```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

                                                        2 ************************************************************************
                                                        3 *
                                                        4 *        Zvector E6 instruction tests for VRI-i encoded:
                                                        5 *
                                                        6 *        E658 VCVD    - VECTOR CONVERT TO DECIMAL (32)
                                                        7 *        E65A VCVDG   - VECTOR CONVERT TO DECIMAL (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 VRI-i vector
                                                       18 *  convert to decimal. 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-e6-13-converttodecimal: VECTOR E6 VRI-i instruction
                                                       27 * *
                                                       28 * *    Zvector E6 tests for VRI-i encoded instruction:
                                                       29 * *
                                                       30 * *    E658 VCVD    - VECTOR CONVERT TO DECIMAL (32)
                                                       31 * *    E65A VCVDG   - VECTOR CONVERT TO DECIMAL (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-e6-13-converttodecimal.core" 0x0
                                                       45 * diag8cmd    disable   # (reset back to default)
                                                       46 *
                                                       47 * *Done
                                                       48 *
                                                       49 ************************************************************************


                          00000000  00003707     51 ZVE6TST  START 0
00000000                  00000000                 52          USING ZVE6TST,R0            Low core addressability
                                                   53
                          00000140  00000000     54 SVOLDPSW EQU   ZVE6TST+X'140'        z/Arch Supervisor call old PSW
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00000000                     00000000  000001A0    56          ORG   ZVE6TST+X'1A0'        z/Architecure RESTART PSW
000001A0  00000001 80000000                        57          DC    X'0000000180000000'
000001A8  00000000 00000200                        58          DC    AD(BEGIN)


000001B0                     000001B0  000001D0    60          ORG   ZVE6TST+X'1D0'        z/Architecure PROGRAM CHECK PSW
000001D0  00020001 80000000                        61          DC    X'0002000180000000'
000001D8  00000000 0000DEAD                        62          DC    AD(X'DEAD')




000001E0                     000001E0  00000200    64          ORG   ZVE6TST+X'200'        Start of actual test program...
                                                   65
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                     67 ************************************************************************
                                                     68 *               The actual "ZVE6TST" program itself...
                                                     69 ************************************************************************
                                                     70 *
                                                     71 *  Architecture Mode: z/Arch
                                                     72 *  Register Usage:
                                                     73 *
                                                     74 *   R0       (work)
                                                     75 *   R1-4     (work)
                                                     76 *   R5       Testing control table - current test base
                                                     77 *   R6-R7    (work)
                                                     78 *   R8       First base register
                                                     79 *   R9       Second base register
                                                     80 *   R10      Third base register
                                                     81 *   R11      E6TEST call return
                                                     82 *   R12      E6TESTS register
                                                     83 *   R13      (work)
                                                     84 *   R14      Subroutine call
                                                     85 *   R15      Secondary Subroutine call or work
                                                     86 *
                                                     87 ************************************************************************

00000200                          00000200           89          USING  BEGIN,R8        FIRST Base Register
00000200                          00001200           90          USING  BEGIN+4096,R9   SECOND Base Register

00000200  0580                                       92 BEGIN     BALR  R8,0            Initalize FIRST base register
00000202  0680                                       93           BCTR  R8,0            Initalize FIRST base register
00000204  0680                                       94           BCTR  R8,0            Initalize FIRST base register

00000206  4190 8800                00000800          96           LA    R9,2048(,R8)    Initalize SECOND base register
0000020A  4190 9800                00000800          97           LA    R9,2048(,R9)    Initalize SECOND base register

0000020E  41A0 9800                00000800          99           LA    R10,2048(,R9)   Initalize THIRD base register
00000212  41A0 A800                00000800         100           LA    R10,2048(,R10)  Initalize THIRD base register
                                                    101
00000216  B600 829C                0000049C         102           STCTL R0,R0,CTLR0     Store CR0 to enable AFP
0000021A  9604 829D                0000049D         103           OI    CTLR0+1,X'04'   Turn on AFP bit
0000021E  9602 829D                0000049D         104           OI    CTLR0+1,X'02'   Turn on Vector bit
00000222  B700 829C                0000049C         105           LCTL  R0,R0,CTLR0     Reload updated CR0
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    107 ************************************************************************
                                                    108 *               Do tests in the E6TESTS table
                                                    109 ************************************************************************
                                                    110
00000226  58C0 82A4                       000004A4  111           L     R12,E6TADR       get table of test addresses
                                                    112
                                0000022A  00000001  113 NEXTE6    EQU   *
0000022A  5850 C000                       00000000  114           L     R5,0(0,R12)       get test address
0000022E  1255                                      115           LTR   R5,R5                have a test?
00000230  4780 8170                       00000370  116           BZ    ENDTEST                 done?
                                                    117
00000234  B982 0000                                 118           XGR   R0,R0              no cc error
                                                    119
00000238                  00000000                  120           USING E6TEST,R5
                                                    121
00000238  58B0 5000                       00000000  122           L     R11,TSUB           get address of test routine
0000023C  05BB                                      123           BALR  R11,R11            do test
                                                    124
0000023E  E310 500A 0076                  0000000A  125           LB    R1,CCMASK          (failure CC mask)
00000244  8910 0004                       00000004  126           SLL   R1,4               (shift to BC instr CC position)
00000248  4410 8064                       00000264  127           EX    R1,TESTCC             fail if...
                                                    128
                                0000024C  00000001  129 TESTREST EQU   *
0000024C  E310 5018 0014                  00000018  130           LGF   R1,READDR          get address of expected result
00000252  D50F 8F08 1000  00001108        00000000  131           CLC   V1OUTPUT,0(R1)     valid?
00000258  4770 80F8                       000002F8  132           BNE   FAILMSG              no, issue failed message
                                                    133
0000025C  41C0 C004                       00000004  134           LA    R12,4(0,R12)        next test address
00000260  47F0 802A                       0000022A  135           B     NEXTE6
                                                    136
00000264  4700 8068                       00000268  137 TESTCC    BC    0,CCMSG          (fail if unexpected condition code)
                                                    138
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    140 ********************************************************************************
                                                    141 * cc was not as expected
                                                    142 ********************************************************************************
                                00000268  00000001  143 CCMSG    EQU   *
00000268  E310 0001 0082                  00000001  144          XG    R1,R1
0000026E  E310 5008 0076                  00000008  145          LB    R1,M4             m3 has CS bit
00000274  5410 82A8                       000004A8  146          N     R1,=F'1'          get CS (CC set) bit
00000278  4780 804C                       0000024C  147          BZ    TESTREST             ignore if not set
                                                    148 *
                                                    149 * extract CC extracted PSW
                                                    150 *
0000027C  5810 8EE4                       000010E4  151          L     R1,CCPSW
00000280  8810 000C                       0000000C  152          SRL   R1,12
00000284  5410 82AC                       000004AC  153          N     R1,=XL4'3'
00000288  4210 8EEC                       000010EC  154          STC   R1,CCFOUND        save cc
                                                    155 *
                                                    156 * FILL IN MESSAGE
                                                    157 *
0000028C  4820 5004                       00000004  158          LH    R2,TNUM                get test number and convert
00000290  4E20 8ED1                       000010D1  159          CVD   R2,DECNUM
00000294  D211 8EBB 8EA5      000010BB    000010A5  160          MVC   PRT3,EDIT
0000029A  DE11 8EBB 8ED1      000010BB    000010D1  161          ED    PRT3,DECNUM
000002A0  D202 8E60 8EC8      00001060    000010C8  162          MVC   CCPRTNUM(3),PRT3+13     fill in message with test #
                                                    163
000002A6  D207 8E7D 500B      0000107D    0000000B  164          MVC   CCPRTNAME,OPNAME       fill in message with instruction
                                                    165
000002AC  B982 0022                                 166          XGR   R2,R2               get CC as U8
000002B0  4320 5009                       00000009  167          IC    R2,CC
000002B4  4E20 8ED1                       000010D1  168          CVD   R2,DECNUM           and convert
000002B8  D211 8EBB 8EA5      000010BB    000010A5  169          MVC   PRT3,EDIT
000002BE  DE11 8EBB 8ED1      000010BB    000010D1  170          ED    PRT3,DECNUM
000002C4  D200 8E93 8ECA      00001093    000010CA  171          MVC   CCPRTEXP(1),PRT3+15     fill in message with CC field
                                                    172
000002CA  B982 0022                                 173          XGR   R2,R2               get CCFOUND as U8
000002CE  4320 8EEC                       000010EC  174          IC    R2,CCFOUND
000002D2  4E20 8ED1                       000010D1  175          CVD   R2,DECNUM           and convert
000002D6  D211 8EBB 8EA5      000010BB    000010A5  176          MVC   PRT3,EDIT
000002DC  DE11 8EBB 8ED1      000010BB    000010D1  177          ED    PRT3,DECNUM
000002E2  D200 8EA3 8ECA      000010A3    000010CA  178          MVC   CCPRTGOT(1),PRT3+15     fill in message with ccfound
                                                    179
000002E8  4100 0055                       00000055  180          LA    R0,CCPRTLNG         message length
000002EC  4110 8E50                       00001050  181          LA    R1,CCPRTLINE        messagfe address
000002F0  45F0 817E                       0000037E  182          BAL   R15,RPTERROR
                                                    183
000002F4  47F0 8160                       00000360  184          B     FAILCONT
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    186 ************************************************************************
                                                    187 * result not as expected:
                                                    188 *        issue message with test number, instruction under test
                                                    189 *              and instruction l2
                                                    190 ************************************************************************
                               000002F8  00000001   191 FAILMSG  EQU   *
000002F8  4820 5004                      00000004   192          LH    R2,TNUM              get test number and convert
000002FC  4E20 8ED1                      000010D1   193          CVD   R2,DECNUM
00000300  D211 8EBB 8EA5       000010BB  000010A5   194          MVC   PRT3,EDIT
00000306  DE11 8EBB 8ED1       000010BB  000010D1   195          ED    PRT3,DECNUM
0000030C  D202 8E14 8EC8       00001014  000010C8   196          MVC   PRTNUM(3),PRT3+13    fill in message with test #
                                                    197
00000312  D207 8E2F 500B       0000102F  0000000B   198          MVC   PRTNAME,OPNAME       fill in message with instruction
                                                    199
00000318  B982 0022                                 200          XGR   R2,R2                get i3 as U8
0000031C  4320 5007                      00000007   201          IC    R2,I3                and convert
00000320  4E20 8ED1                      000010D1   202          CVD   R2,DECNUM
00000324  D211 8EBB 8EA5       000010BB  000010A5   203          MVC   PRT3,EDIT
0000032A  DE11 8EBB 8ED1       000010BB  000010D1   204          ED    PRT3,DECNUM
00000330  D202 8E40 8EC8       00001040  000010C8   205          MVC   PRTI3(3),PRT3+13     fill in message with i3 field
                                                    206
00000336  B982 0022                                 207          XGR   R2,R2                get m4 as U8
0000033A  4320 5008                      00000008   208          IC    R2,M4                and convert
0000033E  4E20 8ED1                      000010D1   209          CVD   R2,DECNUM
00000342  D211 8EBB 8EA5       000010BB  000010A5   210          MVC   PRT3,EDIT
00000348  DE11 8EBB 8ED1       000010BB  000010D1   211          ED    PRT3,DECNUM
0000034E  D202 8E4D 8EC9       0000104D  000010C9   212          MVC   PRTM4(3),PRT3+14     fill in message with m4 field
                                                    213
00000354  4100 004C                      0000004C   214          LA    R0,PRTLNG            message length
00000358  4110 8E04                      00001004   215          LA    R1,PRTLINE           messagfe address
0000035C  45F0 817E                      0000037E   216          BAL   R15,RPTERROR

                                                    218 ************************************************************************
                                                    219 * continue after a failed test
                                                    220 ************************************************************************
                               00000360  00000001   221 FAILCONT EQU   *
00000360  5800 82A8                      000004A8   222          L     R0,=F'1'             set GLOBAL failed test indicator
00000364  5000 8E00                      00001000   223          ST    R0,FAILED
                                                    224
00000368  41C0 C004                      00000004   225          LA    R12,4(0,R12)         next test address
0000036C  47F0 802A                      0000022A   226          B     NEXTE6


                                                    228 ************************************************************************
                                                    229 * end of testing; set ending psw
                                                    230 ************************************************************************
                               00000370  00000001   231 ENDTEST  EQU   *
00000370  5810 8E00                      00001000   232          L     R1,FAILED            did a test fail?
00000374  1211                                      233          LTR   R1,R1
00000376  4780 8280                      00000480   234          BZ    EOJ                     No, exit
0000037A  47F0 8298                      00000498   235          B     FAILTEST                Yes, exit with BAD PSW
                                                    236
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    238 ************************************************************************
                                                    239 *        RPTERROR          Report instruction test in error
                                                    240 *                             R0 = MESSGAE LENGTH
                                                    241 *                             R1 = ADDRESS OF MESSAGE
                                                    242 ************************************************************************

0000037E  50F0 819C                 0000039C    244 RPTERROR ST    R15,RPTSAVE          Save return address
00000382  5050 81A0                 000003A0    245          ST    R5,RPTSVR5           Save R5
                                                    246 *
                                                    247 *        Use Hercules Diagnose for Message to console
                                                    248 *
00000386  9002 81A8                 000003A8    249          STM   R0,R2,RPTDWSAV       save regs used by MSG
0000038A  4520 81B8                 000003B8    250          BAL   R2,MSG               call Hercules console MSG display
0000038E  9802 81A8                 000003A8    251          LM    R0,R2,RPTDWSAV       restore regs


00000392  5850 81A0                 000003A0    253          L     R5,RPTSVR5           Restore R5
00000396  58F0 819C                 0000039C    254          L     R15,RPTSAVE          Restore return address
0000039A  07FF                                  255          BR    R15                  Return to caller

0000039C  00000000                              257 RPTSAVE  DC    F'0'                 R15 save area
000003A0  00000000                              258 RPTSVR5  DC    F'0'                 R5 save area

000003A8  00000000 00000000                     260 RPTDWSAV DC    2D'0'                R0-R2 save area for MSG call
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    262 ************************************************************************
                                                    263 *        Issue HERCULES MESSAGE pointed to by R1, length in R0
                                                    264 *              R2 = return address
                                                    265 ************************************************************************
                                                    266
000003B8  4900 82B0                  000004B0      267 MSG      CH    R0,=H'0'                 Do we even HAVE a message?
000003BC  07D2                                     268          BNHR  R2                       No, ignore
                                                   269
000003BE  9002 81F0                  000003F0      270          STM   R0,R2,MSGSAVE            Save registers
                                                   271
000003C2  4900 82B2                  000004B2      272          CH    R0,=AL2(L'MSGMSG)        Message length within limits?
000003C6  47D0 81CE                  000003CE      273          BNH   MSGOK                    Yes, continue
000003CA  4100 005F                  0000005F      274          LA    R0,L'MSGMSG              No, set to maximum
                                                   275
000003CE  1820                                     276 MSGOK    LR    R2,R0                    Copy length to work register
000003D0  0620                                     277          BCTR  R2,0                     Minus-1 for execute
000003D2  4420 81FC                  000003FC      278          EX    R2,MSGMVC                Copy message to O/P buffer
                                                   279
000003D6  4120 200A                  0000000A      280          LA    R2,1+L'MSGCMD(,R2)       Calculate true command length
000003DA  4110 8202                  00000402      281          LA    R1,MSGCMD                Point to true command
                                                   282
000003DE  83120008                                 283          DC    X'83',X'12',X'0008'      Issue Hercules Diagnose X'008'
000003E2  4780 81E8                  000003E8      284          BZ    MSGRET                   Return if successful
000003E6  0000                                     285          DC    H'0'                     CRASH for debugging purposes
                                                   286
000003E8  9802 81F0                  000003F0      287 MSGRET   LM    R0,R2,MSGSAVE            Restore registers
000003EC  07F2                                     288          BR    R2                       Return to caller


000003F0  00000000 00000000                        290 MSGSAVE  DC    3F'0'                    Registers save area
000003FC  D200 820B 1000      0000040B  00000000   291 MSGMVC   MVC   MSGMSG(0),0(R1)          Executed instruction


00000402  D4E2C7D5 D6C8405C                        293 MSGCMD   DC    C'MSGNOH * '             *** HERCULES MESSAGE COMMAND ***
0000040B  40404040 40404040                        294 MSGMSG   DC    CL95' '                  The message text to be displayed
                                                   295
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT
                                                      297 ************************************************************************
                                                      298 *        Normal completion or Abnormal termination PSWs
                                                      299 ************************************************************************


00000470  00020001 80000000                           301 EOJPSW   DC    0D'0',X'0002000180000000',AD(0)

00000480  B2B2 8270                         00000470  303 EOJ      LPSWE EOJPSW               Normal completion


00000488  00020001 80000000                           305 FAILPSW  DC    0D'0',X'0002000180000000',AD(X'BAD')

00000498  B2B2 8288                         00000488  307 FAILTEST LPSWE FAILPSW              Abnormal termination


                                                      309 ************************************************************************
                                                      310 *        Working Storage
                                                      311 ************************************************************************

0000049C  00000000                                    313 CTLR0    DS    F                    CR0
000004A0  00000000                                    314          DS    F
                                                      315
000004A4  00003558                                    316 E6TADR   DC    A(E6TESTS)           address of E6 test table


000004A8                                              318          LTORG ,                    Literals pool
000004A8  00000001                                    319                =F'1'
000004AC  00000003                                    320                =XL4'3'
000004B0  0000                                        321                =H'0'
000004B2  005F                                        322                =AL2(L'MSGMSG)
                                                      323
                                                      324 *        some constants
                                                      325
                            00000400  00000001        326 K        EQU   1024                 One KB
                            00001000  00000001        327 PAGE     EQU   (4*K)                Size of one page
                            00010000  00000001        328 K64      EQU   (64*K)               64 KB
                            00100000  00000001        329 MB       EQU   (K*K)                 1 MB
                                                      330
                                                      331
                            AABBCCDD  00000001        332 REG2PATT EQU   X'AABBCCDD'      Polluted Register pattern
                            000000DD  00000001        333 REG2LOW  EQU         X'DD'      (last byte above)
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                     335 *=====================================================================
                                                     336 *
                                                     337 *  NOTE: start data on an address that is easy to display
                                                     338 *        within Hercules
                                                     339 *
                                                     340 *=====================================================================
                                                     341
000004B4                      000004B4  00001000     342          ORG   ZVE6TST+X'1000'
00001000  00000000                                   343 FAILED   DC    F'0'                      some test failed?


                                                     345 ***************************************************************************
                                                     346 *        TEST failed : result messgae
                                                     347 ***************************************************************************
                                                     348 *
                                                     349 *        failed message and associated editting
                                                     350 *
00001004  40404040 40404040                          351 PRTLINE  DC    C'         Test # '
00001014  A7A7A7                                     352 PRTNUM   DC    C'xxx'
00001017  40868189 93858440                          353          DC    C' failed for instruction '
0000102F  A7A7A7A7 A7A7A7A7                          354 PRTNAME  DC    CL8'xxxxxxxx'
00001037  40A689A3 884089F3                          355          DC    C' with i3='
00001040  A7A7A76B                                   356 PRTI3    DC    C'xxx,'
00001044  40A689A3 884094F4                          357          DC    C' with m4='
0000104D  A7A7                                       358 PRTM4    DC    C'xx'
0000104F  4B                                         359          DC    C'.'
                              0000004C  00000001     360 PRTLNG   EQU   *-PRTLINE


                                                     362 ***************************************************************************
                                                     363 *        TEST failed : CC message
                                                     364 ***************************************************************************
                                                     365 *
                                                     366 *        failed message and associated editting
                                                     367 *
00001050  40404040 40404040                          368 CCPRTLINE DC   C'         Test # '
00001060  A7A7A7                                     369 CCPRTNUM DC    C'xxx'
00001063  40A69996 95874083                          370          DC    c' wrong cc for instruction '
0000107D  A7A7A7A7 A7A7A7A7                          371 CCPRTNAME DC    CL8'xxxxxxxx'
00001085  4085A797 8583A385                          372          DC    C' expected: cc='
00001093  A7                                         373 CCPRTEXP DC    C'x'
00001094  6B                                         374          DC    C','
00001095  40998583 8589A585                          375          DC    C' received: cc='
000010A3  A7                                         376 CCPRTGOT DC    C'x'
000010A4  4B                                         377          DC    C'.'
                              00000055  00000001     378 CCPRTLNG   EQU   *-CCPRTLINE
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                     380 ************************************************************************
                                                     381 *        TEST failed : message working storge
                                                     382 ************************************************************************
000010A5  40212020 20202020                          383 EDIT     DC    XL18'402120202020202020202020202020202020'
                                                     384
000010B7  7E7E7E6E                                   385          DC    C'===>'
000010BB  40404040 40404040                          386 PRT3     DC    CL18' '
000010CD  4C7E7E7E                                   387          DC    C'<==='
000010D1  00000000 00000000                          388 DECNUM   DS    CL16
                                                     389 *
                                                     390 *        CC extrtaction
                                                     391 *
000010E4  00000000 00000000                          392 CCPSW    DS    2F          extract PSW after test (has CC)
000010EC  00                                         393 CCFOUND  DS    X           extracted cc


                                                     395 ************************************************************************
                                                     396 *        Vector instruction results, pollution and input
                                                     397 ************************************************************************
000010F0                                             398          DS    0FD
000010F0  AABBCCDD EEFFAABB                          399 R1FUDGE  DC    XL8'AABBCCDDEEFFAABB'                    R1 FUDGE
000010F8  00000000 00000000                          400          DS    XL16                                      gap
00001108  00000000 00000000                          401 V1OUTPUT DS    XL16                                     V1 OUTPUT
00001118  00000000 00000000                          402          DS    XL16                                        gap
00001128  00000000 00000000                          403 R1OUTPUT DS    FD                                       R1 OUTPUT
00001130  00000000 00000000                          404          DS    XL16                                        gap
00001140  FFFFFFFF FFFFFFFF                          405 V1FUDGE  DC    XL16'FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF'   V1 FUDGE
00001150  BBBBBBBB BBBBBBBB                          406 V1FUDGEB DC    XL16'BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB'   V1 FUDGE b
00001160  F1F2F3F4 F5F6F7F8                          407 V1INPUT  DC    CL16'1234567890123456'                   V1 input
00001170  F7F8F9F0 F1F2F3F4                          408          DC    CL14'78901234567890'
0000117E  D9                                         409          DC    X'D9'
0000117F  00000000 00000000                          410          DS    XL16                                        gap
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                     412 ********************************************************************************
                                                     413 *        E6TEST DSECT
                                                     414 ********************************************************************************


                                                     416 E6TEST   DSECT ,
00000000  00000000                                   417 TSUB     DC    A(0)           pointer  to test
00000004  0000                                       418 TNUM     DC    H'00'          Test Number
00000006  00                                         419          DC    XL1'00'
00000007  00                                         420 I3       DC    HL1'00'        i3
00000008  00                                         421 M4       DC    HL1'00'        m4
00000009  00                                         422 CC       DC    HL1'00'        cc
0000000A  00                                         423 CCMASK   DC    HL1'00'        not expected CC mask
                                                     424
0000000B  40404040 40404040                          425 OPNAME   DC    CL8' '         E6 name
                                                     426
00000014  00000000                                   427 RELEN    DC    A(0)           RESULT LENGTH
00000018  00000000                                   428 READDR   DC    A(0)           expected result address
                                                     429
                                                     430 **
                                                     431 *        test routine will be here (from VRR_K macro)
                                                     432 * followed by
                                                     433 *        16-byte EXPECTED RESULT
                                                     434 *        8-byte  byte source
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT
                                                      436 ************************************************************************
                                                      437 *     Macros to help build test tables
                                                      438 *----------------------------------------------------------------------
                                                      439 *     VRR_K Macro to help build test tables
                                                      440 ************************************************************************
                                                      441          MACRO
                                                      442          VRR_K &INST,&I3,&M4,&CC
                                                      443 .*                                 &INST  - instruction under test
                                                      444 .*                                 &I3
                                                      445 .*                                 &M4
                                                      446 .*                                 &CC    - expected CC
                                                      447 .*
                                                      448          LCLA  &XCC(4)  &CC has mask values for FAILED condition codes
                                                      449 &XCC(1)  SETA  7                  CC != 0
                                                      450 &XCC(2)  SETA  11                 CC != 1
                                                      451 &XCC(3)  SETA  13                 CC != 2
                                                      452 &XCC(4)  SETA  14                 CC != 3
                                                      453
                                                      454          GBLA  &TNUM
                                                      455 &TNUM    SETA  &TNUM+1
                                                      456
                                                      457          DS    0FD
                                                      458          USING *,R5               base for test data and test routine
                                                      459
                                                      460 T&TNUM   DC    A(X&TNUM)          address of test routine
                                                      461          DC    H'&TNUM'           test number
                                                      462          DC    XL1'00'
                                                      463          DC    HL1'&I3'           i3
                                                      464          DC    HL1'&M4'           m4
                                                      465          DC    HL1'&CC'           cc
                                                      466          DC    HL1'&XCC(&CC+1)'   cc failed mask
                                                      467
                                                      468          DC    CL8'&INST'         instruction name
                                                      469
                                                      470          DC    A(16)              result length
                                                      471 REA&TNUM DC    A(RE&TNUM)         result address
                                                      472 .*
                                                      473 *                                 INSTRUCTION UNDER TEST ROUTINE
                                                      474 X&TNUM   DS    0F
                                                      475          VL    V1,V1FUDGE         pollute V1
                                                      476          lG    R2,RE&TNUM+16      get R2 source
                                                      477
                                                      478          &INST V1,R2,&I3,&M4      test instruction
                                                      479
                                                      480          VST   V1,V1OUTPUT        save
                                                      481          EPSW  R2,R0              exptract psw
                                                      482          ST    R2,CCPSW               to save CC
                                                      483
                                                      484          BR    R11                return
                                                      485
                                                      486 RE&TNUM  DC    0F
                                                      487          DROP  R5
                                                      488
                                                      489          MEND
```

```
 LOC         OBJECT CODE       ADDR1     ADDR2     STMT

                                                     491 ********************************************************************************
                                                     492 *     PTTABLE Macro to generate table of pointers to individual tests
                                                     493 ********************************************************************************
                                                     494
                                                     495          MACRO
                                                     496          PTTABLE
                                                     497          GBLA  &TNUM
                                                     498          LCLA  &CUR
                                                     499 &CUR     SETA  1
                                                     500 .*
                                                     501 TTABLE   DS    0F
                                                     502 .LOOP    ANOP
                                                     503 .*
                                                     504          DC    A(T&CUR)           address of test
                                                     505 .*
                                                     506 &CUR     SETA  &CUR+1
                                                     507          AIF   (&CUR LE &TNUM).LOOP
                                                     508 *
                                                     509          DC    A(0)               END OF TABLE
                                                     510          DC    A(0)
                                                     511 .*
                                                     512          MEND
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT
                                                      514 ********************************************************************************
                                                      515 *        E6 VRR_K tests
                                                      516 ********************************************************************************
                                00000000  00003707    517 ZVE6TST  CSECT ,
00001190                                              518          DS    0F


                                                      520          PRINT DATA
                                                      521 *
                                                      522 *        E658 VCVD    - VECTOR CONVERT TO DECIMAL (32)
                                                      523 *        E65A VCVDG   - VECTOR CONVERT TO DECIMAL (64)
                                                      524 *
                                                      525 *        VRR_K instr, i3, m4, cc
                                                      526 *              followed by
                                                      527 *              v1     - expected result (16 bytes)
                                                      528 *              R2     - 8 byte binary source
                                                      529
                                                      530 *-------------------------------------------------------------------
                                                      531 * VCVD    - VECTOR CONVERT TO DECIMAL (32)
                                                      532 *-------------------------------------------------------------------
                                                      533 * VCVD simple                  m4=   1 ( LB=0, P1=0 , CS=1)
                                                      534 *                              m4=   3 ( LB=0, P1=1 , CS=1)
                                                      535 *                              m4=   9 ( LB=1, P1=0 , CS=1)
                                                      536 *                              m4=  11 ( LB=1, P1=1 , CS=1)
                                                      537 *
                                                      538 *                              i3= 137 ( IOM=1, RDC= 9)
                                                      539 *                              i3= 159 ( IOM=1, RDC=31)
                                                      540 *
                                                      541 * VCVD          m4=   1 ( LB=0, P1=0 , CS=1)
                                                      542 *               i3= 159 ( IOM=1, RDC=31)
                                                      543
                                                      544          VRR_K VCVD,159,1,0
00001190                                              545+         DS    0FD
00001190                      00001190                546+         USING *,R5              base for test data and test routine
00001190  000011AC                                    547+T1       DC    A(X1)             address of test routine
00001194  0001                                        548+         DC    H'1'              test number
00001196  00                                          549+         DC    XL1'00'
00001197  9F                                          550+         DC    HL1'159'          i3
00001198  01                                          551+         DC    HL1'1'            m4
00001199  00                                          552+         DC    HL1'0'            cc
0000119A  07                                          553+         DC    HL1'7'            cc failed mask
0000119B  E5C3E5C4 40404040                           554+         DC    CL8'VCVD'         instruction name
000011A4  00000010                                    555+         DC    A(16)             result length
000011A8  000011D0                                    556+REA1     DC    A(RE1)            result address
                                                      557+*                                 INSTRUCTION UNDER TEST ROUTINE
000011AC                                              558+X1       DS    0F
000011AC  E710 8F40 0006                  00001140    559+         VL    V1,V1FUDGE        pollute V1
000011B2  E320 5050 0004                  000011E0    560+         lG    R2,RE1+16         get R2 source
