X5       DS    0F
00001304  E310 8EE8 0004                 000010E8  743+         LG    R1,R1FUDGE        pollute R1
0000130A  E710 5048 0006                 00001330  744+         VL    V1,RE5+8          get V1 source
00001310  E611 0010 0050                           745+         VCVB  R1,V1,1           test instruction
00001316  E310 8F20 0024                 00001120  746+         STG   R1,R1OUTPUT       save
0000131C  B98D 0020                                747+         EPSW  R2,R0             exptract psw
00001320  5020 8ED8                      000010D8  748+         ST    R2,CCPSW              to save CC
00001324  07FB                                     749+         BR    R11               return
00001328                                           750+RE5      DC    0F
00001328                                           751+         DROP  R5
00001328  AABBCCDD 7FFFFFFF                        752          DC    XL08'AABBCCDD7FFFFFFF'                    R1 result
00001330  00000000 00000000                        753          DC    XL16'00000000000000000000002147483647C'   V1 source
00001338  00000214 7483647C
                                                   754
                                                   755          VRR_I VCVB,1,0                                  INT_MIN
00001340                                           756+         DS    0FD
00001340                         00001340          757+         USING *,R5              base for test data and test routine
00001340  0000135C                                 758+T6       DC    A(X6)             address of test routine
00001344  0006                                     759+         DC    H'6'              test number
00001346  00                                       760+         DC    XL1'00'
00001347  01                                       761+         DC    HL1'1'            &M3
00001348  00                                       762+         DC    HL1'0'            cc
00001349  07                                       763+         DC    HL1'7'            cc failed mask
0000134A  E5C3E5C2 40404040                        764+         DC    CL8'VCVB'         instruction name
00001354  00000010                                 765+         DC    A(16)             result length
00001358  00001380                                 766+REA6     DC    A(RE6)            result address
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    767+*                                INSTRUCTION UNDER TEST ROUTINE
0000135C                                            768+X6       DS    0F
0000135C  E310 8EE8 0004                 000010E8   769+         LG    R1,R1FUDGE        pollute R1
00001362  E710 5048 0006                 00001388   770+         VL    V1,RE6+8          get V1 source
00001368  E611 0010 0050                            771+         VCVB  R1,V1,1           test instruction
0000136E  E310 8F20 0024                 00001120   772+         STG   R1,R1OUTPUT       save
00001374  B98D 0020                                 773+         EPSW  R2,R0             exptract psw
00001378  5020 8ED8                      000010D8   774+         ST    R2,CCPSW              to save CC
0000137C  07FB                                      775+         BR    R11               return
00001380                                            776+RE6      DC    0F
00001380                                            777+         DROP  R5
00001380  AABBCCDD 80000000                         778          DC    XL08'AABBCCDD80000000'                      R1 result
00001388  00000000 00000000                         779          DC    XL16'00000000000000000000002147483648D'     V1 source
00001390  00000214 7483648D
                                                    780
                                                    781          VRR_I VCVB,3,0                                    UINT_MAX
00001398                                            782+         DS    0FD
00001398                         00001398           783+         USING *,R5              base for test data and test routine
00001398  000013B4                                  784+T7       DC    A(X7)             address of test routine
0000139C  0007                                      785+         DC    H'7'              test number
0000139E  00                                        786+         DC    XL1'00'
0000139F  03                                        787+         DC    HL1'3'            &M3
000013A0  00                                        788+         DC    HL1'0'            cc
000013A1  07                                        789+         DC    HL1'7'            cc failed mask
000013A2  E5C3E5C2 40404040                         790+         DC    CL8'VCVB'         instruction name
000013AC  00000010                                  791+         DC    A(16)             result length
000013B0  000013D8                                  792+REA7     DC    A(RE7)            result address
                                                    793+*                                INSTRUCTION UNDER TEST ROUTINE
000013B4                                            794+X7       DS    0F
000013B4  E310 8EE8 0004                 000010E8   795+         LG    R1,R1FUDGE        pollute R1
000013BA  E710 5048 0006                 000013E0   796+         VL    V1,RE7+8          get V1 source
000013C0  E611 0030 0050                            797+         VCVB  R1,V1,3           test instruction
000013C6  E310 8F20 0024                 00001120   798+         STG   R1,R1OUTPUT       save
000013CC  B98D 0020                                 799+         EPSW  R2,R0             exptract psw
000013D0  5020 8ED8                      000010D8   800+         ST    R2,CCPSW              to save CC
000013D4  07FB                                      801+         BR    R11               return
000013D8                                            802+RE7      DC    0F
000013D8                                            803+         DROP  R5
000013D8  AABBCCDD FFFFFFFF                         804          DC    XL08'AABBCCDDFFFFFFFF'                      R1 result
000013E0  00000000 00000000                         805          DC    XL16'00000000000000000000004294967295C'     V1 source
000013E8  00000429 4967295C
                                                    806
                                                    807          VRR_I VCVB,3,3                                    UINT_MAX +1
000013F0                                            808+         DS    0FD
000013F0                         000013F0           809+         USING *,R5              base for test data and test routine
000013F0  0000140C                                  810+T8       DC    A(X8)             address of test routine
000013F4  0008                                      811+         DC    H'8'              test number
000013F6  00                                        812+         DC    XL1'00'
000013F7  03                                        813+         DC    HL1'3'            &M3
000013F8  03                                        814+         DC    HL1'3'            cc
000013F9  0E                                        815+         DC    HL1'14'           cc failed mask
000013FA  E5C3E5C2 40404040                         816+         DC    CL8'VCVB'         instruction name
00001404  00000010                                  817+         DC    A(16)             result length
00001408  00001430                                  818+REA8     DC    A(RE8)            result address
                                                    819+*                                INSTRUCTION UNDER TEST ROUTINE
0000140C                                            820+X8       DS    0F
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

0000140C  E310 8EE8 0004                 000010E8   821+         LG    R1,R1FUDGE        pollute R1
00001412  E710 5048 0006                 00001438   822+         VL    V1,RE8+8          get V1 source
00001418  E611 0030 0050                            823+         VCVB  R1,V1,3           test instruction
0000141E  E310 8F20 0024                 00001120   824+         STG   R1,R1OUTPUT       save
00001424  B98D 0020                                 825+         EPSW  R2,R0             exptract psw
00001428  5020 8ED8                      000010D8   826+         ST    R2,CCPSW              to save CC
0000142C  07FB                                      827+         BR    R11               return
00001430                                            828+RE8      DC    0F
00001430                                            829+         DROP  R5
00001430  AABBCCDD 00000000                         830          DC    XL08'AABBCCDD00000000'                    R1 result
00001438  00000000 00000000                         831          DC    XL16'00000000000000000000004294967296C'   V1 source
00001440  00000429 4967296C
                                                    832
                                                    833          VRR_I VCVB,1,3
00001448                                            834+         DS    0FD
00001448                           00001448         835+         USING *,R5              base for test data and test routine
00001448  00001464                                  836+T9       DC    A(X9)             address of test routine
0000144C  0009                                      837+         DC    H'9'              test number
0000144E  00                                        838+         DC    XL1'00'
0000144F  01                                        839+         DC    HL1'1'            &M3
00001450  03                                        840+         DC    HL1'3'            cc
00001451  0E                                        841+         DC    HL1'14'           cc failed mask
00001452  E5C3E5C2 40404040                         842+         DC    CL8'VCVB'         instruction name
0000145C  00000010                                  843+         DC    A(16)             result length
00001460  00001488                                  844+REA9     DC    A(RE9)            result address
                                                    845+*                                INSTRUCTION UNDER TEST ROUTINE
00001464                                            846+X9       DS    0F
00001464  E310 8EE8 0004                 000010E8   847+         LG    R1,R1FUDGE        pollute R1
0000146A  E710 5048 0006                 00001490   848+         VL    V1,RE9+8          get V1 source
00001470  E611 0010 0050                            849+         VCVB  R1,V1,1           test instruction
00001476  E310 8F20 0024                 00001120   850+         STG   R1,R1OUTPUT       save
0000147C  B98D 0020                                 851+         EPSW  R2,R0             exptract psw
00001480  5020 8ED8                      000010D8   852+         ST    R2,CCPSW              to save CC
00001484  07FB                                      853+         BR    R11               return
00001488                                            854+RE9      DC    0F
00001488                                            855+         DROP  R5
00001488  AABBCCDD DF8E1660                         856          DC    XL08'AABBCCDDDF8E1660'                    R1 result
00001490  00000000 00000000                         857          DC    XL16'00000000000000000000012340565600C'   V1 source
00001498  00001234 0565600C
                                                    858
                                                    859 * VCVB simple: p2=1
                                                    860          VRR_I VCVB,9,0
000014A0                                            861+         DS    0FD
000014A0                           000014A0         862+         USING *,R5              base for test data and test routine
000014A0  000014BC                                  863+T10      DC    A(X10)            address of test routine
000014A4  000A                                      864+         DC    H'10'             test number
000014A6  00                                        865+         DC    XL1'00'
000014A7  09                                        866+         DC    HL1'9'            &M3
000014A8  00                                        867+         DC    HL1'0'            cc
000014A9  07                                        868+         DC    HL1'7'            cc failed mask
000014AA  E5C3E5C2 40404040                         869+         DC    CL8'VCVB'         instruction name
000014B4  00000010                                  870+         DC    A(16)             result length
000014B8  000014E0                                  871+REA10    DC    A(RE10)           result address
                                                    872+*                                INSTRUCTION UNDER TEST ROUTINE
000014BC                                            873+X10      DS    0F
000014BC  E310 8EE8 0004                 000010E8   874+         LG    R1,R1FUDGE        pollute R1
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

000014C2  E710 5048 0006                 000014E8   875+         VL    V1,RE10+8          get V1 source
000014C8  E611 0090 0050                            876+         VCVB  R1,V1,9            test instruction
000014CE  E310 8F20 0024                 00001120   877+         STG   R1,R1OUTPUT        save
000014D4  B98D 0020                                 878+         EPSW  R2,R0              exptract psw
000014D8  5020 8ED8                      000010D8   879+         ST    R2,CCPSW                to save CC
000014DC  07FB                                      880+         BR    R11                return
000014E0                                            881+RE10     DC    0F
000014E0                                            882+         DROP  R5
000014E0  AABBCCDD 0000000A                         883          DC    XL08'AABBCCDD0000000A'                    R1 result
000014E8  00000000 00000000                         884          DC    XL16'0000000000000000000000000000010C'    V1 source
000014F0  00000000 0000010C
                                                    885
                                                    886          VRR_I VCVB,9,0
000014F8                                            887+         DS    0FD
000014F8                         000014F8           888+         USING *,R5               base for test data and test routine
000014F8  00001514                                  889+T11      DC    A(X11)             address of test routine
000014FC  000B                                      890+         DC    H'11'              test number
000014FE  00                                        891+         DC    XL1'00'
000014FF  09                                        892+         DC    HL1'9'             &M3
00001500  00                                        893+         DC    HL1'0'             cc
00001501  07                                        894+         DC    HL1'7'             cc failed mask
00001502  E5C3E5C2 40404040                         895+         DC    CL8'VCVB'          instruction name
0000150C  00000010                                  896+         DC    A(16)              result length
00001510  00001538                                  897+REA11    DC    A(RE11)            result address
                                                    898+*                                 INSTRUCTION UNDER TEST ROUTINE
00001514                                            899+X11      DS    0F
00001514  E310 8EE8 0004                 000010E8   900+         LG    R1,R1FUDGE         pollute R1
0000151A  E710 5048 0006                 00001540   901+         VL    V1,RE11+8          get V1 source
00001520  E611 0090 0050                            902+         VCVB  R1,V1,9            test instruction
00001526  E310 8F20 0024                 00001120   903+         STG   R1,R1OUTPUT        save
0000152C  B98D 0020                                 904+         EPSW  R2,R0              exptract psw
00001530  5020 8ED8                      000010D8   905+         ST    R2,CCPSW                to save CC
00001534  07FB                                      906+         BR    R11                return
00001538                                            907+RE11     DC    0F
00001538                                            908+         DROP  R5
00001538  AABBCCDD 0000000A                         909          DC    XL08'AABBCCDD0000000A'                    R1 result
00001540  00000000 00000000                         910          DC    XL16'0000000000000000000000000000010D'    V1 source
00001548  00000000 0000010D
                                                    911
                                                    912          VRR_I VCVB,9,0
00001550                                            913+         DS    0FD
00001550                         00001550           914+         USING *,R5               base for test data and test routine
00001550  0000156C                                  915+T12      DC    A(X12)             address of test routine
00001554  000C                                      916+         DC    H'12'              test number
00001556  00                                        917+         DC    XL1'00'
00001557  09                                        918+         DC    HL1'9'             &M3
00001558  00                                        919+         DC    HL1'0'             cc
00001559  07                                        920+         DC    HL1'7'             cc failed mask
0000155A  E5C3E5C2 40404040                         921+         DC    CL8'VCVB'          instruction name
00001564  00000010                                  922+         DC    A(16)              result length
00001568  00001590                                  923+REA12    DC    A(RE12)            result address
                                                    924+*                                 INSTRUCTION UNDER TEST ROUTINE
0000156C                                            925+X12      DS    0F
0000156C  E310 8EE8 0004                 000010E8   926+         LG    R1,R1FUDGE         pollute R1
00001572  E710 5048 0006                 00001598   927+         VL    V1,RE12+8          get V1 source
00001578  E611 0090 0050                            928+         VCVB  R1,V1,9            test instruction
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