000011B8  E612 0019 F058                              561+         VCVD  V1,R2,159,1       test instruction
000011BE  E710 8F08 000E                  00001108    562+         VST   V1,V1OUTPUT       save
000011C4  B98D 0020                                   563+         EPSW  R2,R0             exptract psw
000011C8  5020 8EE4                       000010E4    564+         ST    R2,CCPSW              to save CC
000011CC  07FB                                        565+         BR    R11               return
000011D0                                              566+RE1      DC    0F
000011D0                                              567+         DROP  R5
000011D0  00000000 00000000                          568          DC    XL16'00000000000000000000000000000000C'   V1 result
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
000011D8  00000000 0000000C
000011E0  00000000 00000000                          569          DC    FD'0'                                    R2 source
                                                     570
                                                     571          VRR_K VCVD,159,1,0
000011E8                                             572+         DS    0FD
000011E8                          000011E8           573+         USING *,R5               base for test data and test routine
000011E8  00001204                                   574+T2       DC    A(X2)              address of test routine
000011EC  0002                                       575+         DC    H'2'               test number
000011EE  00                                         576+         DC    XL1'00'
000011EF  9F                                         577+         DC    HL1'159'           i3
000011F0  01                                         578+         DC    HL1'1'             m4
000011F1  00                                         579+         DC    HL1'0'             cc
000011F2  07                                         580+         DC    HL1'7'             cc failed mask
000011F3  E5C3E5C4 40404040                          581+         DC    CL8'VCVD'          instruction name
000011FC  00000010                                   582+         DC    A(16)              result length
00001200  00001228                                   583+REA2     DC    A(RE2)             result address
                                                     584+*                                 INSTRUCTION UNDER TEST ROUTINE
00001204                                             585+X2       DS    0F
00001204  E710 8F40 0006                 00001140    586+         VL    V1,V1FUDGE         pollute V1
0000120A  E320 9038 0004                 00001238    587+         lG    R2,RE2+16          get R2 source
00001210  E612 0019 F058                             588+         VCVD  V1,R2,159,1        test instruction
00001216  E710 8F08 000E                 00001108    589+         VST   V1,V1OUTPUT        save
0000121C  B98D 0020                                  590+         EPSW  R2,R0              exptract psw
00001220  5020 8EE4                      000010E4    591+         ST    R2,CCPSW               to save CC
00001224  07FB                                       592+         BR    R11                return
00001228                                             593+RE2      DC    0F
00001228                                             594+         DROP  R5
00001228  00000000 00000000                          595          DC    XL16'0000000000000000000000000000001C'   V1 result
00001230  00000000 0000001C
00001238  00000000 00000001                          596          DC    FD'1'                                    R2 source
                                                     597
                                                     598          VRR_K VCVD,159,1,0
00001240                                             599+         DS    0FD
00001240                          00001240           600+         USING *,R5               base for test data and test routine
00001240  0000125C                                   601+T3       DC    A(X3)              address of test routine
00001244  0003                                       602+         DC    H'3'               test number
00001246  00                                         603+         DC    XL1'00'
00001247  9F                                         604+         DC    HL1'159'           i3
00001248  01                                         605+         DC    HL1'1'             m4
00001249  00                                         606+         DC    HL1'0'             cc
0000124A  07                                         607+         DC    HL1'7'             cc failed mask
0000124B  E5C3E5C4 40404040                          608+         DC    CL8'VCVD'          instruction name
00001254  00000010                                   609+         DC    A(16)              result length
00001258  00001280                                   610+REA3     DC    A(RE3)             result address
                                                     611+*                                 INSTRUCTION UNDER TEST ROUTINE
0000125C                                             612+X3       DS    0F
0000125C  E710 8F40 0006                 00001140    613+         VL    V1,V1FUDGE         pollute V1
00001262  E320 5050 0004                 00001290    614+         lG    R2,RE3+16          get R2 source
00001268  E612 0019 F058                             615+         VCVD  V1,R2,159,1        test instruction
0000126E  E710 8F08 000E                 00001108    616+         VST   V1,V1OUTPUT        save
00001274  B98D 0020                                  617+         EPSW  R2,R0              exptract psw
00001278  5020 8EE4                      000010E4    618+         ST    R2,CCPSW               to save CC
0000127C  07FB                                       619+         BR    R11                return
00001280                                             620+RE3      DC    0F
00001280                                             621+         DROP  R5
00001280  00000000 00000000                          622          DC    XL16'0000000000000000000000000000001D'   V1 result
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2    STMT
00001288  00000000 0000001D
00001290  FFFFFFFF FFFFFFFF                        623          DC    FD'-1'                                    R2 source
                                                   624
                                                   625          VRR_K VCVD,159,1,0                              INT_MAX
00001298                                           626+         DS    0FD
00001298                      00001298             627+         USING *,R5              base for test data and test routine
00001298  000012B4                                 628+T4       DC    A(X4)             address of test routine
0000129C  0004                                     629+         DC    H'4'              test number
0000129E  00                                       630+         DC    XL1'00'
0000129F  9F                                       631+         DC    HL1'159'          i3
000012A0  01                                       632+         DC    HL1'1'            m4
000012A1  00                                       633+         DC    HL1'0'            cc
000012A2  07                                       634+         DC    HL1'7'            cc failed mask
000012A3  E5C3E5C4 40404040                        635+         DC    CL8'VCVD'         instruction name
000012AC  00000010                                 636+         DC    A(16)             result length
000012B0  000012D8                                 637+REA4     DC    A(RE4)            result address
                                                   638+*                                INSTRUCTION UNDER TEST ROUTINE
000012B4                                           639+X4       DS    0F
000012B4  E710 8F40 0006              00001140     640+         VL    V1,V1FUDGE        pollute V1
000012BA  E320 5050 0004              000012E8     641+         lG    R2,RE4+16         get R2 source
000012C0  E612 0019 F058                           642+         VCVD  V1,R2,159,1       test instruction
000012C6  E710 8F08 000E              00001108     643+         VST   V1,V1OUTPUT       save
000012CC  B98D 0020                                644+         EPSW  R2,R0             exptract psw
000012D0  5020 8EE4                   000010E4     645+         ST    R2,CCPSW              to save CC
000012D4  07FB                                     646+         BR    R11               return
000012D8                                           647+RE4      DC    0F
000012D8                                           648+         DROP  R5
000012D8  00000000 00000000                        649          DC    XL16'0000000000000000000002147483647C'    V1 result
000012E0  00000214 7483647C
000012E8  00000000 7FFFFFFF                        650          DC    FD'2147483647'                            R2 source
                                                   651
                                                   652          VRR_K VCVD,159,1,0                              INT_MIN
000012F0                                           653+         DS    0FD
000012F0                      000012F0             654+         USING *,R5              base for test data and test routine
000012F0  0000130C                                 655+T5       DC    A(X5)             address of test routine
000012F4  0005                                     656+         DC    H'5'              test number
000012F6  00                                       657+         DC    XL1'00'
000012F7  9F                                       658+         DC    HL1'159'          i3
000012F8  01                                       659+         DC    HL1'1'            m4
000012F9  00                                       660+         DC    HL1'0'            cc
000012FA  07                                       661+         DC    HL1'7'            cc failed mask
000012FB  E5C3E5C4 40404040                        662+         DC    CL8'VCVD'         instruction name
00001304  00000010                                 663+         DC    A(16)             result length
00001308  00001330                                 664+REA5     DC    A(RE5)            result address
                                                   665+*                                INSTRUCTION UNDER TEST ROUTINE
0000130C                                           666+X5       DS    0F
0000130C  E710 8F40 0006              00001140     667+         VL    V1,V1FUDGE        pollute V1
00001312  E320 5050 0004              00001340     668+         lG    R2,RE5+16         get R2 source
00001318  E612 0019 F058                           669+         VCVD  V1,R2,159,1       test instruction
0000131E  E710 8F08 000E              00001108     670+         VST   V1,V1OUTPUT       save
00001324  B98D 0020                                671+         EPSW  R2,R0             exptract psw
00001328  5020 8EE4                   000010E4     672+         ST    R2,CCPSW              to save CC
0000132C  07FB                                     673+         BR    R11               return
00001330                                           674+RE5      DC    0F
00001330                                           675+         DROP  R5
00001330  00000000 00000000                        676          DC    XL16'0000000000000000000002147483648D'    V1 result
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2    STMT
00001338  00000214 7483648D
00001340  FFFFFFFF 80000000                         677          DC    FD'-2147483648'                          R2 source
                                                    678
                                                    679 * VCVD         m4=   1 ( LB=0, P1=0 , CS=1)
                                                    680 *              i3= 137 ( IOM=1, RDC= 9)
                                                    681
                                                    682          VRR_K VCVD,137,1,0
00001348                                            683+         DS    0FD
00001348                          00001348          684+         USING *,R5              base for test data and test routine
00001348  00001364                                  685+T6       DC    A(X6)             address of test routine
0000134C  0006                                      686+         DC    H'6'              test number
0000134E  00                                        687+         DC    XL1'00'
0000134F  89                                        688+         DC    HL1'137'          i3
00001350  01                                        689+         DC    HL1'1'            m4
00001351  00                                        690+         DC    HL1'0'            cc
00001352  07                                        691+         DC    HL1'7'            cc failed mask
00001353  E5C3E5C4 40404040                        692+         DC    CL8'VCVD'         instruction name
0000135C  00000010                                  693+         DC    A(16)             result length
00001360  00001388                                  694+REA6     DC    A(RE6)            result address
                                                    695+*                                INSTRUCTION UNDER TEST ROUTINE
00001364                                            696+X6       DS    0F
00001364  E710 8F40 0006                 00001140   697+         VL    V1,V1FUDGE        pollute V1
0000136A  E320 5050 0004                 00001398   698+         lG    R2,RE6+16         get R2 source
00001370  E612 0018 9058                            699+         VCVD  V1,R2,137,1       test instruction
00001376  E710 8F08 000E                 00001108   700+         VST   V1,V1OUTPUT       save
0000137C  B98D 0020                                 701+         EPSW  R2,R0             exptract psw
00001380  5020 8EE4                     000010E4   702+         ST    R2,CCPSW              to save CC
00001384  07FB                                      703+         BR    R11               return
00001388                                            704+RE6      DC    0F
00001388                                            705+         DROP  R5
00001388  00000000 00000000                         706          DC    XL16'0000000000000000000000000000000C'   V1 result
00001390  00000000 0000000C
00001398  00000000 00000000                         707          DC    FD'0'                                    R2 source
                                                    708
                                                    709          VRR_K VCVD,137,1,0
000013A0                                            710+         DS    0FD
000013A0                          000013A0          711+         USING *,R5              base for test data and test routine
000013A0  000013BC                                  712+T7       DC    A(X7)             address of test routine
000013A4  0007                                      713+         DC    H'7'              test number
000013A6  00                                        714+         DC    XL1'00'
000013A7  89                                        715+         DC    HL1'137'          i3
000013A8  01                                        716+         DC    HL1'1'            m4
000013A9  00                                        717+         DC    HL1'0'            cc
000013AA  07                                        718+         DC    HL1'7'            cc failed mask
000013AB  E5C3E5C4 40404040                        719+         DC    CL8'VCVD'         instruction name
000013B4  00000010                                  720+         DC    A(16)             result length
000013B8  000013E0                                  721+REA7     DC    A(RE7)            result address
                                                    722+*                                INSTRUCTION UNDER TEST ROUTINE
000013BC                                            723+X7       DS    0F
000013BC  E710 8F40 0006                 00001140   724+         VL    V1,V1FUDGE        pollute V1
000013C2  E320 5050 0004                 000013F0   725+         lG    R2,RE7+16         get R2 source
000013C8  E612 0018 9058                            726+         VCVD  V1,R2,137,1       test instruction
000013CE  E710 8F08 000E                 00001108   727+         VST   V1,V1OUTPUT       save
000013D4  B98D 0020                                 728+         EPSW  R2,R0             exptract psw
000013D8  5020 8EE4                     000010E4   729+         ST    R2,CCPSW              to save CC
000013DC  07FB                                      730+         BR    R11               return
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
000013E0                                           731+RE7      DC    0F
000013E0                                           732+         DROP  R5
000013E0  00000000 00000000                        733          DC    XL16'0000000000000000000000000000001C'   V1 result
000013E8  00000000 0000001C
000013F0  00000000 00000001                        734          DC    FD'1'                                    R2 source
                                                   735
                                                   736          VRR_K VCVD,137,1,0
000013F8                                           737+         DS    0FD
000013F8                     000013F8              738+         USING *,R5             base for test data and test routine
000013F8  00001414                                 739+T8       DC    A(X8)            address of test routine
000013FC  0008                                     740+         DC    H'8'             test number
000013FE  00                                       741+         DC    XL1'00'
000013FF  89                                       742+         DC    HL1'137'         i3
00001400  01                                       743+         DC    HL1'1'           m4
00001401  00                                       744+         DC    HL1'0'           cc
00001402  07                                       745+         DC    HL1'7'           cc failed mask
00001403  E5C3E5C4 40404040                        746+         DC    CL8'VCVD'        instruction name
0000140C  00000010                                 747+         DC    A(16)            result length
00001410  00001438                                 748+REA8     DC    A(RE8)           result address
                                                   749+*                              INSTRUCTION UNDER TEST ROUTINE
00001414                                           750+X8       DS    0F
00001414  E710 8F40 0006              00001140     751+         VL    V1,V1FUDGE       pollute V1
0000141A  E320 5050 0004              00001448     752+         lG    R2,RE8+16        get R2 source
00001420  E612 0018 9058                           753+         VCVD  V1,R2,137,1      test instruction
00001426  E710 8F08 000E              00001108     754+         VST   V1,V1OUTPUT      save
0000142C  B98D 0020                                755+         EPSW  R2,R0            exptract psw
00001430  5020 8EE4                   000010E4     756+         ST    R2,CCPSW             to save CC
00001434  07FB                                     757+         BR    R11              return
00001438                                           758+RE8      DC    0F
00001438                                           759+         DROP  R5
00001438  00000000 00000000                        760          DC    XL16'0000000000000000000000000000001D'   V1 result
00001440  00000000 0000001D
00001448  FFFFFFFF FFFFFFFF                        761          DC    FD'-1'                                   R2 source
                                                   762
                                                   763          VRR_K VCVD,137,1,3                             INT_MAX
00001450                                           764+         DS    0FD
00001450                     00001450              765+         USING *,R5             base for test data and test routine
00001450  0000146C                                 766+T9       DC    A(X9)            address of test routine
00001454  0009                                     767+         DC    H'9'             test number
00001456  00                                       768+         DC    XL1'00'
00001457  89                                       769+         DC    HL1'137'         i3
00001458  01                                       770+         DC    HL1'1'           m4
00001459  03                                       771+         DC    HL1'3'           cc
0000145A  0E                                       772+         DC    HL1'14'          cc failed mask
0000145B  E5C3E5C4 40404040                        773+         DC    CL8'VCVD'        instruction name
00001464  00000010                                 774+         DC    A(16)            result length
00001468  00001490                                 775+REA9     DC    A(RE9)           result address
                                                   776+*                              INSTRUCTION UNDER TEST ROUTINE
0000146C                                           777+X9       DS    0F
0000146C  E710 8F40 0006              00001140     778+         VL    V1,V1FUDGE       pollute V1
00001472  E320 5050 0004              000014A0     779+         lG    R2,RE9+16        get R2 source
00001478  E612 0018 9058                           780+         VCVD  V1,R2,137,1      test instruction
0000147E  E710 8F08 000E              00001108     781+         VST   V1,V1OUTPUT      save
00001484  B98D 0020                                782+         EPSW  R2,R0            exptract psw
00001488  5020 8EE4                   000010E4     783+         ST    R2,CCPSW             to save CC
0000148C  07FB                                     784+         BR    R11              return
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00001490                                           785+RE9      DC    0F
00001490                                           786+         DROP  R5
00001490  00000000 00000000                        787          DC    XL16'0000000000000000000000147483647C'   V1 result
00001498  00000014 7483647C
000014A0  00000000 7FFFFFFF                        788          DC    FD'2147483647'                           R2 source
                                                   789
                                                   790          VRR_K VCVD,137,1,3                             INT_MIN
000014A8                                           791+         DS    0FD
000014A8                     000014A8              792+         USING *,R5              base for test data and test routine
000014A8  000014C4                                 793+T10      DC    A(X10)            address of test routine
000014AC  000A                                     794+         DC    H'10'             test number
000014AE  00                                       795+         DC    XL1'00'
000014AF  89                                       796+         DC    HL1'137'          i3
000014B0  01                                       797+         DC    HL1'1'            m4
000014B1  03                                       798+         DC    HL1'3'            cc
000014B2  0E                                       799+         DC    HL1'14'           cc failed mask
000014B3  E5C3E5C4 40404040                        800+         DC    CL8'VCVD'         instruction name
000014BC  00000010                                 801+         DC    A(16)             result length
000014C0  000014E8                                 802+REA10    DC    A(RE10)           result address
                                                   803+*                                INSTRUCTION UNDER TEST ROUTINE
000014C4                                           804+X10      DS    0F
000014C4  E710 8F40 0006              00001140     805+         VL    V1,V1FUDGE        pollute V1
000014CA  E320 5050 0004              000014F8     806+         lG    R2,RE10+16        get R2 source
000014D0  E612 0018 9058                           807+         VCVD  V1,R2,137,1       test instruction
000014D6  E710 8F08 000E              00001108     808+         VST   V1,V1OUTPUT       save
000014DC  B98D 0020                                809+         EPSW  R2,R0             exptract psw
000014E0  5020 8EE4                   000010E4     810+         ST    R2,CCPSW                to save CC
000014E4  07FB                                     811+         BR    R11               return
000014E8                                           812+RE10     DC    0F
000014E8                                           813+         DROP  R5
000014E8  00000000 00000000                        814          DC    XL16'0000000000000000000000147483648D'   V1 result
000014F0  00000014 7483648D
000014F8  FFFFFFFF 80000000                        815          DC    FD'-2147483648'
                                                   816
                                                   817 *-------------------------------------------------------------------
                                                   818 * VCVD          m4=   3 ( LB=0, P1=1 , CS=1)
                                                   819 *               i3= 159 ( IOM=1, RDC=31)
                                                   820
                                                   821          VRR_K VCVD,159,3,0
00001500                                           822+         DS    0FD
00001500                     00001500              823+         USING *,R5              base for test data and test routine
00001500  0000151C                                 824+T11      DC    A(X11)            address of test routine
00001504  000B                                     825+         DC    H'11'             test number
00001506  00                                       826+         DC    XL1'00'
00001507  9F                                       827+         DC    HL1'159'          i3
00001508  03                                       828+         DC    HL1'3'            m4
00001509  00                                       829+         DC    HL1'0'            cc
0000150A  07                                       830+         DC    HL1'7'            cc failed mask
0000150B  E5C3E5C4 40404040                        831+         DC    CL8'VCVD'         instruction name
00001514  00000010                                 832+         DC    A(16)             result length
00001518  00001540                                 833+REA11    DC    A(RE11)           result address
                                                   834+*                                INSTRUCTION UNDER TEST ROUTINE
0000151C                                           835+X11      DS    0F
0000151C  E710 8F40 0006              00001140     836+         VL    V1,V1FUDGE        pollute V1
00001522  E320 5050 0004              00001550     837+         lG    R2,RE11+16        get R2 source
00001528  E612 0039 F058                           838+         VCVD  V1,R2,159,3       test instruction
```

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  LOC        OBJECT CODE       ADDR1     ADDR2    STMT

0000152E  E710 8F08 000E                 00001108   839+         VST   V1,V1OUTPUT       save
00001534  B98D 0020                                 840+         EPSW  R2,R0             exptract psw
00001538  5020 8EE4                      000010E4   841+         ST    R2,CCPSW              to save CC
0000153C  07FB                                      842+         BR    R11               return
00001540                                            843+RE11     DC    0F
00001540                                            844+         DROP  R5
00001540  00000000 00000000                         845          DC    XL16'0000000000000000000000000000000F'   V1 result
00001548  00000000 0000000F
00001550  00000000 00000000                         846          DC    FD'0'                                    R2 source
                                                    847
                                                    848          VRR_K VCVD,159,3,0
00001558                                            849+         DS    0FD
00001558                    00001558                850+         USING *,R5              base for test data and test routine
00001558  00001574                                  851+T12      DC    A(X12)            address of test routine
0000155C  000C                                      852+         DC    H'12'             test number
0000155E  00                                        853+         DC    XL1'00'
0000155F  9F                                        854+         DC    HL1'159'          i3
00001560  03                                        855+         DC    HL1'3'            m4
00001561  00                                        856+         DC    HL1'0'            cc
00001562  07                                        857+         DC    HL1'7'            cc failed mask
00001563  E5C3E5C4 40404040                         858+         DC    CL8'VCVD'         instruction name
0000156C  00000010                                  859+         DC    A(16)             result length
00001570  00001598                                  860+REA12    DC    A(RE12)           result address
                                                    861+*                                INSTRUCTION UNDER TEST ROUTINE
00001574                                            862+X12      DS    0F
00001574  E710 8F40 0006                 00001140   863+         VL    V1,V1FUDGE        pollute V1
0000157A  E320 5050 0004                 000015A8   864+         lG    R2,RE12+16        get R2 source
00001580  E612 0039 F058                            865+         VCVD  V1,R2,159,3       test instruction
00001586  E710 8F08 000E                 00001108   866+         VST   V1,V1OUTPUT       save
0000158C  B98D 0020                                 867+         EPSW  R2,R0             exptract psw
00001590  5020 8EE4                      000010E4   868+         ST    R2,CCPSW              to save CC
00001594  07FB                                      869+         BR    R11               return
00001598                                            870+RE12     DC    0F
00001598                                            871+         DROP  R5
00001598  00000000 00000000                         872          DC    XL16'0000000000000000000000000000001F'   V1 result
000015A0  00000000 0000001F
000015A8  00000000 00000001                         873          DC    FD'1'                                    R2 source
                                                    874
                                                    875          VRR_K VCVD,159,3,0
000015B0                                            876+         DS    0FD
000015B0                    000015B0                877+         USING *,R5              base for test data and test routine
000015B0  000015CC                                  878+T13      DC    A(X13)            address of test routine
000015B4  000D                                      879+         DC    H'13'             test number
000015B6  00                                        880+         DC    XL1'00'
000015B7  9F                                        881+         DC    HL1'159'          i3
000015B8  03                                        882+         DC    HL1'3'            m4
000015B9  00                                        883+         DC    HL1'0'            cc
000015BA  07                                        884+         DC    HL1'7'            cc failed mask
000015BB  E5C3E5C4 40404040                         885+         DC    CL8'VCVD'         instruction name
000015C4  00000010                                  886+         DC    A(16)             result length
000015C8  000015F0                                  887+REA13    DC    A(RE13)           result address
                                                    888+*                                INSTRUCTION UNDER TEST ROUTINE
000015CC                                            889+X13      DS    0F
000015CC  E710 8F40 0006                 00001140   890+         VL    V1,V1FUDGE        pollute V1
000015D2  E320 5050 0004                 00001600   891+         lG    R2,RE13+16        get R2 source
000015D8  E612 0039 F058                            892+         VCVD  V1,R2,159,3       test instruction
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  LOC        OBJECT CODE       ADDR1     ADDR2    STMT

000015DE  E710 8F08 000E                 00001108   893+         VST   V1,V1OUTPUT       save
000015E4  B98D 0020                                 894+         EPSW  R2,R0             exptract psw
000015E8  5020 8EE4                      000010E4   895+         ST    R2,CCPSW              to save CC
000015EC  07FB                                      896+         BR    R11               return
000015F0                                            897+RE13     DC    0F
000015F0                                            898+         DROP  R5
000015F0  00000000 00000000                         899          DC    XL16'00000000000000000000000000000001F'   V1 result
000015F8  00000000 0000001F
00001600  FFFFFFFF FFFFFFFF                         900          DC    FD'-1'                                    R2 source
                                                    901
                                                    902          VRR_K VCVD,159,3,0                              INT_MAX
00001608                                            903+         DS    0FD
00001608                         00001608           904+         USING *,R5              base for test data and test routine
00001608  00001624                                  905+T14      DC    A(X14)            address of test routine
0000160C  000E                                      906+         DC    H'14'             test number
0000160E  00                                        907+         DC    XL1'00'
0000160F  9F                                        908+         DC    HL1'159'          i3
00001610  03                                        909+         DC    HL1'3'            m4
00001611  00                                        910+         DC    HL1'0'            cc
00001612  07                                        911+         DC    HL1'7'            cc failed mask
00001613  E5C3E5C4 40404040                         912+         DC    CL8'VCVD'         instruction name
0000161C  00000010                                  913+         DC    A(16)             result length
00001620  00001648                                  914+REA14    DC    A(RE14)           result address
                                                    915+*                                INSTRUCTION UNDER TEST ROUTINE
00001624                                            916+X14      DS    0F
00001624  E710 8F40 0006                 00001140   917+         VL    V1,V1FUDGE        pollute V1
0000162A  E320 5050 0004                 00001658   918+         lG    R2,RE14+16        get R2 source
00001630  E612 0039 F058                            919+         VCVD  V1,R2,159,3       test instruction
00001636  E710 8F08 000E                 00001108   920+         VST   V1,V1OUTPUT       save
0000163C  B98D 0020                                 921+         EPSW  R2,R0             exptract psw
00001640  5020 8EE4                      000010E4   922+         ST    R2,CCPSW              to save CC
00001644  07FB                                      923+         BR    R11               return
00001648                                            924+RE14     DC    0F
00001648                                            925+         DROP  R5
00001648  00000000 00000000                         926          DC    XL16'00000000000000000000002147483647F'   V1 result
00001650  00000214 7483647F
00001658  00000000 7FFFFFFF                         927          DC    FD'2147483647'                            R2 source
                                                    928
                                                    929          VRR_K VCVD,159,3,0                              INT_MIN
00001660                                            930+         DS    0FD
00001660                         00001660           931+         USING *,R5              base for test data and test routine
00001660  0000167C                                  932+T15      DC    A(X15)            address of test routine
00001664  000F                                      933+         DC    H'15'             test number
00001666  00                                        934+         DC    XL1'00'
00001667  9F                                        935+         DC    HL1'159'          i3
00001668  03                                        936+         DC    HL1'3'            m4
00001669  00                                        937+         DC    HL1'0'            cc
0000166A  07                                        938+         DC    HL1'7'            cc failed mask
0000166B  E5C3E5C4 40404040                         939+         DC    CL8'VCVD'         instruction name
00001674  00000010                                  940+         DC    A(16)             result length
00001678  000016A0                                  941+REA15    DC    A(RE15)           result address
                                                    942+*                                INSTRUCTION UNDER TEST ROUTINE
0000167C                                            943+X15      DS    0F
0000167C  E710 8F40 0006                 00001140   944+         VL    V1,V1FUDGE        pollute V1
00001682  E320 5050 0004                 000016B0   945+         lG    R2,RE15+16        get R2 source
00001688  E612 0039 F058                            946+         VCVD  V1,R2,159,3       test instruction
```

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  LOC        OBJECT CODE       ADDR1     ADDR2    STMT
0000168E  E710 8F08 000E                 00001108   947+         VST   V1,V1OUTPUT       save
00001694  B98D 0020                                 948+         EPSW  R2,R0             exptract psw
00001698  5020 8EE4                      000010E4   949+         ST    R2,CCPSW              to save CC
0000169C  07FB                                      950+         BR    R11               return
000016A0                                            951+RE15     DC    0F
000016A0                                            952+         DROP  R5
000016A0  00000000 00000000                         953          DC    XL16'0000000000000000000002147483648F'   V1 result
000016A8  00000214 7483648F
000016B0  FFFFFFFF 80000000                         954          DC    FD'-2147483648'                          R2 source
                                                    955
                                                    956 * VCVD         m4=   3 ( LB=0, P1=1 , CS=1)
                                                    957 *              i3= 137 ( IOM=1, RDC= 9)
                                                    958
                                                    959          VRR_K VCVD,137,3,0
000016B8                                            960+         DS    0FD
000016B8                         000016B8           961+         USING *,R5              base for test data and test routine
000016B8  000016D4                                  962+T16      DC    A(X16)            address of test routine
000016BC  0010                                      963+         DC    H'16'             test number
000016BE  00                                        964+         DC    XL1'00'
000016BF  89                                        965+         DC    HL1'137'          i3
000016C0  03                                        966+         DC    HL1'3'            m4
000016C1  00                                        967+         DC    HL1'0'            cc
000016C2  07                                        968+         DC    HL1'7'            cc failed mask
000016C3  E5C3E5C4 40404040                         969+         DC    CL8'VCVD'         instruction name
000016CC  00000010                                  970+         DC    A(16)             result length
000016D0  000016F8                                  971+REA16    DC    A(RE16)           result address
                                                    972+*                                INSTRUCTION UNDER TEST ROUTINE
000016D4                                            973+X16      DS    0F
000016D4  E710 8F40 0006                 00001140   974+         VL    V1,V1FUDGE        pollute V1
000016DA  E320 5050 0004                 00001708   975+         lG    R2,RE16+16        get R2 source
000016E0  E612 0038 9058                            976+         VCVD  V1,R2,137,3       test instruction
000016E6  E710 8F08 000E                 00001108   977+         VST   V1,V1OUTPUT       save
000016EC  B98D 0020                                 978+         EPSW  R2,R0             exptract psw
000016F0  5020 8EE4                      000010E4   979+         ST    R2,CCPSW              to save CC
000016F4  07FB                                      980+         BR    R11               return
000016F8                                            981+RE16     DC    0F
000016F8                                            982+         DROP  R5
000016F8  00000000 00000000                         983          DC    XL16'00000000000000000000000000000000F'  V1 result
00001700  00000000 0000000F
00001708  00000000 00000000                         984          DC    FD'0'                                    R2 source
                                                    985
                                                    986          VRR_K VCVD,137,3,0
00001710                                            987+         DS    0FD
00001710                         00001710           988+         USING *,R5              base for test data and test routine
00001710  0000172C                                  989+T17      DC    A(X17)            address of test routine
00001714  0011                                      990+         DC    H'17'             test number
00001716  00                                        991+         DC    XL1'00'
00001717  89                                        992+         DC    HL1'137'          i3
00001718  03                                        993+         DC    HL1'3'            m4
00001719  00                                        994+         DC    HL1'0'            cc
0000171A  07                                        995+         DC    HL1'7'            cc failed mask
0000171B  E5C3E5C4 40404040                         996+         DC    CL8'VCVD'         instruction name
00001724  00000010                                  997+         DC    A(16)             result length
00001728  00001750                                  998+REA17    DC    A(RE17)           result address
                                                    999+*                                INSTRUCTION UNDER TEST ROUTINE
0000172C                                           1000+X17      DS    0F
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

0000172C  E710 8F40 0006                 00001140  1001+         VL    V1,V1FUDGE        pollute V1
00001732  E320 5050 0004                 00001760  1002+         lG    R2,RE17+16        get R2 source
00001738  E612 0038 9058                           1003+         VCVD  V1,R2,137,3       test instruction
0000173E  E710 8F08 000E                 00001108  1004+         VST   V1,V1OUTPUT       save
00001744  B98D 0020                                1005+         EPSW  R2,R0             exptract psw
00001748  5020 8EE4                      000010E4  1006+         ST    R2,CCPSW              to save CC
0000174C  07FB                                     1007+         BR    R11               return
00001750                                           1008+RE17     DC    0F
00001750                                           1009+         DROP  R5
00001750  00000000 00000000                        1010          DC    XL16'00000000000000000000000000000001F'   V1 result
00001758  00000000 0000001F
00001760  00000000 00000001                        1011          DC    FD'1'                                     R2 source
                                                   1012
                                                   1013          VRR_K VCVD,137,3,0
00001768                                           1014+         DS    0FD
00001768                           00001768        1015+         USING *,R5              base for test data and test routine
00001768  00001784                                 1016+T18      DC    A(X18)            address of test routine
0000176C  0012                                     1017+         DC    H'18'             test number
0000176E  00                                       1018+         DC    XL1'00'
0000176F  89                                       1019+         DC    HL1'137'          i3
00001770  03                                       1020+         DC    HL1'3'            m4
00001771  00                                       1021+         DC    HL1'0'            cc
00001772  07                                       1022+         DC    HL1'7'            cc failed mask
00001773  E5C3E5C4 40404040                        1023+         DC    CL8'VCVD'         instruction name
0000177C  00000010                                 1024+         DC    A(16)             result length
00001780  000017A8                                 1025+REA18    DC    A(RE18)           result address
                                                   1026+*                                INSTRUCTION UNDER TEST ROUTINE
00001784                                           1027+X18      DS    0F
00001784  E710 8F40 0006                 00001140  1028+         VL    V1,V1FUDGE        pollute V1
0000178A  E320 5050 0004                 000017B8  1029+         lG    R2,RE18+16        get R2 source
00001790  E612 0038 9058                           1030+         VCVD  V1,R2,137,3       test instruction