0000157E  E310 8F20 0024                 00001120   929+          STG   R1,R1OUTPUT       save
00001584  B98D 0020                                 930+          EPSW  R2,R0             exptract psw
00001588  5020 8ED8                      000010D8   931+          ST    R2,CCPSW              to save CC
0000158C  07FB                                      932+          BR    R11               return
00001590                                            933+RE12      DC    0F
00001590                                            934+          DROP  R5
00001590  AABBCCDD 0008A160                         935           DC    XL08'AABBCCDD0008A160'                    R1 result
00001598  00000000 00000000                         936           DC    XL16'0000000000000000000000000565600C'    V1 source
000015A0  00000000 0565600C
                                                    937
                                                    938           VRR_I VCVB,9,0
000015A8                                            939+          DS    0FD
000015A8                         000015A8           940+          USING *,R5              base for test data and test routine
000015A8  000015C4                                  941+T13       DC    A(X13)            address of test routine
000015AC  000D                                      942+          DC    H'13'             test number
000015AE  00                                        943+          DC    XL1'00'
000015AF  09                                        944+          DC    HL1'9'            &M3
000015B0  00                                        945+          DC    HL1'0'            cc
000015B1  07                                        946+          DC    HL1'7'            cc failed mask
000015B2  E5C3E5C2 40404040                         947+          DC    CL8'VCVB'         instruction name
000015BC  00000010                                  948+          DC    A(16)             result length
000015C0  000015E8                                  949+REA13     DC    A(RE13)           result address
                                                    950+*                                 INSTRUCTION UNDER TEST ROUTINE
000015C4                                            951+X13       DS    0F
000015C4  E310 8EE8 0004                 000010E8   952+          LG    R1,R1FUDGE        pollute R1
000015CA  E710 5048 0006                 000015F0   953+          VL    V1,RE13+8         get V1 source
000015D0  E611 0090 0050                            954+          VCVB  R1,V1,9           test instruction
000015D6  E310 8F20 0024                 00001120   955+          STG   R1,R1OUTPUT       save
000015DC  B98D 0020                                 956+          EPSW  R2,R0             exptract psw
000015E0  5020 8ED8                      000010D8   957+          ST    R2,CCPSW              to save CC
000015E4  07FB                                      958+          BR    R11               return
000015E8                                            959+RE13      DC    0F
000015E8                                            960+          DROP  R5
000015E8  AABBCCDD 0008A160                         961           DC    XL08'AABBCCDD0008A160'                    R1 result
000015F0  00000000 00000000                         962           DC    XL16'0000000000000000000000000565600D'    V1 source
000015F8  00000000 0565600D
                                                    963
                                                    964           VRR_I VCVB,9,0                                  INT_MAX
00001600                                            965+          DS    0FD
00001600                         00001600           966+          USING *,R5              base for test data and test routine
00001600  0000161C                                  967+T14       DC    A(X14)            address of test routine
00001604  000E                                      968+          DC    H'14'             test number
00001606  00                                        969+          DC    XL1'00'
00001607  09                                        970+          DC    HL1'9'            &M3
00001608  00                                        971+          DC    HL1'0'            cc
00001609  07                                        972+          DC    HL1'7'            cc failed mask
0000160A  E5C3E5C2 40404040                         973+          DC    CL8'VCVB'         instruction name
00001614  00000010                                  974+          DC    A(16)             result length
00001618  00001640                                  975+REA14     DC    A(RE14)           result address
                                                    976+*                                 INSTRUCTION UNDER TEST ROUTINE
0000161C                                            977+X14       DS    0F
0000161C  E310 8EE8 0004                 000010E8   978+          LG    R1,R1FUDGE        pollute R1
00001622  E710 5048 0006                 00001648   979+          VL    V1,RE14+8         get V1 source
00001628  E611 0090 0050                            980+          VCVB  R1,V1,9           test instruction
0000162E  E310 8F20 0024                 00001120   981+          STG   R1,R1OUTPUT       save
00001634  B98D 0020                                 982+          EPSW  R2,R0             exptract psw
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00001638  5020 8ED8                      000010D8   983+          ST    R2,CCPSW              to save CC
0000163C  07FB                                       984+          BR    R11                 return
00001640                                             985+RE14      DC    0F
00001640                                             986+          DROP  R5
00001640  AABBCCDD 7FFFFFFF                          987           DC    XL08'AABBCCDD7FFFFFFF'                    R1 result
00001648  00000000 00000000                          988           DC    XL16'0000000000000000000002147483647C'    V1 source
00001650  00000214 7483647C
                                                     989
                                                     990           VRR_I VCVB,9,3                                  INT_MIN
00001658                                             991+          DS    0FD
00001658                    00001658                 992+          USING *,R5                base for test data and test routine
00001658  00001674                                   993+T15       DC    A(X15)              address of test routine
0000165C  000F                                       994+          DC    H'15'               test number
0000165E  00                                         995+          DC    XL1'00'
0000165F  09                                         996+          DC    HL1'9'              &M3
00001660  03                                         997+          DC    HL1'3'              cc
00001661  0E                                         998+          DC    HL1'14'             cc failed mask
00001662  E5C3E5C2 40404040                         999+          DC    CL8'VCVB'           instruction name
0000166C  00000010                                  1000+          DC    A(16)               result length
00001670  00001698                                  1001+REA15     DC    A(RE15)             result address
                                                    1002+*                                   INSTRUCTION UNDER TEST ROUTINE
00001674                                            1003+X15       DS    0F
00001674  E310 8EE8 0004                 000010E8   1004+          LG    R1,R1FUDGE          pollute R1
0000167A  E710 5048 0006                 000016A0   1005+          VL    V1,RE15+8           get V1 source
00001680  E611 0090 0050                            1006+          VCVB  R1,V1,9             test instruction
00001686  E310 8F20 0024                 00001120   1007+          STG   R1,R1OUTPUT         save
0000168C  B98D 0020                                 1008+          EPSW  R2,R0               exptract psw
00001690  5020 8ED8                      000010D8   1009+          ST    R2,CCPSW              to save CC
00001694  07FB                                      1010+          BR    R11                 return
00001698                                            1011+RE15      DC    0F
00001698                                            1012+          DROP  R5
00001698  AABBCCDD 80000000                         1013           DC    XL08'AABBCCDD80000000'                    R1 result
000016A0  00000000 00000000                         1014           DC    XL16'0000000000000000000002147483648D'    V1 source
000016A8  00000214 7483648D
                                                    1015
                                                    1016           VRR_I VCVB,11,0                                 UINT_MAX
000016B0                                            1017+          DS    0FD
000016B0                    000016B0                1018+          USING *,R5                base for test data and test routine
000016B0  000016CC                                  1019+T16       DC    A(X16)              address of test routine
000016B4  0010                                      1020+          DC    H'16'               test number
000016B6  00                                        1021+          DC    XL1'00'
000016B7  0B                                        1022+          DC    HL1'11'             &M3
000016B8  00                                        1023+          DC    HL1'0'              cc
000016B9  07                                        1024+          DC    HL1'7'              cc failed mask
000016BA  E5C3E5C2 40404040                        1025+          DC    CL8'VCVB'           instruction name
000016C4  00000010                                 1026+          DC    A(16)               result length
000016C8  000016F0                                 1027+REA16     DC    A(RE16)             result address
                                                   1028+*                                   INSTRUCTION UNDER TEST ROUTINE
000016CC                                           1029+X16       DS    0F
000016CC  E310 8EE8 0004                 000010E8  1030+          LG    R1,R1FUDGE          pollute R1
000016D2  E710 5048 0006                 000016F8  1031+          VL    V1,RE16+8           get V1 source
000016D8  E611 00B0 0050                           1032+          VCVB  R1,V1,11            test instruction
000016DE  E310 8F20 0024                 00001120  1033+          STG   R1,R1OUTPUT         save
000016E4  B98D 0020                                1034+          EPSW  R2,R0               exptract psw
000016E8  5020 8ED8                      000010D8  1035+          ST    R2,CCPSW              to save CC
000016EC  07FB                                     1036+          BR    R11                 return
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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
000016F0                                           1037+RE16     DC    0F
000016F0                                           1038+         DROP  R5
000016F0  AABBCCDD FFFFFFFF                        1039          DC    XL08'AABBCCDDFFFFFFFF'                    R1 result
000016F8  00000000 00000000                        1040          DC    XL16'00000000000000000000004294967295C'   V1 source
00001700  00000429 4967295C
                                                   1041
                                                   1042          VRR_I VCVB,11,3                                  UINT_MAX +1
00001708                                           1043+         DS    0FD
00001708                     00001708              1044+         USING *,R5              base for test data and test routine
00001708  00001724                                 1045+T17      DC    A(X17)            address of test routine
0000170C  0011                                     1046+         DC    H'17'             test number
0000170E  00                                       1047+         DC    XL1'00'
0000170F  0B                                       1048+         DC    HL1'11'           &M3
00001710  03                                       1049+         DC    HL1'3'            cc
00001711  0E                                       1050+         DC    HL1'14'           cc failed mask
00001712  E5C3E5C2 40404040                        1051+         DC    CL8'VCVB'         instruction name
0000171C  00000010                                 1052+         DC    A(16)             result length
00001720  00001748                                 1053+REA17    DC    A(RE17)           result address
                                                   1054+*                                INSTRUCTION UNDER TEST ROUTINE
00001724                                           1055+X17      DS    0F
00001724  E310 8EE8 0004              000010E8     1056+         LG    R1,R1FUDGE        pollute R1
0000172A  E710 5048 0006              00001750     1057+         VL    V1,RE17+8         get V1 source
00001730  E611 00B0 0050                           1058+         VCVB  R1,V1,11          test instruction
00001736  E310 8F20 0024              00001120     1059+         STG   R1,R1OUTPUT       save
0000173C  B98D 0020                                1060+         EPSW  R2,R0             exptract psw
00001740  5020 8ED8                   000010D8     1061+         ST    R2,CCPSW              to save CC
00001744  07FB                                     1062+         BR    R11               return
00001748                                           1063+RE17     DC    0F
00001748                                           1064+         DROP  R5
00001748  AABBCCDD 00000000                        1065          DC    XL08'AABBCCDD00000000'                    R1 result
00001750  00000000 00000000                        1066          DC    XL16'00000000000000000000004294967296C'   V1 source
00001758  00000429 4967296C
                                                   1067
                                                   1068          VRR_I VCVB,9,3
00001760                                           1069+         DS    0FD
00001760                     00001760              1070+         USING *,R5              base for test data and test routine
00001760  0000177C                                 1071+T18      DC    A(X18)            address of test routine
00001764  0012                                     1072+         DC    H'18'             test number
00001766  00                                       1073+         DC    XL1'00'
00001767  09                                       1074+         DC    HL1'9'            &M3
00001768  03                                       1075+         DC    HL1'3'            cc
00001769  0E                                       1076+         DC    HL1'14'           cc failed mask
0000176A  E5C3E5C2 40404040                        1077+         DC    CL8'VCVB'         instruction name
00001774  00000010                                 1078+         DC    A(16)             result length
00001778  000017A0                                 1079+REA18    DC    A(RE18)           result address
                                                   1080+*                                INSTRUCTION UNDER TEST ROUTINE
0000177C                                           1081+X18      DS    0F
0000177C  E310 8EE8 0004              000010E8     1082+         LG    R1,R1FUDGE        pollute R1
00001782  E710 5048 0006              000017A8     1083+         VL    V1,RE18+8         get V1 source
00001788  E611 0090 0050                           1084+         VCVB  R1,V1,9           test instruction
0000178E  E310 8F20 0024              00001120     1085+         STG   R1,R1OUTPUT       save
00001794  B98D 0020                                1086+         EPSW  R2,R0             exptract psw
00001798  5020 8ED8                   000010D8     1087+         ST    R2,CCPSW              to save CC
0000179C  07FB                                     1088+         BR    R11               return
000017A0                                           1089+RE18     DC    0F
000017A0                                           1090+         DROP  R5
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
000017A0  AABBCCDD DF8E1660                        1091          DC    XL08'AABBCCDDDF8E1660'                    R1 result
000017A8  00000000 00000000                        1092          DC    XL16'0000000000000000000012340565600C'  V1 source
000017B0  00001234 0565600C
                                                   1093
                                                   1094 *-------------------------------------------------------------------
                                                   1095 * VCVBG   - VECTOR CONVERT TO BINARY  (64)
                                                   1096 *-------------------------------------------------------------------
                                                   1097 * VCVBG simple
                                                   1098          VRR_I VCVBG,1,0
000017B8                                           1099+         DS    0FD
000017B8                          000017B8         1100+         USING *,R5              base for test data and test routine
000017B8  000017D4                                 1101+T19      DC    A(X19)            address of test routine
000017BC  0013                                     1102+         DC    H'19'             test number
000017BE  00                                       1103+         DC    XL1'00'
000017BF  01                                       1104+         DC    HL1'1'            &M3
000017C0  00                                       1105+         DC    HL1'0'            cc
000017C1  07                                       1106+         DC    HL1'7'            cc failed mask
000017C2  E5C3E5C2 C7404040                        1107+         DC    CL8'VCVBG'        instruction name
000017CC  00000010                                 1108+         DC    A(16)             result length
000017D0  000017F8                                 1109+REA19    DC    A(RE19)           result address
                                                   1110+*                                INSTRUCTION UNDER TEST ROUTINE
000017D4                                           1111+X19      DS    0F
000017D4  E310 8EE8 0004                 000010E8  1112+         LG    R1,R1FUDGE        pollute R1
000017DA  E710 5048 0006                 00001800  1113+         VL    V1,RE19+8         get V1 source
000017E0  E611 0010 0052                           1114+         VCVBG R1,V1,1           test instruction
000017E6  E310 8F20 0024                 00001120  1115+         STG   R1,R1OUTPUT       save
000017EC  B98D 0020                                1116+         EPSW  R2,R0             exptract psw
000017F0  5020 8ED8                      000010D8  1117+         ST    R2,CCPSW              to save CC
000017F4  07FB                                     1118+         BR    R11               return
000017F8                                           1119+RE19     DC    0F
000017F8                                           1120+         DROP  R5
000017F8  00000000 0000000A                       1121          DC    XL08'000000000000000A'                    R1 result
00001800  00000000 00000000                       1122          DC    XL16'0000000000000000000000000000010C'  V1 source
00001808  00000000 0000010C
                                                   1123
                                                   1124          VRR_I VCVBG,1,0
00001810                                           1125+         DS    0FD
00001810                          00001810         1126+         USING *,R5              base for test data and test routine
00001810  0000182C                                 1127+T20      DC    A(X20)            address of test routine
00001814  0014                                     1128+         DC    H'20'             test number
00001816  00                                       1129+         DC    XL1'00'
00001817  01                                       1130+         DC    HL1'1'            &M3
00001818  00                                       1131+         DC    HL1'0'            cc
00001819  07                                       1132+         DC    HL1'7'            cc failed mask
0000181A  E5C3E5C2 C7404040                        1133+         DC    CL8'VCVBG'        instruction name
00001824  00000010                                 1134+         DC    A(16)             result length
00001828  00001850                                 1135+REA20    DC    A(RE20)           result address
                                                   1136+*                                INSTRUCTION UNDER TEST ROUTINE
0000182C                                           1137+X20      DS    0F
0000182C  E310 8EE8 0004                 000010E8  1138+         LG    R1,R1FUDGE        pollute R1
00001832  E710 5048 0006                 00001858  1139+         VL    V1,RE20+8         get V1 source
00001838  E611 0010 0052                           1140+         VCVBG R1,V1,1           test instruction
0000183E  E310 8F20 0024                 00001120  1141+         STG   R1,R1OUTPUT       save
00001844  B98D 0020                                1142+         EPSW  R2,R0             exptract psw
00001848  5020 8ED8                      000010D8  1143+         ST    R2,CCPSW              to save CC
0000184C  07FB                                     1144+         BR    R11               return
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00001850                                           1145+RE20     DC    0F
00001850                                           1146+         DROP  R5
00001850  FFFFFFFF FFFFFFF6                        1147          DC    XL08'FFFFFFFFFFFFFFF6'                    R1 result
00001858  00000000 00000000                        1148          DC    XL16'0000000000000000000000000000010D'    V1 source
00001860  00000000 0000010D
                                                   1149
                                                   1150          VRR_I VCVBG,1,0
00001868                                           1151+         DS    0FD
00001868                     00001868              1152+         USING *,R5              base for test data and test routine
00001868  00001884                                 1153+T21      DC    A(X21)            address of test routine
0000186C  0015                                     1154+         DC    H'21'             test number
0000186E  00                                       1155+         DC    XL1'00'
0000186F  01                                       1156+         DC    HL1'1'            &M3
00001870  00                                       1157+         DC    HL1'0'            cc
00001871  07                                       1158+         DC    HL1'7'            cc failed mask
00001872  E5C3E5C2 C7404040                        1159+         DC    CL8'VCVBG'        instruction name
0000187C  00000010                                 1160+         DC    A(16)             result length
00001880  000018A8                                 1161+REA21    DC    A(RE21)           result address
                                                   1162+*                                INSTRUCTION UNDER TEST ROUTINE
00001884                                           1163+X21      DS    0F
00001884  E310 8EE8 0004              000010E8     1164+         LG    R1,R1FUDGE        pollute R1
0000188A  E710 5048 0006              000018B0     1165+         VL    V1,RE21+8         get V1 source
00001890  E611 0010 0052                           1166+         VCVBG R1,V1,1           test instruction
00001896  E310 8F20 0024              00001120     1167+         STG   R1,R1OUTPUT       save
0000189C  B98D 0020                                1168+         EPSW  R2,R0             exptract psw
000018A0  5020 8ED8                   000010D8     1169+         ST    R2,CCPSW              to save CC
000018A4  07FB                                     1170+         BR    R11               return
000018A8                                           1171+RE21     DC    0F
000018A8                                           1172+         DROP  R5
000018A8  00000000 0008A160                        1173          DC    XL08'000000000008A160'                    R1 result
000018B0  00000000 00000000                        1174          DC    XL16'0000000000000000000000000565600C'    V1 source
000018B8  00000000 0565600C
                                                   1175
                                                   1176          VRR_I VCVBG,1,0
000018C0                                           1177+         DS    0FD
000018C0                     000018C0              1178+         USING *,R5              base for test data and test routine
000018C0  000018DC                                 1179+T22      DC    A(X22)            address of test routine
000018C4  0016                                     1180+         DC    H'22'             test number
000018C6  00                                       1181+         DC    XL1'00'
000018C7  01                                       1182+         DC    HL1'1'            &M3
000018C8  00                                       1183+         DC    HL1'0'            cc
000018C9  07                                       1184+         DC    HL1'7'            cc failed mask
000018CA  E5C3E5C2 C7404040                        1185+         DC    CL8'VCVBG'        instruction name
000018D4  00000010                                 1186+         DC    A(16)             result length
000018D8  00001900                                 1187+REA22    DC    A(RE22)           result address
                                                   1188+*                                INSTRUCTION UNDER TEST ROUTINE
000018DC                                           1189+X22      DS    0F
000018DC  E310 8EE8 0004              000010E8     1190+         LG    R1,R1FUDGE        pollute R1
000018E2  E710 5048 0006              00001908     1191+         VL    V1,RE22+8         get V1 source
000018E8  E611 0010 0052                           1192+         VCVBG R1,V1,1           test instruction
000018EE  E310 8F20 0024              00001120     1193+         STG   R1,R1OUTPUT       save
000018F4  B98D 0020                                1194+         EPSW  R2,R0             exptract psw
000018F8  5020 8ED8                   000010D8     1195+         ST    R2,CCPSW              to save CC
000018FC  07FB                                     1196+         BR    R11               return
00001900                                           1197+RE22     DC    0F
00001900                                           1198+         DROP  R5
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00001900  FFFFFFFF FFF75EA0                        1199           DC    XL08'FFFFFFFFFFF75EA0'                     R1 result
00001908  00000000 00000000                        1200           DC    XL16'0000000000000000000000000565600D'     V1 source
00001910  00000000 0565600D
                                                   1201
                                                   1202           VRR_I VCVBG,1,0                                  INT_MAX
00001918                                           1203+          DS    0FD
00001918                     00001918              1204+          USING *,R5              base for test data and test routine
00001918  00001934                                 1205+T23       DC    A(X23)            address of test routine
0000191C  0017                                     1206+          DC    H'23'             test number
0000191E  00                                       1207+          DC    XL1'00'
0000191F  01                                       1208+          DC    HL1'1'            &M3
00001920  00                                       1209+          DC    HL1'0'            cc
00001921  07                                       1210+          DC    HL1'7'            cc failed mask
00001922  E5C3E5C2 C7404040                        1211+          DC    CL8'VCVBG'        instruction name
0000192C  00000010                                 1212+          DC    A(16)             result length
00001930  00001958                                 1213+REA23     DC    A(RE23)           result address
                                                   1214+*                                 INSTRUCTION UNDER TEST ROUTINE
00001934                                           1215+X23       DS    0F
00001934  E310 8EE8 0004                 000010E8  1216+          LG    R1,R1FUDGE        pollute R1
0000193A  E710 5048 0006                 00001960  1217+          VL    V1,RE23+8         get V1 source
00001940  E611 0010 0052                           1218+          VCVBG R1,V1,1           test instruction
00001946  E310 8F20 0024                 00001120  1219+          STG   R1,R1OUTPUT       save
0000194C  B98D 0020                                1220+          EPSW  R2,R0             exptract psw
00001950  5020 8ED8                      000010D8  1221+          ST    R2,CCPSW              to save CC
00001954  07FB                                     1222+          BR    R11               return
00001958                                           1223+RE23      DC    0F
00001958                                           1224+          DROP  R5
00001958  00000000 7FFFFFFF                        1225           DC    XL08'000000007FFFFFFF'                     R1 result
00001960  00000000 00000000                        1226           DC    XL16'0000000000000000000000002147483647C'  V1 source
00001968  00000214 7483647C
                                                   1227
                                                   1228           VRR_I VCVBG,1,0                                  INT_MIN
00001970                                           1229+          DS    0FD
00001970                     00001970              1230+          USING *,R5              base for test data and test routine
00001970  0000198C                                 1231+T24       DC    A(X24)            address of test routine
00001974  0018                                     1232+          DC    H'24'             test number
00001976  00                                       1233+          DC    XL1'00'
00001977  01                                       1234+          DC    HL1'1'            &M3
00001978  00                                       1235+          DC    HL1'0'            cc
00001979  07                                       1236+          DC    HL1'7'            cc failed mask
0000197A  E5C3E5C2 C7404040                        1237+          DC    CL8'VCVBG'        instruction name
00001984  00000010                                 1238+          DC    A(16)             result length
00001988  000019B0                                 1239+REA24     DC    A(RE24)           result address
                                                   1240+*                                 INSTRUCTION UNDER TEST ROUTINE
0000198C                                           1241+X24       DS    0F
0000198C  E310 8EE8 0004                 000010E8  1242+          LG    R1,R1FUDGE        pollute R1
00001992  E710 5048 0006                 000019B8  1243+          VL    V1,RE24+8         get V1 source
00001998  E611 0010 0052                           1244+          VCVBG R1,V1,1           test instruction
0000199E  E310 8F20 0024                 00001120  1245+          STG   R1,R1OUTPUT       save
000019A4  B98D 0020                                1246+          EPSW  R2,R0             exptract psw
000019A8  5020 8ED8                      000010D8  1247+          ST    R2,CCPSW              to save CC
000019AC  07FB                                     1248+          BR    R11               return
000019B0                                           1249+RE24      DC    0F
000019B0                                           1250+          DROP  R5
000019B0  FFFFFFFF 80000000                        1251           DC    XL08'FFFFFFFF80000000'                     R1 result
000019B8  00000000 00000000                        1252           DC    XL16'0000000000000000000000002147483648D'  V1 source
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
000019C0  00000214 7483648D                          1253
                                                     1254          VRR_I VCVBG,1,0                                 UINT_MAX
000019C8                                             1255+         DS    0FD
000019C8                        000019C8             1256+         USING *,R5              base for test data and test routine
000019C8  000019E4                                   1257+T25      DC    A(X25)            address of test routine
000019CC  0019                                       1258+         DC    H'25'             test number
000019CE  00                                         1259+         DC    XL1'00'
000019CF  01                                         1260+         DC    HL1'1'            &M3
000019D0  00                                         1261+         DC    HL1'0'            cc
000019D1  07                                         1262+         DC    HL1'7'            cc failed mask
000019D2  E5C3E5C2 C7404040                          1263+         DC    CL8'VCVBG'        instruction name
000019DC  00000010                                   1264+         DC    A(16)             result length
000019E0  00001A08                                   1265+REA25    DC    A(RE25)           result address
                                                     1266+*                                INSTRUCTION UNDER TEST ROUTINE
000019E4                                             1267+X25      DS    0F
000019E4  E310 8EE8 0004                 000010E8    1268+         LG    R1,R1FUDGE        pollute R1
000019EA  E710 5048 0006                 00001A10    1269+         VL    V1,RE25+8         get V1 source
000019F0  E611 0010 0052                             1270+         VCVBG R1,V1,1           test instruction
000019F6  E310 8F20 0024                 00001120    1271+         STG   R1,R1OUTPUT       save
000019FC  B98D 0020                                  1272+         EPSW  R2,R0             exptract psw
00001A00  5020 8ED8                      000010D8    1273+         ST    R2,CCPSW              to save CC
00001A04  07FB                                       1274+         BR    R11               return
00001A08                                             1275+RE25     DC    0F
00001A08                                             1276+         DROP  R5
00001A08  00000000 FFFFFFFF                          1277          DC    XL08'00000000FFFFFFFF'                    R1 result
00001A10  00000000 00000000                          1278          DC    XL16'0000000000000000000004294967295C'    V1 source
00001A18  00000429 4967295C
                                                     1279
                                                     1280          VRR_I VCVBG,1,0                                 UINT_MAX +1
00001A20                                             1281+         DS    0FD
00001A20                        00001A20             1282+         USING *,R5              base for test data and test routine
00001A20  00001A3C                                   1283+T26      DC    A(X26)            address of test routine
00001A24  001A                                       1284+         DC    H'26'             test number
00001A26  00                                         1285+         DC    XL1'00'
00001A27  01                                         1286+         DC    HL1'1'            &M3
00001A28  00                                         1287+         DC    HL1'0'            cc
00001A29  07                                         1288+         DC    HL1'7'            cc failed mask
00001A2A  E5C3E5C2 C7404040                          1289+         DC    CL8'VCVBG'        instruction name
00001A34  00000010                                   1290+         DC    A(16)             result length
00001A38  00001A60                                   1291+REA26    DC    A(RE26)           result address
                                                     1292+*                                INSTRUCTION UNDER TEST ROUTINE
00001A3C                                             1293+X26      DS    0F
00001A3C  E310 8EE8 0004                 000010E8    1294+         LG    R1,R1FUDGE        pollute R1
00001A42  E710 5048 0006                 00001A68    1295+         VL    V1,RE26+8         get V1 source
00001A48  E611 0010 0052                             1296+         VCVBG R1,V1,1           test instruction
00001A4E  E310 8F20 0024                 00001120    1297+         STG   R1,R1OUTPUT       save
00001A54  B98D 0020                                  1298+         EPSW  R2,R0             exptract psw
00001A58  5020 8ED8                      000010D8    1299+         ST    R2,CCPSW              to save CC
00001A5C  07FB                                       1300+         BR    R11               return
00001A60                                             1301+RE26     DC    0F
00001A60                                             1302+         DROP  R5
00001A60  00000001 00000000                          1303          DC    XL08'0000000100000000'                    R1 result
00001A68  00000000 00000000                          1304          DC    XL16'0000000000000000000004294967296C'    V1 source
00001A70  00000429 4967296C
                                                     1305
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

                                                   1306          VRR_I VCVBG,1,0
00001A78                                           1307+         DS    0FD
00001A78                       00001A78            1308+         USING *,R5              base for test data and test routine
00001A78  00001A94                                 1309+T27      DC    A(X27)            address of test routine
00001A7C  001B                                     1310+         DC    H'27'             test number
00001A7E  00                                       1311+         DC    XL1'00'
00001A7F  01                                       1312+         DC    HL1'1'            &M3
00001A80  00                                       1313+         DC    HL1'0'            cc
00001A81  07                                       1314+         DC    HL1'7'            cc failed mask
00001A82  E5C3E5C2 C7404040                        1315+         DC    CL8'VCVBG'        instruction name
00001A8C  00000010                                 1316+         DC    A(16)             result length
00001A90  00001AB8                                 1317+REA27    DC    A(RE27)           result address
                                                   1318+*                                INSTRUCTION UNDER TEST ROUTINE
00001A94                                           1319+X27      DS    0F
00001A94  E310 8EE8 0004              000010E8     1320+         LG    R1,R1FUDGE        pollute R1
00001A9A  E710 5048 0006              00001AC0     1321+         VL    V1,RE27+8         get V1 source
00001AA0  E611 0010 0052                           1322+         VCVBG R1,V1,1           test instruction
00001AA6  E310 8F20 0024              00001120     1323+         STG   R1,R1OUTPUT       save
00001AAC  B98D 0020                                1324+         EPSW  R2,R0             exptract psw
00001AB0  5020 8ED8                   000010D8     1325+         ST    R2,CCPSW              to save CC
00001AB4  07FB                                     1326+         BR    R11               return
00001AB8                                           1327+RE27     DC    0F
00001AB8                                           1328+         DROP  R5
00001AB8  00000002 DF8E1660                        1329          DC    XL08'00000002DF8E1660'                    R1 result
00001AC0  00000000 00000000                        1330          DC    XL16'00000000000000000000012340565600C'   V1 source
00001AC8  00001234 0565600C
                                                   1331
                                                   1332          VRR_I VCVBG,1,0                                 LONG_MAX
00001AD0                                           1333+         DS    0FD
00001AD0                       00001AD0            1334+         USING *,R5              base for test data and test routine
00001AD0  00001AEC                                 1335+T28      DC    A(X28)            address of test routine
00001AD4  001C                                     1336+         DC    H'28'             test number
00001AD6  00                                       1337+         DC    XL1'00'
00001AD7  01                                       1338+         DC    HL1'1'            &M3
00001AD8  00                                       1339+         DC    HL1'0'            cc
00001AD9  07                                       1340+         DC    HL1'7'            cc failed mask
00001ADA  E5C3E5C2 C7404040                        1341+         DC    CL8'VCVBG'        instruction name
00001AE4  00000010                                 1342+         DC    A(16)             result length
00001AE8  00001B10                                 1343+REA28    DC    A(RE28)           result address
                                                   1344+*                                INSTRUCTION UNDER TEST ROUTINE
00001AEC                                           1345+X28      DS    0F
00001AEC  E310 8EE8 0004              000010E8     1346+         LG    R1,R1FUDGE        pollute R1
00001AF2  E710 5048 0006              00001B18     1347+         VL    V1,RE28+8         get V1 source
00001AF8  E611 0010 0052                           1348+         VCVBG R1,V1,1           test instruction
00001AFE  E310 8F20 0024              00001120     1349+         STG   R1,R1OUTPUT       save
00001B04  B98D 0020                                1350+         EPSW  R2,R0             exptract psw
00001B08  5020 8ED8                   000010D8     1351+         ST    R2,CCPSW              to save CC
00001B0C  07FB                                     1352+         BR    R11               return
00001B10                                           1353+RE28     DC    0F
00001B10                                           1354+         DROP  R5
00001B10  7FFFFFFF FFFFFFFF                        1355          DC    XL08'7FFFFFFFFFFFFFFF'                    R1 result
00001B18  00000000 00009223                        1356          DC    XL16'00000000000092233720368547758070'    V1 source
00001B20  37203685 4775807C
                                                   1357
                                                   1358          VRR_I VCVBG,1,0                                 LONG_MIN
00001B28                                           1359+         DS    0FD
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00001B28                     00001B28              1360+         USING *,R5              base for test data and test routine
00001B28  00001B44                                 1361+T29      DC    A(X29)            address of test routine
00001B2C  001D                                     1362+         DC    H'29'             test number
00001B2E  00                                       1363+         DC    XL1'00'
00001B2F  01                                       1364+         DC    HL1'1'            &M3
00001B30  00                                       1365+         DC    HL1'0'            cc
00001B31  07                                       1366+         DC    HL1'7'            cc failed mask
00001B32  E5C3E5C2 C7404040                        1367+         DC    CL8'VCVBG'        instruction name
00001B3C  00000010                                 1368+         DC    A(16)             result length
00001B40  00001B68                                 1369+REA29    DC    A(RE29)           result address
                                                   1370+*                                INSTRUCTION UNDER TEST ROUTINE
00001B44                                           1371+X29      DS    0F
00001B44  E310 8EE8 0004                 000010E8  1372+         LG    R1,R1FUDGE        pollute R1
00001B4A  E710 5048 0006                 00001B70  1373+         VL    V1,RE29+8         get V1 source
00001B50  E611 0010 0052                           1374+         VCVBG R1,V1,1           test instruction
00001B56  E310 8F20 0024                 00001120  1375+         STG   R1,R1OUTPUT       save
00001B5C  B98D 0020                                1376+         EPSW  R2,R0             exptract psw
00001B60  5020 8ED8                      000010D8  1377+         ST    R2,CCPSW              to save CC
00001B64  07FB                                     1378+         BR    R11               return
00001B68                                           1379+RE29     DC    0F
00001B68                                           1380+         DROP  R5
00001B68  80000000 00000000                        1381          DC    XL08'8000000000000000'                    R1 result
00001B70  00000000 00009223                        1382          DC    XL16'00000000000092233720368547758080'    V1 source
00001B78  37203685 4775808D
                                                   1383
                                                   1384          VRR_I VCVBG,3,0                                 ULONG_MAX
00001B80                                           1385+         DS    0FD
00001B80                     00001B80              1386+         USING *,R5              base for test data and test routine
00001B80  00001B9C                                 1387+T30      DC    A(X30)            address of test routine
00001B84  001E                                     1388+         DC    H'30'             test number
00001B86  00                                       1389+         DC    XL1'00'
00001B87  03                                       1390+         DC    HL1'3'            &M3
00001B88  00                                       1391+         DC    HL1'0'            cc
00001B89  07                                       1392+         DC    HL1'7'            cc failed mask
00001B8A  E5C3E5C2 C7404040                        1393+         DC    CL8'VCVBG'        instruction name
00001B94  00000010                                 1394+         DC    A(16)             result length
00001B98  00001BC0                                 1395+REA30    DC    A(RE30)           result address
                                                   1396+*                                INSTRUCTION UNDER TEST ROUTINE
00001B9C                                           1397+X30      DS    0F
00001B9C  E310 8EE8 0004                 000010E8  1398+         LG    R1,R1FUDGE        pollute R1
00001BA2  E710 5048 0006                 00001BC8  1399+         VL    V1,RE30+8         get V1 source
00001BA8  E611 0030 0052                           1400+         VCVBG R1,V1,3           test instruction
00001BAE  E310 8F20 0024                 00001120  1401+         STG   R1,R1OUTPUT       save
00001BB4  B98D 0020                                1402+         EPSW  R2,R0             exptract psw
00001BB8  5020 8ED8                      000010D8  1403+         ST    R2,CCPSW              to save CC
00001BBC  07FB                                     1404+         BR    R11               return
00001BC0                                           1405+RE30     DC    0F
00001BC0                                           1406+         DROP  R5
00001BC0  FFFFFFFF FFFFFFFF                        1407          DC    XL08'FFFFFFFFFFFFFFFF'                    R1 result
00001BC8  00000000 00018446                        1408          DC    XL16'0000000000018446744073709551615C'    V1 source
00001BD0  74407370 9551615C
                                                   1409
                                                   1410          VRR_I VCVBG,3,3                                 ULONG_MAX +1
00001BD8                                           1411+         DS    0FD
00001BD8                     00001BD8              1412+         USING *,R5              base for test data and test routine
00001BD8  00001BF4                                 1413+T31      DC    A(X31)            address of test routine
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00001BDC  001F                                     1414+          DC    H'31'              test number
00001BDE  00                                       1415+          DC    XL1'00'
00001BDF  03                                       1416+          DC    HL1'3'             &M3
00001BE0  03                                       1417+          DC    HL1'3'             cc
00001BE1  0E                                       1418+          DC    HL1'14'            cc failed mask
00001BE2  E5C3E5C2 C7404040                        1419+          DC    CL8'VCVBG'         instruction name
00001BEC  00000010                                 1420+          DC    A(16)              result length
00001BF0  00001C18                                 1421+REA31     DC    A(RE31)            result address
                                                   1422+*                                  INSTRUCTION UNDER TEST ROUTINE
00001BF4                                           1423+X31       DS    0F
00001BF4  E310 8EE8 0004                 000010E8  1424+          LG    R1,R1FUDGE         pollute R1
00001BFA  E710 5048 0006                 00001C20  1425+          VL    V1,RE31+8          get V1 source
00001C00  E611 0030 0052                           1426+          VCVBG R1,V1,3            test instruction
00001C06  E310 8F20 0024                 00001120  1427+          STG   R1,R1OUTPUT        save
00001C0C  B98D 0020                                1428+          EPSW  R2,R0              exptract psw
00001C10  5020 8ED8                      000010D8  1429+          ST    R2,CCPSW                to save CC
00001C14  07FB                                     1430+          BR    R11                return
00001C18                                           1431+RE31      DC    0F
00001C18                                           1432+          DROP  R5
00001C18  00000000 00000000                        1433           DC    XL08'0000000000000000'                    R1 result
00001C20  00000000 00018446                        1434           DC    XL16'00000000000184467440737095516l6C'    V1 source
00001C28  74407370 9551616C
                                                   1435
                                                   1436           VRR_I VCVBG,3,3                                 ULONG_MAX +11
00001C30                                           1437+          DS    0FD
00001C30                         00001C30          1438+          USING *,R5               base for test data and test routine
00001C30  00001C4C                                 1439+T32       DC    A(X32)             address of test routine
00001C34  0020                                     1440+          DC    H'32'              test number
00001C36  00                                       1441+          DC    XL1'00'
00001C37  03                                       1442+          DC    HL1'3'             &M3
00001C38  03                                       1443+          DC    HL1'3'             cc
00001C39  0E                                       1444+          DC    HL1'14'            cc failed mask
00001C3A  E5C3E5C2 C7404040                        1445+          DC    CL8'VCVBG'         instruction name
00001C44  00000010                                 1446+          DC    A(16)              result length
00001C48  00001C70                                 1447+REA32     DC    A(RE32)            result address
                                                   1448+*                                  INSTRUCTION UNDER TEST ROUTINE
00001C4C                                           1449+X32       DS    0F
00001C4C  E310 8EE8 0004                 000010E8  1450+          LG    R1,R1FUDGE         pollute R1
00001C52  E710 5048 0006                 00001C78  1451+          VL    V1,RE32+8          get V1 source
00001C58  E611 0030 0052                           1452+          VCVBG R1,V1,3            test instruction
00001C5E  E310 8F20 0024                 00001120  1453+          STG   R1,R1OUTPUT        save
00001C64  B98D 0020                                1454+          EPSW  R2,R0              exptract psw
00001C68  5020 8ED8                      000010D8  1455+          ST    R2,CCPSW                to save CC
00001C6C  07FB                                     1456+          BR    R11                return
00001C70                                           1457+RE32      DC    0F
00001C70                                           1458+          DROP  R5
00001C70  00000000 0000000A                        1459           DC    XL08'000000000000000A'                    R1 result
00001C78  00000000 00018446                        1460           DC    XL16'00000000000184467440737095516l6C'    V1 source
00001C80  74407370 9551626C
                                                   1461
                                                   1462 * VCVBG simple: p2=1
                                                   1463           VRR_I VCVBG,9,0
00001C88                                           1464+          DS    0FD
00001C88                         00001C88          1465+          USING *,R5               base for test data and test routine
00001C88  00001CA4                                 1466+T33       DC    A(X33)             address of test routine
00001C8C  0021                                     1467+          DC    H'33'              test number
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00001C8E  00                                       1468+          DC    XL1'00'
00001C8F  09                                       1469+          DC    HL1'9'             &M3
00001C90  00                                       1470+          DC    HL1'0'             cc
00001C91  07                                       1471+          DC    HL1'7'             cc failed mask
00001C92  E5C3E5C2 C7404040                        1472+          DC    CL8'VCVBG'         instruction name
00001C9C  00000010                                 1473+          DC    A(16)              result length
00001CA0  00001CC8                                 1474+REA33     DC    A(RE33)            result address
                                                   1475+*                                  INSTRUCTION UNDER TEST ROUTINE
00001CA4                                           1476+X33       DS    0F
00001CA4  E310 8EE8 0004                 000010E8  1477+          LG    R1,R1FUDGE         pollute R1
00001CAA  E710 5048 0006                 00001CD0  1478+          VL    V1,RE33+8          get V1 source
00001CB0  E611 0090 0052                           1479+          VCVBG R1,V1,9            test instruction
00001CB6  E310 8F20 0024                 00001120  1480+          STG   R1,R1OUTPUT        save
00001CBC  B98D 0020                                1481+          EPSW  R2,R0              exptract psw
00001CC0  5020 8ED8                      000010D8  1482+          ST    R2,CCPSW                 to save CC
00001CC4  07FB                                     1483+          BR    R11                return
00001CC8                                           1484+RE33      DC    0F
00001CC8                                           1485+          DROP  R5
00001CC8  00000000 0000000A                        1486           DC    XL08'000000000000000A'                    R1 result
00001CD0  00000000 00000000                        1487           DC    XL16'00000000000000000000000000000010C'   V1 source
00001CD8  00000000 0000010C
                                                   1488
                                                   1489           VRR_I VCVBG,9,0
00001CE0                                           1490+          DS    0FD
00001CE0                         00001CE0          1491+          USING *,R5               base for test data and test routine
00001CE0  00001CFC                                 1492+T34       DC    A(X34)             address of test routine
00001CE4  0022                                     1493+          DC    H'34'              test number
00001CE6  00                                       1494+          DC    XL1'00'
00001CE7  09                                       1495+          DC    HL1'9'             &M3
00001CE8  00                                       1496+          DC    HL1'0'             cc
00001CE9  07                                       1497+          DC    HL1'7'             cc failed mask
00001CEA  E5C3E5C2 C7404040                        1498+          DC    CL8'VCVBG'         instruction name
00001CF4  00000010                                 1499+          DC    A(16)              result length
00001CF8  00001D20                                 1500+REA34     DC    A(RE34)            result address
                                                   1501+*                                  INSTRUCTION UNDER TEST ROUTINE
00001CFC                                           1502+X34       DS    0F
00001CFC  E310 8EE8 0004                 000010E8  1503+          LG    R1,R1FUDGE         pollute R1
00001D02  E710 5048 0006                 00001D28  1504+          VL    V1,RE34+8          get V1 source
00001D08  E611 0090 0052                           1505+          VCVBG R1,V1,9            test instruction
00001D0E  E310 8F20 0024                 00001120  1506+          STG   R1,R1OUTPUT        save
00001D14  B98D 0020                                1507+          EPSW  R2,R0              exptract psw
00001D18  5020 8ED8                      000010D8  1508+          ST    R2,CCPSW               to save CC
00001D1C  07FB                                     1509+          BR    R11                return
00001D20                                           1510+RE34      DC    0F
00001D20                                           1511+          DROP  R5
00001D20  00000000 0000000A                        1512           DC    XL08'000000000000000A'                    R1 result
00001D28  00000000 00000000                        1513           DC    XL16'00000000000000000000000000000010D'   V1 source
00001D30  00000000 0000010D
                                                   1514
                                                   1515           VRR_I VCVBG,9,0
00001D38                                           1516+          DS    0FD
00001D38                         00001D38          1517+          USING *,R5               base for test data and test routine
00001D38  00001D54                                 1518+T35       DC    A(X35)             address of test routine
00001D3C  0023                                     1519+          DC    H'35'              test number
00001D3E  00                                       1520+          DC    XL1'00'