00001796  E710 8F08 000E                 00001108  1031+         VST   V1,V1OUTPUT       save
0000179C  B98D 0020                                1032+         EPSW  R2,R0             exptract psw
000017A0  5020 8EE4                      000010E4  1033+         ST    R2,CCPSW              to save CC
000017A4  07FB                                     1034+         BR    R11               return
000017A8                                           1035+RE18     DC    0F
000017A8                                           1036+         DROP  R5
000017A8  00000000 00000000                        1037          DC    XL16'00000000000000000000000000000001F'   V1 result
000017B0  00000000 0000001F
000017B8  FFFFFFFF FFFFFFFF                        1038          DC    FD'-1'                                    R2 source
                                                   1039
                                                   1040          VRR_K VCVD,137,3,3                              INT_MAX
000017C0                                           1041+         DS    0FD
000017C0                           000017C0        1042+         USING *,R5              base for test data and test routine
000017C0  000017DC                                 1043+T19      DC    A(X19)            address of test routine
000017C4  0013                                     1044+         DC    H'19'             test number
000017C6  00                                       1045+         DC    XL1'00'
000017C7  89                                       1046+         DC    HL1'137'          i3
000017C8  03                                       1047+         DC    HL1'3'            m4
000017C9  03                                       1048+         DC    HL1'3'            cc
000017CA  0E                                       1049+         DC    HL1'14'           cc failed mask
000017CB  E5C3E5C4 40404040                        1050+         DC    CL8'VCVD'         instruction name
000017D4  00000010                                 1051+         DC    A(16)             result length
000017D8  00001800                                 1052+REA19    DC    A(RE19)           result address
                                                   1053+*                                INSTRUCTION UNDER TEST ROUTINE
000017DC                                           1054+X19      DS    0F
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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
000017DC  E710 8F40 0006                 00001140  1055+         VL    V1,V1FUDGE        pollute V1
000017E2  E320 5050 0004                 00001810  1056+         lG    R2,RE19+16        get R2 source
000017E8  E612 0038 9058                           1057+         VCVD  V1,R2,137,3       test instruction
000017EE  E710 8F08 000E                 00001108  1058+         VST   V1,V1OUTPUT       save
000017F4  B98D 0020                                1059+         EPSW  R2,R0             exptract psw
000017F8  5020 8EE4                      000010E4  1060+         ST    R2,CCPSW              to save CC
000017FC  07FB                                     1061+         BR    R11               return
00001800                                           1062+RE19     DC    0F
00001800                                           1063+         DROP  R5
00001800  00000000 00000000                        1064          DC    XL16'00000000000000000000000147483647F'   V1 result
00001808  00000014 7483647F
00001810  00000000 7FFFFFFF                        1065          DC    FD'2147483647'                            R2 source
                                                   1066
                                                   1067          VRR_K VCVD,137,3,3                              INT_MIN
00001818                                           1068+         DS    0FD
00001818                           00001818        1069+         USING *,R5              base for test data and test routine
00001818  00001834                                 1070+T20      DC    A(X20)            address of test routine
0000181C  0014                                     1071+         DC    H'20'             test number
0000181E  00                                       1072+         DC    XL1'00'
0000181F  89                                       1073+         DC    HL1'137'          i3
00001820  03                                       1074+         DC    HL1'3'            m4
00001821  03                                       1075+         DC    HL1'3'            cc
00001822  0E                                       1076+         DC    HL1'14'           cc failed mask
00001823  E5C3E5C4 40404040                        1077+         DC    CL8'VCVD'         instruction name
0000182C  00000010                                 1078+         DC    A(16)             result length
00001830  00001858                                 1079+REA20    DC    A(RE20)           result address
                                                   1080+*                                INSTRUCTION UNDER TEST ROUTINE
00001834                                           1081+X20      DS    0F
00001834  E710 8F40 0006                 00001140  1082+         VL    V1,V1FUDGE        pollute V1
0000183A  E320 5050 0004                 00001868  1083+         lG    R2,RE20+16        get R2 source
00001840  E612 0038 9058                           1084+         VCVD  V1,R2,137,3       test instruction
00001846  E710 8F08 000E                 00001108  1085+         VST   V1,V1OUTPUT       save
0000184C  B98D 0020                                1086+         EPSW  R2,R0             exptract psw
00001850  5020 8EE4                      000010E4  1087+         ST    R2,CCPSW              to save CC
00001854  07FB                                     1088+         BR    R11               return
00001858                                           1089+RE20     DC    0F
00001858                                           1090+         DROP  R5
00001858  00000000 00000000                        1091          DC    XL16'00000000000000000000000147483648F'   V1 result
00001860  00000014 7483648F
00001868  FFFFFFFF 80000000                        1092          DC    FD'-2147483648'
                                                   1093
                                                   1094 *------------------------------------------------------------------------
                                                   1095 * VCVD          m4=   9 ( LB=1, P1=0 , CS=1)
                                                   1096 *               i3= 159 ( IOM=1, RDC=31)
                                                   1097
                                                   1098          VRR_K VCVD,159,9,0
00001870                                           1099+         DS    0FD
00001870                           00001870        1100+         USING *,R5              base for test data and test routine
00001870  0000188C                                 1101+T21      DC    A(X21)            address of test routine
00001874  0015                                     1102+         DC    H'21'             test number
00001876  00                                       1103+         DC    XL1'00'
00001877  9F                                       1104+         DC    HL1'159'          i3
00001878  09                                       1105+         DC    HL1'9'            m4
00001879  00                                       1106+         DC    HL1'0'            cc
0000187A  07                                       1107+         DC    HL1'7'            cc failed mask
0000187B  E5C3E5C4 40404040                        1108+         DC    CL8'VCVD'         instruction name
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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00001884  00000010                                1109+         DC    A(16)             result length
00001888  000018B0                                1110+REA21    DC    A(RE21)           result address
                                                  1111+*                                INSTRUCTION UNDER TEST ROUTINE
0000188C                                          1112+X21      DS    0F
0000188C  E710 8F40 0006                 00001140 1113+         VL    V1,V1FUDGE        pollute V1
00001892  E320 5050 0004                 000018C0 1114+         lG    R2,RE21+16        get R2 source
00001898  E612 0099 F058                          1115+         VCVD  V1,R2,159,9       test instruction
0000189E  E710 8F08 000E                 00001108 1116+         VST   V1,V1OUTPUT       save
000018A4  B98D 0020                               1117+         EPSW  R2,R0             exptract psw
000018A8  5020 8EE4                      000010E4 1118+         ST    R2,CCPSW              to save CC
000018AC  07FB                                    1119+         BR    R11               return
000018B0                                          1120+RE21     DC    0F
000018B0                                          1121+         DROP  R5
000018B0  00000000 00000000                       1122          DC    XL16'0000000000000000000000000000000C'   V1 result
000018B8  00000000 0000000C
000018C0  00000000 00000000                       1123          DC    FD'0'                                    R2 source
                                                  1124
                                                  1125          VRR_K VCVD,159,9,0
000018C8                                          1126+         DS    0FD
000018C8                  000018C8                1127+         USING *,R5              base for test data and test routine
000018C8  000018E4                                1128+T22      DC    A(X22)            address of test routine
000018CC  0016                                    1129+         DC    H'22'             test number
000018CE  00                                      1130+         DC    XL1'00'
000018CF  9F                                      1131+         DC    HL1'159'          i3
000018D0  09                                      1132+         DC    HL1'9'            m4
000018D1  00                                      1133+         DC    HL1'0'            cc
000018D2  07                                      1134+         DC    HL1'7'            cc failed mask
000018D3  E5C3E5C4 40404040                       1135+         DC    CL8'VCVD'         instruction name
000018DC  00000010                                1136+         DC    A(16)             result length
000018E0  00001908                                1137+REA22    DC    A(RE22)           result address
                                                  1138+*                                INSTRUCTION UNDER TEST ROUTINE
000018E4                                          1139+X22      DS    0F
000018E4  E710 8F40 0006                 00001140 1140+         VL    V1,V1FUDGE        pollute V1
000018EA  E320 5050 0004                 00001918 1141+         lG    R2,RE22+16        get R2 source
000018F0  E612 0099 F058                          1142+         VCVD  V1,R2,159,9       test instruction
000018F6  E710 8F08 000E                 00001108 1143+         VST   V1,V1OUTPUT       save
000018FC  B98D 0020                               1144+         EPSW  R2,R0             exptract psw
00001900  5020 8EE4                      000010E4 1145+         ST    R2,CCPSW              to save CC
00001904  07FB                                    1146+         BR    R11               return
00001908                                          1147+RE22     DC    0F
00001908                                          1148+         DROP  R5
00001908  00000000 00000000                       1149          DC    XL16'0000000000000000000000000000001C'   V1 result
00001910  00000000 0000001C
00001918  00000000 00000001                       1150          DC    FD'1'                                    R2 source
                                                  1151
                                                  1152          VRR_K VCVD,159,9,0                             UINT_MAX
00001920                                          1153+         DS    0FD
00001920                  00001920                1154+         USING *,R5              base for test data and test routine
00001920  0000193C                                1155+T23      DC    A(X23)            address of test routine
00001924  0017                                    1156+         DC    H'23'             test number
00001926  00                                      1157+         DC    XL1'00'
00001927  9F                                      1158+         DC    HL1'159'          i3
00001928  09                                      1159+         DC    HL1'9'            m4
00001929  00                                      1160+         DC    HL1'0'            cc
0000192A  07                                      1161+         DC    HL1'7'            cc failed mask
0000192B  E5C3E5C4 40404040                       1162+         DC    CL8'VCVD'         instruction name
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00001934  00000010                                1163+         DC    A(16)              result length
00001938  00001960                                1164+REA23    DC    A(RE23)            result address
                                                  1165+*                                 INSTRUCTION UNDER TEST ROUTINE
0000193C                                          1166+X23      DS    0F
0000193C  E710 8F40 0006                 00001140 1167+         VL    V1,V1FUDGE         pollute V1
00001942  E320 5050 0004                 00001970 1168+         lG    R2,RE23+16         get R2 source
00001948  E612 0099 F058                          1169+         VCVD  V1,R2,159,9        test instruction
0000194E  E710 8F08 000E                 00001108 1170+         VST   V1,V1OUTPUT        save
00001954  B98D 0020                               1171+         EPSW  R2,R0              exptract psw
00001958  5020 8EE4                      000010E4 1172+         ST    R2,CCPSW               to save CC
0000195C  07FB                                    1173+         BR    R11                return
00001960                                          1174+RE23     DC    0F
00001960                                          1175+         DROP  R5
00001960  00000000 00000000                       1176          DC    XL16'00000000000000000000004294967295C'   V1 result
00001968  00000429 4967295C
00001970  FFFFFFFF FFFFFFFF                       1177          DC    FD'-1'                                    R2 source
                                                  1178
                                                  1179          VRR_K VCVD,159,9,0                              INT_MAX
00001978                                          1180+         DS    0FD
00001978                  00001978                1181+         USING *,R5               base for test data and test routine
00001978  00001994                                1182+T24      DC    A(X24)             address of test routine
0000197C  0018                                    1183+         DC    H'24'              test number
0000197E  00                                      1184+         DC    XL1'00'
0000197F  9F                                      1185+         DC    HL1'159'           i3
00001980  09                                      1186+         DC    HL1'9'             m4
00001981  00                                      1187+         DC    HL1'0'             cc
00001982  07                                      1188+         DC    HL1'7'             cc failed mask
00001983  E5C3E5C4 40404040                       1189+         DC    CL8'VCVD'          instruction name
0000198C  00000010                                1190+         DC    A(16)              result length
00001990  000019B8                                1191+REA24    DC    A(RE24)            result address
                                                  1192+*                                 INSTRUCTION UNDER TEST ROUTINE
00001994                                          1193+X24      DS    0F
00001994  E710 8F40 0006                 00001140 1194+         VL    V1,V1FUDGE         pollute V1
0000199A  E320 5050 0004                 000019C8 1195+         lG    R2,RE24+16         get R2 source
000019A0  E612 0099 F058                          1196+         VCVD  V1,R2,159,9        test instruction
000019A6  E710 8F08 000E                 00001108 1197+         VST   V1,V1OUTPUT        save
000019AC  B98D 0020                               1198+         EPSW  R2,R0              exptract psw
000019B0  5020 8EE4                      000010E4 1199+         ST    R2,CCPSW               to save CC
000019B4  07FB                                    1200+         BR    R11                return
000019B8                                          1201+RE24     DC    0F
000019B8                                          1202+         DROP  R5
000019B8  00000000 00000000                       1203          DC    XL16'00000000000000000000002147483647C'   V1 result
000019C0  00000214 7483647C
000019C8  00000000 7FFFFFFF                       1204          DC    FD'2147483647'                            R2 source
                                                  1205
                                                  1206          VRR_K VCVD,159,9,0                              INT_MIN
000019D0                                          1207+         DS    0FD
000019D0                  000019D0                1208+         USING *,R5               base for test data and test routine
000019D0  000019EC                                1209+T25      DC    A(X25)             address of test routine
000019D4  0019                                    1210+         DC    H'25'              test number
000019D6  00                                      1211+         DC    XL1'00'
000019D7  9F                                      1212+         DC    HL1'159'           i3
000019D8  09                                      1213+         DC    HL1'9'             m4
000019D9  00                                      1214+         DC    HL1'0'             cc
000019DA  07                                      1215+         DC    HL1'7'             cc failed mask
000019DB  E5C3E5C4 40404040                       1216+         DC    CL8'VCVD'          instruction name
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

000019E4  00000010                                 1217+          DC    A(16)              result length
000019E8  00001A10                                 1218+REA25     DC    A(RE25)            result address
                                                   1219+*                                  INSTRUCTION UNDER TEST ROUTINE
000019EC                                           1220+X25       DS    0F
000019EC  E710 8F40 0006                 00001140  1221+           VL    V1,V1FUDGE         pollute V1
000019F2  E320 5050 0004                 00001A20  1222+           lG    R2,RE25+16         get R2 source
000019F8  E612 0099 F058                           1223+          VCVD  V1,R2,159,9        test instruction
000019FE  E710 8F08 000E                 00001108  1224+          VST   V1,V1OUTPUT        save
00001A04  B98D 0020                                1225+          EPSW  R2,R0              exptract psw
00001A08  5020 8EE4                      000010E4  1226+          ST    R2,CCPSW                 to save CC
00001A0C  07FB                                     1227+          BR    R11                return
00001A10                                           1228+RE25      DC    0F
00001A10                                           1229+          DROP  R5
00001A10  00000000 00000000                        1230           DC    XL16'00000000000000000000002147483648C'   V1 result
00001A18  00000214 7483648C
00001A20  FFFFFFFF 80000000                        1231           DC    FD'-2147483648'                           R2 source
                                                   1232
                                                   1233 * VCVD          m4=   9 ( LB=1, P1=0 , CS=1)
                                                   1234 *               i3= 137 ( IOM=1, RDC= 9)
                                                   1235
                                                   1236           VRR_K VCVD,137,9,0
00001A28                                           1237+          DS    0FD
00001A28                           00001A28        1238+          USING *,R5               base for test data and test routine
00001A28  00001A44                                 1239+T26       DC    A(X26)             address of test routine
00001A2C  001A                                     1240+          DC    H'26'              test number
00001A2E  00                                       1241+          DC    XL1'00'
00001A2F  89                                       1242+          DC    HL1'137'           i3
00001A30  09                                       1243+          DC    HL1'9'             m4
00001A31  00                                       1244+          DC    HL1'0'             cc
00001A32  07                                       1245+          DC    HL1'7'             cc failed mask
00001A33  E5C3E5C4 40404040                        1246+          DC    CL8'VCVD'          instruction name
00001A3C  00000010                                 1247+          DC    A(16)              result length
00001A40  00001A68                                 1248+REA26     DC    A(RE26)            result address
                                                   1249+*                                  INSTRUCTION UNDER TEST ROUTINE
00001A44                                           1250+X26       DS    0F
00001A44  E710 8F40 0006                 00001140  1251+          VL    V1,V1FUDGE         pollute V1
00001A4A  E320 5050 0004                 00001A78  1252+          lG    R2,RE26+16         get R2 source
00001A50  E612 0098 9058                           1253+          VCVD  V1,R2,137,9        test instruction
00001A56  E710 8F08 000E                 00001108  1254+          VST   V1,V1OUTPUT        save
00001A5C  B98D 0020                                1255+          EPSW  R2,R0              exptract psw
00001A60  5020 8EE4                      000010E4  1256+          ST    R2,CCPSW                 to save CC
00001A64  07FB                                     1257+          BR    R11                return
00001A68                                           1258+RE26      DC    0F
00001A68                                           1259+          DROP  R5
00001A68  00000000 00000000                        1260           DC    XL16'0000000000000000000000000000000C'   V1 result
00001A70  00000000 0000000C
00001A78  00000000 00000000                        1261           DC    FD'0'                                    R2 source
                                                   1262
                                                   1263           VRR_K VCVD,137,9,0
00001A80                                           1264+          DS    0FD
00001A80                           00001A80        1265+          USING *,R5               base for test data and test routine
00001A80  00001A9C                                 1266+T27       DC    A(X27)             address of test routine
00001A84  001B                                     1267+          DC    H'27'              test number
00001A86  00                                       1268+          DC    XL1'00'
00001A87  89                                       1269+          DC    HL1'137'           i3
00001A88  09                                       1270+          DC    HL1'9'             m4
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00001A89  00                                       1271+          DC    HL1'0'              cc
00001A8A  07                                       1272+          DC    HL1'7'              cc failed mask
00001A8B  E5C3E5C4 40404040                        1273+          DC    CL8'VCVD'           instruction name
00001A94  00000010                                 1274+          DC    A(16)               result length
00001A98  00001AC0                                 1275+REA27     DC    A(RE27)             result address
                                                   1276+*                                   INSTRUCTION UNDER TEST ROUTINE
00001A9C                                           1277+X27       DS    0F
00001A9C  E710 8F40 0006                 00001140  1278+          VL    V1,V1FUDGE          pollute V1
00001AA2  E320 5050 0004                 00001AD0  1279+          lG    R2,RE27+16          get R2 source
00001AA8  E612 0098 9058                           1280+          VCVD  V1,R2,137,9         test instruction
00001AAE  E710 8F08 000E                 00001108  1281+          VST   V1,V1OUTPUT         save
00001AB4  B98D 0020                                1282+          EPSW  R2,R0               exptract psw
00001AB8  5020 8EE4                      000010E4  1283+          ST    R2,CCPSW                to save CC
00001ABC  07FB                                     1284+          BR    R11                 return
00001AC0                                           1285+RE27      DC    0F
00001AC0                                           1286+          DROP  R5
00001AC0  00000000 00000000                        1287           DC    XL16'0000000000000000000000000000001C'   V1 result
00001AC8  00000000 0000001C
00001AD0  00000000 00000001                        1288           DC    FD'1'                    R2 source
                                                   1289
                                                   1290           VRR_K VCVD,137,9,3             UINT_MAX
00001AD8                                           1291+          DS    0FD
00001AD8                   00001AD8                1292+          USING *,R5                base for test data and test routine
00001AD8  00001AF4                                 1293+T28       DC    A(X28)              address of test routine
00001ADC  001C                                     1294+          DC    H'28'               test number
00001ADE  00                                       1295+          DC    XL1'00'
00001ADF  89                                       1296+          DC    HL1'137'            i3
00001AE0  09                                       1297+          DC    HL1'9'              m4
00001AE1  03                                       1298+          DC    HL1'3'              cc
00001AE2  0E                                       1299+          DC    HL1'14'             cc failed mask
00001AE3  E5C3E5C4 40404040                        1300+          DC    CL8'VCVD'           instruction name
00001AEC  00000010                                 1301+          DC    A(16)               result length
00001AF0  00001B18                                 1302+REA28     DC    A(RE28)             result address
                                                   1303+*                                   INSTRUCTION UNDER TEST ROUTINE
00001AF4                                           1304+X28       DS    0F
00001AF4  E710 8F40 0006                 00001140  1305+          VL    V1,V1FUDGE          pollute V1
00001AFA  E320 5050 0004                 00001B28  1306+          lG    R2,RE28+16          get R2 source
00001B00  E612 0098 9058                           1307+          VCVD  V1,R2,137,9         test instruction
00001B06  E710 8F08 000E                 00001108  1308+          VST   V1,V1OUTPUT         save
00001B0C  B98D 0020                                1309+          EPSW  R2,R0               exptract psw
00001B10  5020 8EE4                      000010E4  1310+          ST    R2,CCPSW                to save CC
00001B14  07FB                                     1311+          BR    R11                 return
00001B18                                           1312+RE28      DC    0F
00001B18                                           1313+          DROP  R5
00001B18  00000000 00000000                        1314           DC    XL16'0000000000000000000000294967295C'   V1 result
00001B20  00000029 4967295C
00001B28  FFFFFFFF FFFFFFFF                        1315           DC    FD'-1'                   R2 source
                                                   1316
                                                   1317           VRR_K VCVD,137,9,3             INT_MAX
00001B30                                           1318+          DS    0FD
00001B30                   00001B30                1319+          USING *,R5                base for test data and test routine
00001B30  00001B4C                                 1320+T29       DC    A(X29)              address of test routine
00001B34  001D                                     1321+          DC    H'29'               test number
00001B36  00                                       1322+          DC    XL1'00'
00001B37  89                                       1323+          DC    HL1'137'            i3
00001B38  09                                       1324+          DC    HL1'9'              m4
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00001B39  03                                      1325+          DC    HL1'3'              cc
00001B3A  0E                                      1326+          DC    HL1'14'             cc failed mask
00001B3B  E5C3E5C4 40404040                       1327+          DC    CL8'VCVD'           instruction name
00001B44  00000010                                1328+          DC    A(16)               result length
00001B48  00001B70                                1329+REA29     DC    A(RE29)             result address
                                                  1330+*                                   INSTRUCTION UNDER TEST ROUTINE
00001B4C                                          1331+X29       DS    0F
00001B4C  E710 8F40 0006                 00001140 1332+          VL    V1,V1FUDGE          pollute V1
00001B52  E320 5050 0004                 00001B80 1333+          lG    R2,RE29+16          get R2 source
00001B58  E612 0098 9058                          1334+          VCVD  V1,R2,137,9         test instruction
00001B5E  E710 8F08 000E                 00001108 1335+          VST   V1,V1OUTPUT         save
00001B64  B98D 0020                               1336+          EPSW  R2,R0               exptract psw
00001B68  5020 8EE4                      000010E4 1337+          ST    R2,CCPSW                to save CC
00001B6C  07FB                                    1338+          BR    R11                 return
00001B70                                          1339+RE29      DC    0F
00001B70                                          1340+          DROP  R5
00001B70  00000000 00000000                       1341           DC    XL16'0000000000000000000000147483647C'   V1 result
00001B78  00000014 7483647C
00001B80  00000000 7FFFFFFF                       1342           DC    FD'2147483647'                           R2 source
                                                  1343
                                                  1344           VRR_K VCVD,137,9,3                             INT_MIN
00001B88                                          1345+          DS    0FD
00001B88                  00001B88                1346+          USING *,R5                base for test data and test routine
00001B88  00001BA4                                1347+T30       DC    A(X30)              address of test routine
00001B8C  001E                                    1348+          DC    H'30'               test number
00001B8E  00                                      1349+          DC    XL1'00'
00001B8F  89                                      1350+          DC    HL1'137'            i3
00001B90  09                                      1351+          DC    HL1'9'              m4
00001B91  03                                      1352+          DC    HL1'3'              cc
00001B92  0E                                      1353+          DC    HL1'14'             cc failed mask
00001B93  E5C3E5C4 40404040                       1354+          DC    CL8'VCVD'           instruction name
00001B9C  00000010                                1355+          DC    A(16)               result length
00001BA0  00001BC8                                1356+REA30     DC    A(RE30)             result address
                                                  1357+*                                   INSTRUCTION UNDER TEST ROUTINE
00001BA4                                          1358+X30       DS    0F
00001BA4  E710 8F40 0006                 00001140 1359+          VL    V1,V1FUDGE          pollute V1
00001BAA  E320 5050 0004                 00001BD8 1360+          lG    R2,RE30+16          get R2 source
00001BB0  E612 0098 9058                          1361+          VCVD  V1,R2,137,9         test instruction
00001BB6  E710 8F08 000E                 00001108 1362+          VST   V1,V1OUTPUT         save
00001BBC  B98D 0020                               1363+          EPSW  R2,R0               exptract psw
00001BC0  5020 8EE4                      000010E4 1364+          ST    R2,CCPSW                to save CC
00001BC4  07FB                                    1365+          BR    R11                 return
00001BC8                                          1366+RE30      DC    0F
00001BC8                                          1367+          DROP  R5
00001BC8  00000000 00000000                       1368           DC    XL16'0000000000000000000000147483648C'   V1 result
00001BD0  00000014 7483648C
00001BD8  FFFFFFFF 80000000                       1369           DC    FD'-2147483648'
                                                  1370
                                                  1371 *-------------------------------------------------------------------
                                                  1372 * VCVD          m4=  11 ( LB=1, P1=1 , CS=1)
                                                  1373 *               i3= 159 ( IOM=1, RDC=31)
                                                  1374
                                                  1375           VRR_K VCVD,159,11,0
00001BE0                                          1376+          DS    0FD
00001BE0                  00001BE0                1377+          USING *,R5                base for test data and test routine
00001BE0  00001BFC                                1378+T31       DC    A(X31)              address of test routine
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00001BE4  001F                                    1379+          DC    H'31'              test number
00001BE6  00                                      1380+          DC    XL1'00'
00001BE7  9F                                      1381+          DC    HL1'159'           i3
00001BE8  0B                                      1382+          DC    HL1'11'            m4
00001BE9  00                                      1383+          DC    HL1'0'             cc
00001BEA  07                                      1384+          DC    HL1'7'             cc failed mask
00001BEB  E5C3E5C4 40404040                       1385+          DC    CL8'VCVD'          instruction name
00001BF4  00000010                                1386+          DC    A(16)              result length
00001BF8  00001C20                                1387+REA31     DC    A(RE31)            result address
                                                  1388+*                                  INSTRUCTION UNDER TEST ROUTINE
00001BFC                                          1389+X31       DS    0F
00001BFC  E710 8F40 0006              00001140    1390+          VL    V1,V1FUDGE         pollute V1
00001C02  E320 5050 0004              00001C30    1391+          lG    R2,RE31+16         get R2 source
00001C08  E612 00B9 F058                          1392+          VCVD  V1,R2,159,11       test instruction
00001C0E  E710 8F08 000E              00001108    1393+          VST   V1,V1OUTPUT        save
00001C14  B98D 0020                               1394+          EPSW  R2,R0              exptract psw
00001C18  5020 8EE4                   000010E4    1395+          ST    R2,CCPSW               to save CC
00001C1C  07FB                                    1396+          BR    R11                return
00001C20                                          1397+RE31      DC    0F
00001C20                                          1398+          DROP  R5
00001C20  00000000 00000000                       1399           DC    XL16'00000000000000000000000000000000F'   V1 result
00001C28  00000000 0000000F
00001C30  00000000 00000000                       1400           DC    FD'0'                                     R2 source
                                                  1401
                                                  1402           VRR_K VCVD,159,11,0
00001C38                                          1403+          DS    0FD
00001C38                      00001C38            1404+          USING *,R5               base for test data and test routine
00001C38  00001C54                                1405+T32       DC    A(X32)             address of test routine
00001C3C  0020                                    1406+          DC    H'32'              test number
00001C3E  00                                      1407+          DC    XL1'00'
00001C3F  9F                                      1408+          DC    HL1'159'           i3
00001C40  0B                                      1409+          DC    HL1'11'            m4
00001C41  00                                      1410+          DC    HL1'0'             cc
00001C42  07                                      1411+          DC    HL1'7'             cc failed mask
00001C43  E5C3E5C4 40404040                       1412+          DC    CL8'VCVD'          instruction name
00001C4C  00000010                                1413+          DC    A(16)              result length
00001C50  00001C78                                1414+REA32     DC    A(RE32)            result address
                                                  1415+*                                  INSTRUCTION UNDER TEST ROUTINE
00001C54                                          1416+X32       DS    0F
00001C54  E710 8F40 0006              00001140    1417+          VL    V1,V1FUDGE         pollute V1
00001C5A  E320 5050 0004              00001C88    1418+          lG    R2,RE32+16         get R2 source
00001C60  E612 00B9 F058                          1419+          VCVD  V1,R2,159,11       test instruction
00001C66  E710 8F08 000E              00001108    1420+          VST   V1,V1OUTPUT        save
00001C6C  B98D 0020                               1421+          EPSW  R2,R0              exptract psw
00001C70  5020 8EE4                   000010E4    1422+          ST    R2,CCPSW               to save CC
00001C74  07FB                                    1423+          BR    R11                return
00001C78                                          1424+RE32      DC    0F
00001C78                                          1425+          DROP  R5
00001C78  00000000 00000000                       1426           DC    XL16'00000000000000000000000000000001F'   V1 result
00001C80  00000000 0000001F
00001C88  00000000 00000001                       1427           DC    FD'1'                                     R2 source
                                                  1428
                                                  1429           VRR_K VCVD,159,11,0                              UINT_MAX
00001C90                                          1430+          DS    0FD
00001C90                      00001C90            1431+          USING *,R5               base for test data and test routine
00001C90  00001CAC                                1432+T33       DC    A(X33)             address of test routine
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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00001C94  0021                                    1433+          DC    H'33'              test number
00001C96  00                                      1434+          DC    XL1'00'
00001C97  9F                                      1435+          DC    HL1'159'           i3
00001C98  0B                                      1436+          DC    HL1'11'            m4
00001C99  00                                      1437+          DC    HL1'0'             cc
00001C9A  07                                      1438+          DC    HL1'7'             cc failed mask
00001C9B  E5C3E5C4 40404040                       1439+          DC    CL8'VCVD'          instruction name
00001CA4  00000010                                1440+          DC    A(16)              result length
00001CA8  00001CD0                                1441+REA33     DC    A(RE33)            result address
                                                  1442+*                                  INSTRUCTION UNDER TEST ROUTINE
00001CAC                                          1443+X33       DS    0F
00001CAC  E710 8F40 0006              00001140    1444+          VL    V1,V1FUDGE         pollute V1
00001CB2  E320 5050 0004              00001CE0    1445+          lG    R2,RE33+16         get R2 source
00001CB8  E612 00B9 F058                          1446+          VCVD  V1,R2,159,11       test instruction
00001CBE  E710 8F08 000E              00001108    1447+          VST   V1,V1OUTPUT        save
00001CC4  B98D 0020                               1448+          EPSW  R2,R0              exptract psw
00001CC8  5020 8EE4                   000010E4    1449+          ST    R2,CCPSW               to save CC
00001CCC  07FB                                    1450+          BR    R11                return
00001CD0                                          1451+RE33      DC    0F
00001CD0                                          1452+          DROP  R5
00001CD0  00000000 00000000                       1453           DC    XL16'00000000000000000000004294967295F'   V1 result
00001CD8  00000429 4967295F
00001CE0  FFFFFFFF FFFFFFFF                       1454           DC    FD'-1'                                    R2 source
                                                  1455
                                                  1456           VRR_K VCVD,159,11,0                              INT_MAX
00001CE8                                          1457+          DS    0FD
00001CE8                      00001CE8            1458+          USING *,R5               base for test data and test routine
00001CE8  00001D04                                1459+T34       DC    A(X34)             address of test routine
00001CEC  0022                                    1460+          DC    H'34'              test number
00001CEE  00                                      1461+          DC    XL1'00'
00001CEF  9F                                      1462+          DC    HL1'159'           i3
00001CF0  0B                                      1463+          DC    HL1'11'            m4
00001CF1  00                                      1464+          DC    HL1'0'             cc
00001CF2  07                                      1465+          DC    HL1'7'             cc failed mask
00001CF3  E5C3E5C4 40404040                       1466+          DC    CL8'VCVD'          instruction name
00001CFC  00000010                                1467+          DC    A(16)              result length
00001D00  00001D28                                1468+REA34     DC    A(RE34)            result address
                                                  1469+*                                  INSTRUCTION UNDER TEST ROUTINE
00001D04                                          1470+X34       DS    0F
00001D04  E710 8F40 0006              00001140    1471+          VL    V1,V1FUDGE         pollute V1
00001D0A  E320 5050 0004              00001D38    1472+          lG    R2,RE34+16         get R2 source
00001D10  E612 00B9 F058                          1473+          VCVD  V1,R2,159,11       test instruction
00001D16  E710 8F08 000E              00001108    1474+          VST   V1,V1OUTPUT        save
00001D1C  B98D 0020                               1475+          EPSW  R2,R0              exptract psw
00001D20  5020 8EE4                   000010E4    1476+          ST    R2,CCPSW               to save CC
00001D24  07FB                                    1477+          BR    R11                return
00001D28                                          1478+RE34      DC    0F
00001D28                                          1479+          DROP  R5
00001D28  00000000 00000000                       1480           DC    XL16'00000000000000000000002147483647F'   V1 result
00001D30  00000214 7483647F
00001D38  00000000 7FFFFFFF                       1481           DC    FD'2147483647'                            R2 source
                                                  1482
                                                  1483           VRR_K VCVD,159,11,0                              INT_MIN
00001D40                                          1484+          DS    0FD
00001D40                      00001D40            1485+          USING *,R5               base for test data and test routine
00001D40  00001D5C                                1486+T35       DC    A(X35)             address of test routine
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00001D44  0023                                     1487+          DC    H'35'              test number
00001D46  00                                       1488+          DC    XL1'00'
00001D47  9F                                       1489+          DC    HL1'159'           i3
00001D48  0B                                       1490+          DC    HL1'11'            m4
00001D49  00                                       1491+          DC    HL1'0'             cc
00001D4A  07                                       1492+          DC    HL1'7'             cc failed mask
00001D4B  E5C3E5C4 40404040                        1493+          DC    CL8'VCVD'          instruction name
00001D54  00000010                                 1494+          DC    A(16)              result length
00001D58  00001D80                                 1495+REA35     DC    A(RE35)            result address
                                                   1496+*                                  INSTRUCTION UNDER TEST ROUTINE
00001D5C                                           1497+X35       DS    0F
00001D5C  E710 8F40 0006                 00001140  1498+          VL    V1,V1FUDGE         pollute V1
00001D62  E320 5050 0004                 00001D90  1499+          lG    R2,RE35+16         get R2 source
00001D68  E612 00B9 F058                           1500+          VCVD  V1,R2,159,11       test instruction
00001D6E  E710 8F08 000E                 00001108  1501+          VST   V1,V1OUTPUT        save
00001D74  B98D 0020                                1502+          EPSW  R2,R0              exptract psw
00001D78  5020 8EE4                      000010E4  1503+          ST    R2,CCPSW               to save CC
00001D7C  07FB                                     1504+          BR    R11                return
00001D80                                           1505+RE35      DC    0F
00001D80                                           1506+          DROP  R5
00001D80  00000000 00000000                        1507           DC    XL16'00000000000000000000002147483648F'   V1 result
00001D88  00000214 7483648F
00001D90  FFFFFFFF 80000000                        1508           DC    FD'-2147483648'                           R2 source
                                                   1509
                                                   1510 * VCVD          m4=  11 ( LB=1, P1=1 , CS=1)
                                                   1511 *               i3= 137 ( IOM=1, RDC= 9)
                                                   1512
                                                   1513           VRR_K VCVD,137,11,0
00001D98                                           1514+          DS    0FD
00001D98                 00001D98                  1515+          USING *,R5               base for test data and test routine
00001D98  00001DB4                                 1516+T36       DC    A(X36)             address of test routine
00001D9C  0024                                     1517+          DC    H'36'              test number
00001D9E  00                                       1518+          DC    XL1'00'
00001D9F  89                                       1519+          DC    HL1'137'           i3
00001DA0  0B                                       1520+          DC    HL1'11'            m4
00001DA1  00                                       1521+          DC    HL1'0'             cc
00001DA2  07                                       1522+          DC    HL1'7'             cc failed mask
00001DA3  E5C3E5C4 40404040                        1523+          DC    CL8'VCVD'          instruction name
00001DAC  00000010                                 1524+          DC    A(16)              result length
00001DB0  00001DD8                                 1525+REA36     DC    A(RE36)            result address
                                                   1526+*                                  INSTRUCTION UNDER TEST ROUTINE
00001DB4                                           1527+X36       DS    0F
00001DB4  E710 8F40 0006                 00001140  1528+          VL    V1,V1FUDGE         pollute V1
00001DBA  E320 5050 0004                 00001DE8  1529+          lG    R2,RE36+16         get R2 source
00001DC0  E612 00B8 9058                           1530+          VCVD  V1,R2,137,11       test instruction
00001DC6  E710 8F08 000E                 00001108  1531+          VST   V1,V1OUTPUT        save
00001DCC  B98D 0020                                1532+          EPSW  R2,R0              exptract psw
00001DD0  5020 8EE4                      000010E4  1533+          ST    R2,CCPSW               to save CC
00001DD4  07FB                                     1534+          BR    R11                return
00001DD8                                           1535+RE36      DC    0F
00001DD8                                           1536+          DROP  R5
00001DD8  00000000 00000000                        1537           DC    XL16'0000000000000000000000000000000F'   V1 result
00001DE0  00000000 0000000F
00001DE8  00000000 00000000                        1538           DC    FD'0'                                    R2 source
                                                   1539
                                                   1540           VRR_K VCVD,137,11,0
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00001DF0                                          1541+          DS    0FD
00001DF0                       00001DF0           1542+          USING *,R5              base for test data and test routine
00001DF0  00001E0C                                1543+T37       DC    A(X37)            address of test routine
00001DF4  0025                                    1544+          DC    H'37'             test number
00001DF6  00                                      1545+          DC    XL1'00'
00001DF7  89                                      1546+          DC    HL1'137'          i3
00001DF8  0B                                      1547+          DC    HL1'11'           m4
00001DF9  00                                      1548+          DC    HL1'0'            cc
00001DFA  07                                      1549+          DC    HL1'7'            cc failed mask
00001DFB  E5C3E5C4 40404040                       1550+          DC    CL8'VCVD'         instruction name
00001E04  00000010                                1551+          DC    A(16)             result length
00001E08  00001E30                                1552+REA37     DC    A(RE37)           result address
                                                  1553+*                                 INSTRUCTION UNDER TEST ROUTINE
00001E0C                                          1554+X37       DS    0F
00001E0C  E710 8F40 0006              00001140    1555+          VL    V1,V1FUDGE        pollute V1
00001E12  E320 5050 0004              00001E40    1556+          lG    R2,RE37+16        get R2 source
00001E18  E612 00B8 9058                          1557+          VCVD  V1,R2,137,11      test instruction
00001E1E  E710 8F08 000E              00001108    1558+          VST   V1,V1OUTPUT       save
00001E24  B98D 0020                               1559+          EPSW  R2,R0             exptract psw
00001E28  5020 8EE4                   000010E4    1560+          ST    R2,CCPSW              to save CC
00001E2C  07FB                                    1561+          BR    R11               return
00001E30                                          1562+RE37      DC    0F
00001E30                                          1563+          DROP  R5
00001E30  00000000 00000000                       1564           DC    XL16'0000000000000000000000000000001F'   V1 result
00001E38  00000000 0000001F
00001E40  00000000 00000001                       1565           DC    FD'1'                                    R2 source
                                                  1566
                                                  1567           VRR_K VCVD,137,11,3                             UINT_MAX
00001E48                                          1568+          DS    0FD
00001E48                       00001E48           1569+          USING *,R5              base for test data and test routine
00001E48  00001E64                                1570+T38       DC    A(X38)            address of test routine
00001E4C  0026                                    1571+          DC    H'38'             test number
00001E4E  00                                      1572+          DC    XL1'00'
00001E4F  89                                      1573+          DC    HL1'137'          i3
00001E50  0B                                      1574+          DC    HL1'11'           m4
00001E51  03                                      1575+          DC    HL1'3'            cc
00001E52  0E                                      1576+          DC    HL1'14'           cc failed mask
00001E53  E5C3E5C4 40404040                       1577+          DC    CL8'VCVD'         instruction name
00001E5C  00000010                                1578+          DC    A(16)             result length
00001E60  00001E88                                1579+REA38     DC    A(RE38)           result address
                                                  1580+*                                 INSTRUCTION UNDER TEST ROUTINE
00001E64                                          1581+X38       DS    0F
00001E64  E710 8F40 0006              00001140    1582+          VL    V1,V1FUDGE        pollute V1
00001E6A  E320 5050 0004              00001E98    1583+          lG    R2,RE38+16        get R2 source
00001E70  E612 00B8 9058                          1584+          VCVD  V1,R2,137,11      test instruction
00001E76  E710 8F08 000E              00001108    1585+          VST   V1,V1OUTPUT       save
00001E7C  B98D 0020                               1586+          EPSW  R2,R0             exptract psw
00001E80  5020 8EE4                   000010E4    1587+          ST    R2,CCPSW              to save CC
00001E84  07FB                                    1588+          BR    R11               return
00001E88                                          1589+RE38      DC    0F
00001E88                                          1590+          DROP  R5
00001E88  00000000 00000000                       1591           DC    XL16'0000000000000000000000294967295F'   V1 result
00001E90  00000029 4967295F
00001E98  FFFFFFFF FFFFFFFF                       1592           DC    FD'-1'                                   R2 source
                                                  1593
                                                  1594           VRR_K VCVD,137,11,3                             INT_MAX
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00001EA0                                           1595+          DS    0FD
00001EA0                      00001EA0             1596+          USING *,R5              base for test data and test routine
00001EA0  00001EBC                                 1597+T39       DC    A(X39)            address of test routine
00001EA4  0027                                     1598+          DC    H'39'             test number
00001EA6  00                                       1599+          DC    XL1'00'
00001EA7  89                                       1600+          DC    HL1'137'          i3
00001EA8  0B                                       1601+          DC    HL1'11'           m4
00001EA9  03                                       1602+          DC    HL1'3'            cc
00001EAA  0E                                       1603+          DC    HL1'14'           cc failed mask
00001EAB  E5C3E5C4 40404040                        1604+          DC    CL8'VCVD'         instruction name
00001EB4  00000010                                 1605+          DC    A(16)             result length
00001EB8  00001EE0                                 1606+REA39     DC    A(RE39)           result address
                                                   1607+*                                 INSTRUCTION UNDER TEST ROUTINE
00001EBC                                           1608+X39       DS    0F
00001EBC  E710 8F40 0006              00001140     1609+          VL    V1,V1FUDGE        pollute V1
00001EC2  E320 5050 0004              00001EF0     1610+          lG    R2,RE39+16        get R2 source
00001EC8  E612 00B8 9058                           1611+          VCVD  V1,R2,137,11      test instruction
00001ECE  E710 8F08 000E              00001108     1612+          VST   V1,V1OUTPUT       save
00001ED4  B98D 0020                                1613+          EPSW  R2,R0             exptract psw
00001ED8  5020 8EE4                   000010E4     1614+          ST    R2,CCPSW              to save CC
00001EDC  07FB                                     1615+          BR    R11               return
00001EE0                                           1616+RE39      DC    0F
00001EE0                                           1617+          DROP  R5
00001EE0  00000000 00000000                        1618           DC    XL16'00000000000000000000000147483647F'   V1 result
00001EE8  00000014 7483647F
00001EF0  00000000 7FFFFFFF                        1619           DC    FD'2147483647'                            R2 source
                                                   1620
                                                   1621           VRR_K VCVD,137,11,3                             INT_MIN
00001EF8                                           1622+          DS    0FD
00001EF8                      00001EF8             1623+          USING *,R5              base for test data and test routine
00001EF8  00001F14                                 1624+T40       DC    A(X40)            address of test routine
00001EFC  0028                                     1625+          DC    H'40'             test number
00001EFE  00                                       1626+          DC    XL1'00'
00001EFF  89                                       1627+          DC    HL1'137'          i3
00001F00  0B                                       1628+          DC    HL1'11'           m4
00001F01  03                                       1629+          DC    HL1'3'            cc
00001F02  0E                                       1630+          DC    HL1'14'           cc failed mask
00001F03  E5C3E5C4 40404040                        1631+          DC    CL8'VCVD'         instruction name
00001F0C  00000010                                 1632+          DC    A(16)             result length
00001F10  00001F38                                 1633+REA40     DC    A(RE40)           result address
                                                   1634+*                                 INSTRUCTION UNDER TEST ROUTINE
00001F14                                           1635+X40       DS    0F
00001F14  E710 8F40 0006              00001140     1636+          VL    V1,V1FUDGE        pollute V1
00001F1A  E320 5050 0004              00001F48     1637+          lG    R2,RE40+16        get R2 source
00001F20  E612 00B8 9058                           1638+          VCVD  V1,R2,137,11      test instruction
00001F26  E710 8F08 000E              00001108     1639+          VST   V1,V1OUTPUT       save
00001F2C  B98D 0020                                1640+          EPSW  R2,R0             exptract psw
00001F30  5020 8EE4                   000010E4     1641+          ST    R2,CCPSW              to save CC
00001F34  07FB                                     1642+          BR    R11               return
00001F38                                           1643+RE40      DC    0F
00001F38                                           1644+          DROP  R5
00001F38  00000000 00000000                        1645           DC    XL16'00000000000000000000000147483648F'   V1 result
00001F40  00000014 7483648F
00001F48  FFFFFFFF 80000000                        1646           DC    FD'-2147483648'
                                                   1647
                                                   1648
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

                                                   1649 *-------------------------------------------------------------------
                                                   1650 * VCVDG   - VECTOR CONVERT TO DECIMAL (64)
                                                   1651 *-------------------------------------------------------------------
                                                   1652 * VCVDG simple                 m4=   1 ( LB=0, P1=0 , CS=1)
                                                   1653 *                             m4=   3 ( LB=0, P1=1 , CS=1)
                                                   1654 *                             m4=   9 ( LB=1, P1=0 , CS=1)
                                                   1655 *                             m4=  11 ( LB=1, P1=1 , CS=1)
                                                   1656 *
                                                   1657 *                             i3= 137 ( IOM=1, RDC= 9)
                                                   1658 *                             i3= 159 ( IOM=1, RDC=31)
                                                   1659 *
                                                   1660 * VCVDG        m4=   1 ( LB=0, P1=0 , CS=1)
                                                   1661 *              i3= 159 ( IOM=1, RDC=31)
                                                   1662
                                                   1663          VRR_K VCVDG,159,1,0
00001F50                                           1664+         DS    0FD
00001F50                          00001F50         1665+         USING *,R5              base for test data and test routine
00001F50  00001F6C                                 1666+T41      DC    A(X41)            address of test routine
00001F54  0029                                     1667+         DC    H'41'             test number
00001F56  00                                       1668+         DC    XL1'00'
00001F57  9F                                       1669+         DC    HL1'159'          i3
00001F58  01                                       1670+         DC    HL1'1'            m4
00001F59  00                                       1671+         DC    HL1'0'            cc
00001F5A  07                                       1672+         DC    HL1'7'            cc failed mask
00001F5B  E5C3E5C4 C7404040                        1673+         DC    CL8'VCVDG'        instruction name
00001F64  00000010                                 1674+         DC    A(16)             result length
00001F68  00001F90                                 1675+REA41    DC    A(RE41)           result address
                                                   1676+*                                INSTRUCTION UNDER TEST ROUTINE
00001F6C                                           1677+X41      DS    0F
00001F6C  E710 8F40 0006              00001140     1678+         VL    V1,V1FUDGE        pollute V1
00001F72  E320 5050 0004              00001FA0     1679+         lG    R2,RE41+16        get R2 source
00001F78  E612 0019 F05A                           1680+         VCVDG V1,R2,159,1       test instruction
00001F7E  E710 8F08 000E              00001108     1681+         VST   V1,V1OUTPUT       save
00001F84  B98D 0020                                1682+         EPSW  R2,R0             exptract psw
00001F88  5020 8EE4                   000010E4     1683+         ST    R2,CCPSW              to save CC
00001F8C  07FB                                     1684+         BR    R11               return
00001F90                                           1685+RE41     DC    0F
00001F90                                           1686+         DROP  R5
00001F90  00000000 00000000                        1687          DC    XL16'0000000000000000000000000000000C'   V1 result
00001F98  00000000 0000000C
00001FA0  00000000 00000000                        1688          DC    FD'0'                                    R2 source
                                                   1689
                                                   1690          VRR_K VCVDG,159,1,0
00001FA8                                           1691+         DS    0FD
00001FA8                          00001FA8         1692+         USING *,R5              base for test data and test routine
00001FA8  00001FC4                                 1693+T42      DC    A(X42)            address of test routine
00001FAC  002A                                     1694+         DC    H'42'             test number
00001FAE  00                                       1695+         DC    XL1'00'
00001FAF  9F                                       1696+         DC    HL1'159'          i3
00001FB0  01                                       1697+         DC    HL1'1'            m4
00001FB1  00                                       1698+         DC    HL1'0'            cc
00001FB2  07                                       1699+         DC    HL1'7'            cc failed mask
00001FB3  E5C3E5C4 C7404040                        1700+         DC    CL8'VCVDG'        instruction name
00001FBC  00000010                                 1701+         DC    A(16)             result length
00001FC0  00001FE8                                 1702+REA42    DC    A(RE42)           result address
                                                   1703+*                                INSTRUCTION UNDER TEST ROUTINE
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00001FC4                                           1704+X42      DS    0F
00001FC4  E710 8F40 0006                 00001140  1705+          VL    V1,V1FUDGE        pollute V1
00001FCA  E320 5050 0004                 00001FF8  1706+          lG    R2,RE42+16        get R2 source
00001FD0  E612 0019 F05A                           1707+          VCVDG V1,R2,159,1       test instruction
00001FD6  E710 8F08 000E                 00001108  1708+          VST   V1,V1OUTPUT       save
00001FDC  B98D 0020                                1709+          EPSW  R2,R0             exptract psw
00001FE0  5020 8EE4                      000010E4  1710+          ST    R2,CCPSW              to save CC
00001FE4  07FB                                     1711+          BR    R11               return
00001FE8                                           1712+RE42      DC    0F
00001FE8                                           1713+          DROP  R5
00001FE8  00000000 00000000                        1714           DC    XL16'0000000000000000000000000000001C'   V1 result
00001FF0  00000000 0000001C
00001FF8  00000000 00000001                        1715           DC    FD'1'                                    R2 source
                                                   1716
                                                   1717           VRR_K VCVDG,159,1,0
00002000                                           1718+          DS    0FD
00002000                   00002000                1719+          USING *,R5              base for test data and test routine
00002000  0000201C                                 1720+T43       DC    A(X43)            address of test routine
00002004  002B                                     1721+          DC    H'43'             test number
00002006  00                                       1722+          DC    XL1'00'
00002007  9F                                       1723+          DC    HL1'159'          i3
00002008  01                                       1724+          DC    HL1'1'            m4
00002009  00                                       1725+          DC    HL1'0'            cc
0000200A  07                                       1726+          DC    HL1'7'            cc failed mask
0000200B  E5C3E5C4 C7404040                        1727+          DC    CL8'VCVDG'        instruction name
00002014  00000010                                 1728+          DC    A(16)             result length
00002018  00002040                                 1729+REA43     DC    A(RE43)           result address
                                                   1730+*                                 INSTRUCTION UNDER TEST ROUTINE
0000201C                                           1731+X43       DS    0F
0000201C  E710 8F40 0006                 00001140  1732+          VL    V1,V1FUDGE        pollute V1
00002022  E320 5050 0004                 00002050  1733+          lG    R2,RE43+16        get R2 source
00002028  E612 0019 F05A                           1734+          VCVDG V1,R2,159,1       test instruction
0000202E  E710 8F08 000E                 00001108  1735+          VST   V1,V1OUTPUT       save
00002034  B98D 0020                                1736+          EPSW  R2,R0             exptract psw
00002038  5020 8EE4                      000010E4  1737+          ST    R2,CCPSW              to save CC
0000203C  07FB                                     1738+          BR    R11               return
00002040                                           1739+RE43      DC    0F
00002040                                           1740+          DROP  R5
00002040  00000000 00000000                        1741           DC    XL16'0000000000000000000000000000001D'   V1 result
00002048  00000000 0000001D
00002050  FFFFFFFF FFFFFFFF                        1742           DC    FD'-1'                                   R2 source
                                                   1743
                                                   1744           VRR_K VCVDG,159,1,0                             INT_MAX
00002058                                           1745+          DS    0FD
00002058                   00002058                1746+          USING *,R5              base for test data and test routine
00002058  00002074                                 1747+T44       DC    A(X44)            address of test routine
0000205C  002C                                     1748+          DC    H'44'             test number
0000205E  00                                       1749+          DC    XL1'00'
0000205F  9F                                       1750+          DC    HL1'159'          i3
00002060  01                                       1751+          DC    HL1'1'            m4
00002061  00                                       1752+          DC    HL1'0'            cc
00002062  07                                       1753+          DC    HL1'7'            cc failed mask
00002063  E5C3E5C4 C7404040                        1754+          DC    CL8'VCVDG'        instruction name
0000206C  00000010                                 1755+          DC    A(16)             result length
00002070  00002098                                 1756+REA44     DC    A(RE44)           result address
                                                   1757+*                                 INSTRUCTION UNDER TEST ROUTINE
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00002074                                           1758+X44      DS    0F
00002074  E710 8F40 0006                 00001140  1759+          VL    V1,V1FUDGE        pollute V1
0000207A  E320 5050 0004                 000020A8  1760+          lG    R2,RE44+16        get R2 source
00002080  E612 0019 F05A                           1761+          VCVDG V1,R2,159,1       test instruction
00002086  E710 8F08 000E                 00001108  1762+          VST   V1,V1OUTPUT       save
0000208C  B98D 0020                                1763+          EPSW  R2,R0             exptract psw
00002090  5020 8EE4                      000010E4  1764+          ST    R2,CCPSW              to save CC
00002094  07FB                                     1765+          BR    R11               return
00002098                                           1766+RE44      DC    0F
00002098                                           1767+          DROP  R5
00002098  00000000 00000000                        1768           DC    XL16'00000000000000000000002147483647C'   V1 result
000020A0  00000214 7483647C
000020A8  00000000 7FFFFFFF                        1769           DC    FD'2147483647'                            R2 source
                                                   1770
                                                   1771           VRR_K VCVDG,159,1,0                              INT_MIN
000020B0                                           1772+          DS    0FD
000020B0                         000020B0          1773+          USING *,R5              base for test data and test routine
000020B0  000020CC                                 1774+T45       DC    A(X45)            address of test routine
000020B4  002D                                     1775+          DC    H'45'             test number
000020B6  00                                       1776+          DC    XL1'00'
000020B7  9F                                       1777+          DC    HL1'159'          i3
000020B8  01                                       1778+          DC    HL1'1'            m4
000020B9  00                                       1779+          DC    HL1'0'            cc
000020BA  07                                       1780+          DC    HL1'7'            cc failed mask
000020BB  E5C3E5C4 C7404040                        1781+          DC    CL8'VCVDG'        instruction name
000020C4  00000010                                 1782+          DC    A(16)             result length
000020C8  000020F0                                 1783+REA45     DC    A(RE45)           result address
                                                   1784+*                                 INSTRUCTION UNDER TEST ROUTINE
000020CC                                           1785+X45       DS    0F
000020CC  E710 8F40 0006                 00001140  1786+          VL    V1,V1FUDGE        pollute V1
000020D2  E320 5050 0004                 00002100  1787+          lG    R2,RE45+16        get R2 source
000020D8  E612 0019 F05A                           1788+          VCVDG V1,R2,159,1       test instruction
000020DE  E710 8F08 000E                 00001108  1789+          VST   V1,V1OUTPUT       save
000020E4  B98D 0020                                1790+          EPSW  R2,R0             exptract psw
000020E8  5020 8EE4                      000010E4  1791+          ST    R2,CCPSW              to save CC
000020EC  07FB                                     1792+          BR    R11               return
000020F0                                           1793+RE45      DC    0F
000020F0                                           1794+          DROP  R5
000020F0  00000000 00000000                        1795           DC    XL16'00000000000000000000002147483648D'   V1 result
000020F8  00000214 7483648D
00002100  FFFFFFFF 80000000                        1796           DC    FD'-2147483648'                           R2 source
                                                   1797
                                                   1798           VRR_K VCVDG,159,1,0                             LONG_MAX
00002108                                           1799+          DS    0FD
00002108                         00002108          1800+          USING *,R5              base for test data and test routine
00002108  00002124                                 1801+T46       DC    A(X46)            address of test routine
0000210C  002E                                     1802+          DC    H'46'             test number
0000210E  00                                       1803+          DC    XL1'00'
0000210F  9F                                       1804+          DC    HL1'159'          i3
00002110  01                                       1805+          DC    HL1'1'            m4
00002111  00                                       1806+          DC    HL1'0'            cc
00002112  07                                       1807+          DC    HL1'7'            cc failed mask
00002113  E5C3E5C4 C7404040                        1808+          DC    CL8'VCVDG'        instruction name
0000211C  00000010                                 1809+          DC    A(16)             result length
00002120  00002148                                 1810+REA46     DC    A(RE46)           result address
                                                   1811+*                                 INSTRUCTION UNDER TEST ROUTINE
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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00002124                                           1812+X46      DS    0F
00002124  E710 8F40 0006                 00001140  1813+         VL    V1,V1FUDGE        pollute V1
0000212A  E320 5050 0004                 00002158  1814+         lG    R2,RE46+16        get R2 source
00002130  E612 0019 F05A                           1815+         VCVDG V1,R2,159,1       test instruction
00002136  E710 8F08 000E                 00001108  1816+         VST   V1,V1OUTPUT       save
0000213C  B98D 0020                                1817+         EPSW  R2,R0             exptract psw
00002140  5020 8EE4                      000010E4  1818+         ST    R2,CCPSW              to save CC
00002144  07FB                                     1819+         BR    R11               return
00002148                                           1820+RE46     DC    0F
00002148                                           1821+         DROP  R5
00002148  00000000 00009223                        1822          DC    XL16'00000000000092233720368547758O7C'   V1 source
00002150  37203685 4775807C
00002158  7FFFFFFF FFFFFFFF                        1823          DC    XL08'7FFFFFFFFFFFFFFF'                   R1 result
                                                   1824
                                                   1825          VRR_K VCVDG,159,1,0                            LONG_MIN
00002160                                           1826+         DS    0FD
00002160                           00002160        1827+         USING *,R5              base for test data and test routine
00002160  0000217C                                 1828+T47      DC    A(X47)            address of test routine
00002164  002F                                     1829+         DC    H'47'             test number
00002166  00                                       1830+         DC    XL1'00'
00002167  9F                                       1831+         DC    HL1'159'          i3
00002168  01                                       1832+         DC    HL1'1'            m4
00002169  00                                       1833+         DC    HL1'0'            cc
0000216A  07                                       1834+         DC    HL1'7'            cc failed mask
0000216B  E5C3E5C4 C7404040                        1835+         DC    CL8'VCVDG'        instruction name
00002174  00000010                                 1836+         DC    A(16)             result length
00002178  000021A0                                 1837+REA47    DC    A(RE47)           result address
                                                   1838+*                                INSTRUCTION UNDER TEST ROUTINE
0000217C                                           1839+X47      DS    0F
0000217C  E710 8F40 0006                 00001140  1840+         VL    V1,V1FUDGE        pollute V1
00002182  E320 5050 0004                 000021B0  1841+         lG    R2,RE47+16        get R2 source
00002188  E612 0019 F05A                           1842+         VCVDG V1,R2,159,1       test instruction
0000218E  E710 8F08 000E                 00001108  1843+         VST   V1,V1OUTPUT       save
00002194  B98D 0020                                1844+         EPSW  R2,R0             exptract psw
00002198  5020 8EE4                      000010E4  1845+         ST    R2,CCPSW              to save CC
0000219C  07FB                                     1846+         BR    R11               return
000021A0                                           1847+RE47     DC    0F
000021A0                                           1848+         DROP  R5
000021A0  00000000 00009223                        1849          DC    XL16'00000000000092233720368547758O8D'   V1 source
000021A8  37203685 4775808D
000021B0  80000000 00000000                        1850          DC    XL08'8000000000000000'                   R1 result
                                                   1851
                                                   1852          VRR_K VCVDG,159,1,0                            ULONG_MAX
000021B8                                           1853+         DS    0FD
000021B8                           000021B8        1854+         USING *,R5              base for test data and test routine
000021B8  000021D4                                 1855+T48      DC    A(X48)            address of test routine
000021BC  0030                                     1856+         DC    H'48'             test number
000021BE  00                                       1857+         DC    XL1'00'
000021BF  9F                                       1858+         DC    HL1'159'          i3
000021C0  01                                       1859+         DC    HL1'1'            m4
000021C1  00                                       1860+         DC    HL1'0'            cc
000021C2  07                                       1861+         DC    HL1'7'            cc failed mask
000021C3  E5C3E5C4 C7404040                        1862+         DC    CL8'VCVDG'        instruction name
000021CC  00000010                                 1863+         DC    A(16)             result length
000021D0  000021F8                                 1864+REA48    DC    A(RE48)           result address
                                                   1865+*                                INSTRUCTION UNDER TEST ROUTINE
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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

000021D4                                           1866+X48      DS    0F
000021D4  E710 8F40 0006                 00001140  1867+         VL    V1,V1FUDGE        pollute V1
000021DA  E320 5050 0004                 00002208  1868+         lG    R2,RE48+16        get R2 source
000021E0  E612 0019 F05A                           1869+         VCVDG V1,R2,159,1       test instruction
000021E6  E710 8F08 000E                 00001108  1870+         VST   V1,V1OUTPUT       save
000021EC  B98D 0020                                1871+         EPSW  R2,R0             exptract psw
000021F0  5020 8EE4                      000010E4  1872+         ST    R2,CCPSW              to save CC
000021F4  07FB                                     1873+         BR    R11               return
000021F8                                           1874+RE48     DC    0F
000021F8                                           1875+         DROP  R5
000021F8  00000000 00000000                        1876          DC    XL16'00000000000000000000000000000001D'   V1 source
00002200  00000000 0000001D
00002208  FFFFFFFF FFFFFFFF                        1877          DC    XL08'FFFFFFFFFFFFFFFF'                    R1 result
                                                   1878
                                                   1879 * VCVDG         m4=   1 ( LB=0, P1=0 , CS=1)
                                                   1880 *               i3= 137 ( IOM=1, RDC= 9)
                                                   1881
                                                   1882          VRR_K VCVDG,137,1,0
00002210                                           1883+         DS    0FD
00002210                           00002210        1884+         USING *,R5              base for test data and test routine
00002210  0000222C                                 1885+T49      DC    A(X49)            address of test routine
00002214  0031                                     1886+         DC    H'49'             test number
00002216  00                                       1887+         DC    XL1'00'
00002217  89                                       1888+         DC    HL1'137'          i3
00002218  01                                       1889+         DC    HL1'1'            m4
00002219  00                                       1890+         DC    HL1'0'            cc
0000221A  07                                       1891+         DC    HL1'7'            cc failed mask
0000221B  E5C3E5C4 C7404040                        1892+         DC    CL8'VCVDG'        instruction name
00002224  00000010                                 1893+         DC    A(16)             result length
00002228  00002250                                 1894+REA49    DC    A(RE49)           result address
                                                   1895+*                                INSTRUCTION UNDER TEST ROUTINE
0000222C                                           1896+X49      DS    0F
0000222C  E710 8F40 0006                 00001140  1897+         VL    V1,V1FUDGE        pollute V1
00002232  E320 5050 0004                 00002260  1898+         lG    R2,RE49+16        get R2 source
00002238  E612 0018 905A                           1899+         VCVDG V1,R2,137,1       test instruction
0000223E  E710 8F08 000E                 00001108  1900+         VST   V1,V1OUTPUT       save
00002244  B98D 0020                                1901+         EPSW  R2,R0             exptract psw
00002248  5020 8EE4                      000010E4  1902+         ST    R2,CCPSW              to save CC
0000224C  07FB                                     1903+         BR    R11               return
00002250                                           1904+RE49     DC    0F
00002250                                           1905+         DROP  R5
00002250  00000000 00000000                        1906          DC    XL16'00000000000000000000000000000000C'   V1 result
00002258  00000000 0000000C
00002260  00000000 00000000                        1907          DC    FD'0'                                     R2 source
                                                   1908
                                                   1909          VRR_K VCVDG,137,1,0
00002268                                           1910+         DS    0FD
00002268                           00002268        1911+         USING *,R5              base for test data and test routine
00002268  00002284                                 1912+T50      DC    A(X50)            address of test routine
0000226C  0032                                     1913+         DC    H'50'             test number
0000226E  00                                       1914+         DC    XL1'00'
0000226F  89                                       1915+         DC    HL1'137'          i3
00002270  01                                       1916+         DC    HL1'1'            m4
00002271  00                                       1917+         DC    HL1'0'            cc
00002272  07                                       1918+         DC    HL1'7'            cc failed mask
00002273  E5C3E5C4 C7404040                        1919+         DC    CL8'VCVDG'        instruction name
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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

0000227C  00000010                                1920+         DC    A(16)             result length
00002280  000022A8                                1921+REA50    DC    A(RE50)           result address
                                                  1922+*                                  INSTRUCTION UNDER TEST ROUTINE
00002284                                          1923+X50      DS    0F
00002284  E710 8F40 0006                 00001140 1924+         VL    V1,V1FUDGE        pollute V1
0000228A  E320 5050 0004                 000022B8 1925+         lG    R2,RE50+16        get R2 source
00002290  E612 0018 905A                          1926+         VCVDG V1,R2,137,1       test instruction
00002296  E710 8F08 000E                 00001108 1927+         VST   V1,V1OUTPUT       save
0000229C  B98D 0020                               1928+         EPSW  R2,R0             exptract psw
000022A0  5020 8EE4                      000010E4 1929+         ST    R2,CCPSW              to save CC
000022A4  07FB                                    1930+         BR    R11               return
000022A8                                          1931+RE50     DC    0F
000022A8                                          1932+         DROP  R5
000022A8  00000000 00000000                      1933          DC    XL16'0000000000000000000000000000001C'   V1 result
000022B0  00000000 0000001C
000022B8  00000000 00000001                      1934          DC    FD'1'                                    R2 source
                                                  1935
                                                  1936          VRR_K VCVDG,137,1,0
000022C0                                          1937+         DS    0FD
000022C0                  000022C0                1938+         USING *,R5              base for test data and test routine
000022C0  000022DC                                1939+T51      DC    A(X51)            address of test routine
000022C4  0033                                    1940+         DC    H'51'             test number
000022C6  00                                      1941+         DC    XL1'00'
000022C7  89                                      1942+         DC    HL1'137'          i3
000022C8  01                                      1943+         DC    HL1'1'            m4
000022C9  00                                      1944+         DC    HL1'0'            cc
000022CA  07                                      1945+         DC    HL1'7'            cc failed mask
000022CB  E5C3E5C4 C7404040                       1946+         DC    CL8'VCVDG'        instruction name
000022D4  00000010                                1947+         DC    A(16)             result length
000022D8  00002300                                1948+REA51    DC    A(RE51)           result address
                                                  1949+*                                  INSTRUCTION UNDER TEST ROUTINE
000022DC                                          1950+X51      DS    0F
000022DC  E710 8F40 0006                 00001140 1951+         VL    V1,V1FUDGE        pollute V1
000022E2  E320 5050 0004                 00002310 1952+         lG    R2,RE51+16        get R2 source
000022E8  E612 0018 905A                          1953+         VCVDG V1,R2,137,1       test instruction
000022EE  E710 8F08 000E                 00001108 1954+         VST   V1,V1OUTPUT       save
000022F4  B98D 0020                               1955+         EPSW  R2,R0             exptract psw
000022F8  5020 8EE4                      000010E4 1956+         ST    R2,CCPSW              to save CC
000022FC  07FB                                    1957+         BR    R11               return
00002300                                          1958+RE51     DC    0F
00002300                                          1959+         DROP  R5
00002300  00000000 00000000                      1960          DC    XL16'0000000000000000000000000000001D'   V1 result
00002308  00000000 0000001D
00002310  FFFFFFFF FFFFFFFF                      1961          DC    FD'-1'                                   R2 source
                                                  1962