00001D3F  09                                       1521+          DC    HL1'9'             &M3
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00001D40  00                                       1522+          DC    HL1'0'              cc
00001D41  07                                       1523+          DC    HL1'7'              cc failed mask
00001D42  E5C3E5C2 C7404040                        1524+          DC    CL8'VCVBG'          instruction name
00001D4C  00000010                                 1525+          DC    A(16)               result length
00001D50  00001D78                                 1526+REA35     DC    A(RE35)             result address
                                                   1527+*                                   INSTRUCTION UNDER TEST ROUTINE
00001D54                                           1528+X35       DS    0F
00001D54  E310 8EE8 0004                 000010E8  1529+          LG    R1,R1FUDGE          pollute R1
00001D5A  E710 5048 0006                 00001D80  1530+          VL    V1,RE35+8           get V1 source
00001D60  E611 0090 0052                           1531+          VCVBG R1,V1,9             test instruction
00001D66  E310 8F20 0024                 00001120  1532+          STG   R1,R1OUTPUT         save
00001D6C  B98D 0020                                1533+          EPSW  R2,R0               exptract psw
00001D70  5020 8ED8                      000010D8  1534+          ST    R2,CCPSW                to save CC
00001D74  07FB                                     1535+          BR    R11                 return
00001D78                                           1536+RE35      DC    0F
00001D78                                           1537+          DROP  R5
00001D78  00000000 0008A160                        1538           DC    XL08'000000000008A160'                    R1 result
00001D80  00000000 00000000                        1539           DC    XL16'0000000000000000000000000565600C'    V1 source
00001D88  00000000 0565600C
                                                   1540
                                                   1541           VRR_I VCVBG,9,0
00001D90                                           1542+          DS    0FD
00001D90                         00001D90          1543+          USING *,R5                base for test data and test routine
00001D90  00001DAC                                 1544+T36       DC    A(X36)              address of test routine
00001D94  0024                                     1545+          DC    H'36'               test number
00001D96  00                                       1546+          DC    XL1'00'
00001D97  09                                       1547+          DC    HL1'9'              &M3
00001D98  00                                       1548+          DC    HL1'0'              cc
00001D99  07                                       1549+          DC    HL1'7'              cc failed mask
00001D9A  E5C3E5C2 C7404040                        1550+          DC    CL8'VCVBG'          instruction name
00001DA4  00000010                                 1551+          DC    A(16)               result length
00001DA8  00001DD0                                 1552+REA36     DC    A(RE36)             result address
                                                   1553+*                                   INSTRUCTION UNDER TEST ROUTINE
00001DAC                                           1554+X36       DS    0F
00001DAC  E310 8EE8 0004                 000010E8  1555+          LG    R1,R1FUDGE          pollute R1
00001DB2  E710 5048 0006                 00001DD8  1556+          VL    V1,RE36+8           get V1 source
00001DB8  E611 0090 0052                           1557+          VCVBG R1,V1,9             test instruction
00001DBE  E310 8F20 0024                 00001120  1558+          STG   R1,R1OUTPUT         save
00001DC4  B98D 0020                                1559+          EPSW  R2,R0               exptract psw
00001DC8  5020 8ED8                      000010D8  1560+          ST    R2,CCPSW                to save CC
00001DCC  07FB                                     1561+          BR    R11                 return
00001DD0                                           1562+RE36      DC    0F
00001DD0                                           1563+          DROP  R5
00001DD0  00000000 0008A160                        1564           DC    XL08'000000000008A160'                    R1 result
00001DD8  00000000 00000000                        1565           DC    XL16'0000000000000000000000000565600D'    V1 source
00001DE0  00000000 0565600D
                                                   1566
                                                   1567           VRR_I VCVBG,9,0                                 INT_MAX
00001DE8                                           1568+          DS    0FD
00001DE8                         00001DE8          1569+          USING *,R5                base for test data and test routine
00001DE8  00001E04                                 1570+T37       DC    A(X37)              address of test routine
00001DEC  0025                                     1571+          DC    H'37'               test number
00001DEE  00                                       1572+          DC    XL1'00'
00001DEF  09                                       1573+          DC    HL1'9'              &M3
00001DF0  00                                       1574+          DC    HL1'0'              cc
00001DF1  07                                       1575+          DC    HL1'7'              cc failed mask
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00001DF2  E5C3E5C2 C7404040                        1576+          DC    CL8'VCVBG'          instruction name
00001DFC  00000010                                 1577+          DC    A(16)               result length
00001E00  00001E28                                 1578+REA37     DC    A(RE37)             result address
                                                   1579+*                                   INSTRUCTION UNDER TEST ROUTINE
00001E04                                           1580+X37       DS    0F
00001E04  E310 8EE8 0004                 000010E8  1581+          LG    R1,R1FUDGE          pollute R1
00001E0A  E710 5048 0006                 00001E30  1582+          VL    V1,RE37+8           get V1 source
00001E10  E611 0090 0052                           1583+          VCVBG R1,V1,9             test instruction
00001E16  E310 8F20 0024                 00001120  1584+          STG   R1,R1OUTPUT         save
00001E1C  B98D 0020                                1585+          EPSW  R2,R0               exptract psw
00001E20  5020 8ED8                      000010D8  1586+          ST    R2,CCPSW                to save CC
00001E24  07FB                                     1587+          BR    R11                 return
00001E28                                           1588+RE37      DC    0F
00001E28                                           1589+          DROP  R5
00001E28  00000000 7FFFFFFF                        1590           DC    XL08'000000007FFFFFFF'                    R1 result
00001E30  00000000 00000000                        1591           DC    XL16'0000000000000000000002147483647C'    V1 source
00001E38  00000214 7483647C
                                                   1592
                                                   1593           VRR_I VCVBG,9,0                                 INT_MIN
00001E40                                           1594+          DS    0FD
00001E40                         00001E40          1595+          USING *,R5                base for test data and test routine
00001E40  00001E5C                                 1596+T38       DC    A(X38)              address of test routine
00001E44  0026                                     1597+          DC    H'38'               test number
00001E46  00                                       1598+          DC    XL1'00'
00001E47  09                                       1599+          DC    HL1'9'              &M3
00001E48  00                                       1600+          DC    HL1'0'              cc
00001E49  07                                       1601+          DC    HL1'7'              cc failed mask
00001E4A  E5C3E5C2 C7404040                        1602+          DC    CL8'VCVBG'          instruction name
00001E54  00000010                                 1603+          DC    A(16)               result length
00001E58  00001E80                                 1604+REA38     DC    A(RE38)             result address
                                                   1605+*                                   INSTRUCTION UNDER TEST ROUTINE
00001E5C                                           1606+X38       DS    0F
00001E5C  E310 8EE8 0004                 000010E8  1607+          LG    R1,R1FUDGE          pollute R1
00001E62  E710 5048 0006                 00001E88  1608+          VL    V1,RE38+8           get V1 source
00001E68  E611 0090 0052                           1609+          VCVBG R1,V1,9             test instruction
00001E6E  E310 8F20 0024                 00001120  1610+          STG   R1,R1OUTPUT         save
00001E74  B98D 0020                                1611+          EPSW  R2,R0               exptract psw
00001E78  5020 8ED8                      000010D8  1612+          ST    R2,CCPSW                to save CC
00001E7C  07FB                                     1613+          BR    R11                 return
00001E80                                           1614+RE38      DC    0F
00001E80                                           1615+          DROP  R5
00001E80  00000000 80000000                        1616           DC    XL08'0000000080000000'                    R1 result
00001E88  00000000 00000000                        1617           DC    XL16'0000000000000000000002147483648D'    V1 source
00001E90  00000214 7483648D
                                                   1618
                                                   1619           VRR_I VCVBG,9,0                                 UINT_MAX
00001E98                                           1620+          DS    0FD
00001E98                         00001E98          1621+          USING *,R5                base for test data and test routine
00001E98  00001EB4                                 1622+T39       DC    A(X39)              address of test routine
00001E9C  0027                                     1623+          DC    H'39'               test number
00001E9E  00                                       1624+          DC    XL1'00'
00001E9F  09                                       1625+          DC    HL1'9'              &M3
00001EA0  00                                       1626+          DC    HL1'0'              cc
00001EA1  07                                       1627+          DC    HL1'7'              cc failed mask
00001EA2  E5C3E5C2 C7404040                        1628+          DC    CL8'VCVBG'          instruction name
00001EAC  00000010                                 1629+          DC    A(16)               result length
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00001EB0  00001ED8                        1630+REA39    DC    A(RE39)           result address
                                          1631+*                                INSTRUCTION UNDER TEST ROUTINE
00001EB4                                  1632+X39      DS    0F
00001EB4  E310 8EE8 0004            000010E8  1633+          LG    R1,R1FUDGE        pollute R1
00001EBA  E710 5048 0006            00001EE0  1634+          VL    V1,RE39+8         get V1 source
00001EC0  E611 0090 0052                      1635+          VCVBG R1,V1,9           test instruction
00001EC6  E310 8F20 0024            00001120  1636+          STG   R1,R1OUTPUT       save
00001ECC  B98D 0020                           1637+          EPSW  R2,R0             exptract psw
00001ED0  5020 8ED8                 000010D8  1638+          ST    R2,CCPSW              to save CC
00001ED4  07FB                                1639+          BR    R11               return
00001ED8                                  1640+RE39     DC    0F
00001ED8                                  1641+         DROP  R5
00001ED8  00000000 FFFFFFFF               1642          DC    XL08'00000000FFFFFFFF'                    R1 result
00001EE0  00000000 00000000               1643          DC    XL16'0000000000000000000004294967295C'    V1 source
00001EE8  00000429 4967295C
                                          1644
                                          1645          VRR_I VCVBG,9,0                                 UINT_MAX +1
00001EF0                                  1646+         DS    0FD
00001EF0                  00001EF0        1647+         USING *,R5              base for test data and test routine
00001EF0  00001F0C                        1648+T40      DC    A(X40)            address of test routine
00001EF4  0028                            1649+         DC    H'40'             test number
00001EF6  00                              1650+         DC    XL1'00'
00001EF7  09                              1651+         DC    HL1'9'            &M3
00001EF8  00                              1652+         DC    HL1'0'            cc
00001EF9  07                              1653+         DC    HL1'7'            cc failed mask
00001EFA  E5C3E5C2 C7404040               1654+         DC    CL8'VCVBG'        instruction name
00001F04  00000010                        1655+         DC    A(16)             result length
00001F08  00001F30                        1656+REA40    DC    A(RE40)           result address
                                          1657+*                                INSTRUCTION UNDER TEST ROUTINE
00001F0C                                  1658+X40      DS    0F
00001F0C  E310 8EE8 0004            000010E8  1659+          LG    R1,R1FUDGE        pollute R1
00001F12  E710 5048 0006            00001F38  1660+          VL    V1,RE40+8         get V1 source
00001F18  E611 0090 0052                      1661+          VCVBG R1,V1,9           test instruction
00001F1E  E310 8F20 0024            00001120  1662+          STG   R1,R1OUTPUT       save
00001F24  B98D 0020                           1663+          EPSW  R2,R0             exptract psw
00001F28  5020 8ED8                 000010D8  1664+          ST    R2,CCPSW              to save CC
00001F2C  07FB                                1665+          BR    R11               return
00001F30                                  1666+RE40     DC    0F
00001F30                                  1667+         DROP  R5
00001F30  00000001 00000000               1668          DC    XL08'0000000100000000'                    R1 result
00001F38  00000000 00000000               1669          DC    XL16'0000000000000000000004294967296C'    V1 source
00001F40  00000429 4967296C
                                          1670
                                          1671          VRR_I VCVBG,9,0
00001F48                                  1672+         DS    0FD
00001F48                  00001F48        1673+         USING *,R5              base for test data and test routine
00001F48  00001F64                        1674+T41      DC    A(X41)            address of test routine
00001F4C  0029                            1675+         DC    H'41'             test number
00001F4E  00                              1676+         DC    XL1'00'
00001F4F  09                              1677+         DC    HL1'9'            &M3
00001F50  00                              1678+         DC    HL1'0'            cc
00001F51  07                              1679+         DC    HL1'7'            cc failed mask
00001F52  E5C3E5C2 C7404040               1680+         DC    CL8'VCVBG'        instruction name
00001F5C  00000010                        1681+         DC    A(16)             result length
00001F60  00001F88                        1682+REA41    DC    A(RE41)           result address
                                          1683+*                                INSTRUCTION UNDER TEST ROUTINE
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00001F64                                           1684+X41      DS    0F
00001F64  E310 8EE8 0004                 000010E8  1685+          LG    R1,R1FUDGE        pollute R1
00001F6A  E710 5048 0006                 00001F90  1686+          VL    V1,RE41+8         get V1 source
00001F70  E611 0090 0052                           1687+          VCVBG R1,V1,9           test instruction
00001F76  E310 8F20 0024                 00001120  1688+          STG   R1,R1OUTPUT       save
00001F7C  B98D 0020                                1689+          EPSW  R2,R0             exptract psw
00001F80  5020 8ED8                      000010D8  1690+          ST    R2,CCPSW              to save CC
00001F84  07FB                                     1691+          BR    R11               return
00001F88                                           1692+RE41      DC    0F
00001F88                                           1693+          DROP  R5
00001F88  00000002 DF8E1660                        1694           DC    XL08'00000002DF8E1660'                    R1 result
00001F90  00000000 00000000                        1695           DC    XL16'0000000000000000000012340565600C'    V1 source
00001F98  00001234 0565600C
                                                   1696
                                                   1697           VRR_I VCVBG,9,0                                 LONG_MAX
00001FA0                                           1698+          DS    0FD
00001FA0                 00001FA0                  1699+          USING *,R5              base for test data and test routine
00001FA0  00001FBC                                 1700+T42       DC    A(X42)            address of test routine
00001FA4  002A                                     1701+          DC    H'42'             test number
00001FA6  00                                       1702+          DC    XL1'00'
00001FA7  09                                       1703+          DC    HL1'9'            &M3
00001FA8  00                                       1704+          DC    HL1'0'            cc
00001FA9  07                                       1705+          DC    HL1'7'            cc failed mask
00001FAA  E5C3E5C2 C7404040                        1706+          DC    CL8'VCVBG'        instruction name
00001FB4  00000010                                 1707+          DC    A(16)             result length
00001FB8  00001FE0                                 1708+REA42     DC    A(RE42)           result address
                                                   1709+*                                 INSTRUCTION UNDER TEST ROUTINE
00001FBC                                           1710+X42       DS    0F
00001FBC  E310 8EE8 0004                 000010E8  1711+          LG    R1,R1FUDGE        pollute R1
00001FC2  E710 5048 0006                 00001FE8  1712+          VL    V1,RE42+8         get V1 source
00001FC8  E611 0090 0052                           1713+          VCVBG R1,V1,9           test instruction
00001FCE  E310 8F20 0024                 00001120  1714+          STG   R1,R1OUTPUT       save
00001FD4  B98D 0020                                1715+          EPSW  R2,R0             exptract psw
00001FD8  5020 8ED8                      000010D8  1716+          ST    R2,CCPSW              to save CC
00001FDC  07FB                                     1717+          BR    R11               return
00001FE0                                           1718+RE42      DC    0F
00001FE0                                           1719+          DROP  R5
00001FE0  7FFFFFFF FFFFFFFF                        1720           DC    XL08'7FFFFFFFFFFFFFFF'                    R1 result
00001FE8  00000000 00009223                        1721           DC    XL16'0000000000009223372036854775807C'    V1 source
00001FF0  37203685 4775807C
                                                   1722
                                                   1723           VRR_I VCVBG,9,3                                 LONG_MIN
00001FF8                                           1724+          DS    0FD
00001FF8                 00001FF8                  1725+          USING *,R5              base for test data and test routine
00001FF8  00002014                                 1726+T43       DC    A(X43)            address of test routine
00001FFC  002B                                     1727+          DC    H'43'             test number
00001FFE  00                                       1728+          DC    XL1'00'
00001FFF  09                                       1729+          DC    HL1'9'            &M3
00002000  03                                       1730+          DC    HL1'3'            cc
00002001  0E                                       1731+          DC    HL1'14'           cc failed mask
00002002  E5C3E5C2 C7404040                        1732+          DC    CL8'VCVBG'        instruction name
0000200C  00000010                                 1733+          DC    A(16)             result length
00002010  00002038                                 1734+REA43     DC    A(RE43)           result address
                                                   1735+*                                 INSTRUCTION UNDER TEST ROUTINE
00002014                                           1736+X43       DS    0F
00002014  E310 8EE8 0004                 000010E8  1737+          LG    R1,R1FUDGE        pollute R1
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