                                                  1963          VRR_K VCVDG,137,1,3                             INT_MAX
00002318                                          1964+         DS    0FD
00002318                  00002318                1965+         USING *,R5              base for test data and test routine
00002318  00002334                                1966+T52      DC    A(X52)            address of test routine
0000231C  0034                                    1967+         DC    H'52'             test number
0000231E  00                                      1968+         DC    XL1'00'
0000231F  89                                      1969+         DC    HL1'137'          i3
00002320  01                                      1970+         DC    HL1'1'            m4
00002321  03                                      1971+         DC    HL1'3'            cc
00002322  0E                                      1972+         DC    HL1'14'           cc failed mask
00002323  E5C3E5C4 C7404040                       1973+         DC    CL8'VCVDG'        instruction name
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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

0000232C  00000010                                 1974+          DC    A(16)              result length
00002330  00002358                                 1975+REA52     DC    A(RE52)            result address
                                                   1976+*                                  INSTRUCTION UNDER TEST ROUTINE
00002334                                           1977+X52       DS    0F
00002334  E710 8F40 0006                 00001140  1978+          VL    V1,V1FUDGE         pollute V1
0000233A  E320 5050 0004                 00002368  1979+          lG    R2,RE52+16         get R2 source
00002340  E612 0018 905A                           1980+          VCVDG V1,R2,137,1        test instruction
00002346  E710 8F08 000E                 00001108  1981+          VST   V1,V1OUTPUT        save
0000234C  B98D 0020                                1982+          EPSW  R2,R0              exptract psw
00002350  5020 8EE4                      000010E4  1983+          ST    R2,CCPSW             to save CC
00002354  07FB                                     1984+          BR    R11                return
00002358                                           1985+RE52      DC    0F
00002358                                           1986+          DROP  R5
00002358  00000000 00000000                        1987           DC    XL16'00000000000000000000000147483647C'   V1 result
00002360  00000014 7483647C
00002368  00000000 7FFFFFFF                        1988           DC    FD'2147483647'                            R2 source
                                                   1989
                                                   1990           VRR_K VCVDG,137,1,3                              INT_MIN
00002370                                           1991+          DS    0FD
00002370                    00002370               1992+          USING *,R5               base for test data and test routine
00002370  0000238C                                 1993+T53       DC    A(X53)             address of test routine
00002374  0035                                     1994+          DC    H'53'              test number
00002376  00                                       1995+          DC    XL1'00'
00002377  89                                       1996+          DC    HL1'137'           i3
00002378  01                                       1997+          DC    HL1'1'             m4
00002379  03                                       1998+          DC    HL1'3'             cc
0000237A  0E                                       1999+          DC    HL1'14'            cc failed mask
0000237B  E5C3E5C4 C7404040                        2000+          DC    CL8'VCVDG'         instruction name
00002384  00000010                                 2001+          DC    A(16)              result length
00002388  000023B0                                 2002+REA53     DC    A(RE53)            result address
                                                   2003+*                                  INSTRUCTION UNDER TEST ROUTINE
0000238C                                           2004+X53       DS    0F
0000238C  E710 8F40 0006                 00001140  2005+          VL    V1,V1FUDGE         pollute V1
00002392  E320 5050 0004                 000023C0  2006+          lG    R2,RE53+16         get R2 source
00002398  E612 0018 905A                           2007+          VCVDG V1,R2,137,1        test instruction
0000239E  E710 8F08 000E                 00001108  2008+          VST   V1,V1OUTPUT        save
000023A4  B98D 0020                                2009+          EPSW  R2,R0              exptract psw
000023A8  5020 8EE4                      000010E4  2010+          ST    R2,CCPSW             to save CC
000023AC  07FB                                     2011+          BR    R11                return
000023B0                                           2012+RE53      DC    0F
000023B0                                           2013+          DROP  R5
000023B0  00000000 00000000                        2014           DC    XL16'00000000000000000000000147483648D'   V1 result
000023B8  00000014 7483648D
000023C0  FFFFFFFF 80000000                        2015           DC    FD'-2147483648'
                                                   2016
                                                   2017           VRR_K VCVDG,137,1,3                              LONG_MAX
000023C8                                           2018+          DS    0FD
000023C8                    000023C8               2019+          USING *,R5               base for test data and test routine
000023C8  000023E4                                 2020+T54       DC    A(X54)             address of test routine
000023CC  0036                                     2021+          DC    H'54'              test number
000023CE  00                                       2022+          DC    XL1'00'
000023CF  89                                       2023+          DC    HL1'137'           i3
000023D0  01                                       2024+          DC    HL1'1'             m4
000023D1  03                                       2025+          DC    HL1'3'             cc
000023D2  0E                                       2026+          DC    HL1'14'            cc failed mask
000023D3  E5C3E5C4 C7404040                        2027+          DC    CL8'VCVDG'         instruction name
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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

000023DC  00000010                                2028+          DC    A(16)              result length
000023E0  00002408                                2029+REA54     DC    A(RE54)            result address
                                                  2030+*                                  INSTRUCTION UNDER TEST ROUTINE
000023E4                                          2031+X54       DS    0F
000023E4  E710 8F40 0006                 00001140 2032+          VL    V1,V1FUDGE         pollute V1
000023EA  E320 5050 0004                 00002418 2033+          lG    R2,RE54+16         get R2 source
000023F0  E612 0018 905A                          2034+          VCVDG V1,R2,137,1        test instruction
000023F6  E710 8F08 000E                 00001108 2035+          VST   V1,V1OUTPUT        save
000023FC  B98D 0020                               2036+          EPSW  R2,R0              exptract psw
00002400  5020 8EE4                      000010E4 2037+          ST    R2,CCPSW                to save CC
00002404  07FB                                    2038+          BR    R11                return
00002408                                          2039+RE54      DC    0F
00002408                                          2040+          DROP  R5
00002408  00000000 00000000                       2041           DC    XL16'00000000000000000000000854775807C'   V1 source
00002410  00000085 4775807C
00002418  7FFFFFFF FFFFFFFF                       2042           DC    XL08'7FFFFFFFFFFFFFFF'                    R1 result
                                                  2043
                                                  2044           VRR_K VCVDG,137,1,3                             LONG_MIN
00002420                                          2045+          DS    0FD
00002420                  00002420                2046+          USING *,R5               base for test data and test routine
00002420  0000243C                                2047+T55       DC    A(X55)             address of test routine
00002424  0037                                    2048+          DC    H'55'              test number
00002426  00                                      2049+          DC    XL1'00'
00002427  89                                      2050+          DC    HL1'137'           i3
00002428  01                                      2051+          DC    HL1'1'             m4
00002429  03                                      2052+          DC    HL1'3'             cc
0000242A  0E                                      2053+          DC    HL1'14'            cc failed mask
0000242B  E5C3E5C4 C7404040                       2054+          DC    CL8'VCVDG'         instruction name
00002434  00000010                                2055+          DC    A(16)              result length
00002438  00002460                                2056+REA55     DC    A(RE55)            result address
                                                  2057+*                                  INSTRUCTION UNDER TEST ROUTINE
0000243C                                          2058+X55       DS    0F
0000243C  E710 8F40 0006                 00001140 2059+          VL    V1,V1FUDGE         pollute V1
00002442  E320 5050 0004                 00002470 2060+          lG    R2,RE55+16         get R2 source
00002448  E612 0018 905A                          2061+          VCVDG V1,R2,137,1        test instruction
0000244E  E710 8F08 000E                 00001108 2062+          VST   V1,V1OUTPUT        save
00002454  B98D 0020                               2063+          EPSW  R2,R0              exptract psw
00002458  5020 8EE4                      000010E4 2064+          ST    R2,CCPSW                to save CC
0000245C  07FB                                    2065+          BR    R11                return
00002460                                          2066+RE55      DC    0F
00002460                                          2067+          DROP  R5
00002460  00000000 00000000                       2068           DC    XL16'00000000000000000000000854775808D'   V1 source
00002468  00000085 4775808D
00002470  80000000 00000000                       2069           DC    XL08'8000000000000000'                    R1 result
                                                  2070
                                                  2071           VRR_K VCVDG,137,1,0                             ULONG_MAX
00002478                                          2072+          DS    0FD
00002478                  00002478                2073+          USING *,R5               base for test data and test routine
00002478  00002494                                2074+T56       DC    A(X56)             address of test routine
0000247C  0038                                    2075+          DC    H'56'              test number
0000247E  00                                      2076+          DC    XL1'00'
0000247F  89                                      2077+          DC    HL1'137'           i3
00002480  01                                      2078+          DC    HL1'1'             m4
00002481  00                                      2079+          DC    HL1'0'             cc
00002482  07                                      2080+          DC    HL1'7'             cc failed mask
00002483  E5C3E5C4 C7404040                       2081+          DC    CL8'VCVDG'         instruction name
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

0000248C  00000010                                2082+          DC    A(16)              result length
00002490  000024B8                                2083+REA56     DC    A(RE56)            result address
                                                  2084+*                                  INSTRUCTION UNDER TEST ROUTINE
00002494                                          2085+X56       DS    0F
00002494  E710 8F40 0006                 00001140 2086+          VL    V1,V1FUDGE         pollute V1
0000249A  E320 5050 0004                 000024C8 2087+          lG    R2,RE56+16         get R2 source
000024A0  E612 0018 905A                          2088+          VCVDG V1,R2,137,1        test instruction
000024A6  E710 8F08 000E                 00001108 2089+          VST   V1,V1OUTPUT        save
000024AC  B98D 0020                               2090+          EPSW  R2,R0              exptract psw
000024B0  5020 8EE4                      000010E4 2091+          ST    R2,CCPSW               to save CC
000024B4  07FB                                    2092+          BR    R11                return
000024B8                                          2093+RE56      DC    0F
000024B8                                          2094+          DROP  R5
000024B8  00000000 00000000                      2095           DC    XL16'0000000000000000000000000000001D'   V1 source
000024C0  00000000 0000001D
000024C8  FFFFFFFF FFFFFFFF                      2096           DC    XL08'FFFFFFFFFFFFFFFF'                   R1 result
                                                 2097
                                                 2098 *-------------------------------------------------------------------
                                                 2099 * VCVDG          m4=   3 ( LB=0, P1=1 , CS=1)
                                                 2100 *               i3= 159 ( IOM=1, RDC=31)
                                                 2101
                                                 2102           VRR_K VCVDG,159,3,0
000024D0                                         2103+          DS    0FD
000024D0                         000024D0        2104+          USING *,R5               base for test data and test routine
000024D0  000024EC                               2105+T57       DC    A(X57)             address of test routine
000024D4  0039                                   2106+          DC    H'57'              test number
000024D6  00                                     2107+          DC    XL1'00'
000024D7  9F                                     2108+          DC    HL1'159'           i3
000024D8  03                                     2109+          DC    HL1'3'             m4
000024D9  00                                     2110+          DC    HL1'0'             cc
000024DA  07                                     2111+          DC    HL1'7'             cc failed mask
000024DB  E5C3E5C4 C7404040                      2112+          DC    CL8'VCVDG'         instruction name
000024E4  00000010                               2113+          DC    A(16)              result length
000024E8  00002510                               2114+REA57     DC    A(RE57)            result address
                                                 2115+*                                  INSTRUCTION UNDER TEST ROUTINE
000024EC                                         2116+X57       DS    0F
000024EC  E710 8F40 0006                 00001140 2117+          VL    V1,V1FUDGE         pollute V1
000024F2  E320 5050 0004                 00002520 2118+          lG    R2,RE57+16         get R2 source
000024F8  E612 0039 F05A                          2119+          VCVDG V1,R2,159,3        test instruction
000024FE  E710 8F08 000E                 00001108 2120+          VST   V1,V1OUTPUT        save
00002504  B98D 0020                               2121+          EPSW  R2,R0              exptract psw
00002508  5020 8EE4                      000010E4 2122+          ST    R2,CCPSW               to save CC
0000250C  07FB                                    2123+          BR    R11                return
00002510                                          2124+RE57      DC    0F
00002510                                          2125+          DROP  R5
00002510  00000000 00000000                      2126           DC    XL16'0000000000000000000000000000000F'   V1 result
00002518  00000000 0000000F
00002520  00000000 00000000                      2127           DC    FD'0'                                    R2 source
                                                 2128
                                                 2129           VRR_K VCVDG,159,3,0
00002528                                         2130+          DS    0FD
00002528                         00002528        2131+          USING *,R5               base for test data and test routine
00002528  00002544                               2132+T58       DC    A(X58)             address of test routine
0000252C  003A                                   2133+          DC    H'58'              test number
0000252E  00                                     2134+          DC    XL1'00'
0000252F  9F                                     2135+          DC    HL1'159'           i3
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00002530  03                                      2136+          DC    HL1'3'              m4
00002531  00                                      2137+          DC    HL1'0'              cc
00002532  07                                      2138+          DC    HL1'7'              cc failed mask
00002533  E5C3E5C4 C7404040                       2139+          DC    CL8'VCVDG'          instruction name
0000253C  00000010                                2140+          DC    A(16)               result length
00002540  00002568                                2141+REA58     DC    A(RE58)             result address
                                                  2142+*                                   INSTRUCTION UNDER TEST ROUTINE
00002544                                          2143+X58       DS    0F
00002544  E710 8F40 0006                00001140  2144+          VL    V1,V1FUDGE          pollute V1
0000254A  E320 5050 0004                00002578  2145+          lG    R2,RE58+16          get R2 source
00002550  E612 0039 F05A                          2146+          VCVDG V1,R2,159,3         test instruction
00002556  E710 8F08 000E                00001108  2147+          VST   V1,V1OUTPUT         save
0000255C  B98D 0020                               2148+          EPSW  R2,R0               exptract psw
00002560  5020 8EE4                     000010E4  2149+          ST    R2,CCPSW                to save CC
00002564  07FB                                    2150+          BR    R11                 return
00002568                                          2151+RE58      DC    0F
00002568                                          2152+          DROP  R5
00002568  00000000 00000000                       2153           DC    XL16'00000000000000000000000000000001F'   V1 result
00002570  00000000 0000001F
00002578  00000000 00000001                       2154           DC    FD'1'                                     R2 source
                                                  2155
                                                  2156           VRR_K VCVDG,159,3,0
00002580                                          2157+          DS    0FD
00002580                  00002580                2158+          USING *,R5                base for test data and test routine
00002580  0000259C                                2159+T59       DC    A(X59)              address of test routine
00002584  003B                                    2160+          DC    H'59'               test number
00002586  00                                      2161+          DC    XL1'00'
00002587  9F                                      2162+          DC    HL1'159'            i3
00002588  03                                      2163+          DC    HL1'3'              m4
00002589  00                                      2164+          DC    HL1'0'              cc
0000258A  07                                      2165+          DC    HL1'7'              cc failed mask
0000258B  E5C3E5C4 C7404040                       2166+          DC    CL8'VCVDG'          instruction name
00002594  00000010                                2167+          DC    A(16)               result length
00002598  000025C0                                2168+REA59     DC    A(RE59)             result address
                                                  2169+*                                   INSTRUCTION UNDER TEST ROUTINE
0000259C                                          2170+X59       DS    0F
0000259C  E710 8F40 0006                00001140  2171+          VL    V1,V1FUDGE          pollute V1
000025A2  E320 5050 0004                000025D0  2172+          lG    R2,RE59+16          get R2 source
000025A8  E612 0039 F05A                          2173+          VCVDG V1,R2,159,3         test instruction
000025AE  E710 8F08 000E                00001108  2174+          VST   V1,V1OUTPUT         save
000025B4  B98D 0020                               2175+          EPSW  R2,R0               exptract psw
000025B8  5020 8EE4                     000010E4  2176+          ST    R2,CCPSW                to save CC
000025BC  07FB                                    2177+          BR    R11                 return
000025C0                                          2178+RE59      DC    0F
000025C0                                          2179+          DROP  R5
000025C0  00000000 00000000                       2180           DC    XL16'00000000000000000000000000000001F'   V1 result
000025C8  00000000 0000001F
000025D0  FFFFFFFF FFFFFFFF                       2181           DC    FD'-1'                                    R2 source
                                                  2182
                                                  2183           VRR_K VCVDG,159,3,0                              INT_MAX
000025D8                                          2184+          DS    0FD
000025D8                  000025D8                2185+          USING *,R5                base for test data and test routine
000025D8  000025F4                                2186+T60       DC    A(X60)              address of test routine
000025DC  003C                                    2187+          DC    H'60'               test number
000025DE  00                                      2188+          DC    XL1'00'
000025DF  9F                                      2189+          DC    HL1'159'            i3
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

000025E0  03                                       2190+          DC    HL1'3'              m4
000025E1  00                                       2191+          DC    HL1'0'              cc
000025E2  07                                       2192+          DC    HL1'7'              cc failed mask
000025E3  E5C3E5C4 C7404040                        2193+          DC    CL8'VCVDG'          instruction name
000025EC  00000010                                 2194+          DC    A(16)               result length
000025F0  00002618                                 2195+REA60     DC    A(RE60)             result address
                                                   2196+*                                   INSTRUCTION UNDER TEST ROUTINE
000025F4                                           2197+X60       DS    0F
000025F4  E710 8F40 0006                 00001140  2198+          VL    V1,V1FUDGE          pollute V1
000025FA  E320 5050 0004                 00002628  2199+          lG    R2,RE60+16          get R2 source
00002600  E612 0039 F05A                           2200+          VCVDG V1,R2,159,3         test instruction
00002606  E710 8F08 000E                 00001108  2201+          VST   V1,V1OUTPUT         save
0000260C  B98D 0020                                2202+          EPSW  R2,R0               exptract psw
00002610  5020 8EE4                      000010E4  2203+          ST    R2,CCPSW                to save CC
00002614  07FB                                     2204+          BR    R11                 return
00002618                                           2205+RE60      DC    0F
00002618                                           2206+          DROP  R5
00002618  00000000 00000000                        2207           DC    XL16'00000000000000000000002147483647F'   V1 result
00002620  00000214 7483647F
00002628  00000000 7FFFFFFF                        2208           DC    FD'2147483647'                            R2 source
                                                   2209
                                                   2210           VRR_K VCVDG,159,3,0                              INT_MIN
00002630                                           2211+          DS    0FD
00002630                   00002630                2212+          USING *,R5                base for test data and test routine
00002630  0000264C                                 2213+T61       DC    A(X61)              address of test routine
00002634  003D                                     2214+          DC    H'61'               test number
00002636  00                                       2215+          DC    XL1'00'
00002637  9F                                       2216+          DC    HL1'159'            i3
00002638  03                                       2217+          DC    HL1'3'              m4
00002639  00                                       2218+          DC    HL1'0'              cc
0000263A  07                                       2219+          DC    HL1'7'              cc failed mask
0000263B  E5C3E5C4 C7404040                        2220+          DC    CL8'VCVDG'          instruction name
00002644  00000010                                 2221+          DC    A(16)               result length
00002648  00002670                                 2222+REA61     DC    A(RE61)             result address
                                                   2223+*                                   INSTRUCTION UNDER TEST ROUTINE
0000264C                                           2224+X61       DS    0F
0000264C  E710 8F40 0006                 00001140  2225+          VL    V1,V1FUDGE          pollute V1
00002652  E320 5050 0004                 00002680  2226+          lG    R2,RE61+16          get R2 source
00002658  E612 0039 F05A                           2227+          VCVDG V1,R2,159,3         test instruction
0000265E  E710 8F08 000E                 00001108  2228+          VST   V1,V1OUTPUT         save
00002664  B98D 0020                                2229+          EPSW  R2,R0               exptract psw
00002668  5020 8EE4                      000010E4  2230+          ST    R2,CCPSW                to save CC
0000266C  07FB                                     2231+          BR    R11                 return
00002670                                           2232+RE61      DC    0F
00002670                                           2233+          DROP  R5
00002670  00000000 00000000                        2234           DC    XL16'00000000000000000000002147483648F'   V1 result
00002678  00000214 7483648F
00002680  FFFFFFFF 80000000                        2235           DC    FD'-2147483648'                           R2 source
                                                   2236
                                                   2237           VRR_K VCVDG,159,3,0                             LONG_MAX
00002688                                           2238+          DS    0FD
00002688                   00002688                2239+          USING *,R5                base for test data and test routine
00002688  000026A4                                 2240+T62       DC    A(X62)              address of test routine
0000268C  003E                                     2241+          DC    H'62'               test number
0000268E  00                                       2242+          DC    XL1'00'
0000268F  9F                                       2243+          DC    HL1'159'            i3
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00002690  03                                      2244+          DC    HL1'3'              m4
00002691  00                                      2245+          DC    HL1'0'              cc
00002692  07                                      2246+          DC    HL1'7'              cc failed mask
00002693  E5C3E5C4 C7404040                       2247+          DC    CL8'VCVDG'          instruction name
0000269C  00000010                                2248+          DC    A(16)               result length
000026A0  000026C8                                2249+REA62     DC    A(RE62)             result address
                                                  2250+*                                   INSTRUCTION UNDER TEST ROUTINE
000026A4                                          2251+X62       DS    0F
000026A4  E710 8F40 0006                00001140  2252+          VL    V1,V1FUDGE          pollute V1
000026AA  E320 5050 0004                000026D8  2253+          lG    R2,RE62+16          get R2 source
000026B0  E612 0039 F05A                          2254+          VCVDG V1,R2,159,3         test instruction
000026B6  E710 8F08 000E                00001108  2255+          VST   V1,V1OUTPUT         save
000026BC  B98D 0020                               2256+          EPSW  R2,R0               exptract psw
000026C0  5020 8EE4                     000010E4  2257+          ST    R2,CCPSW                to save CC
000026C4  07FB                                    2258+          BR    R11                 return
000026C8                                          2259+RE62      DC    0F
000026C8                                          2260+          DROP  R5
000026C8  00000000 00009223                      2261           DC    XL16'00000000000092233720368547758O7F'   V1 source
000026D0  37203685 4775807F
000026D8  7FFFFFFF FFFFFFFF                      2262           DC    XL08'7FFFFFFFFFFFFFFF'                   R1 result
                                                  2263
                                                  2264           VRR_K VCVDG,159,3,0                            LONG_MIN
000026E0                                          2265+          DS    0FD
000026E0                        000026E0          2266+          USING *,R5                base for test data and test routine
000026E0  000026FC                                2267+T63       DC    A(X63)              address of test routine
000026E4  003F                                    2268+          DC    H'63'               test number
000026E6  00                                      2269+          DC    XL1'00'
000026E7  9F                                      2270+          DC    HL1'159'            i3
000026E8  03                                      2271+          DC    HL1'3'              m4
000026E9  00                                      2272+          DC    HL1'0'              cc
000026EA  07                                      2273+          DC    HL1'7'              cc failed mask
000026EB  E5C3E5C4 C7404040                       2274+          DC    CL8'VCVDG'          instruction name
000026F4  00000010                                2275+          DC    A(16)               result length
000026F8  00002720                                2276+REA63     DC    A(RE63)             result address
                                                  2277+*                                   INSTRUCTION UNDER TEST ROUTINE
000026FC                                          2278+X63       DS    0F
000026FC  E710 8F40 0006                00001140  2279+          VL    V1,V1FUDGE          pollute V1
00002702  E320 5050 0004                00002730  2280+          lG    R2,RE63+16          get R2 source
00002708  E612 0039 F05A                          2281+          VCVDG V1,R2,159,3         test instruction
0000270E  E710 8F08 000E                00001108  2282+          VST   V1,V1OUTPUT         save
00002714  B98D 0020                               2283+          EPSW  R2,R0               exptract psw
00002718  5020 8EE4                     000010E4  2284+          ST    R2,CCPSW                to save CC
0000271C  07FB                                    2285+          BR    R11                 return
00002720                                          2286+RE63      DC    0F
00002720                                          2287+          DROP  R5
00002720  00000000 00009223                      2288           DC    XL16'00000000000092233720368547758O8F'   V1 source
00002728  37203685 4775808F
00002730  80000000 00000000                      2289           DC    XL08'8000000000000000'                   R1 result
                                                  2290
                                                  2291           VRR_K VCVDG,159,3,0                            ULONG_MAX
00002738                                          2292+          DS    0FD
00002738                        00002738          2293+          USING *,R5                base for test data and test routine
00002738  00002754                                2294+T64       DC    A(X64)              address of test routine
0000273C  0040                                    2295+          DC    H'64'               test number
0000273E  00                                      2296+          DC    XL1'00'
0000273F  9F                                      2297+          DC    HL1'159'            i3
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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00002740  03                                      2298+          DC    HL1'3'              m4
00002741  00                                      2299+          DC    HL1'0'              cc
00002742  07                                      2300+          DC    HL1'7'              cc failed mask
00002743  E5C3E5C4 C7404040                       2301+          DC    CL8'VCVDG'          instruction name
0000274C  00000010                                2302+          DC    A(16)               result length
00002750  00002778                                2303+REA64     DC    A(RE64)             result address
                                                  2304+*                                   INSTRUCTION UNDER TEST ROUTINE
00002754                                          2305+X64       DS    0F
00002754  E710 8F40 0006                00001140  2306+          VL    V1,V1FUDGE          pollute V1
0000275A  E320 5050 0004                00002788  2307+          lG    R2,RE64+16          get R2 source
00002760  E612 0039 F05A                          2308+          VCVDG V1,R2,159,3         test instruction
00002766  E710 8F08 000E                00001108  2309+          VST   V1,V1OUTPUT         save
0000276C  B98D 0020                               2310+          EPSW  R2,R0               exptract psw
00002770  5020 8EE4                     000010E4  2311+          ST    R2,CCPSW                to save CC
00002774  07FB                                    2312+          BR    R11                 return
00002778                                          2313+RE64      DC    0F
00002778                                          2314+          DROP  R5
00002778  00000000 00000000                       2315           DC    XL16'00000000000000000000000000000001F'   V1 source
00002780  00000000 0000001F
00002788  FFFFFFFF FFFFFFFF                       2316           DC    XL08'FFFFFFFFFFFFFFFF'                    R1 result
                                                  2317
                                                  2318 * VCVDG          m4=   3 ( LB=0, P1=1 , CS=1)
                                                  2319 *               i3= 137 ( IOM=1, RDC= 9)
                                                  2320
                                                  2321           VRR_K VCVDG,137,3,0
00002790                                          2322+          DS    0FD
00002790                        00002790          2323+          USING *,R5                base for test data and test routine
00002790  000027AC                                2324+T65       DC    A(X65)              address of test routine
00002794  0041                                    2325+          DC    H'65'               test number
00002796  00                                      2326+          DC    XL1'00'
00002797  89                                      2327+          DC    HL1'137'            i3
00002798  03                                      2328+          DC    HL1'3'              m4
00002799  00                                      2329+          DC    HL1'0'              cc
0000279A  07                                      2330+          DC    HL1'7'              cc failed mask
0000279B  E5C3E5C4 C7404040                       2331+          DC    CL8'VCVDG'          instruction name
000027A4  00000010                                2332+          DC    A(16)               result length
000027A8  000027D0                                2333+REA65     DC    A(RE65)             result address
                                                  2334+*                                   INSTRUCTION UNDER TEST ROUTINE
000027AC                                          2335+X65       DS    0F
000027AC  E710 8F40 0006                00001140  2336+          VL    V1,V1FUDGE          pollute V1
000027B2  E320 5050 0004                000027E0  2337+          lG    R2,RE65+16          get R2 source
000027B8  E612 0038 905A                          2338+          VCVDG V1,R2,137,3         test instruction
000027BE  E710 8F08 000E                00001108  2339+          VST   V1,V1OUTPUT         save
000027C4  B98D 0020                               2340+          EPSW  R2,R0               exptract psw
000027C8  5020 8EE4                     000010E4  2341+          ST    R2,CCPSW                to save CC
000027CC  07FB                                    2342+          BR    R11                 return
000027D0                                          2343+RE65      DC    0F
000027D0                                          2344+          DROP  R5
000027D0  00000000 00000000                       2345           DC    XL16'00000000000000000000000000000000F'   V1 result
000027D8  00000000 0000000F
000027E0  00000000 00000000                       2346           DC    FD'0'                                     R2 source
                                                  2347
                                                  2348           VRR_K VCVDG,137,3,0
000027E8                                          2349+          DS    0FD
000027E8                        000027E8          2350+          USING *,R5                base for test data and test routine
000027E8  00002804                                2351+T66       DC    A(X66)              address of test routine
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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
000027EC  0042                                    2352+          DC    H'66'              test number
000027EE  00                                      2353+          DC    XL1'00'
000027EF  89                                      2354+          DC    HL1'137'           i3
000027F0  03                                      2355+          DC    HL1'3'             m4
000027F1  00                                      2356+          DC    HL1'0'             cc
000027F2  07                                      2357+          DC    HL1'7'             cc failed mask
000027F3  E5C3E5C4 C7404040                       2358+          DC    CL8'VCVDG'         instruction name
000027FC  00000010                                2359+          DC    A(16)              result length
00002800  00002828                                2360+REA66     DC    A(RE66)            result address
                                                  2361+*                                  INSTRUCTION UNDER TEST ROUTINE
00002804                                          2362+X66       DS    0F
00002804  E710 8F40 0006              00001140    2363+          VL    V1,V1FUDGE         pollute V1
0000280A  E320 5050 0004              00002838    2364+          lG    R2,RE66+16         get R2 source
00002810  E612 0038 905A                          2365+          VCVDG V1,R2,137,3        test instruction
00002816  E710 8F08 000E              00001108    2366+          VST   V1,V1OUTPUT        save
0000281C  B98D 0020                               2367+          EPSW  R2,R0              exptract psw
00002820  5020 8EE4                   000010E4    2368+          ST    R2,CCPSW               to save CC
00002824  07FB                                    2369+          BR    R11                return
00002828                                          2370+RE66      DC    0F
00002828                                          2371+          DROP  R5
00002828  00000000 00000000                       2372           DC    XL16'00000000000000000000000000000001F'   V1 result
00002830  00000000 0000001F
00002838  00000000 00000001                       2373           DC    FD'1'                                     R2 source
                                                  2374
                                                  2375           VRR_K VCVDG,137,3,0
00002840                                          2376+          DS    0FD
00002840                      00002840            2377+          USING *,R5               base for test data and test routine
00002840  0000285C                                2378+T67       DC    A(X67)             address of test routine
00002844  0043                                    2379+          DC    H'67'              test number
00002846  00                                      2380+          DC    XL1'00'
00002847  89                                      2381+          DC    HL1'137'           i3
00002848  03                                      2382+          DC    HL1'3'             m4
00002849  00                                      2383+          DC    HL1'0'             cc
0000284A  07                                      2384+          DC    HL1'7'             cc failed mask
0000284B  E5C3E5C4 C7404040                       2385+          DC    CL8'VCVDG'         instruction name
00002854  00000010                                2386+          DC    A(16)              result length
00002858  00002880                                2387+REA67     DC    A(RE67)            result address
                                                  2388+*                                  INSTRUCTION UNDER TEST ROUTINE
0000285C                                          2389+X67       DS    0F
0000285C  E710 8F40 0006              00001140    2390+          VL    V1,V1FUDGE         pollute V1
00002862  E320 5050 0004              00002890    2391+          lG    R2,RE67+16         get R2 source
00002868  E612 0038 905A                          2392+          VCVDG V1,R2,137,3        test instruction
0000286E  E710 8F08 000E              00001108    2393+          VST   V1,V1OUTPUT        save
00002874  B98D 0020                               2394+          EPSW  R2,R0              exptract psw
00002878  5020 8EE4                   000010E4    2395+          ST    R2,CCPSW               to save CC
0000287C  07FB                                    2396+          BR    R11                return
00002880                                          2397+RE67      DC    0F
00002880                                          2398+          DROP  R5
00002880  00000000 00000000                       2399           DC    XL16'00000000000000000000000000000001F'   V1 result
00002888  00000000 0000001F
00002890  FFFFFFFF FFFFFFFF                       2400           DC    FD'-1'                                    R2 source
                                                  2401
                                                  2402           VRR_K VCVDG,137,3,3                              INT_MAX
00002898                                          2403+          DS    0FD
00002898                      00002898            2404+          USING *,R5               base for test data and test routine
00002898  000028B4                                2405+T68       DC    A(X68)             address of test routine
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

0000289C  0044                                    2406+          DC    H'68'              test number
0000289E  00                                      2407+          DC    XL1'00'
0000289F  89                                      2408+          DC    HL1'137'           i3
000028A0  03                                      2409+          DC    HL1'3'             m4
000028A1  03                                      2410+          DC    HL1'3'             cc
000028A2  0E                                      2411+          DC    HL1'14'            cc failed mask
000028A3  E5C3E5C4 C7404040                       2412+          DC    CL8'VCVDG'         instruction name
000028AC  00000010                                2413+          DC    A(16)              result length
000028B0  000028D8                                2414+REA68     DC    A(RE68)            result address
                                                  2415+*                                  INSTRUCTION UNDER TEST ROUTINE
000028B4                                          2416+X68       DS    0F
000028B4  E710 8F40 0006              00001140    2417+          VL    V1,V1FUDGE         pollute V1
000028BA  E320 5050 0004              000028E8    2418+          lG    R2,RE68+16         get R2 source
000028C0  E612 0038 905A                          2419+          VCVDG V1,R2,137,3        test instruction
000028C6  E710 8F08 000E              00001108    2420+          VST   V1,V1OUTPUT        save
000028CC  B98D 0020                               2421+          EPSW  R2,R0              exptract psw
000028D0  5020 8EE4                   000010E4    2422+          ST    R2,CCPSW               to save CC
000028D4  07FB                                    2423+          BR    R11                return
000028D8                                          2424+RE68      DC    0F