0000201A  E710 5048 0006                 00002040  1738+          VL     V1,RE43+8          get V1 source
00002020  E611 0090 0052                           1739+          VCVBG  R1,V1,9            test instruction
00002026  E310 8F20 0024                 00001120  1740+          STG    R1,R1OUTPUT        save
0000202C  B98D 0020                                1741+          EPSW   R2,R0              exptract psw
00002030  5020 8ED8                      000010D8  1742+          ST     R2,CCPSW                to save CC
00002034  07FB                                     1743+          BR     R11                return
00002038                                           1744+RE43      DC     0F
00002038                                           1745+          DROP   R5
00002038  80000000 00000000                        1746           DC     XL08'8000000000000000'                      R1 result
00002040  00000000 00009223                        1747           DC     XL16'0000000000009223372036854775808D'      V1 source
00002048  37203685 4775808D
                                                   1748
                                                   1749           VRR_I  VCVBG,11,0                                  ULONG_MAX
00002050                                           1750+          DS     0FD
00002050                         00002050          1751+          USING  *,R5               base for test data and test routine
00002050  0000206C                                 1752+T44       DC     A(X44)             address of test routine
00002054  002C                                     1753+          DC     H'44'              test number
00002056  00                                       1754+          DC     XL1'00'
00002057  0B                                       1755+          DC     HL1'11'            &M3
00002058  00                                       1756+          DC     HL1'0'             cc
00002059  07                                       1757+          DC     HL1'7'             cc failed mask
0000205A  E5C3E5C2 C7404040                        1758+          DC     CL8'VCVBG'         instruction name
00002064  00000010                                 1759+          DC     A(16)              result length
00002068  00002090                                 1760+REA44     DC     A(RE44)            result address
                                                   1761+*                                   INSTRUCTION UNDER TEST ROUTINE
0000206C                                           1762+X44       DS     0F
0000206C  E310 8EE8 0004                 000010E8  1763+          LG     R1,R1FUDGE         pollute R1
00002072  E710 5048 0006                 00002098  1764+          VL     V1,RE44+8          get V1 source
00002078  E611 00B0 0052                           1765+          VCVBG  R1,V1,11           test instruction
0000207E  E310 8F20 0024                 00001120  1766+          STG    R1,R1OUTPUT        save
00002084  B98D 0020                                1767+          EPSW   R2,R0              exptract psw
00002088  5020 8ED8                      000010D8  1768+          ST     R2,CCPSW                to save CC
0000208C  07FB                                     1769+          BR     R11                return
00002090                                           1770+RE44      DC     0F
00002090                                           1771+          DROP   R5
00002090  FFFFFFFF FFFFFFFF                        1772           DC     XL08'FFFFFFFFFFFFFFFF'                      R1 result
00002098  00000000 00018446                        1773           DC     XL16'0000000000018446744073709551615C'      V1 source
000020A0  74407370 9551615C
                                                   1774
                                                   1775           VRR_I  VCVBG,11,3                                  ULONG_MAX +1
000020A8                                           1776+          DS     0FD
000020A8                         000020A8          1777+          USING  *,R5               base for test data and test routine
000020A8  000020C4                                 1778+T45       DC     A(X45)             address of test routine
000020AC  002D                                     1779+          DC     H'45'              test number
000020AE  00                                       1780+          DC     XL1'00'
000020AF  0B                                       1781+          DC     HL1'11'            &M3
000020B0  03                                       1782+          DC     HL1'3'             cc
000020B1  0E                                       1783+          DC     HL1'14'            cc failed mask
000020B2  E5C3E5C2 C7404040                        1784+          DC     CL8'VCVBG'         instruction name
000020BC  00000010                                 1785+          DC     A(16)              result length
000020C0  000020E8                                 1786+REA45     DC     A(RE45)            result address
                                                   1787+*                                   INSTRUCTION UNDER TEST ROUTINE
000020C4                                           1788+X45       DS     0F
000020C4  E310 8EE8 0004                 000010E8  1789+          LG     R1,R1FUDGE         pollute R1
000020CA  E710 5048 0006                 000020F0  1790+          VL     V1,RE45+8          get V1 source
000020D0  E611 00B0 0052                           1791+          VCVBG  R1,V1,11           test instruction
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