000028D8                                          2425+          DROP  R5
000028D8  00000000 00000000                       2426           DC    XL16'0000000000000000000000147483647F'   V1 result
000028E0  00000014 7483647F
000028E8  00000000 7FFFFFFF                       2427           DC    FD'2147483647'                           R2 source
                                                  2428
                                                  2429           VRR_K VCVDG,137,3,3                             INT_MIN
000028F0                                          2430+          DS    0FD
000028F0                      000028F0            2431+          USING *,R5               base for test data and test routine
000028F0  0000290C                                2432+T69       DC    A(X69)             address of test routine
000028F4  0045                                    2433+          DC    H'69'              test number
000028F6  00                                      2434+          DC    XL1'00'
000028F7  89                                      2435+          DC    HL1'137'           i3
000028F8  03                                      2436+          DC    HL1'3'             m4
000028F9  03                                      2437+          DC    HL1'3'             cc
000028FA  0E                                      2438+          DC    HL1'14'            cc failed mask
000028FB  E5C3E5C4 C7404040                       2439+          DC    CL8'VCVDG'         instruction name
00002904  00000010                                2440+          DC    A(16)              result length
00002908  00002930                                2441+REA69     DC    A(RE69)            result address
                                                  2442+*                                  INSTRUCTION UNDER TEST ROUTINE
0000290C                                          2443+X69       DS    0F
0000290C  E710 8F40 0006              00001140    2444+          VL    V1,V1FUDGE         pollute V1
00002912  E320 5050 0004              00002940    2445+          lG    R2,RE69+16         get R2 source
00002918  E612 0038 905A                          2446+          VCVDG V1,R2,137,3        test instruction
0000291E  E710 8F08 000E              00001108    2447+          VST   V1,V1OUTPUT        save
00002924  B98D 0020                               2448+          EPSW  R2,R0              exptract psw
00002928  5020 8EE4                   000010E4    2449+          ST    R2,CCPSW               to save CC
0000292C  07FB                                    2450+          BR    R11                return
00002930                                          2451+RE69      DC    0F
00002930                                          2452+          DROP  R5
00002930  00000000 00000000                       2453           DC    XL16'0000000000000000000000147483648F'   V1 result
00002938  00000014 7483648F
00002940  FFFFFFFF 80000000                       2454           DC    FD'-2147483648'
                                                  2455
                                                  2456           VRR_K VCVDG,137,3,3                             LONG_MAX
00002948                                          2457+          DS    0FD
00002948                      00002948            2458+          USING *,R5               base for test data and test routine
00002948  00002964                                2459+T70       DC    A(X70)             address of test routine
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

0000294C  0046                                    2460+          DC    H'70'              test number
0000294E  00                                      2461+          DC    XL1'00'
0000294F  89                                      2462+          DC    HL1'137'           i3
00002950  03                                      2463+          DC    HL1'3'             m4
00002951  03                                      2464+          DC    HL1'3'             cc
00002952  0E                                      2465+          DC    HL1'14'            cc failed mask
00002953  E5C3E5C4 C7404040                       2466+          DC    CL8'VCVDG'         instruction name
0000295C  00000010                                2467+          DC    A(16)              result length
00002960  00002988                                2468+REA70     DC    A(RE70)            result address
                                                  2469+*                                  INSTRUCTION UNDER TEST ROUTINE
00002964                                          2470+X70       DS    0F
00002964  E710 8F40 0006                00001140  2471+          VL    V1,V1FUDGE         pollute V1
0000296A  E320 5050 0004                00002998  2472+          lG    R2,RE70+16         get R2 source
00002970  E612 0038 905A                          2473+          VCVDG V1,R2,137,3        test instruction
00002976  E710 8F08 000E                00001108  2474+          VST   V1,V1OUTPUT        save
0000297C  B98D 0020                               2475+          EPSW  R2,R0              exptract psw
00002980  5020 8EE4                     000010E4  2476+          ST    R2,CCPSW               to save CC
00002984  07FB                                    2477+          BR    R11                return
00002988                                          2478+RE70      DC    0F
00002988                                          2479+          DROP  R5
00002988  00000000 00000000                       2480           DC    XL16'0000000000000000000000854775807F'   V1 source
00002990  00000085 4775807F
00002998  7FFFFFFF FFFFFFFF                       2481           DC    XL08'7FFFFFFFFFFFFFFF'                   R1 result
                                                  2482
                                                  2483           VRR_K VCVDG,137,3,3                            LONG_MIN
000029A0                                          2484+          DS    0FD
000029A0                        000029A0          2485+          USING *,R5               base for test data and test routine
000029A0  000029BC                                2486+T71       DC    A(X71)             address of test routine
000029A4  0047                                    2487+          DC    H'71'              test number
000029A6  00                                      2488+          DC    XL1'00'
000029A7  89                                      2489+          DC    HL1'137'           i3
000029A8  03                                      2490+          DC    HL1'3'             m4
000029A9  03                                      2491+          DC    HL1'3'             cc
000029AA  0E                                      2492+          DC    HL1'14'            cc failed mask
000029AB  E5C3E5C4 C7404040                       2493+          DC    CL8'VCVDG'         instruction name
000029B4  00000010                                2494+          DC    A(16)              result length
000029B8  000029E0                                2495+REA71     DC    A(RE71)            result address
                                                  2496+*                                  INSTRUCTION UNDER TEST ROUTINE
000029BC                                          2497+X71       DS    0F
000029BC  E710 8F40 0006                00001140  2498+          VL    V1,V1FUDGE         pollute V1
000029C2  E320 5050 0004                000029F0  2499+          lG    R2,RE71+16         get R2 source
000029C8  E612 0038 905A                          2500+          VCVDG V1,R2,137,3        test instruction
000029CE  E710 8F08 000E                00001108  2501+          VST   V1,V1OUTPUT        save
000029D4  B98D 0020                               2502+          EPSW  R2,R0              exptract psw
000029D8  5020 8EE4                     000010E4  2503+          ST    R2,CCPSW               to save CC
000029DC  07FB                                    2504+          BR    R11                return
000029E0                                          2505+RE71      DC    0F
000029E0                                          2506+          DROP  R5
000029E0  00000000 00000000                       2507           DC    XL16'0000000000000000000000854775808F'   V1 source
000029E8  00000085 4775808F
000029F0  80000000 00000000                       2508           DC    XL08'8000000000000000'                   R1 result
                                                  2509
                                                  2510           VRR_K VCVDG,137,3,0                            ULONG_MAX
000029F8                                          2511+          DS    0FD
000029F8                        000029F8          2512+          USING *,R5               base for test data and test routine
000029F8  00002A14                                2513+T72       DC    A(X72)             address of test routine
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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

000029FC  0048                                    2514+          DC    H'72'              test number
000029FE  00                                      2515+          DC    XL1'00'
000029FF  89                                      2516+          DC    HL1'137'           i3
00002A00  03                                      2517+          DC    HL1'3'             m4
00002A01  00                                      2518+          DC    HL1'0'             cc
00002A02  07                                      2519+          DC    HL1'7'             cc failed mask
00002A03  E5C3E5C4 C7404040                       2520+          DC    CL8'VCVDG'         instruction name
00002A0C  00000010                                2521+          DC    A(16)              result length
00002A10  00002A38                                2522+REA72     DC    A(RE72)            result address
                                                  2523+*                                  INSTRUCTION UNDER TEST ROUTINE
00002A14                                          2524+X72       DS    0F
00002A14  E710 8F40 0006              00001140    2525+          VL    V1,V1FUDGE         pollute V1
00002A1A  E320 5050 0004              00002A48    2526+          lG    R2,RE72+16         get R2 source
00002A20  E612 0038 905A                          2527+          VCVDG V1,R2,137,3        test instruction
00002A26  E710 8F08 000E              00001108    2528+          VST   V1,V1OUTPUT        save
00002A2C  B98D 0020                               2529+          EPSW  R2,R0              exptract psw
00002A30  5020 8EE4                   000010E4    2530+          ST    R2,CCPSW             to save CC
00002A34  07FB                                    2531+          BR    R11                return
00002A38                                          2532+RE72      DC    0F
00002A38                                          2533+          DROP  R5
00002A38  00000000 00000000                       2534           DC    XL16'00000000000000000000000000000001F'   V1 source
00002A40  00000000 0000001F
00002A48  FFFFFFFF FFFFFFFF                       2535           DC    XL08'FFFFFFFFFFFFFFFF'                    R1 result
                                                  2536
                                                  2537 *-------------------------------------------------------------------
                                                  2538 * VCVDG         m4=   9 ( LB=1, P1=0 , CS=1)
                                                  2539 *               i3= 159 ( IOM=1, RDC=31)
                                                  2540
                                                  2541           VRR_K VCVDG,159,9,0
00002A50                                          2542+          DS    0FD
00002A50                      00002A50            2543+          USING *,R5               base for test data and test routine
00002A50  00002A6C                                2544+T73       DC    A(X73)             address of test routine
00002A54  0049                                    2545+          DC    H'73'              test number
00002A56  00                                      2546+          DC    XL1'00'
00002A57  9F                                      2547+          DC    HL1'159'           i3
00002A58  09                                      2548+          DC    HL1'9'             m4
00002A59  00                                      2549+          DC    HL1'0'             cc
00002A5A  07                                      2550+          DC    HL1'7'             cc failed mask
00002A5B  E5C3E5C4 C7404040                       2551+          DC    CL8'VCVDG'         instruction name
00002A64  00000010                                2552+          DC    A(16)              result length
00002A68  00002A90                                2553+REA73     DC    A(RE73)            result address
                                                  2554+*                                  INSTRUCTION UNDER TEST ROUTINE
00002A6C                                          2555+X73       DS    0F
00002A6C  E710 8F40 0006              00001140    2556+          VL    V1,V1FUDGE         pollute V1
00002A72  E320 5050 0004              00002AA0    2557+          lG    R2,RE73+16         get R2 source
00002A78  E612 0099 F05A                          2558+          VCVDG V1,R2,159,9        test instruction
00002A7E  E710 8F08 000E              00001108    2559+          VST   V1,V1OUTPUT        save
00002A84  B98D 0020                               2560+          EPSW  R2,R0              exptract psw
00002A88  5020 8EE4                   000010E4    2561+          ST    R2,CCPSW             to save CC
00002A8C  07FB                                    2562+          BR    R11                return
00002A90                                          2563+RE73      DC    0F
00002A90                                          2564+          DROP  R5
00002A90  00000000 00000000                       2565           DC    XL16'00000000000000000000000000000000C'   V1 result
00002A98  00000000 0000000C
00002AA0  00000000 00000000                       2566           DC    FD'0'                                     R2 source
                                                  2567
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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

                                                   2568          VRR_K VCVDG,159,9,0
00002AA8                                           2569+         DS    0FD
00002AA8                       00002AA8            2570+         USING *,R5              base for test data and test routine
00002AA8  00002AC4                                 2571+T74      DC    A(X74)            address of test routine
00002AAC  004A                                     2572+         DC    H'74'             test number
00002AAE  00                                       2573+         DC    XL1'00'
00002AAF  9F                                       2574+         DC    HL1'159'          i3
00002AB0  09                                       2575+         DC    HL1'9'            m4
00002AB1  00                                       2576+         DC    HL1'0'            cc
00002AB2  07                                       2577+         DC    HL1'7'            cc failed mask
00002AB3  E5C3E5C4 C7404040                        2578+         DC    CL8'VCVDG'        instruction name
00002ABC  00000010                                 2579+         DC    A(16)             result length
00002AC0  00002AE8                                 2580+REA74    DC    A(RE74)           result address
                                                   2581+*                                INSTRUCTION UNDER TEST ROUTINE
00002AC4                                           2582+X74      DS    0F
00002AC4  E710 8F40 0006              00001140     2583+         VL    V1,V1FUDGE        pollute V1
00002ACA  E320 5050 0004              00002AF8     2584+         lG    R2,RE74+16        get R2 source
00002AD0  E612 0099 F05A                           2585+         VCVDG V1,R2,159,9       test instruction
00002AD6  E710 8F08 000E              00001108     2586+         VST   V1,V1OUTPUT       save
00002ADC  B98D 0020                                2587+         EPSW  R2,R0             exptract psw
00002AE0  5020 8EE4                   000010E4     2588+         ST    R2,CCPSW              to save CC
00002AE4  07FB                                     2589+         BR    R11               return
00002AE8                                           2590+RE74     DC    0F
00002AE8                                           2591+         DROP  R5
00002AE8  00000000 00000000                        2592          DC    XL16'0000000000000000000000000000001C'   V1 result
00002AF0  00000000 0000001C
00002AF8  00000000 00000001                        2593          DC    FD'1'                                    R2 source
                                                   2594
                                                   2595          VRR_K VCVDG,159,9,0                             UINT_MAX
00002B00                                           2596+         DS    0FD
00002B00                       00002B00            2597+         USING *,R5              base for test data and test routine
00002B00  00002B1C                                 2598+T75      DC    A(X75)            address of test routine
00002B04  004B                                     2599+         DC    H'75'             test number
00002B06  00                                       2600+         DC    XL1'00'
00002B07  9F                                       2601+         DC    HL1'159'          i3
00002B08  09                                       2602+         DC    HL1'9'            m4
00002B09  00                                       2603+         DC    HL1'0'            cc
00002B0A  07                                       2604+         DC    HL1'7'            cc failed mask
00002B0B  E5C3E5C4 C7404040                        2605+         DC    CL8'VCVDG'        instruction name
00002B14  00000010                                 2606+         DC    A(16)             result length
00002B18  00002B40                                 2607+REA75    DC    A(RE75)           result address
                                                   2608+*                                INSTRUCTION UNDER TEST ROUTINE
00002B1C                                           2609+X75      DS    0F
00002B1C  E710 8F40 0006              00001140     2610+         VL    V1,V1FUDGE        pollute V1
00002B22  E320 5050 0004              00002B50     2611+         lG    R2,RE75+16        get R2 source
00002B28  E612 0099 F05A                           2612+         VCVDG V1,R2,159,9       test instruction
00002B2E  E710 8F08 000E              00001108     2613+         VST   V1,V1OUTPUT       save
00002B34  B98D 0020                                2614+         EPSW  R2,R0             exptract psw
00002B38  5020 8EE4                   000010E4     2615+         ST    R2,CCPSW              to save CC
00002B3C  07FB                                     2616+         BR    R11               return
00002B40                                           2617+RE75     DC    0F
00002B40                                           2618+         DROP  R5
00002B40  00000000 00018446                        2619          DC    XL16'0000000000018446744073709551615C'   V1 source
00002B48  74407370 9551615C
00002B50  FFFFFFFF FFFFFFFF                        2620          DC    FD'-1'                                   R2 source
                                                   2621
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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    2622          VRR_K VCVDG,159,9,0                          INT_MAX
00002B58                                            2623+         DS    0FD
00002B58                      00002B58              2624+         USING *,R5              base for test data and test routine
00002B58  00002B74                                  2625+T76      DC    A(X76)            address of test routine
00002B5C  004C                                      2626+         DC    H'76'             test number
00002B5E  00                                        2627+         DC    XL1'00'
00002B5F  9F                                        2628+         DC    HL1'159'          i3
00002B60  09                                        2629+         DC    HL1'9'            m4
00002B61  00                                        2630+         DC    HL1'0'            cc
00002B62  07                                        2631+         DC    HL1'7'            cc failed mask
00002B63  E5C3E5C4 C7404040                         2632+         DC    CL8'VCVDG'        instruction name
00002B6C  00000010                                  2633+         DC    A(16)             result length
00002B70  00002B98                                  2634+REA76    DC    A(RE76)           result address
                                                    2635+*                                  INSTRUCTION UNDER TEST ROUTINE
00002B74                                            2636+X76      DS    0F
00002B74  E710 8F40 0006              00001140      2637+         VL    V1,V1FUDGE        pollute V1
00002B7A  E320 5050 0004              00002BA8      2638+         lG    R2,RE76+16        get R2 source
00002B80  E612 0099 F05A                            2639+         VCVDG V1,R2,159,9       test instruction
00002B86  E710 8F08 000E              00001108      2640+         VST   V1,V1OUTPUT       save
00002B8C  B98D 0020                                 2641+         EPSW  R2,R0             exptract psw
00002B90  5020 8EE4                   000010E4      2642+         ST    R2,CCPSW              to save CC
00002B94  07FB                                      2643+         BR    R11               return
00002B98                                            2644+RE76     DC    0F
00002B98                                            2645+         DROP  R5
00002B98  00000000 00000000                         2646          DC    XL16'00000000000000000000000002147483647C'   V1 result
00002BA0  00000214 7483647C
00002BA8  00000000 7FFFFFFF                         2647          DC    FD'2147483647'                               R2 source
                                                    2648
                                                    2649          VRR_K VCVDG,159,9,0                          INT_MIN
00002BB0                                            2650+         DS    0FD
00002BB0                      00002BB0              2651+         USING *,R5              base for test data and test routine
00002BB0  00002BCC                                  2652+T77      DC    A(X77)            address of test routine
00002BB4  004D                                      2653+         DC    H'77'             test number
00002BB6  00                                        2654+         DC    XL1'00'
00002BB7  9F                                        2655+         DC    HL1'159'          i3
00002BB8  09                                        2656+         DC    HL1'9'            m4
00002BB9  00                                        2657+         DC    HL1'0'            cc
00002BBA  07                                        2658+         DC    HL1'7'            cc failed mask
00002BBB  E5C3E5C4 C7404040                         2659+         DC    CL8'VCVDG'        instruction name
00002BC4  00000010                                  2660+         DC    A(16)             result length
00002BC8  00002BF0                                  2661+REA77    DC    A(RE77)           result address
                                                    2662+*                                  INSTRUCTION UNDER TEST ROUTINE
00002BCC                                            2663+X77      DS    0F
00002BCC  E710 8F40 0006              00001140      2664+         VL    V1,V1FUDGE        pollute V1
00002BD2  E320 5050 0004              00002C00      2665+         lG    R2,RE77+16        get R2 source
00002BD8  E612 0099 F05A                            2666+         VCVDG V1,R2,159,9       test instruction
00002BDE  E710 8F08 000E              00001108      2667+         VST   V1,V1OUTPUT       save
00002BE4  B98D 0020                                 2668+         EPSW  R2,R0             exptract psw
00002BE8  5020 8EE4                   000010E4      2669+         ST    R2,CCPSW              to save CC
00002BEC  07FB                                      2670+         BR    R11               return
00002BF0                                            2671+RE77     DC    0F
00002BF0                                            2672+         DROP  R5
00002BF0  00000000 00018446                         2673          DC    XL16'0000000000018446744071562067968C'   V1 result
00002BF8  74407156 2067968C
00002C00  FFFFFFFF 80000000                         2674          DC    XL8'FFFFFFFF80000000'                    R2 source
                                                    2675 *        DC    FD'-2147483648'                          R2 sourc
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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    2676
                                                    2677          VRR_K VCVDG,159,9,0                          LONG_MAX
00002C08                                            2678+         DS    0FD
00002C08                      00002C08              2679+         USING *,R5              base for test data and test routine
00002C08  00002C24                                  2680+T78      DC    A(X78)            address of test routine
00002C0C  004E                                      2681+         DC    H'78'             test number
00002C0E  00                                        2682+         DC    XL1'00'
00002C0F  9F                                        2683+         DC    HL1'159'          i3
00002C10  09                                        2684+         DC    HL1'9'            m4
00002C11  00                                        2685+         DC    HL1'0'            cc
00002C12  07                                        2686+         DC    HL1'7'            cc failed mask
00002C13  E5C3E5C4 C7404040                         2687+         DC    CL8'VCVDG'        instruction name
00002C1C  00000010                                  2688+         DC    A(16)             result length
00002C20  00002C48                                  2689+REA78    DC    A(RE78)           result address
                                                    2690+*                                INSTRUCTION UNDER TEST ROUTINE
00002C24                                            2691+X78      DS    0F
00002C24  E710 8F40 0006              00001140      2692+         VL    V1,V1FUDGE        pollute V1
00002C2A  E320 5050 0004              00002C58      2693+         lG    R2,RE78+16        get R2 source
00002C30  E612 0099 F05A                            2694+         VCVDG V1,R2,159,9       test instruction
00002C36  E710 8F08 000E              00001108      2695+         VST   V1,V1OUTPUT       save
00002C3C  B98D 0020                                 2696+         EPSW  R2,R0             exptract psw
00002C40  5020 8EE4                   000010E4      2697+         ST    R2,CCPSW              to save CC
00002C44  07FB                                      2698+         BR    R11               return
00002C48                                            2699+RE78     DC    0F
00002C48                                            2700+         DROP  R5
00002C48  00000000 00009223                         2701          DC    XL16'00000000000092233720368547758070'   V1 source
00002C50  37203685 4775807C
00002C58  7FFFFFFF FFFFFFFF                         2702          DC    XL08'7FFFFFFFFFFFFFFF'                   R1 result
                                                    2703
                                                    2704          VRR_K VCVDG,159,9,0                          LONG_MIN
00002C60                                            2705+         DS    0FD
00002C60                      00002C60              2706+         USING *,R5              base for test data and test routine
00002C60  00002C7C                                  2707+T79      DC    A(X79)            address of test routine
00002C64  004F                                      2708+         DC    H'79'             test number
00002C66  00                                        2709+         DC    XL1'00'
00002C67  9F                                        2710+         DC    HL1'159'          i3
00002C68  09                                        2711+         DC    HL1'9'            m4
00002C69  00                                        2712+         DC    HL1'0'            cc
00002C6A  07                                        2713+         DC    HL1'7'            cc failed mask
00002C6B  E5C3E5C4 C7404040                         2714+         DC    CL8'VCVDG'        instruction name
00002C74  00000010                                  2715+         DC    A(16)             result length
00002C78  00002CA0                                  2716+REA79    DC    A(RE79)           result address
                                                    2717+*                                INSTRUCTION UNDER TEST ROUTINE
00002C7C                                            2718+X79      DS    0F
00002C7C  E710 8F40 0006              00001140      2719+         VL    V1,V1FUDGE        pollute V1
00002C82  E320 5050 0004              00002CB0      2720+         lG    R2,RE79+16        get R2 source
00002C88  E612 0099 F05A                            2721+         VCVDG V1,R2,159,9       test instruction
00002C8E  E710 8F08 000E              00001108      2722+         VST   V1,V1OUTPUT       save
00002C94  B98D 0020                                 2723+         EPSW  R2,R0             exptract psw
00002C98  5020 8EE4                   000010E4      2724+         ST    R2,CCPSW              to save CC
00002C9C  07FB                                      2725+         BR    R11               return
00002CA0                                            2726+RE79     DC    0F
00002CA0                                            2727+         DROP  R5
00002CA0  00000000 00009223                         2728          DC    XL16'00000000000092233720368547758080'   V1 source
00002CA8  37203685 4775808C
00002CB0  80000000 00000000                         2729          DC    XL08'8000000000000000'                   R1 result
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                    2730
                                                    2731          VRR_K VCVDG,159,9,0                          ULONG_MAX
00002CB8                                            2732+         DS    0FD
00002CB8                      00002CB8              2733+         USING *,R5              base for test data and test routine
00002CB8  00002CD4                                  2734+T80      DC    A(X80)            address of test routine
00002CBC  0050                                      2735+         DC    H'80'             test number
00002CBE  00                                        2736+         DC    XL1'00'
00002CBF  9F                                        2737+         DC    HL1'159'          i3
00002CC0  09                                        2738+         DC    HL1'9'            m4
00002CC1  00                                        2739+         DC    HL1'0'            cc
00002CC2  07                                        2740+         DC    HL1'7'            cc failed mask
00002CC3  E5C3E5C4 C7404040                         2741+         DC    CL8'VCVDG'        instruction name
00002CCC  00000010                                  2742+         DC    A(16)             result length
00002CD0  00002CF8                                  2743+REA80    DC    A(RE80)           result address
                                                    2744+*                                INSTRUCTION UNDER TEST ROUTINE
00002CD4                                            2745+X80      DS    0F
00002CD4  E710 8F40 0006              00001140      2746+         VL    V1,V1FUDGE        pollute V1
00002CDA  E320 5050 0004              00002D08      2747+         lG    R2,RE80+16        get R2 source
00002CE0  E612 0099 F05A                            2748+         VCVDG V1,R2,159,9       test instruction
00002CE6  E710 8F08 000E              00001108      2749+         VST   V1,V1OUTPUT       save
00002CEC  B98D 0020                                 2750+         EPSW  R2,R0             exptract psw
00002CF0  5020 8EE4                   000010E4      2751+         ST    R2,CCPSW              to save CC
00002CF4  07FB                                      2752+         BR    R11               return
00002CF8                                            2753+RE80     DC    0F
00002CF8                                            2754+         DROP  R5
00002CF8  00000000 00018446                         2755          DC    XL16'0000000000018446744073709551615C'   V1 source
00002D00  74407370 9551615C
00002D08  FFFFFFFF FFFFFFFF                         2756          DC    XL08'FFFFFFFFFFFFFFFF'                   R1 result
                                                    2757
                                                    2758 * VCVDG         m4=   9 ( LB=1, P1=0 , CS=1)
                                                    2759 *               i3= 137 ( IOM=1, RDC= 9)
                                                    2760
                                                    2761          VRR_K VCVDG,137,9,0
00002D10                                            2762+         DS    0FD
00002D10                      00002D10              2763+         USING *,R5              base for test data and test routine
00002D10  00002D2C                                  2764+T81      DC    A(X81)            address of test routine
00002D14  0051                                      2765+         DC    H'81'             test number
00002D16  00                                        2766+         DC    XL1'00'
00002D17  89                                        2767+         DC    HL1'137'          i3
00002D18  09                                        2768+         DC    HL1'9'            m4
00002D19  00                                        2769+         DC    HL1'0'            cc
00002D1A  07                                        2770+         DC    HL1'7'            cc failed mask
00002D1B  E5C3E5C4 C7404040                         2771+         DC    CL8'VCVDG'        instruction name
00002D24  00000010                                  2772+         DC    A(16)             result length
00002D28  00002D50                                  2773+REA81    DC    A(RE81)           result address
                                                    2774+*                                INSTRUCTION UNDER TEST ROUTINE
00002D2C                                            2775+X81      DS    0F
00002D2C  E710 8F40 0006              00001140      2776+         VL    V1,V1FUDGE        pollute V1
00002D32  E320 5050 0004              00002D60      2777+         lG    R2,RE81+16        get R2 source
00002D38  E612 0098 905A                            2778+         VCVDG V1,R2,137,9       test instruction
00002D3E  E710 8F08 000E              00001108      2779+         VST   V1,V1OUTPUT       save
00002D44  B98D 0020                                 2780+         EPSW  R2,R0             exptract psw
00002D48  5020 8EE4                   000010E4      2781+         ST    R2,CCPSW              to save CC
00002D4C  07FB                                      2782+         BR    R11               return
00002D50                                            2783+RE81     DC    0F
00002D50                                            2784+         DROP  R5
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00002D50  00000000 00000000                        2785          DC    XL16'0000000000000000000000000000000C'   V1 result
00002D58  00000000 0000000C
00002D60  00000000 00000000                        2786          DC    FD'0'                                    R2 source
                                                   2787
                                                   2788          VRR_K VCVDG,137,9,0
00002D68                                           2789+         DS    0FD
00002D68                     00002D68              2790+         USING *,R5              base for test data and test routine
00002D68  00002D84                                 2791+T82      DC    A(X82)            address of test routine
00002D6C  0052                                     2792+         DC    H'82'             test number
00002D6E  00                                       2793+         DC    XL1'00'
00002D6F  89                                       2794+         DC    HL1'137'          i3
00002D70  09                                       2795+         DC    HL1'9'            m4
00002D71  00                                       2796+         DC    HL1'0'            cc
00002D72  07                                       2797+         DC    HL1'7'            cc failed mask
00002D73  E5C3E5C4 C7404040                        2798+         DC    CL8'VCVDG'        instruction name
00002D7C  00000010                                 2799+         DC    A(16)             result length
00002D80  00002DA8                                 2800+REA82    DC    A(RE82)           result address
                                                   2801+*                                INSTRUCTION UNDER TEST ROUTINE
00002D84                                           2802+X82      DS    0F
00002D84  E710 8F40 0006                 00001140  2803+         VL    V1,V1FUDGE        pollute V1
00002D8A  E320 5050 0004                 00002DB8  2804+         lG    R2,RE82+16        get R2 source
00002D90  E612 0098 905A                           2805+         VCVDG V1,R2,137,9       test instruction
00002D96  E710 8F08 000E                 00001108  2806+         VST   V1,V1OUTPUT       save
00002D9C  B98D 0020                                2807+         EPSW  R2,R0             exptract psw
00002DA0  5020 8EE4                      000010E4  2808+         ST    R2,CCPSW              to save CC
00002DA4  07FB                                     2809+         BR    R11               return
00002DA8                                           2810+RE82     DC    0F
00002DA8                                           2811+         DROP  R5
00002DA8  00000000 00000000                        2812          DC    XL16'0000000000000000000000000000001C'   V1 result
00002DB0  00000000 0000001C
00002DB8  00000000 00000001                        2813          DC    FD'1'                                    R2 source
                                                   2814
                                                   2815          VRR_K VCVDG,137,9,3                             UINT_MAX
00002DC0                                           2816+         DS    0FD
00002DC0                     00002DC0              2817+         USING *,R5              base for test data and test routine
00002DC0  00002DDC                                 2818+T83      DC    A(X83)            address of test routine
00002DC4  0053                                     2819+         DC    H'83'             test number
00002DC6  00                                       2820+         DC    XL1'00'
00002DC7  89                                       2821+         DC    HL1'137'          i3
00002DC8  09                                       2822+         DC    HL1'9'            m4
00002DC9  03                                       2823+         DC    HL1'3'            cc
00002DCA  0E                                       2824+         DC    HL1'14'           cc failed mask
00002DCB  E5C3E5C4 C7404040                        2825+         DC    CL8'VCVDG'        instruction name
00002DD4  00000010                                 2826+         DC    A(16)             result length
00002DD8  00002E00                                 2827+REA83    DC    A(RE83)           result address
                                                   2828+*                                INSTRUCTION UNDER TEST ROUTINE
00002DDC                                           2829+X83      DS    0F
00002DDC  E710 8F40 0006                 00001140  2830+         VL    V1,V1FUDGE        pollute V1
00002DE2  E320 5050 0004                 00002E10  2831+         lG    R2,RE83+16        get R2 source
00002DE8  E612 0098 905A                           2832+         VCVDG V1,R2,137,9       test instruction
00002DEE  E710 8F08 000E                 00001108  2833+         VST   V1,V1OUTPUT       save
00002DF4  B98D 0020                                2834+         EPSW  R2,R0             exptract psw
00002DF8  5020 8EE4                      000010E4  2835+         ST    R2,CCPSW              to save CC
00002DFC  07FB                                     2836+         BR    R11               return
00002E00                                           2837+RE83     DC    0F
00002E00                                           2838+         DROP  R5
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00002E00  00000000 00000000                        2839          DC    XL16'0000000000000000000000709551615C'   V1 source
00002E08  00000070 9551615C
00002E10  FFFFFFFF FFFFFFFF                        2840          DC    FD'-1'                                    R2 source
                                                   2841
                                                   2842          VRR_K VCVDG,137,9,3                              INT_MAX
00002E18                                           2843+         DS    0FD
00002E18                    00002E18               2844+         USING *,R5              base for test data and test routine
00002E18  00002E34                                 2845+T84      DC    A(X84)            address of test routine
00002E1C  0054                                     2846+         DC    H'84'             test number
00002E1E  00                                       2847+         DC    XL1'00'
00002E1F  89                                       2848+         DC    HL1'137'          i3
00002E20  09                                       2849+         DC    HL1'9'            m4
00002E21  03                                       2850+         DC    HL1'3'            cc
00002E22  0E                                       2851+         DC    HL1'14'           cc failed mask
00002E23  E5C3E5C4 C7404040                        2852+         DC    CL8'VCVDG'        instruction name
00002E2C  00000010                                 2853+         DC    A(16)             result length
00002E30  00002E58                                 2854+REA84    DC    A(RE84)           result address
                                                   2855+*                                INSTRUCTION UNDER TEST ROUTINE
00002E34                                           2856+X84      DS    0F
00002E34  E710 8F40 0006                00001140   2857+         VL    V1,V1FUDGE        pollute V1
00002E3A  E320 5050 0004                00002E68   2858+         lG    R2,RE84+16        get R2 source
00002E40  E612 0098 905A                           2859+         VCVDG V1,R2,137,9       test instruction
00002E46  E710 8F08 000E                00001108   2860+         VST   V1,V1OUTPUT       save
00002E4C  B98D 0020                                2861+         EPSW  R2,R0             exptract psw
00002E50  5020 8EE4                     000010E4   2862+         ST    R2,CCPSW              to save CC
00002E54  07FB                                     2863+         BR    R11               return
00002E58                                           2864+RE84     DC    0F
00002E58                                           2865+         DROP  R5
00002E58  00000000 00000000                        2866          DC    XL16'00000000000000000000000147483647C'   V1 result
00002E60  00000014 7483647C
00002E68  00000000 7FFFFFFF                        2867          DC    FD'2147483647'                            R2 source
                                                   2868
                                                   2869          VRR_K VCVDG,137,9,3                              INT_MIN
00002E70                                           2870+         DS    0FD
00002E70                    00002E70               2871+         USING *,R5              base for test data and test routine
00002E70  00002E8C                                 2872+T85      DC    A(X85)            address of test routine
00002E74  0055                                     2873+         DC    H'85'             test number
00002E76  00                                       2874+         DC    XL1'00'
00002E77  89                                       2875+         DC    HL1'137'          i3
00002E78  09                                       2876+         DC    HL1'9'            m4
00002E79  03                                       2877+         DC    HL1'3'            cc
00002E7A  0E                                       2878+         DC    HL1'14'           cc failed mask
00002E7B  E5C3E5C4 C7404040                        2879+         DC    CL8'VCVDG'        instruction name
00002E84  00000010                                 2880+         DC    A(16)             result length
00002E88  00002EB0                                 2881+REA85    DC    A(RE85)           result address
                                                   2882+*                                INSTRUCTION UNDER TEST ROUTINE
00002E8C                                           2883+X85      DS    0F
00002E8C  E710 8F40 0006                00001140   2884+         VL    V1,V1FUDGE        pollute V1
00002E92  E320 5050 0004                00002EC0   2885+         lG    R2,RE85+16        get R2 source
00002E98  E612 0098 905A                           2886+         VCVDG V1,R2,137,9       test instruction
00002E9E  E710 8F08 000E                00001108   2887+         VST   V1,V1OUTPUT       save
00002EA4  B98D 0020                                2888+         EPSW  R2,R0             exptract psw