000020D6  E310 8F20 0024                 00001120  1792+          STG   R1,R1OUTPUT       save
000020DC  B98D 0020                               1793+          EPSW  R2,R0             exptract psw
000020E0  5020 8ED8                      000010D8  1794+          ST    R2,CCPSW              to save CC
000020E4  07FB                                    1795+          BR    R11               return
000020E8                                          1796+RE45      DC    0F
000020E8                                          1797+          DROP  R5
000020E8  00000000 00000000                       1798           DC    XL08'0000000000000000'                  R1 result
000020F0  00000000 00018446                       1799           DC    XL16'00000000000184467440737095516l6C'  V1 source
000020F8  74407370 9551616C
                                                  1800
                                                  1801           VRR_I VCVBG,11,3                              ULONG_MAX +11
00002100                                          1802+          DS    0FD
00002100                 00002100                 1803+          USING *,R5              base for test data and test routine
00002100  0000211C                                1804+T46       DC    A(X46)            address of test routine
00002104  002E                                    1805+          DC    H'46'             test number
00002106  00                                      1806+          DC    XL1'00'
00002107  0B                                      1807+          DC    HL1'11'           &M3
00002108  03                                      1808+          DC    HL1'3'            cc
00002109  0E                                      1809+          DC    HL1'14'           cc failed mask
0000210A  E5C3E5C2 C7404040                       1810+          DC    CL8'VCVBG'        instruction name
00002114  00000010                                1811+          DC    A(16)             result length
00002118  00002140                                1812+REA46     DC    A(RE46)           result address
                                                  1813+*                                 INSTRUCTION UNDER TEST ROUTINE
0000211C                                          1814+X46       DS    0F
0000211C  E310 8EE8 0004                 000010E8 1815+          LG    R1,R1FUDGE        pollute R1
00002122  E710 5048 0006                 00002148 1816+          VL    V1,RE46+8         get V1 source
00002128  E611 00B0 0052                          1817+          VCVBG R1,V1,11          test instruction
0000212E  E310 8F20 0024                 00001120 1818+          STG   R1,R1OUTPUT       save
00002134  B98D 0020                               1819+          EPSW  R2,R0             exptract psw
00002138  5020 8ED8                      000010D8 1820+          ST    R2,CCPSW              to save CC
0000213C  07FB                                    1821+          BR    R11               return
00002140                                          1822+RE46      DC    0F
00002140                                          1823+          DROP  R5
00002140  00000000 0000000A                       1824           DC    XL08'000000000000000A'                  R1 result
00002148  00000000 00018446                       1825           DC    XL16'00000000000184467440737095516l6C'  V1 source
00002150  74407370 9551626C
                                                  1826
00002158  00000000                                1827           DC    F'0'      END OF TABLE
0000215C  00000000                                1828           DC    F'0'
                                                  1829 *
                                                  1830 * table of pointers to individual load test
                                                  1831 *
00002160                                          1832 E6TESTS   DS    0F
                                                  1833           PTTABLE
00002160                                          1834+TTABLE    DS    0F
00002160  00001188                                1835+          DC    A(T1)             address of test
00002164  000011E0                                1836+          DC    A(T2)             address of test
00002168  00001238                                1837+          DC    A(T3)             address of test
0000216C  00001290                                1838+          DC    A(T4)             address of test
00002170  000012E8                                1839+          DC    A(T5)             address of test
00002174  00001340                                1840+          DC    A(T6)             address of test
00002178  00001398                                1841+          DC    A(T7)             address of test
0000217C  000013F0                                1842+          DC    A(T8)             address of test
00002180  00001448                                1843+          DC    A(T9)             address of test
00002184  000014A0                                1844+          DC    A(T10)            address of test
00002188  000014F8                                1845+          DC    A(T11)            address of test
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

0000218C  00001550                          1846+         DC    A(T12)            address of test
00002190  000015A8                          1847+         DC    A(T13)            address of test
00002194  00001600                          1848+         DC    A(T14)            address of test
00002198  00001658                          1849+         DC    A(T15)            address of test
0000219C  000016B0                          1850+         DC    A(T16)            address of test
000021A0  00001708                          1851+         DC    A(T17)            address of test
000021A4  00001760                          1852+         DC    A(T18)            address of test
000021A8  000017B8                          1853+         DC    A(T19)            address of test
000021AC  00001810                          1854+         DC    A(T20)            address of test
000021B0  00001868                          1855+         DC    A(T21)            address of test
000021B4  000018C0                          1856+         DC    A(T22)            address of test
000021B8  00001918                          1857+         DC    A(T23)            address of test
000021BC  00001970                          1858+         DC    A(T24)            address of test
000021C0  000019C8                          1859+         DC    A(T25)            address of test
000021C4  00001A20                          1860+         DC    A(T26)            address of test
000021C8  00001A78                          1861+         DC    A(T27)            address of test
000021CC  00001AD0                          1862+         DC    A(T28)            address of test
000021D0  00001B28                          1863+         DC    A(T29)            address of test
000021D4  00001B80                          1864+         DC    A(T30)            address of test
000021D8  00001BD8                          1865+         DC    A(T31)            address of test
000021DC  00001C30                          1866+         DC    A(T32)            address of test
000021E0  00001C88                          1867+         DC    A(T33)            address of test
000021E4  00001CE0                          1868+         DC    A(T34)            address of test
000021E8  00001D38                          1869+         DC    A(T35)            address of test
000021EC  00001D90                          1870+         DC    A(T36)            address of test
000021F0  00001DE8                          1871+         DC    A(T37)            address of test
000021F4  00001E40                          1872+         DC    A(T38)            address of test
000021F8  00001E98                          1873+         DC    A(T39)            address of test
000021FC  00001EF0                          1874+         DC    A(T40)            address of test
00002200  00001F48                          1875+         DC    A(T41)            address of test
00002204  00001FA0                          1876+         DC    A(T42)            address of test
00002208  00001FF8                          1877+         DC    A(T43)            address of test
0000220C  00002050                          1878+         DC    A(T44)            address of test
00002210  000020A8                          1879+         DC    A(T45)            address of test
00002214  00002100                          1880+         DC    A(T46)            address of test
                                            1881+*
00002218  00000000                          1882+         DC    A(0)              END OF TABLE
0000221C  00000000                          1883+         DC    A(0)
                                            1884
00002220  00000000                          1885          DC    F'0'      END OF TABLE
00002224  00000000                          1886          DC    F'0'
```