00002EA8  5020 8EE4                     000010E4   2889+         ST    R2,CCPSW              to save CC
00002EAC  07FB                                     2890+         BR    R11               return
00002EB0                                           2891+RE85     DC    0F
00002EB0                                           2892+         DROP  R5
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00002EB0  00000000 00000000                        2893          DC    XL16'0000000000000000000000562067968C'   V1 result
00002EB8  00000056 2067968C
00002EC0  FFFFFFFF 80000000                        2894          DC    FD'-2147483648'
                                                   2895
                                                   2896          VRR_K VCVDG,137,9,3                            LONG_MAX
00002EC8                                           2897+         DS    0FD
00002EC8                     00002EC8              2898+         USING *,R5              base for test data and test routine
00002EC8  00002EE4                                 2899+T86      DC    A(X86)            address of test routine
00002ECC  0056                                     2900+         DC    H'86'             test number
00002ECE  00                                       2901+         DC    XL1'00'
00002ECF  89                                       2902+         DC    HL1'137'          i3
00002ED0  09                                       2903+         DC    HL1'9'            m4
00002ED1  03                                       2904+         DC    HL1'3'            cc
00002ED2  0E                                       2905+         DC    HL1'14'           cc failed mask
00002ED3  E5C3E5C4 C7404040                        2906+         DC    CL8'VCVDG'        instruction name
00002EDC  00000010                                 2907+         DC    A(16)             result length
00002EE0  00002F08                                 2908+REA86    DC    A(RE86)           result address
                                                   2909+*                                INSTRUCTION UNDER TEST ROUTINE
00002EE4                                           2910+X86      DS    0F
00002EE4  E710 8F40 0006                 00001140  2911+         VL    V1,V1FUDGE        pollute V1
00002EEA  E320 5050 0004                 00002F18  2912+         lG    R2,RE86+16        get R2 source
00002EF0  E612 0098 905A                           2913+         VCVDG V1,R2,137,9       test instruction
00002EF6  E710 8F08 000E                 00001108  2914+         VST   V1,V1OUTPUT       save
00002EFC  B98D 0020                                2915+         EPSW  R2,R0             exptract psw
00002F00  5020 8EE4                      000010E4  2916+         ST    R2,CCPSW              to save CC
00002F04  07FB                                     2917+         BR    R11               return
00002F08                                           2918+RE86     DC    0F
00002F08                                           2919+         DROP  R5
00002F08  00000000 00000000                        2920          DC    XL16'0000000000000000000000854775807C'   V1 source
00002F10  00000085 4775807C
00002F18  7FFFFFFF FFFFFFFF                        2921          DC    XL08'7FFFFFFFFFFFFFFF'                   R1 result
                                                   2922
                                                   2923          VRR_K VCVDG,137,9,3                            LONG_MIN
00002F20                                           2924+         DS    0FD
00002F20                     00002F20              2925+         USING *,R5              base for test data and test routine
00002F20  00002F3C                                 2926+T87      DC    A(X87)            address of test routine
00002F24  0057                                     2927+         DC    H'87'             test number
00002F26  00                                       2928+         DC    XL1'00'
00002F27  89                                       2929+         DC    HL1'137'          i3
00002F28  09                                       2930+         DC    HL1'9'            m4
00002F29  03                                       2931+         DC    HL1'3'            cc
00002F2A  0E                                       2932+         DC    HL1'14'           cc failed mask
00002F2B  E5C3E5C4 C7404040                        2933+         DC    CL8'VCVDG'        instruction name
00002F34  00000010                                 2934+         DC    A(16)             result length
00002F38  00002F60                                 2935+REA87    DC    A(RE87)           result address
                                                   2936+*                                INSTRUCTION UNDER TEST ROUTINE
00002F3C                                           2937+X87      DS    0F
00002F3C  E710 8F40 0006                 00001140  2938+         VL    V1,V1FUDGE        pollute V1
00002F42  E320 5050 0004                 00002F70  2939+         lG    R2,RE87+16        get R2 source
00002F48  E612 0098 905A                           2940+         VCVDG V1,R2,137,9       test instruction
00002F4E  E710 8F08 000E                 00001108  2941+         VST   V1,V1OUTPUT       save
00002F54  B98D 0020                                2942+         EPSW  R2,R0             exptract psw
00002F58  5020 8EE4                      000010E4  2943+         ST    R2,CCPSW              to save CC
00002F5C  07FB                                     2944+         BR    R11               return
00002F60                                           2945+RE87     DC    0F
00002F60                                           2946+         DROP  R5
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00002F60  00000000 00000000                        2947          DC    XL16'0000000000000000000000854775808C'   V1 source
00002F68  00000085 4775808C
00002F70  80000000 00000000                        2948          DC    XL08'8000000000000000'                   R1 result
                                                   2949
                                                   2950          VRR_K VCVDG,137,9,3                            ULONG_MAX
00002F78                                           2951+         DS    0FD
00002F78                     00002F78              2952+         USING *,R5              base for test data and test routine
00002F78  00002F94                                 2953+T88      DC    A(X88)            address of test routine
00002F7C  0058                                     2954+         DC    H'88'             test number
00002F7E  00                                       2955+         DC    XL1'00'
00002F7F  89                                       2956+         DC    HL1'137'          i3
00002F80  09                                       2957+         DC    HL1'9'            m4
00002F81  03                                       2958+         DC    HL1'3'            cc
00002F82  0E                                       2959+         DC    HL1'14'           cc failed mask
00002F83  E5C3E5C4 C7404040                        2960+         DC    CL8'VCVDG'        instruction name
00002F8C  00000010                                 2961+         DC    A(16)             result length
00002F90  00002FB8                                 2962+REA88    DC    A(RE88)           result address
                                                   2963+*                                INSTRUCTION UNDER TEST ROUTINE
00002F94                                           2964+X88      DS    0F
00002F94  E710 8F40 0006                 00001140  2965+         VL    V1,V1FUDGE        pollute V1
00002F9A  E320 5050 0004                 00002FC8  2966+         lG    R2,RE88+16        get R2 source
00002FA0  E612 0098 905A                           2967+         VCVDG V1,R2,137,9       test instruction
00002FA6  E710 8F08 000E                 00001108  2968+         VST   V1,V1OUTPUT       save
00002FAC  B98D 0020                                2969+         EPSW  R2,R0             exptract psw
00002FB0  5020 8EE4                      000010E4  2970+         ST    R2,CCPSW              to save CC
00002FB4  07FB                                     2971+         BR    R11               return
00002FB8                                           2972+RE88     DC    0F
00002FB8                                           2973+         DROP  R5
00002FB8  00000000 00000000                        2974          DC    XL16'0000000000000000000000709551615C'   V1 source
00002FC0  00000070 9551615C
00002FC8  FFFFFFFF FFFFFFFF                        2975          DC    XL08'FFFFFFFFFFFFFFFF'                   R1 result
                                                   2976
                                                   2977 *-------------------------------------------------------------------
                                                   2978 * VCVDG          m4=  11 ( LB=1, P1=1 , CS=1)
                                                   2979 *               i3= 159 ( IOM=1, RDC=31)
                                                   2980
                                                   2981          VRR_K VCVDG,159,11,0
00002FD0                                           2982+         DS    0FD
00002FD0                     00002FD0              2983+         USING *,R5              base for test data and test routine
00002FD0  00002FEC                                 2984+T89      DC    A(X89)            address of test routine
00002FD4  0059                                     2985+         DC    H'89'             test number
00002FD6  00                                       2986+         DC    XL1'00'
00002FD7  9F                                       2987+         DC    HL1'159'          i3
00002FD8  0B                                       2988+         DC    HL1'11'           m4
00002FD9  00                                       2989+         DC    HL1'0'            cc
00002FDA  07                                       2990+         DC    HL1'7'            cc failed mask
00002FDB  E5C3E5C4 C7404040                        2991+         DC    CL8'VCVDG'        instruction name
00002FE4  00000010                                 2992+         DC    A(16)             result length
00002FE8  00003010                                 2993+REA89    DC    A(RE89)           result address
                                                   2994+*                                INSTRUCTION UNDER TEST ROUTINE
00002FEC                                           2995+X89      DS    0F
00002FEC  E710 8F40 0006                 00001140  2996+         VL    V1,V1FUDGE        pollute V1
00002FF2  E320 5050 0004                 00003020  2997+         lG    R2,RE89+16        get R2 source
00002FF8  E612 00B9 F05A                           2998+         VCVDG V1,R2,159,11      test instruction
00002FFE  E710 8F08 000E                 00001108  2999+         VST   V1,V1OUTPUT       save
00003004  B98D 0020                                3000+         EPSW  R2,R0             exptract psw
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00003008  5020 8EE4                      000010E4  3001+         ST    R2,CCPSW              to save CC
0000300C  07FB                                     3002+         BR    R11                 return
00003010                                           3003+RE89     DC    0F
00003010                                           3004+         DROP  R5
00003010  00000000 00000000                        3005          DC    XL16'0000000000000000000000000000000F'   V1 result
00003018  00000000 0000000F
00003020  00000000 00000000                        3006          DC    FD'0'                                    R2 source
                                                   3007
                                                   3008          VRR_K VCVDG,159,11,0
00003028                                           3009+         DS    0FD
00003028                    00003028               3010+         USING *,R5                base for test data and test routine
00003028  00003044                                 3011+T90      DC    A(X90)              address of test routine
0000302C  005A                                     3012+         DC    H'90'               test number
0000302E  00                                       3013+         DC    XL1'00'
0000302F  9F                                       3014+         DC    HL1'159'            i3
00003030  0B                                       3015+         DC    HL1'11'             m4
00003031  00                                       3016+         DC    HL1'0'              cc
00003032  07                                       3017+         DC    HL1'7'              cc failed mask
00003033  E5C3E5C4 C7404040                       3018+         DC    CL8'VCVDG'          instruction name
0000303C  00000010                                 3019+         DC    A(16)               result length
00003040  00003068                                 3020+REA90    DC    A(RE90)             result address
                                                   3021+*                                  INSTRUCTION UNDER TEST ROUTINE
00003044                                           3022+X90      DS    0F
00003044  E710 8F40 0006                00001140   3023+         VL    V1,V1FUDGE          pollute V1
0000304A  E320 5050 0004                00003078   3024+         lG    R2,RE90+16          get R2 source
00003050  E612 00B9 F05A                           3025+         VCVDG V1,R2,159,11        test instruction
00003056  E710 8F08 000E                00001108   3026+         VST   V1,V1OUTPUT         save
0000305C  B98D 0020                                3027+         EPSW  R2,R0               exptract psw
00003060  5020 8EE4                      000010E4  3028+         ST    R2,CCPSW              to save CC
00003064  07FB                                     3029+         BR    R11                 return
00003068                                           3030+RE90     DC    0F
00003068                                           3031+         DROP  R5
00003068  00000000 00000000                        3032          DC    XL16'0000000000000000000000000000001F'   V1 result
00003070  00000000 0000001F
00003078  00000000 00000001                        3033          DC    FD'1'                                    R2 source
                                                   3034
                                                   3035          VRR_K VCVDG,159,11,0                             UINT_MAX
00003080                                           3036+         DS    0FD
00003080                    00003080               3037+         USING *,R5                base for test data and test routine
00003080  0000309C                                 3038+T91      DC    A(X91)              address of test routine
00003084  005B                                     3039+         DC    H'91'               test number
00003086  00                                       3040+         DC    XL1'00'
00003087  9F                                       3041+         DC    HL1'159'            i3
00003088  0B                                       3042+         DC    HL1'11'             m4
00003089  00                                       3043+         DC    HL1'0'              cc
0000308A  07                                       3044+         DC    HL1'7'              cc failed mask
0000308B  E5C3E5C4 C7404040                       3045+         DC    CL8'VCVDG'          instruction name
00003094  00000010                                 3046+         DC    A(16)               result length
00003098  000030C0                                 3047+REA91    DC    A(RE91)             result address
                                                   3048+*                                  INSTRUCTION UNDER TEST ROUTINE
0000309C                                           3049+X91      DS    0F
0000309C  E710 8F40 0006                00001140   3050+         VL    V1,V1FUDGE          pollute V1
000030A2  E320 5050 0004                000030D0   3051+         lG    R2,RE91+16          get R2 source
000030A8  E612 00B9 F05A                           3052+         VCVDG V1,R2,159,11        test instruction
000030AE  E710 8F08 000E                00001108   3053+         VST   V1,V1OUTPUT         save
000030B4  B98D 0020                                3054+         EPSW  R2,R0               exptract psw
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

000030B8  5020 8EE4                     000010E4  3055+         ST    R2,CCPSW              to save CC
000030BC  07FB                                    3056+         BR    R11                 return
000030C0                                          3057+RE91     DC    0F
000030C0                                          3058+         DROP  R5
000030C0  00000000 00018446                       3059          DC    XL16'00000000000184467440737095516 V1 source
000030C8  74407370 9551615F                                                                15F'
000030D0  FFFFFFFF FFFFFFFF                       3060          DC    FD'-1'                R2 source
                                                  3061
                                                  3062          VRR_K VCVDG,159,11,0          INT_MAX
000030D8                                          3063+         DS    0FD
000030D8                  000030D8                3064+         USING *,R5                base for test data and test routine
000030D8  000030F4                                3065+T92      DC    A(X92)              address of test routine
000030DC  005C                                    3066+         DC    H'92'               test number
000030DE  00                                      3067+         DC    XL1'00'
000030DF  9F                                      3068+         DC    HL1'159'            i3
000030E0  0B                                      3069+         DC    HL1'11'             m4
000030E1  00                                      3070+         DC    HL1'0'              cc
000030E2  07                                      3071+         DC    HL1'7'              cc failed mask
000030E3  E5C3E5C4 C7404040                       3072+         DC    CL8'VCVDG'          instruction name
000030EC  00000010                                3073+         DC    A(16)               result length
000030F0  00003118                                3074+REA92    DC    A(RE92)             result address
                                                  3075+*                                  INSTRUCTION UNDER TEST ROUTINE
000030F4                                          3076+X92      DS    0F
000030F4  E710 8F40 0006          00001140        3077+         VL    V1,V1FUDGE          pollute V1
000030FA  E320 5050 0004          00003128        3078+         lG    R2,RE92+16          get R2 source
00003100  E612 00B9 F05A                          3079+         VCVDG V1,R2,159,11        test instruction
00003106  E710 8F08 000E          00001108        3080+         VST   V1,V1OUTPUT         save
0000310C  B98D 0020                               3081+         EPSW  R2,R0               exptract psw
00003110  5020 8EE4                     000010E4  3082+         ST    R2,CCPSW              to save CC
00003114  07FB                                    3083+         BR    R11                 return
00003118                                          3084+RE92     DC    0F
00003118                                          3085+         DROP  R5
00003118  00000000 00000000                       3086          DC    XL16'00000000000000000000000021474 V1 result
00003120  00000214 7483647F                                                                83647F'
00003128  00000000 7FFFFFFF                       3087          DC    FD'2147483647'        R2 source
                                                  3088
                                                  3089          VRR_K VCVDG,159,11,0          INT_MIN
00003130                                          3090+         DS    0FD
00003130                  00003130                3091+         USING *,R5                base for test data and test routine
00003130  0000314C                                3092+T93      DC    A(X93)              address of test routine
00003134  005D                                    3093+         DC    H'93'               test number
00003136  00                                      3094+         DC    XL1'00'
00003137  9F                                      3095+         DC    HL1'159'            i3
00003138  0B                                      3096+         DC    HL1'11'             m4
00003139  00                                      3097+         DC    HL1'0'              cc
0000313A  07                                      3098+         DC    HL1'7'              cc failed mask
0000313B  E5C3E5C4 C7404040                       3099+         DC    CL8'VCVDG'          instruction name
00003144  00000010                                3100+         DC    A(16)               result length
00003148  00003170                                3101+REA93    DC    A(RE93)             result address
                                                  3102+*                                  INSTRUCTION UNDER TEST ROUTINE
0000314C                                          3103+X93      DS    0F
0000314C  E710 8F40 0006          00001140        3104+         VL    V1,V1FUDGE          pollute V1
00003152  E320 5050 0004          00003180        3105+         lG    R2,RE93+16          get R2 source
00003158  E612 00B9 F05A                          3106+         VCVDG V1,R2,159,11        test instruction
0000315E  E710 8F08 000E          00001108        3107+         VST   V1,V1OUTPUT         save
00003164  B98D 0020                               3108+         EPSW  R2,R0               exptract psw
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00003168  5020 8EE4                      000010E4  3109+         ST    R2,CCPSW              to save CC
0000316C  07FB                                    3110+         BR    R11                 return
00003170                                          3111+RE93     DC    0F
00003170                                          3112+         DROP  R5
00003170  00000000 00018446                       3113          DC    XL16'00000000000184467440715620679 V1 result
00003178  74407156 2067968F                                                                      68F'
00003180  FFFFFFFF 80000000                       3114          DC    XL8'FFFFFFFF80000000'                R2 source
                                                  3115 *        DC    FD'-2147483648'                      R2 sourc
                                                  3116
                                                  3117          VRR_K VCVDG,159,11,0                        LONG_MAX
00003188                                          3118+         DS    0FD
00003188                        00003188          3119+         USING *,R5                base for test data and test routine
00003188  000031A4                                3120+T94      DC    A(X94)              address of test routine
0000318C  005E                                    3121+         DC    H'94'               test number
0000318E  00                                      3122+         DC    XL1'00'
0000318F  9F                                      3123+         DC    HL1'159'            i3
00003190  0B                                      3124+         DC    HL1'11'             m4
00003191  00                                      3125+         DC    HL1'0'              cc
00003192  07                                      3126+         DC    HL1'7'              cc failed mask
00003193  E5C3E5C4 C7404040                       3127+         DC    CL8'VCVDG'          instruction name
0000319C  00000010                                3128+         DC    A(16)               result length
000031A0  000031C8                                3129+REA94    DC    A(RE94)             result address
                                                  3130+*                                  INSTRUCTION UNDER TEST ROUTINE
000031A4                                          3131+X94      DS    0F
000031A4  E710 8F40 0006                  00001140 3132+         VL    V1,V1FUDGE          pollute V1
000031AA  E320 5050 0004                  000031D8 3133+         lG    R2,RE94+16          get R2 source
000031B0  E612 00B9 F05A                           3134+         VCVDG V1,R2,159,11        test instruction
000031B6  E710 8F08 000E                  00001108 3135+         VST   V1,V1OUTPUT         save
000031BC  B98D 0020                                3136+         EPSW  R2,R0               exptract psw
000031C0  5020 8EE4                       000010E4 3137+         ST    R2,CCPSW              to save CC
000031C4  07FB                                     3138+         BR    R11                 return
000031C8                                           3139+RE94     DC    0F
000031C8                                           3140+         DROP  R5
000031C8  00000000 00009223                       3141          DC    XL16'00000000000092233720368547758 V1 source
000031D0  37203685 4775807F                                                                      07F'
000031D8  7FFFFFFF FFFFFFFF                       3142          DC    XL08'7FFFFFFFFFFFFFFF'               R1 result
                                                  3143
                                                  3144          VRR_K VCVDG,159,11,0                        LONG_MIN
000031E0                                          3145+         DS    0FD
000031E0                        000031E0          3146+         USING *,R5                base for test data and test routine
000031E0  000031FC                                3147+T95      DC    A(X95)              address of test routine
000031E4  005F                                    3148+         DC    H'95'               test number
000031E6  00                                      3149+         DC    XL1'00'
000031E7  9F                                      3150+         DC    HL1'159'            i3
000031E8  0B                                      3151+         DC    HL1'11'             m4
000031E9  00                                      3152+         DC    HL1'0'              cc
000031EA  07                                      3153+         DC    HL1'7'              cc failed mask
000031EB  E5C3E5C4 C7404040                       3154+         DC    CL8'VCVDG'          instruction name
000031F4  00000010                                3155+         DC    A(16)               result length
000031F8  00003220                                3156+REA95    DC    A(RE95)             result address
                                                  3157+*                                  INSTRUCTION UNDER TEST ROUTINE
000031FC                                          3158+X95      DS    0F
000031FC  E710 8F40 0006                  00001140 3159+         VL    V1,V1FUDGE          pollute V1
00003202  E320 5050 0004                  00003230 3160+         lG    R2,RE95+16          get R2 source
00003208  E612 00B9 F05A                           3161+         VCVDG V1,R2,159,11        test instruction
0000320E  E710 8F08 000E                  00001108 3162+         VST   V1,V1OUTPUT         save
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
00003214  B98D 0020                          3163+          EPSW  R2,R0              exptract psw
00003218  5020 8EE4                 000010E4 3164+          ST    R2,CCPSW             to save CC
0000321C  07FB                              3165+          BR    R11                 return
00003220                                    3166+RE95      DC    0F
00003220                                    3167+          DROP  R5
00003220  00000000 00009223                 3168           DC    XL16'00000000000092233720368547758O8F'   V1 source
00003228  37203685 4775808F
00003230  80000000 00000000                 3169           DC    XL08'8000000000000000'                   R1 result
                                            3170
                                            3171           VRR_K VCVDG,159,11,0                            ULONG_MAX
00003238                                    3172+          DS    0FD
00003238                    00003238        3173+          USING *,R5                base for test data and test routine
00003238  00003254                          3174+T96       DC    A(X96)              address of test routine
0000323C  0060                              3175+          DC    H'96'               test number
0000323E  00                                3176+          DC    XL1'00'
0000323F  9F                                3177+          DC    HL1'159'            i3
00003240  0B                                3178+          DC    HL1'11'             m4
00003241  00                                3179+          DC    HL1'0'              cc
00003242  07                                3180+          DC    HL1'7'              cc failed mask
00003243  E5C3E5C4 C7404040                 3181+          DC    CL8'VCVDG'          instruction name
0000324C  00000010                          3182+          DC    A(16)               result length
00003250  00003278                          3183+REA96     DC    A(RE96)             result address
                                            3184+*                                   INSTRUCTION UNDER TEST ROUTINE
00003254                                    3185+X96       DS    0F
00003254  E710 8F40 0006            00001140 3186+          VL    V1,V1FUDGE          pollute V1
0000325A  E320 5050 0004            00003288 3187+          lG    R2,RE96+16          get R2 source
00003260  E612 00B9 F05A                    3188+          VCVDG V1,R2,159,11        test instruction
00003266  E710 8F08 000E            00001108 3189+          VST   V1,V1OUTPUT         save
0000326C  B98D 0020                         3190+          EPSW  R2,R0               exptract psw
00003270  5020 8EE4                 000010E4 3191+          ST    R2,CCPSW             to save CC
00003274  07FB                              3192+          BR    R11                 return
00003278                                    3193+RE96      DC    0F
00003278                                    3194+          DROP  R5
00003278  00000000 00018446                 3195           DC    XL16'00000000000184467440737095516I5F'   V1 source
00003280  74407370 9551615F
00003288  FFFFFFFF FFFFFFFF                 3196           DC    XL08'FFFFFFFFFFFFFFFF'                   R1 result
                                            3197
                                            3198 * VCVDG          m4=  11 ( LB=1, P1=1 , CS=1)
                                            3199 *                i3= 137 ( IOM=1, RDC= 9)
                                            3200
                                            3201           VRR_K VCVDG,137,11,0
00003290                                    3202+          DS    0FD
00003290                    00003290        3203+          USING *,R5                base for test data and test routine
00003290  000032AC                          3204+T97       DC    A(X97)              address of test routine
00003294  0061                              3205+          DC    H'97'               test number
00003296  00                                3206+          DC    XL1'00'
00003297  89                                3207+          DC    HL1'137'            i3
00003298  0B                                3208+          DC    HL1'11'             m4
00003299  00                                3209+          DC    HL1'0'              cc
0000329A  07                                3210+          DC    HL1'7'              cc failed mask
0000329B  E5C3E5C4 C7404040                 3211+          DC    CL8'VCVDG'          instruction name
000032A4  00000010                          3212+          DC    A(16)               result length
000032A8  000032D0                          3213+REA97     DC    A(RE97)             result address
                                            3214+*                                   INSTRUCTION UNDER TEST ROUTINE
000032AC                                    3215+X97       DS    0F
000032AC  E710 8F40 0006            00001140 3216+          VL    V1,V1FUDGE          pollute V1
```

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  LOC         OBJECT CODE       ADDR1     ADDR2     STMT
000032B2  E320 5050 0004                  000032E0  3217+         lG    R2,RE97+16         get R2 source
000032B8  E612 00B8 905A                            3218+         VCVDG V1,R2,137,11       test instruction
000032BE  E710 8F08 000E                  00001108  3219+         VST   V1,V1OUTPUT        save
000032C4  B98D 0020                                 3220+         EPSW  R2,R0              exptract psw
000032C8  5020 8EE4                       000010E4  3221+         ST    R2,CCPSW                to save CC
000032CC  07FB                                      3222+         BR    R11                return
000032D0                                            3223+RE97     DC    0F
000032D0                                            3224+         DROP  R5
000032D0  00000000 00000000                         3225          DC    XL16'0000000000000000000000000000000F'   V1 result
000032D8  00000000 0000000F
000032E0  00000000 00000000                         3226          DC    FD'0'                                    R2 source
                                                    3227
                                                    3228          VRR_K VCVDG,137,11,0
000032E8                                            3229+         DS    0FD
000032E8                          000032E8          3230+         USING *,R5               base for test data and test routine
000032E8  00003304                                  3231+T98      DC    A(X98)             address of test routine
000032EC  0062                                      3232+         DC    H'98'              test number
000032EE  00                                        3233+         DC    XL1'00'
000032EF  89                                        3234+         DC    HL1'137'           i3
000032F0  0B                                        3235+         DC    HL1'11'            m4
000032F1  00                                        3236+         DC    HL1'0'             cc
000032F2  07                                        3237+         DC    HL1'7'             cc failed mask
000032F3  E5C3E5C4 C7404040                         3238+         DC    CL8'VCVDG'         instruction name
000032FC  00000010                                  3239+         DC    A(16)              result length
00003300  00003328                                  3240+REA98    DC    A(RE98)            result address
                                                    3241+*                                 INSTRUCTION UNDER TEST ROUTINE
00003304                                            3242+X98      DS    0F
00003304  E710 8F40 0006                  00001140  3243+         VL    V1,V1FUDGE         pollute V1
0000330A  E320 5050 0004                  00003338  3244+         lG    R2,RE98+16         get R2 source
00003310  E612 00B8 905A                            3245+         VCVDG V1,R2,137,11       test instruction
00003316  E710 8F08 000E                  00001108  3246+         VST   V1,V1OUTPUT        save
0000331C  B98D 0020                                 3247+         EPSW  R2,R0              exptract psw
00003320  5020 8EE4                       000010E4  3248+         ST    R2,CCPSW                to save CC
00003324  07FB                                      3249+         BR    R11                return
00003328                                            3250+RE98     DC    0F
00003328                                            3251+         DROP  R5
00003328  00000000 00000000                         3252          DC    XL16'0000000000000000000000000000001F'   V1 result
00003330  00000000 0000001F
00003338  00000000 00000001                         3253          DC    FD'1'                                    R2 source
                                                    3254
                                                    3255          VRR_K VCVDG,137,11,3                             UINT_MAX
00003340                                            3256+         DS    0FD
00003340                          00003340          3257+         USING *,R5               base for test data and test routine
00003340  0000335C                                  3258+T99      DC    A(X99)             address of test routine
00003344  0063                                      3259+         DC    H'99'              test number
00003346  00                                        3260+         DC    XL1'00'
00003347  89                                        3261+         DC    HL1'137'           i3
00003348  0B                                        3262+         DC    HL1'11'            m4
00003349  03                                        3263+         DC    HL1'3'             cc
0000334A  0E                                        3264+         DC    HL1'14'            cc failed mask
0000334B  E5C3E5C4 C7404040                         3265+         DC    CL8'VCVDG'         instruction name
00003354  00000010                                  3266+         DC    A(16)              result length
00003358  00003380                                  3267+REA99    DC    A(RE99)            result address
                                                    3268+*                                 INSTRUCTION UNDER TEST ROUTINE
0000335C                                            3269+X99      DS    0F
0000335C  E710 8F40 0006                  00001140  3270+         VL    V1,V1FUDGE         pollute V1
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00003362  E320 5050 0004                 00003390  3271+         lG    R2,RE99+16         get R2 source
00003368  E612 00B8 905A                           3272+         VCVDG V1,R2,137,11       test instruction
0000336E  E710 8F08 000E                 00001108  3273+         VST   V1,V1OUTPUT        save
00003374  B98D 0020                                3274+         EPSW  R2,R0              exptract psw
00003378  5020 8EE4                      000010E4  3275+         ST    R2,CCPSW                to save CC
0000337C  07FB                                     3276+         BR    R11                return
00003380                                           3277+RE99     DC    0F
00003380                                           3278+         DROP  R5
00003380  00000000 00000000                        3279          DC    XL16'00000000000000000000000709551615F'   V1 source
00003388  00000070 9551615F
00003390  FFFFFFFF FFFFFFFF                        3280          DC    FD'-1'                                    R2 source
                                                   3281
                                                   3282          VRR_K VCVDG,137,11,3                              INT_MAX
00003398                                           3283+         DS    0FD
00003398                   00003398                3284+         USING *,R5               base for test data and test routine
00003398  000033B4                                 3285+T100     DC    A(X100)            address of test routine
0000339C  0064                                     3286+         DC    H'100'             test number
0000339E  00                                       3287+         DC    XL1'00'
0000339F  89                                       3288+         DC    HL1'137'           i3
000033A0  0B                                       3289+         DC    HL1'11'            m4
000033A1  03                                       3290+         DC    HL1'3'             cc
000033A2  0E                                       3291+         DC    HL1'14'            cc failed mask
000033A3  E5C3E5C4 C7404040                        3292+         DC    CL8'VCVDG'         instruction name
000033AC  00000010                                 3293+         DC    A(16)              result length
000033B0  000033D8                                 3294+REA100   DC    A(RE100)           result address
                                                   3295+*                                 INSTRUCTION UNDER TEST ROUTINE
000033B4                                           3296+X100     DS    0F
000033B4  E710 8F40 0006                 00001140  3297+         VL    V1,V1FUDGE         pollute V1
000033BA  E320 5050 0004                 000033E8  3298+         lG    R2,RE100+16        get R2 source
000033C0  E612 00B8 905A                           3299+         VCVDG V1,R2,137,11       test instruction
000033C6  E710 8F08 000E                 00001108  3300+         VST   V1,V1OUTPUT        save
000033CC  B98D 0020                                3301+         EPSW  R2,R0              exptract psw
000033D0  5020 8EE4                      000010E4  3302+         ST    R2,CCPSW                to save CC
000033D4  07FB                                     3303+         BR    R11                return
000033D8                                           3304+RE100    DC    0F
000033D8                                           3305+         DROP  R5
000033D8  00000000 00000000                        3306          DC    XL16'00000000000000000000000147483647F'   V1 result
000033E0  00000014 7483647F
000033E8  00000000 7FFFFFFF                        3307          DC    FD'2147483647'                            R2 source
                                                   3308
                                                   3309          VRR_K VCVDG,137,11,3                              INT_MIN
000033F0                                           3310+         DS    0FD
000033F0                   000033F0                3311+         USING *,R5               base for test data and test routine
000033F0  0000340C                                 3312+T101     DC    A(X101)            address of test routine
000033F4  0065                                     3313+         DC    H'101'             test number
000033F6  00                                       3314+         DC    XL1'00'
000033F7  89                                       3315+         DC    HL1'137'           i3
000033F8  0B                                       3316+         DC    HL1'11'            m4
000033F9  03                                       3317+         DC    HL1'3'             cc
000033FA  0E                                       3318+         DC    HL1'14'            cc failed mask
000033FB  E5C3E5C4 C7404040                        3319+         DC    CL8'VCVDG'         instruction name
00003404  00000010                                 3320+         DC    A(16)              result length
00003408  00003430                                 3321+REA101   DC    A(RE101)           result address
                                                   3322+*                                 INSTRUCTION UNDER TEST ROUTINE
0000340C                                           3323+X101     DS    0F
0000340C  E710 8F40 0006                 00001140  3324+         VL    V1,V1FUDGE         pollute V1
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00003412  E320 5050 0004                 00003440  3325+         lG    R2,RE101+16       get R2 source
00003418  E612 00B8 905A                           3326+         VCVDG V1,R2,137,11      test instruction
0000341E  E710 8F08 000E                 00001108  3327+         VST   V1,V1OUTPUT       save
00003424  B98D 0020                                3328+         EPSW  R2,R0             exptract psw
00003428  5020 8EE4                      000010E4  3329+         ST    R2,CCPSW              to save CC
0000342C  07FB                                     3330+         BR    R11               return
00003430                                           3331+RE101    DC    0F
00003430                                           3332+         DROP  R5
00003430  00000000 00000000                        3333          DC    XL16'0000000000000000000000562067968F'   V1 result
00003438  00000056 2067968F
00003440  FFFFFFFF 80000000                        3334          DC    XL8'FFFFFFFF80000000'                    R2 source
                                                   3335 *        DC    FD'-2147483648'                          R2 sourc
                                                   3336
                                                   3337          VRR_K VCVDG,137,11,3                            LONG_MAX
00003448                                           3338+         DS    0FD
00003448                         00003448          3339+         USING *,R5              base for test data and test routine
00003448  00003464                                 3340+T102     DC    A(X102)           address of test routine
0000344C  0066                                     3341+         DC    H'102'            test number
0000344E  00                                       3342+         DC    XL1'00'
0000344F  89                                       3343+         DC    HL1'137'          i3
00003450  0B                                       3344+         DC    HL1'11'           m4
00003451  03                                       3345+         DC    HL1'3'            cc
00003452  0E                                       3346+         DC    HL1'14'           cc failed mask
00003453  E5C3E5C4 C7404040                       3347+         DC    CL8'VCVDG'        instruction name
0000345C  00000010                                 3348+         DC    A(16)             result length
00003460  00003488                                 3349+REA102   DC    A(RE102)          result address
                                                   3350+*                                INSTRUCTION UNDER TEST ROUTINE
00003464                                           3351+X102     DS    0F
00003464  E710 8F40 0006                 00001140  3352+         VL    V1,V1FUDGE        pollute V1
0000346A  E320 5050 0004                 00003498  3353+         lG    R2,RE102+16       get R2 source