```
 LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                          1888 ********************************************************************************
                                          1889 *        Register equates
                                          1890 ********************************************************************************

                            00000000  00000001  1892 R0       EQU   0
                            00000001  00000001  1893 R1       EQU   1
                            00000002  00000001  1894 R2       EQU   2
                            00000003  00000001  1895 R3       EQU   3
                            00000004  00000001  1896 R4       EQU   4
                            00000005  00000001  1897 R5       EQU   5
                            00000006  00000001  1898 R6       EQU   6
                            00000007  00000001  1899 R7       EQU   7
                            00000008  00000001  1900 R8       EQU   8
                            00000009  00000001  1901 R9       EQU   9
                            0000000A  00000001  1902 R10      EQU   10
                            0000000B  00000001  1903 R11      EQU   11
                            0000000C  00000001  1904 R12      EQU   12
                            0000000D  00000001  1905 R13      EQU   13
                            0000000E  00000001  1906 R14      EQU   14
                            0000000F  00000001  1907 R15      EQU   15

                                          1909 ********************************************************************************
                                          1910 *        Register equates
                                          1911 ********************************************************************************

                            00000000  00000001  1913 V0       EQU   0
                            00000001  00000001  1914 V1       EQU   1
                            00000002  00000001  1915 V2       EQU   2
                            00000003  00000001  1916 V3       EQU   3
                            00000004  00000001  1917 V4       EQU   4
                            00000005  00000001  1918 V5       EQU   5
                            00000006  00000001  1919 V6       EQU   6
                            00000007  00000001  1920 V7       EQU   7
                            00000008  00000001  1921 V8       EQU   8
                            00000009  00000001  1922 V9       EQU   9
                            0000000A  00000001  1923 V10      EQU   10
                            0000000B  00000001  1924 V11      EQU   11
                            0000000C  00000001  1925 V12      EQU   12
                            0000000D  00000001  1926 V13      EQU   13
                            0000000E  00000001  1927 V14      EQU   14
                            0000000F  00000001  1928 V15      EQU   15
                            00000010  00000001  1929 V16      EQU   16
                            00000011  00000001  1930 V17      EQU   17
                            00000012  00000001  1931 V18      EQU   18
                            00000013  00000001  1932 V19      EQU   19
                            00000014  00000001  1933 V20      EQU   20
                            00000015  00000001  1934 V21      EQU   21
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT
                                00000016  00000001  1935 V22       EQU   22
                                00000017  00000001  1936 V23       EQU   23
                                00000018  00000001  1937 V24       EQU   24
                                00000019  00000001  1938 V25       EQU   25
                                0000001A  00000001  1939 V26       EQU   26
                                0000001B  00000001  1940 V27       EQU   27
                                0000001C  00000001  1941 V28       EQU   28
                                0000001D  00000001  1942 V29       EQU   29
                                0000001E  00000001  1943 V30       EQU   30
                                0000001F  00000001  1944 V31       EQU   31
                                                    1945
                                                    1946           END
```

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
BEGIN	I	00000200	2	151	116 147 148 149
CC	U	00000008	1	512	262
CCFOUND	X	000010E0	1	484	249 269
CCMASK	U	00000009	1	513	220
CCMSG	U	00000322	1	238	232
CCPRTEXP	C	0000108A	1	464	266
CCPRTGOT	C	0000109A	1	467	273
CCPRTLINE	C	00001047	16	459	469 276
CCPRTLNG	U	00000055	1	469	275
CCPRTNAME	C	00001074	8	462	259
CCPRTNUM	C	00001057	3	460	257
CCPSW	F	000010D8	4	483	246 644 670 696 722 748 774 800 826 852 879 905 931 957 983 1009 1035 1061 1087 1117 1143 1169 1195 1221 1247 1273 1299 1325 1351 1377 1403 1429 1455 1482 1508 1534 1560 1586 1612 1638 1664 1690 1716 1742 1768 1794 1820
CTLR0	F	00000534	4	405	161 162 163 164
DECNUM	C	000010C8	16	479	254 256 263 265 270 272 288 290 297 299
E6TEST	4	00000000	28	507	212
E6TESTS	F	00002160	4	1832	203
EDIT	X	0000109C	18	474	255 264 271 289 298
ENDTEST	U	0000040C	1	319	208
EOJ	I	00000518	4	395	196 322
EOJPSW	D	00000508	8	393	395
FAILCONT	U	000003FC	1	309	279
FAILED	F	00001000	4	435	311 320
FAILMSG	U	000003B2	1	286	227
FAILPSW	D	00000520	8	397	399
FAILTEST	I	00000530	4	399	323
FB0001	F	00000288	8	180	184 185 187
IMAGE	1	00000000	8744	0	
K	U	00000400	1	418	419 420 421
K64	U	00010000	1	420	
M3	U	00000007	1	511	240 296
MB	U	00100000	1	421	
MSG	I	00000450	4	355	195 338
MSGCMD	C	0000049E	9	385	368 369
MSGMSG	C	000004A7	95	386	362 383 360
MSGMVC	I	00000498	6	383	366
MSGOK	I	00000466	2	364	361
MSGRET	I	00000486	4	379	372 375
MSGSAVE	F	0000048C	4	382	358 379
NEXTE6	U	000002DC	1	205	230 314
OPNAME	C	0000000A	8	515	259 293
PAGE	U	00001000	1	419	
PRT3	C	000010B2	18	477	255 256 257 264 265 266 271 272 273 289 290 291 298 299 300
PRTLINE	C	00001008	16	444	451 303
PRTLNG	U	0000003F	1	451	302
PRTM3	C	00001044	2	449	300
PRTNAME	C	00001033	8	447	293
PRTNUM	C	00001018	3	445	291
R0	U	00000000	1	1892	110 161 164 184 186 187 188 193 210 214 215 275 302 310 311 337 339 355 358 360 362 364 379 643 669 695 721 747 773 799 825 851 878 904 930 956 982 1008 1034 1060 1086 1116 1142 1168 1194 1220 1246 1272 1298 1324 1350 1376 1402 1428 1454 1481 1507 1533 1559 1585 1611 1637 1663 1689 1715

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
					1741 1767 1793 1819
R1	U	00000001	1	1893	194 220 221 222 225 226 239 240 241 246 247 248 249
					276 303 320 321 369 383 639 641 642 665 667 668 691
					693 694 717 719 720 743 745 746 769 771 772 795 797
					798 821 823 824 847 849 850 874 876 877 900 902 903
					926 928 929 952 954 955 978 980 981 1004 1006 1007 1030
					1032 1033 1056 1058 1059 1082 1084 1085 1112 1114 1115 1138 1140
					1141 1164 1166 1167 1190 1192 1193 1216 1218 1219 1242 1244 1245
					1268 1270 1271 1294 1296 1297 1320 1322 1323 1346 1348 1349 1372
					1374 1375 1398 1400 1401 1424 1426 1427 1450 1452 1453 1477 1479
					1480 1503 1505 1506 1529 1531 1532 1555 1557 1558 1581 1583 1584
					1607 1609 1610 1633 1635 1636 1659 1661 1662 1685 1687 1688 1711
					1713 1714 1737 1739 1740 1763 1765 1766 1789 1791 1792 1815 1817
					1818
R10	U	0000000A	1	1902	149 158 159
R11	U	0000000B	1	1903	217 218 645 671 697 723 749 775 801 827 853 880 906
					932 958 984 1010 1036 1062 1088 1118 1144 1170 1196 1222 1248
					1274 1300 1326 1352 1378 1404 1430 1456 1483 1509 1535 1561 1587
					1613 1639 1665 1691 1717 1743 1769 1795 1821
R12	U	0000000C	1	1904	203 206 229 313
R13	U	0000000D	1	1905	
R14	U	0000000E	1	1906	
R15	U	0000000F	1	1907	277 304 332 342 343
R1FUDGE	X	000010E8	8	490	639 665 691 717 743 769 795 821 847 874 900 926 952
					978 1004 1030 1056 1082 1112 1138 1164 1190 1216 1242 1268 1294
					1320 1346 1372 1398 1424 1450 1477 1503 1529 1555 1581 1607 1633
					1659 1685 1711 1737 1763 1789 1815
R1OUTPUT	F	00001120	8	494	226 642 668 694 720 746 772 798 824 850 877 903 929
					955 981 1007 1033 1059 1085 1115 1141 1167 1193 1219 1245 1271
					1297 1323 1349 1375 1401 1427 1453 1480 1506 1532 1558 1584 1610
					1636 1662 1688 1714 1740 1766 1792 1818
R2	U	00000002	1	1894	195 253 254 261 262 263 268 269 270 287 288 295 296
					297 337 338 339 356 358 364 365 366 368 374 379 380
					643 644 669 670 695 696 721 722 747 748 773 774 799
					800 825 826 851 852 878 879 904 905 930 931 956 957
					982 983 1008 1009 1034 1035 1060 1061 1086 1087 1116 1117 1142
					1143 1168 1169 1194 1195 1220 1221 1246 1247 1272 1273 1298 1299
					1324 1325 1350 1351 1376 1377 1402 1403 1428 1429 1454 1455 1481
					1482 1507 1508 1533 1534 1559 1560 1585 1586 1611 1612 1637 1638
					1663 1664 1689 1690 1715 1716 1741 1742 1767 1768 1793 1794 1819
					1820
R3	U	00000003	1	1895	
R4	U	00000004	1	1896	
R5	U	00000005	1	1897	206 207 212 333 341 627 647 653 673 679 699 705 725
					731 751 757 777 783 803 809 829 835 855 862 882 888
					908 914 934 940 960 966 986 992 1012 1018 1038 1044 1064
					1070 1090 1100 1120 1126 1146 1152 1172 1178 1198 1204 1224 1230
					1250 1256 1276 1282 1302 1308 1328 1334 1354 1360 1380 1386 1406
					1412 1432 1438 1458 1465 1485 1491 1511 1517 1537 1543 1563 1569
					1589 1595 1615 1621 1641 1647 1667 1673 1693 1699 1719 1725 1745
					1751 1771 1777 1797 1803 1823
R6	U	00000006	1	1898	
R7	U	00000007	1	1899	
R8	U	00000008	1	1900	147 151 152 153 155
R9	U	00000009	1	1901	148 155 156 158
RE1	F	000011C8	4	646	636 640

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
RE10	F	000014E0	4	881	871 875
RE11	F	00001538	4	907	897 901
RE12	F	00001590	4	933	923 927
RE13	F	000015E8	4	959	949 953
RE14	F	00001640	4	985	975 979
RE15	F	00001698	4	1011	1001 1005
RE16	F	000016F0	4	1037	1027 1031
RE17	F	00001748	4	1063	1053 1057
RE18	F	000017A0	4	1089	1079 1083
RE19	F	000017F8	4	1119	1109 1113
RE2	F	00001220	4	672	662 666
RE20	F	00001850	4	1145	1135 1139
RE21	F	000018A8	4	1171	1161 1165
RE22	F	00001900	4	1197	1187 1191
RE23	F	00001958	4	1223	1213 1217
RE24	F	000019B0	4	1249	1239 1243
RE25	F	00001A08	4	1275	1265 1269
RE26	F	00001A60	4	1301	1291 1295
RE27	F	00001AB8	4	1327	1317 1321
RE28	F	00001B10	4	1353	1343 1347
RE29	F	00001B68	4	1379	1369 1373
RE3	F	00001278	4	698	688 692
RE30	F	00001BC0	4	1405	1395 1399
RE31	F	00001C18	4	1431	1421 1425
RE32	F	00001C70	4	1457	1447 1451
RE33	F	00001CC8	4	1484	1474 1478
RE34	F	00001D20	4	1510	1500 1504
RE35	F	00001D78	4	1536	1526 1530
RE36	F	00001DD0	4	1562	1552 1556
RE37	F	00001E28	4	1588	1578 1582
RE38	F	00001E80	4	1614	1604 1608
RE39	F	00001ED8	4	1640	1630 1634
RE4	F	000012D0	4	724	714 718
RE40	F	00001F30	4	1666	1656 1660
RE41	F	00001F88	4	1692	1682 1686
RE42	F	00001FE0	4	1718	1708 1712
RE43	F	00002038	4	1744	1734 1738
RE44	F	00002090	4	1770	1760 1764
RE45	F	000020E8	4	1796	1786 1790
RE46	F	00002140	4	1822	1812 1816
RE5	F	00001328	4	750	740 744
RE6	F	00001380	4	776	766 770
RE7	F	000013D8	4	802	792 796
RE8	F	00001430	4	828	818 822
RE9	F	00001488	4	854	844 848
REA1	A	000011A0	4	636	
REA10	A	000014B8	4	871	
REA11	A	00001510	4	897	
REA12	A	00001568	4	923	
REA13	A	000015C0	4	949	
REA14	A	00001618	4	975	
REA15	A	00001670	4	1001	
REA16	A	000016C8	4	1027	
REA17	A	00001720	4	1053	
REA18	A	00001778	4	1079	
REA19	A	000017D0	4	1109	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES		
REA2	A	000011F8	4	662			
REA20	A	00001828	4	1135			
REA21	A	00001880	4	1161			
REA22	A	000018D8	4	1187			
REA23	A	00001930	4	1213			
REA24	A	00001988	4	1239			
REA25	A	000019E0	4	1265			
REA26	A	00001A38	4	1291			
REA27	A	00001A90	4	1317			
REA28	A	00001AE8	4	1343			
REA29	A	00001B40	4	1369			
REA3	A	00001250	4	688			
REA30	A	00001B98	4	1395			
REA31	A	00001BF0	4	1421			
REA32	A	00001C48	4	1447			
REA33	A	00001CA0	4	1474			
REA34	A	00001CF8	4	1500			
REA35	A	00001D50	4	1526			
REA36	A	00001DA8	4	1552			
REA37	A	00001E00	4	1578			
REA38	A	00001E58	4	1604			
REA39	A	00001EB0	4	1630			
REA4	A	000012A8	4	714			
REA40	A	00001F08	4	1656			
REA41	A	00001F60	4	1682			
REA42	A	00001FB8	4	1708			
REA43	A	00002010	4	1734			
REA44	A	00002068	4	1760			
REA45	A	000020C0	4	1786			
REA46	A	00002118	4	1812			
REA5	A	00001300	4	740			
REA6	A	00001358	4	766			
REA7	A	000013B0	4	792			
REA8	A	00001408	4	818			
REA9	A	00001460	4	844			
READDR	A	00000018	4	518	225		
REG2LOW	U	000000DD	1	425			
REG2PATT	U	AABBCCDD	1	424			
RELEN	A	00000014	4	517			
RPTDWSAV	D	00000440	8	348	337	339	
RPTERROR	I	0000041A	4	332	277	304	
RPTSAVE	F	00000438	4	345	332	342	
RPTSVR5	F	0000043C	4	346	333	341	
SKL0001	U	00000054	1	177	193		
SKT0001	C	0000022A	26	174	177	194	
SVOLDPSW	U	00000140	0	112			
T1	A	00001188	4	628	1835		
T10	A	000014A0	4	863	1844		
T11	A	000014F8	4	889	1845		
T12	A	00001550	4	915	1846		
T13	A	000015A8	4	941	1847		
T14	A	00001600	4	967	1848		
T15	A	00001658	4	993	1849		
T16	A	000016B0	4	1019	1850		
T17	A	00001708	4	1045	1851		
T18	A	00001760	4	1071	1852		

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
T19	A	000017B8	4	1101	1853
T2	A	000011E0	4	654	1836
T20	A	00001810	4	1127	1854
T21	A	00001868	4	1153	1855
T22	A	000018C0	4	1179	1856
T23	A	00001918	4	1205	1857
T24	A	00001970	4	1231	1858
T25	A	000019C8	4	1257	1859
T26	A	00001A20	4	1283	1860
T27	A	00001A78	4	1309	1861
T28	A	00001AD0	4	1335	1862
T29	A	00001B28	4	1361	1863
T3	A	00001238	4	680	1837
T30	A	00001B80	4	1387	1864
T31	A	00001BD8	4	1413	1865
T32	A	00001C30	4	1439	1866
T33	A	00001C88	4	1466	1867
T34	A	00001CE0	4	1492	1868
T35	A	00001D38	4	1518	1869
T36	A	00001D90	4	1544	1870
T37	A	00001DE8	4	1570	1871
T38	A	00001E40	4	1596	1872
T39	A	00001E98	4	1622	1873
T4	A	00001290	4	706	1838
T40	A	00001EF0	4	1648	1874
T41	A	00001F48	4	1674	1875
T42	A	00001FA0	4	1700	1876
T43	A	00001FF8	4	1726	1877
T44	A	00002050	4	1752	1878
T45	A	000020A8	4	1778	1879
T46	A	00002100	4	1804	1880
T5	A	000012E8	4	732	1839
T6	A	00001340	4	758	1840
T7	A	00001398	4	784	1841
T8	A	000013F0	4	810	1842
T9	A	00001448	4	836	1843
TESTCC	I	0000031E	4	232	222
TESTING	F	00001004	4	436	215
TESTREST	U	00000306	1	224	242
TNUM	H	00000004	2	509	214 253 287
TSUB	A	00000000	4	508	217
TTABLE	F	00002160	4	1834	
V0	U	00000000	1	1913	
V1	U	00000001	1	1914	640 641 666 667 692 693 718 719 744 745 770 771 796 797 822 823 848 849 875 876 901 902 927 928 953 954 979 980 1005 1006 1031 1032 1057 1058 1083 1084 1113 1114 1139 1140 1165 1166 1191 1192 1217 1218 1243 1244 1269 1270 1295 1296 1321 1322 1347 1348 1373 1374 1399 1400 1425 1426 1451 1452 1478 1479 1504 1505 1530 1531 1556 1557 1582 1583 1608 1609 1634 1635 1660 1661 1686 1687 1712 1713 1738 1739 1764 1765 1790 1791 1816 1817
V10	U	0000000A	1	1923	
V11	U	0000000B	1	1924	
V12	U	0000000C	1	1925	
V13	U	0000000D	1	1926	
V14	U	0000000E	1	1927	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
V15	U	0000000F	1	1928	
V16	U	00000010	1	1929	
V17	U	00000011	1	1930	
V18	U	00000012	1	1931	
V19	U	00000013	1	1932	
V1FUDGE	X	00001138	16	496	
V1FUDGEB	X	00001148	16	497	
V1INPUT	C	00001158	16	498	
V1OUTPUT	X	00001100	16	492	
V2	U	00000002	1	1915	
V20	U	00000014	1	1933	
V21	U	00000015	1	1934	
V22	U	00000016	1	1935	
V23	U	00000017	1	1936	
V24	U	00000018	1	1937	
V25	U	00000019	1	1938	
V26	U	0000001A	1	1939	
V27	U	0000001B	1	1940	
V28	U	0000001C	1	1941	
V29	U	0000001D	1	1942	
V3	U	00000003	1	1916	
V30	U	0000001E	1	1943	
V31	U	0000001F	1	1944	
V4	U	00000004	1	1917	
V5	U	00000005	1	1918	
V6	U	00000006	1	1919	
V7	U	00000007	1	1920	
V8	U	00000008	1	1921	
V9	U	00000009	1	1922	
X0001	U	000002B0	1	183	171 184
X1	F	000011A4	4	638	628
X10	F	000014BC	4	873	863
X11	F	00001514	4	899	889
X12	F	0000156C	4	925	915
X13	F	000015C4	4	951	941
X14	F	0000161C	4	977	967
X15	F	00001674	4	1003	993
X16	F	000016CC	4	1029	1019
X17	F	00001724	4	1055	1045
X18	F	0000177C	4	1081	1071
X19	F	000017D4	4	1111	1101
X2	F	000011FC	4	664	654
X20	F	0000182C	4	1137	1127
X21	F	00001884	4	1163	1153
X22	F	000018DC	4	1189	1179
X23	F	00001934	4	1215	1205
X24	F	0000198C	4	1241	1231
X25	F	000019E4	4	1267	1257
X26	F	00001A3C	4	1293	1283
X27	F	00001A94	4	1319	1309
X28	F	00001AEC	4	1345	1335
X29	F	00001B44	4	1371	1361
X3	F	00001254	4	690	680
X30	F	00001B9C	4	1397	1387
X31	F	00001BF4	4	1423	1413
X32	F	00001C4C	4	1449	1439

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES					
X33	F	00001CA4	4	1476	1466					
X34	F	00001CFC	4	1502	1492					
X35	F	00001D54	4	1528	1518					
X36	F	00001DAC	4	1554	1544					
X37	F	00001E04	4	1580	1570					
X38	F	00001E5C	4	1606	1596					
X39	F	00001EB4	4	1632	1622					
X4	F	000012AC	4	716	706					
X40	F	00001F0C	4	1658	1648					
X41	F	00001F64	4	1684	1674					
X42	F	00001FBC	4	1710	1700					
X43	F	00002014	4	1736	1726					
X44	F	0000206C	4	1762	1752					
X45	F	000020C4	4	1788	1778					
X46	F	0000211C	4	1814	1804					
X5	F	00001304	4	742	732					
X6	F	0000135C	4	768	758					
X7	F	000013B4	4	794	784					
X8	F	0000140C	4	820	810					
X9	F	00001464	4	846	836					
XC0001	U	000002D8	1	197	189					
ZVE6TST	J	00000000	8744	109	112	114	118	122	434	110
=A(E6TESTS)	A	00000540	4	410	203					
=AL2(L'MSGMSG)	R	0000054E	2	414	360					
=F'1'	F	00000544	4	411	241	310				
=F'2'	F	0000053C	4	409	188					
=H'0'	H	0000054C	2	413	355					
=XL4'3'	X	00000548	4	412	248					

```
 MACRO    DEFN  REFERENCES

FCHECK     61    170
PTTABLE   587   1833
VRR_I     532    625    651    677    703    729    755    781    807    833    860    886    912    938    964    990   1016   1042
                 1068   1098   1124   1150   1176   1202   1228   1254   1280   1306   1332   1358   1384   1410   1436   1463   1489
                 1515   1541   1567   1593   1619   1645   1671   1697   1723   1749   1775   1801
```

```
   DESC      SYMBOL   SIZE     POS         ADDR

Entry: 0

Image       IMAGE    8744  0000-2227  0000-2227
  Region             8744  0000-2227  0000-2227
    CSECT   ZVE6TST  8744  0000-2227  0000-2227
```

```
   STMT                              FILE NAME
1     /home/tn529/sharedvfp/tests/zvector-e6-11-convertbinary.asm

** NO ERRORS FOUND **
```