00003470  E612 00B8 905A                           3354+         VCVDG V1,R2,137,11      test instruction
00003476  E710 8F08 000E                 00001108  3355+         VST   V1,V1OUTPUT       save
0000347C  B98D 0020                                3356+         EPSW  R2,R0             exptract psw
00003480  5020 8EE4                      000010E4  3357+         ST    R2,CCPSW              to save CC
00003484  07FB                                     3358+         BR    R11               return
00003488                                           3359+RE102    DC    0F
00003488                                           3360+         DROP  R5
00003488  00000000 00000000                        3361          DC    XL16'0000000000000000000000854775807F'   V1 source
00003490  00000085 4775807F
00003498  7FFFFFFF FFFFFFFF                        3362          DC    XL08'7FFFFFFFFFFFFFFF'                   R1 result
                                                   3363
                                                   3364          VRR_K VCVDG,137,11,3                            LONG_MIN
000034A0                                           3365+         DS    0FD
000034A0                         000034A0          3366+         USING *,R5              base for test data and test routine
000034A0  000034BC                                 3367+T103     DC    A(X103)           address of test routine
000034A4  0067                                     3368+         DC    H'103'            test number
000034A6  00                                       3369+         DC    XL1'00'
000034A7  89                                       3370+         DC    HL1'137'          i3
000034A8  0B                                       3371+         DC    HL1'11'           m4
000034A9  03                                       3372+         DC    HL1'3'            cc
000034AA  0E                                       3373+         DC    HL1'14'           cc failed mask
000034AB  E5C3E5C4 C7404040                       3374+         DC    CL8'VCVDG'        instruction name
000034B4  00000010                                 3375+         DC    A(16)             result length
000034B8  000034E0                                 3376+REA103   DC    A(RE103)          result address
                                                   3377+*                                INSTRUCTION UNDER TEST ROUTINE
000034BC                                           3378+X103     DS    0F
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT
000034BC  E710 8F40 0006                 00001140  3379+         VL    V1,V1FUDGE        pollute V1
000034C2  E320 5050 0004                 000034F0  3380+         lG    R2,RE103+16       get R2 source
000034C8  E612 00B8 905A                           3381+         VCVDG V1,R2,137,11      test instruction
000034CE  E710 8F08 000E                 00001108  3382+         VST   V1,V1OUTPUT       save
000034D4  B98D 0020                                3383+         EPSW  R2,R0             exptract psw
000034D8  5020 8EE4                      000010E4  3384+         ST    R2,CCPSW              to save CC
000034DC  07FB                                     3385+         BR    R11               return
000034E0                                           3386+RE103    DC    0F
000034E0                                           3387+         DROP  R5
000034E0  00000000 00000000                        3388          DC    XL16'00000000000000000000000854775808F'   V1 source
000034E8  00000085 4775808F
000034F0  80000000 00000000                        3389          DC    XL08'8000000000000000'                    R1 result
                                                   3390
                                                   3391          VRR_K VCVDG,137,11,3                             ULONG_MAX
000034F8                                           3392+         DS    0FD
000034F8                 000034F8                  3393+         USING *,R5              base for test data and test routine
000034F8  00003514                                 3394+T104     DC    A(X104)           address of test routine
000034FC  0068                                     3395+         DC    H'104'            test number
000034FE  00                                       3396+         DC    XL1'00'
000034FF  89                                       3397+         DC    HL1'137'          i3
00003500  0B                                       3398+         DC    HL1'11'           m4
00003501  03                                       3399+         DC    HL1'3'            cc
00003502  0E                                       3400+         DC    HL1'14'           cc failed mask
00003503  E5C3E5C4 C7404040                        3401+         DC    CL8'VCVDG'        instruction name
0000350C  00000010                                 3402+         DC    A(16)             result length
00003510  00003538                                 3403+REA104   DC    A(RE104)          result address
                                                   3404+*                                INSTRUCTION UNDER TEST ROUTINE
00003514                                           3405+X104     DS    0F
00003514  E710 8F40 0006                 00001140  3406+         VL    V1,V1FUDGE        pollute V1
0000351A  E320 5050 0004                 00003548  3407+         lG    R2,RE104+16       get R2 source
00003520  E612 00B8 905A                           3408+         VCVDG V1,R2,137,11      test instruction
00003526  E710 8F08 000E                 00001108  3409+         VST   V1,V1OUTPUT       save
0000352C  B98D 0020                                3410+         EPSW  R2,R0             exptract psw
00003530  5020 8EE4                      000010E4  3411+         ST    R2,CCPSW              to save CC
00003534  07FB                                     3412+         BR    R11               return
00003538                                           3413+RE104    DC    0F
00003538                                           3414+         DROP  R5
00003538  00000000 00000000                        3415          DC    XL16'00000000000000000000000709551615F'   V1 source
00003540  00000070 9551615F
00003548  FFFFFFFF FFFFFFFF                        3416          DC    XL08'FFFFFFFFFFFFFFFF'                    R1 result
                                                   3417
00003550  00000000                                 3418          DC    F'0'     END OF TABLE
00003554  00000000                                 3419          DC    F'0'
                                                   3420 *
                                                   3421 * table of pointers to individual load test
                                                   3422 *
00003558                                           3423 E6TESTS  DS    0F
                                                   3424          PTTABLE
00003558                                           3425+TTABLE   DS    0F
00003558  00001190                                 3426+         DC    A(T1)             address of test
0000355C  000011E8                                 3427+         DC    A(T2)             address of test
00003560  00001240                                 3428+         DC    A(T3)             address of test
00003564  00001298                                 3429+         DC    A(T4)             address of test
00003568  000012F0                                 3430+         DC    A(T5)             address of test
0000356C  00001348                                 3431+         DC    A(T6)             address of test
00003570  000013A0                                 3432+         DC    A(T7)             address of test
```

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  LOC        OBJECT CODE       ADDR1     ADDR2    STMT
00003574  000013F8                          3433+         DC    A(T8)             address of test
00003578  00001450                          3434+         DC    A(T9)             address of test
0000357C  000014A8                          3435+         DC    A(T10)            address of test
00003580  00001500                          3436+         DC    A(T11)            address of test
00003584  00001558                          3437+         DC    A(T12)            address of test
00003588  000015B0                          3438+         DC    A(T13)            address of test
0000358C  00001608                          3439+         DC    A(T14)            address of test
00003590  00001660                          3440+         DC    A(T15)            address of test
00003594  000016B8                          3441+         DC    A(T16)            address of test
00003598  00001710                          3442+         DC    A(T17)            address of test
0000359C  00001768                          3443+         DC    A(T18)            address of test
000035A0  000017C0                          3444+         DC    A(T19)            address of test
000035A4  00001818                          3445+         DC    A(T20)            address of test
000035A8  00001870                          3446+         DC    A(T21)            address of test
000035AC  000018C8                          3447+         DC    A(T22)            address of test
000035B0  00001920                          3448+         DC    A(T23)            address of test
000035B4  00001978                          3449+         DC    A(T24)            address of test
000035B8  000019D0                          3450+         DC    A(T25)            address of test
000035BC  00001A28                          3451+         DC    A(T26)            address of test
000035C0  00001A80                          3452+         DC    A(T27)            address of test
000035C4  00001AD8                          3453+         DC    A(T28)            address of test
000035C8  00001B30                          3454+         DC    A(T29)            address of test
000035CC  00001B88                          3455+         DC    A(T30)            address of test
000035D0  00001BE0                          3456+         DC    A(T31)            address of test
000035D4  00001C38                          3457+         DC    A(T32)            address of test
000035D8  00001C90                          3458+         DC    A(T33)            address of test
000035DC  00001CE8                          3459+         DC    A(T34)            address of test
000035E0  00001D40                          3460+         DC    A(T35)            address of test
000035E4  00001D98                          3461+         DC    A(T36)            address of test
000035E8  00001DF0                          3462+         DC    A(T37)            address of test
000035EC  00001E48                          3463+         DC    A(T38)            address of test
000035F0  00001EA0                          3464+         DC    A(T39)            address of test
000035F4  00001EF8                          3465+         DC    A(T40)            address of test
000035F8  00001F50                          3466+         DC    A(T41)            address of test
000035FC  00001FA8                          3467+         DC    A(T42)            address of test
00003600  00002000                          3468+         DC    A(T43)            address of test
00003604  00002058                          3469+         DC    A(T44)            address of test
00003608  000020B0                          3470+         DC    A(T45)            address of test
0000360C  00002108                          3471+         DC    A(T46)            address of test
00003610  00002160                          3472+         DC    A(T47)            address of test
00003614  000021B8                          3473+         DC    A(T48)            address of test
00003618  00002210                          3474+         DC    A(T49)            address of test
0000361C  00002268                          3475+         DC    A(T50)            address of test
00003620  000022C0                          3476+         DC    A(T51)            address of test
00003624  00002318                          3477+         DC    A(T52)            address of test
00003628  00002370                          3478+         DC    A(T53)            address of test
0000362C  000023C8                          3479+         DC    A(T54)            address of test
00003630  00002420                          3480+         DC    A(T55)            address of test
00003634  00002478                          3481+         DC    A(T56)            address of test
00003638  000024D0                          3482+         DC    A(T57)            address of test
0000363C  00002528                          3483+         DC    A(T58)            address of test
00003640  00002580                          3484+         DC    A(T59)            address of test
00003644  000025D8                          3485+         DC    A(T60)            address of test
00003648  00002630                          3486+         DC    A(T61)            address of test
0000364C  00002688                          3487+         DC    A(T62)            address of test
00003650  000026E0                          3488+         DC    A(T63)            address of test
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00003654  00002738                          3489+         DC    A(T64)            address of test
00003658  00002790                          3490+         DC    A(T65)            address of test
0000365C  000027E8                          3491+         DC    A(T66)            address of test
00003660  00002840                          3492+         DC    A(T67)            address of test
00003664  00002898                          3493+         DC    A(T68)            address of test
00003668  000028F0                          3494+         DC    A(T69)            address of test
0000366C  00002948                          3495+         DC    A(T70)            address of test
00003670  000029A0                          3496+         DC    A(T71)            address of test
00003674  000029F8                          3497+         DC    A(T72)            address of test
00003678  00002A50                          3498+         DC    A(T73)            address of test
0000367C  00002AA8                          3499+         DC    A(T74)            address of test
00003680  00002B00                          3500+         DC    A(T75)            address of test
00003684  00002B58                          3501+         DC    A(T76)            address of test
00003688  00002BB0                          3502+         DC    A(T77)            address of test
0000368C  00002C08                          3503+         DC    A(T78)            address of test
00003690  00002C60                          3504+         DC    A(T79)            address of test
00003694  00002CB8                          3505+         DC    A(T80)            address of test
00003698  00002D10                          3506+         DC    A(T81)            address of test
0000369C  00002D68                          3507+         DC    A(T82)            address of test
000036A0  00002DC0                          3508+         DC    A(T83)            address of test
000036A4  00002E18                          3509+         DC    A(T84)            address of test
000036A8  00002E70                          3510+         DC    A(T85)            address of test
000036AC  00002EC8                          3511+         DC    A(T86)            address of test
000036B0  00002F20                          3512+         DC    A(T87)            address of test
000036B4  00002F78                          3513+         DC    A(T88)            address of test
000036B8  00002FD0                          3514+         DC    A(T89)            address of test
000036BC  00003028                          3515+         DC    A(T90)            address of test
000036C0  00003080                          3516+         DC    A(T91)            address of test
000036C4  000030D8                          3517+         DC    A(T92)            address of test
000036C8  00003130                          3518+         DC    A(T93)            address of test
000036CC  00003188                          3519+         DC    A(T94)            address of test
000036D0  000031E0                          3520+         DC    A(T95)            address of test
000036D4  00003238                          3521+         DC    A(T96)            address of test
000036D8  00003290                          3522+         DC    A(T97)            address of test
000036DC  000032E8                          3523+         DC    A(T98)            address of test
000036E0  00003340                          3524+         DC    A(T99)            address of test
000036E4  00003398                          3525+         DC    A(T100)           address of test
000036E8  000033F0                          3526+         DC    A(T101)           address of test
000036EC  00003448                          3527+         DC    A(T102)           address of test
000036F0  000034A0                          3528+         DC    A(T103)           address of test
000036F4  000034F8                          3529+         DC    A(T104)           address of test
                                            3530+*
000036F8  00000000                          3531+         DC    A(0)              END OF TABLE
000036FC  00000000                          3532+         DC    A(0)
                                            3533
00003700  00000000                          3534          DC    F'0'      END OF TABLE
00003704  00000000                          3535          DC    F'0'
```

```
 LOC        OBJECT CODE       ADDR1     ADDR2     STMT
                                                  3537 ********************************************************************************
                                                  3538 *        Register equates
                                                  3539 ********************************************************************************

                                00000000  00000001  3541 R0       EQU   0
                                00000001  00000001  3542 R1       EQU   1
                                00000002  00000001  3543 R2       EQU   2
                                00000003  00000001  3544 R3       EQU   3
                                00000004  00000001  3545 R4       EQU   4
                                00000005  00000001  3546 R5       EQU   5
                                00000006  00000001  3547 R6       EQU   6
                                00000007  00000001  3548 R7       EQU   7
                                00000008  00000001  3549 R8       EQU   8
                                00000009  00000001  3550 R9       EQU   9
                                0000000A  00000001  3551 R10      EQU   10
                                0000000B  00000001  3552 R11      EQU   11
                                0000000C  00000001  3553 R12      EQU   12
                                0000000D  00000001  3554 R13      EQU   13
                                0000000E  00000001  3555 R14      EQU   14
                                0000000F  00000001  3556 R15      EQU   15
```

```
                                                  3558 ********************************************************************************
                                                  3559 *        Register equates
                                                  3560 ********************************************************************************

                                00000000  00000001  3562 V0       EQU   0
                                00000001  00000001  3563 V1       EQU   1
                                00000002  00000001  3564 V2       EQU   2
                                00000003  00000001  3565 V3       EQU   3
                                00000004  00000001  3566 V4       EQU   4
                                00000005  00000001  3567 V5       EQU   5
                                00000006  00000001  3568 V6       EQU   6
                                00000007  00000001  3569 V7       EQU   7
                                00000008  00000001  3570 V8       EQU   8
                                00000009  00000001  3571 V9       EQU   9
                                0000000A  00000001  3572 V10      EQU   10
                                0000000B  00000001  3573 V11      EQU   11
                                0000000C  00000001  3574 V12      EQU   12
                                0000000D  00000001  3575 V13      EQU   13
                                0000000E  00000001  3576 V14      EQU   14
                                0000000F  00000001  3577 V15      EQU   15
                                00000010  00000001  3578 V16      EQU   16
                                00000011  00000001  3579 V17      EQU   17
                                00000012  00000001  3580 V18      EQU   18
                                00000013  00000001  3581 V19      EQU   19
                                00000014  00000001  3582 V20      EQU   20
                                00000015  00000001  3583 V21      EQU   21
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2    STMT
                                00000016  00000001  3584 V22      EQU   22
                                00000017  00000001  3585 V23      EQU   23
                                00000018  00000001  3586 V24      EQU   24
                                00000019  00000001  3587 V25      EQU   25
                                0000001A  00000001  3588 V26      EQU   26
                                0000001B  00000001  3589 V27      EQU   27
                                0000001C  00000001  3590 V28      EQU   28
                                0000001D  00000001  3591 V29      EQU   29
                                0000001E  00000001  3592 V30      EQU   30
                                0000001F  00000001  3593 V31      EQU   31
                                                    3594
                                                    3595          END
```

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
BEGIN	I	00000200	2	92	58 89 90
CC	U	00000009	1	422	167
CCFOUND	X	000010EC	1	393	154 174
CCMASK	U	0000000A	1	423	125
CCMSG	U	00000268	1	143	137
CCPRTEXP	C	00001093	1	373	171
CCPRTGOT	C	000010A3	1	376	178
CCPRTLINE	C	00001050	16	368	378 181
CCPRTLNG	U	00000055	1	378	180
CCPRTNAME	C	0000107D	8	371	164
CCPRTNUM	C	00001060	3	369	162
CCPSW	F	000010E4	4	392	151 564 591 618 645 672 702 729 756 783 810 841 868 895 922 949 979 1006 1033 1060 1087 1118 1145 1172 1199 1226 1256 1283 1310 1337 1364 1395 1422 1449 1476 1503 1533 1560 1587 1614 1641 1683 1710 1737 1764 1791 1818 1845 1872 1902 1929 1956 1983 2010 2037 2064 2091 2122 2149 2176 2203 2230 2257 2284 2311 2341 2368 2395 2422 2449 2476 2503 2530 2561 2588 2615 2642 2669 2697 2724 2751 2781 2808 2835 2862 2889 2916 2943 2970 3001 3028 3055 3082 3109 3137 3164 3191 3221 3248 3275 3302 3329 3357 3384 3411
CTLR0	F	0000049C	4	313	102 103 104 105
DECNUM	C	000010D1	16	388	159 161 168 170 175 177 193 195 202 204 209 211
E6TADR	A	000004A4	4	316	111
E6TEST	4	00000000	28	416	120
E6TESTS	F	00003558	4	3423	316
EDIT	X	000010A5	18	383	160 169 176 194 203 210
ENDTEST	U	00000370	1	231	116
EOJ	I	00000480	4	303	234
EOJPSW	D	00000470	8	301	303
FAILCONT	U	00000360	1	221	184
FAILED	F	00001000	4	343	223 232
FAILMSG	U	000002F8	1	191	132
FAILPSW	D	00000488	8	305	307
FAILTEST	I	00000498	4	307	235
I3	U	00000007	1	420	201
IMAGE	1	00000000	14088	0	
K	U	00000400	1	326	327 328 329
K64	U	00010000	1	328	
M4	U	00000008	1	421	145 208
MB	U	00100000	1	329	
MSG	I	000003B8	4	267	250
MSGCMD	C	00000402	9	293	280 281
MSGMSG	C	0000040B	95	294	274 291 272
MSGMVC	I	000003FC	6	291	278
MSGOK	I	000003CE	2	276	273
MSGRET	I	000003E8	4	287	284
MSGSAVE	F	000003F0	4	290	270 287
NEXTE6	U	0000022A	1	113	135 226
OPNAME	C	0000000B	8	425	164 198
PAGE	U	00001000	1	327	
PRT3	C	000010BB	18	386	160 161 162 169 170 171 176 177 178 194 195 196 203 204 205 210 211 212
PRTI3	C	00001040	4	356	205
PRTLINE	C	00001004	16	351	360 215
PRTLNG	U	0000004C	1	360	214
PRTM4	C	0000104D	2	358	212

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
PRTNAME	C	0000102F	8	354	198
PRTNUM	C	00001014	3	352	196
R0	U	00000000	1	3541	52 102 105 118 180 214 222 223 249 251 267 270 272 274 276 287 563 590 617 644 671 701 728 755 782 809 840 867 894 921 948 978 1005 1032 1059 1086 1117 1144 1171 1198 1225 1255 1282 1309 1336 1363 1394 1421 1448 1475 1502 1532 1559 1586 1613 1640 1682 1709 1736 1763 1790 1817 1844 1871 1901 1928 1955 1982 2009 2036 2063 2090 2121 2148 2175 2202 2229 2256 2283 2310 2340 2367 2394 2421 2448 2475 2502 2529 2560 2587 2614 2641 2668 2696 2723 2750 2780 2807 2834 2861 2888 2915 2942 2969 3000 3027 3054 3081 3108 3136 3163 3190 3220 3247 3274 3301 3328 3356 3383 3410
R1	U	00000001	1	3542	125 126 127 130 131 144 145 146 151 152 153 154 181 215 232 233 281 291
R10	U	0000000A	1	3551	99 100
R11	U	0000000B	1	3552	122 123 565 592 619 646 673 703 730 757 784 811 842 869 896 923 950 980 1007 1034 1061 1088 1119 1146 1173 1200 1227 1257 1284 1311 1338 1365 1396 1423 1450 1477 1504 1534 1561 1588 1615 1642 1684 1711 1738 1765 1792 1819 1846 1873 1903 1930 1957 1984 2011 2038 2065 2092 2123 2150 2177 2204 2231 2258 2285 2312 2342 2369 2396 2423 2450 2477 2504 2531 2562 2589 2616 2643 2670 2698 2725 2752 2782 2809 2836 2863 2890 2917 2944 2971 3002 3029 3056 3083 3110 3138 3165 3192 3222 3249 3276 3303 3330 3358 3385 3412
R12	U	0000000C	1	3553	111 114 134 225
R13	U	0000000D	1	3554	
R14	U	0000000E	1	3555	
R15	U	0000000F	1	3556	182 216 244 254 255
R1FUDGE	X	000010F0	8	399	
R1OUTPUT	F	00001128	8	403	
R2	U	00000002	1	3543	158 159 166 167 168 173 174 175 192 193 200 201 202 207 208 209 249 250 251 268 270 276 277 278 280 287 288 560 561 563 564 587 588 590 591 614 615 617 618 641 642 644 645 668 669 671 672 698 699 701 702 725 726 728 729 752 753 755 756 779 780 782 783 806 807 809 810 837 838 840 841 864 865 867 868 891 892 894 895 918 919 921 922 945 946 948 949 975 976 978 979 1002 1003 1005 1006 1029 1030 1032 1033 1056 1057 1059 1060 1083 1084 1086 1087 1114 1115 1117 1118 1141 1142 1144 1145 1168 1169 1171 1172 1195 1196 1198 1199 1222 1223 1225 1226 1252 1253 1255 1256 1279 1280 1282 1283 1306 1307 1309 1310 1333 1334 1336 1337 1360 1361 1363 1364 1391 1392 1394 1395 1418 1419 1421 1422 1445 1446 1448 1449 1472 1473 1475 1476 1499 1500 1502 1503 1529 1530 1532 1533 1556 1557 1559 1560 1583 1584 1586 1587 1610 1611 1613 1614 1637 1638 1640 1641 1679 1680 1682 1683 1706 1707 1709 1710 1733 1734 1736 1737 1760 1761 1763 1764 1787 1788 1790 1791 1814 1815 1817 1818 1841 1842 1844 1845 1868 1869 1871 1872 1898 1899 1901 1902 1925 1926 1928 1929 1952 1953 1955 1956 1979 1980 1982 1983 2006 2007 2009 2010 2033 2034 2036 2037 2060 2061 2063 2064 2087 2088 2090 2091 2118 2119 2121 2122 2145 2146 2148 2149 2172 2173 2175 2176 2199 2200 2202 2203 2226 2227 2229 2230 2253 2254 2256 2257 2280 2281 2283 2284 2307 2308 2310 2311 2337 2338 2340 2341 2364 2365 2367 2368 2391 2392 2394 2395 2418 2419 2421 2422 2445 2446 2448 2449 2472 2473 2475 2476 2499 2500 2502 2503 2526 2527 2529 2530 2557 2558 2560 2561 2584 2585 2587 2588 2611 2612 2614 2615 2638 2639 2641 2642 2665 2666 2668 2669 2693 2694 2696

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
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					2804 2805 2807 2808 2831 2832 2834 2835 2858 2859 2861 2862 2885
					2886 2888 2889 2912 2913 2915 2916 2939 2940 2942 2943 2966 2967
					2969 2970 2997 2998 3000 3001 3024 3025 3027 3028 3051 3052 3054
					3055 3078 3079 3081 3082 3105 3106 3108 3109 3133 3134 3136 3137
					3160 3161 3163 3164 3187 3188 3190 3191 3217 3218 3220 3221 3244
					3245 3247 3248 3271 3272 3274 3275 3298 3299 3301 3302 3325 3326
					3328 3329 3353 3354 3356 3357 3380 3381 3383 3384 3407 3408 3410
					3411
R3	U	00000003	1	3544	
R4	U	00000004	1	3545	
R5	U	00000005	1	3546	114 115 120 245 253 546 567 573 594 600 621 627 648
					654 675 684 705 711 732 738 759 765 786 792 813 823
					844 850 871 877 898 904 925 931 952 961 982 988 1009
					1015 1036 1042 1063 1069 1090 1100 1121 1127 1148 1154 1175 1181
					1202 1208 1229 1238 1259 1265 1286 1292 1313 1319 1340 1346 1367
					1377 1398 1404 1425 1431 1452 1458 1479 1485 1506 1515 1536 1542
					1563 1569 1590 1596 1617 1623 1644 1665 1686 1692 1713 1719 1740
					1746 1767 1773 1794 1800 1821 1827 1848 1854 1875 1884 1905 1911
					1932 1938 1959 1965 1986 1992 2013 2019 2040 2046 2067 2073 2094
					2104 2125 2131 2152 2158 2179 2185 2206 2212 2233 2239 2260 2266
					2287 2293 2314 2323 2344 2350 2371 2377 2398 2404 2425 2431 2452
					2458 2479 2485 2506 2512 2533 2543 2564 2570 2591 2597 2618 2624
					2645 2651 2672 2679 2700 2706 2727 2733 2754 2763 2784 2790 2811
					2817 2838 2844 2865 2871 2892 2898 2919 2925 2946 2952 2973 2983
					3004 3010 3031 3037 3058 3064 3085 3091 3112 3119 3140 3146 3167
					3173 3194 3203 3224 3230 3251 3257 3278 3284 3305 3311 3332 3339
					3360 3366 3387 3393 3414
R6	U	00000006	1	3547	
R7	U	00000007	1	3548	
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R9	U	00000009	1	3550	90 96 97 99
RE1	F	000011D0	4	566	556 560
RE10	F	000014E8	4	812	802 806
RE100	F	000033D8	4	3304	3294 3298
RE101	F	00003430	4	3331	3321 3325
RE102	F	00003488	4	3359	3349 3353
RE103	F	000034E0	4	3386	3376 3380
RE104	F	00003538	4	3413	3403 3407
RE11	F	00001540	4	843	833 837
RE12	F	00001598	4	870	860 864
RE13	F	000015F0	4	897	887 891
RE14	F	00001648	4	924	914 918
RE15	F	000016A0	4	951	941 945
RE16	F	000016F8	4	981	971 975
RE17	F	00001750	4	1008	998 1002
RE18	F	000017A8	4	1035	1025 1029
RE19	F	00001800	4	1062	1052 1056
RE2	F	00001228	4	593	583 587
RE20	F	00001858	4	1089	1079 1083
RE21	F	000018B0	4	1120	1110 1114
RE22	F	00001908	4	1147	1137 1141
RE23	F	00001960	4	1174	1164 1168
RE24	F	000019B8	4	1201	1191 1195
RE25	F	00001A10	4	1228	1218 1222
RE26	F	00001A68	4	1258	1248 1252

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
RE27	F	00001AC0	4	1285	1275 1279
RE28	F	00001B18	4	1312	1302 1306
RE29	F	00001B70	4	1339	1329 1333
RE3	F	00001280	4	620	610 614
RE30	F	00001BC8	4	1366	1356 1360
RE31	F	00001C20	4	1397	1387 1391
RE32	F	00001C78	4	1424	1414 1418
RE33	F	00001CD0	4	1451	1441 1445
RE34	F	00001D28	4	1478	1468 1472
RE35	F	00001D80	4	1505	1495 1499
RE36	F	00001DD8	4	1535	1525 1529
RE37	F	00001E30	4	1562	1552 1556
RE38	F	00001E88	4	1589	1579 1583
RE39	F	00001EE0	4	1616	1606 1610
RE4	F	000012D8	4	647	637 641
RE40	F	00001F38	4	1643	1633 1637
RE41	F	00001F90	4	1685	1675 1679
RE42	F	00001FE8	4	1712	1702 1706
RE43	F	00002040	4	1739	1729 1733
RE44	F	00002098	4	1766	1756 1760
RE45	F	000020F0	4	1793	1783 1787
RE46	F	00002148	4	1820	1810 1814
RE47	F	000021A0	4	1847	1837 1841
RE48	F	000021F8	4	1874	1864 1868
RE49	F	00002250	4	1904	1894 1898
RE5	F	00001330	4	674	664 668
RE50	F	000022A8	4	1931	1921 1925
RE51	F	00002300	4	1958	1948 1952
RE52	F	00002358	4	1985	1975 1979
RE53	F	000023B0	4	2012	2002 2006
RE54	F	00002408	4	2039	2029 2033
RE55	F	00002460	4	2066	2056 2060
RE56	F	000024B8	4	2093	2083 2087
RE57	F	00002510	4	2124	2114 2118
RE58	F	00002568	4	2151	2141 2145
RE59	F	000025C0	4	2178	2168 2172
RE6	F	00001388	4	704	694 698
RE60	F	00002618	4	2205	2195 2199
RE61	F	00002670	4	2232	2222 2226
RE62	F	000026C8	4	2259	2249 2253
RE63	F	00002720	4	2286	2276 2280
RE64	F	00002778	4	2313	2303 2307
RE65	F	000027D0	4	2343	2333 2337
RE66	F	00002828	4	2370	2360 2364
RE67	F	00002880	4	2397	2387 2391
RE68	F	000028D8	4	2424	2414 2418
RE69	F	00002930	4	2451	2441 2445
RE7	F	000013E0	4	731	721 725
RE70	F	00002988	4	2478	2468 2472
RE71	F	000029E0	4	2505	2495 2499
RE72	F	00002A38	4	2532	2522 2526
RE73	F	00002A90	4	2563	2553 2557
RE74	F	00002AE8	4	2590	2580 2584
RE75	F	00002B40	4	2617	2607 2611
RE76	F	00002B98	4	2644	2634 2638
RE77	F	00002BF0	4	2671	2661 2665

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
RE78	F	00002C48	4	2699	2689 2693
RE79	F	00002CA0	4	2726	2716 2720
RE8	F	00001438	4	758	748 752
RE80	F	00002CF8	4	2753	2743 2747
RE81	F	00002D50	4	2783	2773 2777
RE82	F	00002DA8	4	2810	2800 2804
RE83	F	00002E00	4	2837	2827 2831
RE84	F	00002E58	4	2864	2854 2858
RE85	F	00002EB0	4	2891	2881 2885
RE86	F	00002F08	4	2918	2908 2912
RE87	F	00002F60	4	2945	2935 2939
RE88	F	00002FB8	4	2972	2962 2966
RE89	F	00003010	4	3003	2993 2997
RE9	F	00001490	4	785	775 779
RE90	F	00003068	4	3030	3020 3024
RE91	F	000030C0	4	3057	3047 3051
RE92	F	00003118	4	3084	3074 3078
RE93	F	00003170	4	3111	3101 3105
RE94	F	000031C8	4	3139	3129 3133
RE95	F	00003220	4	3166	3156 3160
RE96	F	00003278	4	3193	3183 3187
RE97	F	000032D0	4	3223	3213 3217
RE98	F	00003328	4	3250	3240 3244
RE99	F	00003380	4	3277	3267 3271
REA1	A	000011A8	4	556	
REA10	A	000014C0	4	802	
REA100	A	000033B0	4	3294	
REA101	A	00003408	4	3321	
REA102	A	00003460	4	3349	
REA103	A	000034B8	4	3376	
REA104	A	00003510	4	3403	
REA11	A	00001518	4	833	
REA12	A	00001570	4	860	
REA13	A	000015C8	4	887	
REA14	A	00001620	4	914	
REA15	A	00001678	4	941	
REA16	A	000016D0	4	971	
REA17	A	00001728	4	998	
REA18	A	00001780	4	1025	
REA19	A	000017D8	4	1052	
REA2	A	00001200	4	583	
REA20	A	00001830	4	1079	
REA21	A	00001888	4	1110	
REA22	A	000018E0	4	1137	
REA23	A	00001938	4	1164	
REA24	A	00001990	4	1191	
REA25	A	000019E8	4	1218	
REA26	A	00001A40	4	1248	
REA27	A	00001A98	4	1275	
REA28	A	00001AF0	4	1302	
REA29	A	00001B48	4	1329	
REA3	A	00001258	4	610	
REA30	A	00001BA0	4	1356	
REA31	A	00001BF8	4	1387	
REA32	A	00001C50	4	1414	
REA33	A	00001CA8	4	1441	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
REA34	A	00001D00	4	1468	
REA35	A	00001D58	4	1495	
REA36	A	00001DB0	4	1525	
REA37	A	00001E08	4	1552	
REA38	A	00001E60	4	1579	
REA39	A	00001EB8	4	1606	
REA4	A	000012B0	4	637	
REA40	A	00001F10	4	1633	
REA41	A	00001F68	4	1675	
REA42	A	00001FC0	4	1702	
REA43	A	00002018	4	1729	
REA44	A	00002070	4	1756	
REA45	A	000020C8	4	1783	
REA46	A	00002120	4	1810	
REA47	A	00002178	4	1837	
REA48	A	000021D0	4	1864	
REA49	A	00002228	4	1894	
REA5	A	00001308	4	664	
REA50	A	00002280	4	1921	
REA51	A	000022D8	4	1948	
REA52	A	00002330	4	1975	
REA53	A	00002388	4	2002	
REA54	A	000023E0	4	2029	
REA55	A	00002438	4	2056	
REA56	A	00002490	4	2083	
REA57	A	000024E8	4	2114	
REA58	A	00002540	4	2141	
REA59	A	00002598	4	2168	
REA6	A	00001360	4	694	
REA60	A	000025F0	4	2195	
REA61	A	00002648	4	2222	
REA62	A	000026A0	4	2249	
REA63	A	000026F8	4	2276	
REA64	A	00002750	4	2303	
REA65	A	000027A8	4	2333	
REA66	A	00002800	4	2360	
REA67	A	00002858	4	2387	
REA68	A	000028B0	4	2414	
REA69	A	00002908	4	2441	
REA7	A	000013B8	4	721	
REA70	A	00002960	4	2468	
REA71	A	000029B8	4	2495	
REA72	A	00002A10	4	2522	
REA73	A	00002A68	4	2553	
REA74	A	00002AC0	4	2580	
REA75	A	00002B18	4	2607	
REA76	A	00002B70	4	2634	
REA77	A	00002BC8	4	2661	
REA78	A	00002C20	4	2689	
REA79	A	00002C78	4	2716	
REA8	A	00001410	4	748	
REA80	A	00002CD0	4	2743	
REA81	A	00002D28	4	2773	
REA82	A	00002D80	4	2800	
REA83	A	00002DD8	4	2827	
REA84	A	00002E30	4	2854	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES	
REA85	A	00002E88	4	2881		
REA86	A	00002EE0	4	2908		
REA87	A	00002F38	4	2935		
REA88	A	00002F90	4	2962		
REA89	A	00002FE8	4	2993		
REA9	A	00001468	4	775		
REA90	A	00003040	4	3020		
REA91	A	00003098	4	3047		
REA92	A	000030F0	4	3074		
REA93	A	00003148	4	3101		
REA94	A	000031A0	4	3129		
REA95	A	000031F8	4	3156		
REA96	A	00003250	4	3183		
REA97	A	000032A8	4	3213		
REA98	A	00003300	4	3240		
REA99	A	00003358	4	3267		
READDR	A	00000018	4	428	130	
REG2LOW	U	000000DD	1	333		
REG2PATT	U	AABBCCDD	1	332		
RELEN	A	00000014	4	427		
RPTDWSAV	D	000003A8	8	260	249	251
RPTERROR	I	0000037E	4	244	182	216
RPTSAVE	F	0000039C	4	257	244	254
RPTSVR5	F	000003A0	4	258	245	253
SVOLDPSW	U	00000140	0	54		
T1	A	00001190	4	547	3426	
T10	A	000014A8	4	793	3435	
T100	A	00003398	4	3285	3525	
T101	A	000033F0	4	3312	3526	
T102	A	00003448	4	3340	3527	
T103	A	000034A0	4	3367	3528	
T104	A	000034F8	4	3394	3529	
T11	A	00001500	4	824	3436	
T12	A	00001558	4	851	3437	
T13	A	000015B0	4	878	3438	
T14	A	00001608	4	905	3439	
T15	A	00001660	4	932	3440	
T16	A	000016B8	4	962	3441	
T17	A	00001710	4	989	3442	
T18	A	00001768	4	1016	3443	
T19	A	000017C0	4	1043	3444	
T2	A	000011E8	4	574	3427	
T20	A	00001818	4	1070	3445	
T21	A	00001870	4	1101	3446	
T22	A	000018C8	4	1128	3447	
T23	A	00001920	4	1155	3448	
T24	A	00001978	4	1182	3449	
T25	A	000019D0	4	1209	3450	
T26	A	00001A28	4	1239	3451	
T27	A	00001A80	4	1266	3452	
T28	A	00001AD8	4	1293	3453	
T29	A	00001B30	4	1320	3454	
T3	A	00001240	4	601	3428	
T30	A	00001B88	4	1347	3455	
T31	A	00001BE0	4	1378	3456	
T32	A	00001C38	4	1405	3457	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
T33	A	00001C90	4	1432	3458
T34	A	00001CE8	4	1459	3459
T35	A	00001D40	4	1486	3460
T36	A	00001D98	4	1516	3461
T37	A	00001DF0	4	1543	3462
T38	A	00001E48	4	1570	3463
T39	A	00001EA0	4	1597	3464
T4	A	00001298	4	628	3429
T40	A	00001EF8	4	1624	3465
T41	A	00001F50	4	1666	3466
T42	A	00001FA8	4	1693	3467
T43	A	00002000	4	1720	3468
T44	A	00002058	4	1747	3469
T45	A	000020B0	4	1774	3470
T46	A	00002108	4	1801	3471
T47	A	00002160	4	1828	3472
T48	A	000021B8	4	1855	3473
T49	A	00002210	4	1885	3474
T5	A	000012F0	4	655	3430
T50	A	00002268	4	1912	3475
T51	A	000022C0	4	1939	3476
T52	A	00002318	4	1966	3477
T53	A	00002370	4	1993	3478
T54	A	000023C8	4	2020	3479
T55	A	00002420	4	2047	3480
T56	A	00002478	4	2074	3481
T57	A	000024D0	4	2105	3482
T58	A	00002528	4	2132	3483
T59	A	00002580	4	2159	3484
T6	A	00001348	4	685	3431
T60	A	000025D8	4	2186	3485
T61	A	00002630	4	2213	3486
T62	A	00002688	4	2240	3487
T63	A	000026E0	4	2267	3488
T64	A	00002738	4	2294	3489
T65	A	00002790	4	2324	3490
T66	A	000027E8	4	2351	3491
T67	A	00002840	4	2378	3492
T68	A	00002898	4	2405	3493
T69	A	000028F0	4	2432	3494
T7	A	000013A0	4	712	3432
T70	A	00002948	4	2459	3495
T71	A	000029A0	4	2486	3496
T72	A	000029F8	4	2513	3497
T73	A	00002A50	4	2544	3498
T74	A	00002AA8	4	2571	3499
T75	A	00002B00	4	2598	3500
T76	A	00002B58	4	2625	3501
T77	A	00002BB0	4	2652	3502
T78	A	00002C08	4	2680	3503
T79	A	00002C60	4	2707	3504
T8	A	000013F8	4	739	3433
T80	A	00002CB8	4	2734	3505
T81	A	00002D10	4	2764	3506
T82	A	00002D68	4	2791	3507
T83	A	00002DC0	4	2818	3508

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
T84	A	00002E18	4	2845	3509
T85	A	00002E70	4	2872	3510
T86	A	00002EC8	4	2899	3511
T87	A	00002F20	4	2926	3512
T88	A	00002F78	4	2953	3513
T89	A	00002FD0	4	2984	3514
T9	A	00001450	4	766	3434
T90	A	00003028	4	3011	3515
T91	A	00003080	4	3038	3516
T92	A	000030D8	4	3065	3517
T93	A	00003130	4	3092	3518
T94	A	00003188	4	3120	3519
T95	A	000031E0	4	3147	3520
T96	A	00003238	4	3174	3521
T97	A	00003290	4	3204	3522
T98	A	000032E8	4	3231	3523
T99	A	00003340	4	3258	3524
TESTCC	I	00000264	4	137	127
TESTREST	U	0000024C	1	129	147
TNUM	H	00000004	2	418	158 192
TSUB	A	00000000	4	417	122
TTABLE	F	00003558	4	3425	
V0	U	00000000	1	3562	
V1	U	00000001	1	3563	559 561 562 586 588 589 613 615 616 640 642 643 667 669 670 697 699 700 724 726 727 751 753 754 778 780 781 805 807 808 836 838 839 863 865 866 890 892 893 917 919 920 944 946 947 974 976 977 1001 1003 1004 1028 1030 1031 1055 1057 1058 1082 1084 1085 1113 1115 1116 1140 1142 1143 1167 1169 1170 1194 1196 1197 1221 1223 1224 1251 1253 1254 1278 1280 1281 1305 1307 1308 1332 1334 1335 1359 1361 1362 1390 1392 1393 1417 1419 1420 1444 1446 1447 1471 1473 1474 1498 1500 1501 1528 1530 1531 1555 1557 1558 1582 1584 1585 1609 1611 1612 1636 1638 1639 1678 1680 1681 1705 1707 1708 1732 1734 1735 1759 1761 1762 1786 1788 1789 1813 1815 1816 1840 1842 1843 1867 1869 1870 1897 1899 1900 1924 1926 1927 1951 1953 1954 1978 1980 1981 2005 2007 2008 2032 2034 2035 2059 2061 2062 2086 2088 2089 2117 2119 2120 2144 2146 2147 2171 2173 2174 2198 2200 2201 2225 2227 2228 2252 2254 2255 2279 2281 2282 2306 2308 2309 2336 2338 2339 2363 2365 2366 2390 2392 2393 2417 2419 2420 2444 2446 2447 2471 2473 2474 2498 2500 2501 2525 2527 2528 2556 2558 2559 2583 2585 2586 2610 2612 2613 2637 2639 2640 2664 2666 2667 2692 2694 2695 2719 2721 2722 2746 2748 2749 2776 2778 2779 2803 2805 2806 2830 2832 2833 2857 2859 2860 2884 2886 2887 2911 2913 2914 2938 2940 2941 2965 2967 2968 2996 2998 2999 3023 3025 3026 3050 3052 3053 3077 3079 3080 3104 3106 3107 3132 3134 3135 3159 3161 3162 3186 3188 3189 3216 3218 3219 3243 3245 3246 3270 3272 3273 3297 3299 3300 3324 3326 3327 3352 3354 3355 3379 3381 3382 3406 3408 3409
V10	U	0000000A	1	3572	
V11	U	0000000B	1	3573	
V12	U	0000000C	1	3574	
V13	U	0000000D	1	3575	
V14	U	0000000E	1	3576	
V15	U	0000000F	1	3577	
V16	U	00000010	1	3578	
V17	U	00000011	1	3579	
V18	U	00000012	1	3580	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
V19	U	00000013	1	3581	
V1FUDGE	X	00001140	16	405	559 586 613 640 667 697 724 751 778 805 836 863 890 917 944 974 1001 1028 1055 1082 1113 1140 1167 1194 1221 1251 1278 1305 1332 1359 1390 1417 1444 1471 1498 1528 1555 1582 1609 1636 1678 1705 1732 1759 1786 1813 1840 1867 1897 1924 1951 1978 2005 2032 2059 2086 2117 2144 2171 2198 2225 2252 2279 2306 2336 2363 2390 2417 2444 2471 2498 2525 2556 2583 2610 2637 2664 2692 2719 2746 2776 2803 2830 2857 2884 2911 2938 2965 2996 3023 3050 3077 3104 3132 3159 3186 3216 3243 3270 3297 3324 3352 3379 3406
V1FUDGEB	X	00001150	16	406	
V1INPUT	C	00001160	16	407	
V1OUTPUT	X	00001108	16	401	131 562 589 616 643 670 700 727 754 781 808 839 866 893 920 947 977 1004 1031 1058 1085 1116 1143 1170 1197 1224 1254 1281 1308 1335 1362 1393 1420 1447 1474 1501 1531 1558 1585 1612 1639 1681 1708 1735 1762 1789 1816 1843 1870 1900 1927 1954 1981 2008 2035 2062 2089 2120 2147 2174 2201 2228 2255 2282 2309 2339 2366 2393 2420 2447 2474 2501 2528 2559 2586 2613 2640 2667 2695 2722 2749 2779 2806 2833 2860 2887 2914 2941 2968 2999 3026 3053 3080 3107 3135 3162 3189 3219 3246 3273 3300 3327 3355 3382 3409
V2	U	00000002	1	3564	
V20	U	00000014	1	3582	
V21	U	00000015	1	3583	
V22	U	00000016	1	3584	
V23	U	00000017	1	3585	
V24	U	00000018	1	3586	
V25	U	00000019	1	3587	
V26	U	0000001A	1	3588	
V27	U	0000001B	1	3589	
V28	U	0000001C	1	3590	
V29	U	0000001D	1	3591	
V3	U	00000003	1	3565	
V30	U	0000001E	1	3592	
V31	U	0000001F	1	3593	
V4	U	00000004	1	3566	
V5	U	00000005	1	3567	
V6	U	00000006	1	3568	
V7	U	00000007	1	3569	
V8	U	00000008	1	3570	
V9	U	00000009	1	3571	
X1	F	000011AC	4	558	547
X10	F	000014C4	4	804	793
X100	F	000033B4	4	3296	3285
X101	F	0000340C	4	3323	3312
X102	F	00003464	4	3351	3340
X103	F	000034BC	4	3378	3367
X104	F	00003514	4	3405	3394
X11	F	0000151C	4	835	824
X12	F	00001574	4	862	851
X13	F	000015CC	4	889	878
X14	F	00001624	4	916	905
X15	F	0000167C	4	943	932
X16	F	000016D4	4	973	962
X17	F	0000172C	4	1000	989
X18	F	00001784	4	1027	1016
X19	F	000017DC	4	1054	1043

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
X2	F	00001204	4	585	574
X20	F	00001834	4	1081	1070
X21	F	0000188C	4	1112	1101
X22	F	000018E4	4	1139	1128
X23	F	0000193C	4	1166	1155
X24	F	00001994	4	1193	1182
X25	F	000019EC	4	1220	1209
X26	F	00001A44	4	1250	1239
X27	F	00001A9C	4	1277	1266
X28	F	00001AF4	4	1304	1293
X29	F	00001B4C	4	1331	1320
X3	F	0000125C	4	612	601
X30	F	00001BA4	4	1358	1347
X31	F	00001BFC	4	1389	1378
X32	F	00001C54	4	1416	1405
X33	F	00001CAC	4	1443	1432
X34	F	00001D04	4	1470	1459
X35	F	00001D5C	4	1497	1486
X36	F	00001DB4	4	1527	1516
X37	F	00001E0C	4	1554	1543
X38	F	00001E64	4	1581	1570
X39	F	00001EBC	4	1608	1597
X4	F	000012B4	4	639	628
X40	F	00001F14	4	1635	1624
X41	F	00001F6C	4	1677	1666
X42	F	00001FC4	4	1704	1693
X43	F	0000201C	4	1731	1720
X44	F	00002074	4	1758	1747
X45	F	000020CC	4	1785	1774
X46	F	00002124	4	1812	1801
X47	F	0000217C	4	1839	1828
X48	F	000021D4	4	1866	1855
X49	F	0000222C	4	1896	1885
X5	F	0000130C	4	666	655
X50	F	00002284	4	1923	1912
X51	F	000022DC	4	1950	1939
X52	F	00002334	4	1977	1966
X53	F	0000238C	4	2004	1993
X54	F	000023E4	4	2031	2020
X55	F	0000243C	4	2058	2047
X56	F	00002494	4	2085	2074
X57	F	000024EC	4	2116	2105
X58	F	00002544	4	2143	2132
X59	F	0000259C	4	2170	2159
X6	F	00001364	4	696	685
X60	F	000025F4	4	2197	2186
X61	F	0000264C	4	2224	2213
X62	F	000026A4	4	2251	2240
X63	F	000026FC	4	2278	2267
X64	F	00002754	4	2305	2294
X65	F	000027AC	4	2335	2324
X66	F	00002804	4	2362	2351
X67	F	0000285C	4	2389	2378
X68	F	000028B4	4	2416	2405
X69	F	0000290C	4	2443	2432
X7	F	000013BC	4	723	712

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
X70	F	00002964	4	2470	2459
X71	F	000029BC	4	2497	2486
X72	F	00002A14	4	2524	2513
X73	F	00002A6C	4	2555	2544
X74	F	00002AC4	4	2582	2571
X75	F	00002B1C	4	2609	2598
X76	F	00002B74	4	2636	2625
X77	F	00002BCC	4	2663	2652
X78	F	00002C24	4	2691	2680
X79	F	00002C7C	4	2718	2707
X8	F	00001414	4	750	739
X80	F	00002CD4	4	2745	2734
X81	F	00002D2C	4	2775	2764
X82	F	00002D84	4	2802	2791
X83	F	00002DDC	4	2829	2818
X84	F	00002E34	4	2856	2845
X85	F	00002E8C	4	2883	2872
X86	F	00002EE4	4	2910	2899
X87	F	00002F3C	4	2937	2926
X88	F	00002F94	4	2964	2953
X89	F	00002FEC	4	2995	2984
X9	F	0000146C	4	777	766
X90	F	00003044	4	3022	3011
X91	F	0000309C	4	3049	3038
X92	F	000030F4	4	3076	3065
X93	F	0000314C	4	3103	3092
X94	F	000031A4	4	3131	3120
X95	F	000031FC	4	3158	3147
X96	F	00003254	4	3185	3174
X97	F	000032AC	4	3215	3204
X98	F	00003304	4	3242	3231
X99	F	0000335C	4	3269	3258
ZVE6TST	J	00000000	14088	51	54 56 60 64 342 52
=AL2(L'MSGMSG)	R	000004B2	2	322	272
=F'1'	F	000004A8	4	319	146 222
=H'0'	H	000004B0	2	321	267
=XL4'3'	X	000004AC	4	320	153

```
 MACRO    DEFN   REFERENCES

PTTABLE    496    3424
VRR_K      442     544    571    598    625    652    682    709    736    763    790    821    848    875    902    929    959    986
                  1013   1040   1067   1098   1125   1152   1179   1206   1236   1263   1290   1317   1344   1375   1402   1429   1456
                  1483   1513   1540   1567   1594   1621   1663   1690   1717   1744   1771   1798   1825   1852   1882   1909   1936
                  1963   1990   2017   2044   2071   2102   2129   2156   2183   2210   2237   2264   2291   2321   2348   2375   2402
                  2429   2456   2483   2510   2541   2568   2595   2622   2649   2677   2704   2731   2761   2788   2815   2842   2869
                  2896   2923   2950   2981   3008   3035   3062   3089   3117   3144   3171   3201   3228   3255   3282   3309   3337
                  3364   3391
```

```
   DESC      SYMBOL    SIZE      POS         ADDR

Entry: 0

Image       IMAGE     14088   0000-3707   0000-3707
  Region              14088   0000-3707   0000-3707
    CSECT   ZVE6TST   14088   0000-3707   0000-3707
```

```
   STMT                          FILE NAME
1     /devstor/dev/tests/zvector-e6-13-converttodecimal.asm

** NO ERRORS FOUND **
```